# **Tuscola County Central Dispatch**



# **Request for Quote**

# Public Safety Software System

Caro, MI

May 20, 2020

## Introduction

The Tuscola County Central Dispatch (TCCD) hereby requests that vendors submit quotes for a public safety software system. These Quotes shall provide all of the material requested herein, including detailed cost proposals for the necessary hardware, software, and services. A vendor's failure to follow any of the provided instructions may result in rejection of the vendor's quote.

The TCCD reserves the right to overlook any errors or omissions on the part of the vendor during the RFQ process.

The TCCD is seeking to replace its existing public safety system. The TCCD is looking for a contemporary, completely integrated solution that is one application, with one database, provided by one vendor. In addition, the TCCD would like the public safety software solution vendor to not only provide but to also maintain the software and servers (including OS and DBMS) under the vendor's annual subscription fee.

### Contacts

All communications regarding this RFQ should be directed to:

Director Sandra Nielsen 1303 Cleaver Rd Caro, MI 48723 tccd911@tuscolacountyorg phone: 989-673-8738 Ext: 2

No vendor employee or consultant shall contact anyone else at the TCCD for purposes of soliciting information about this RFQ.

## Submission deadline

All submissions for responding to this RFQ must be submitted no later than 4:00 p.m on Friday June 5, 2020.

## Deliverables

The vendor must submit the following to the person specified in the Contacts section:

• A PDF copy via email

The proposal shall follow the structure specified in the <u>Content</u> section.

## Profile

The TCCD provides services to 13 law enforcement agencies, 13 fire departments and 6 emergency medical services along with other support services to Tuscola County in Michigan. The county includes a population of approximately 52,764. The TCCD consists of 13 personnel and 4 CAD – dispatch and call taker workstations.

The TCCD needs a contemporary, easy-to-use public safety system to reduce redundant data entry, simplify the report review and approval process, provide straightforward access to information, and otherwise streamline the TCCD's processes.

## **Current System**

At present, the TCCD is using Logisys CAD. This system has been in place for 17 years.

## **Scope of Services**

It is the intention of these specifications that the selected vendor furnish to the TCCD a mature CAD solution that will enable the effective and efficient operation of the TCCD. At a minimum, the system shall support the following:

Please note the following:

- The TCCD is open to new technology and would like to obtain as much information as possible about the software requirements and recommendations for the new system from the respective vendors.
- The TCCD is interested in an On Premise off-the-shelf CAD system w/ integrated Mapping.
- The system must be scalable and must be able to integrate with the existing and future options the TCCD may implement.
- The system shall allow the TCCD to efficiently organize, track, and access the vast amount of information that flows through the system daily, must be easy to use, and must be searchable.
- The system must include integrated (ESRI) Mapping.
- Interfacing needs include:
  - LEIN/NCIC integration for basic queries and Warrant/Wanted Persons Entry and Modify
  - o SMS Paging
  - o E911 (ANI/ALI) interface for VIPER
  - o TEXTTY interface
  - o SMART911 Interface
  - I AM Responding interface
  - RIP and Run Interface
- The selected vendor needs to provide all services including, but not limited to, installation, implementation, data conversion, training, monitoring, technical support, and ongoing maintenance for the TCCD to enter into and maintain full use of the system.

- Acquisition and implementation of a new CAD system is a project that will impact the TCCD for years to come. Key goals for the project are to:
  - Replace the legacy system currently being used with an off-the-shelf solution that meets or exceeds the needs of the TCCD
  - Deliver a fully-integrated CAD system on time and within budget
  - Achieve sufficient knowledge transfer through training to allow staff to be capable of and confident in using the new system
  - Provide a technologically sound platform for expansion of information services into the future
  - Establish a subscription pricing based contract

#### Additional Project Objectives:

- Provide real-time access to public safety data;
- Automate data input processes;
- Reduce paper-based documentation and tracking;
- Leverage new technologies to anticipate the future needs of the TCCD;
- Successfully implement the system with minimal disruption to users and operations.

## **Service Requirements**

### **Project Management**

The vendor must provide a dedicated project manager as part of the project. This person will be responsible for interacting directly with his or her counterpart here at the TCCD for the duration of the project.

## System Configuration and Setup

The vendor must provide detailed system configuration and setup services to the TCCD as part of this project. These services are necessary to ensure that the new system is configured to match the processes and workflow of the TCCD to reduce the learning curve and improve the rate of adoption by the users.

## Training

The vendor must provide custom training on the new system to all users. End-user in person training is preferred however a mix of train-the-trainer may be considered. The TCCD will provide the training facilities, workstations, network, etc. which are required for the training. The vendor will provide training which is specific to both the products on which the users are trained and the processes and workflows with which the users are already familiar. Training shall be performed using a copy of the TCCD's data which has been converted from the existing system.

### **Data Conversion**

Data Conversion is not required

## Content

The vendor must provide its proposal in accordance with the structure and content specified in the following sections:

## Pricing

This must include detailed subscription pricing for the software, hardware, and services included in this proposal. In addition, subscription costs must be included for five (5) years.

Also include any terms or conditions associated with the pricing.

Also include a description of the costs associated with new releases (what does it cost to move from Version X to Version X.1?).

## References

Provide a minimum of 5 references of a similar size and scope to the TCCD. Each reference must include the following information:

- Agency name and address
- Contact person with email and telephone number
- Date agency became a client
- Products purchased

The vendor must ensure that all information for the references is current and that the contact person is willing to provide a reference. References are likely to be checked by phone and will require a minimum of 10 to 15 minutes of the contact person's time.

## **Software Overview**

This must include a brief overview of the software solution, including how all of the products and modules work together.

### Implementation

This must include both an overview of the general implementation process as well as timeline which shows the major milestones of the project from contract signing all the way through system acceptance. This section should also include:

### Training

This must include both an overview of the general approach to training, as well as a sample training plan.

## **Technical Requirements**

This must include the completed *TCCD PSSS Technical Requirements* spreadsheet and any extended explanations which may be needed for the vendor's answers to particular requirements.

## **Evaluations**

The TCCD reserves the right to select the proposal which best meets its needs, regardless of the cost of that proposal relative to other proposals received.

Tuscola County reserves the right at its sole discretion to reject any and all proposals received without penalty and not to enter a contract as a result of this RFQ. The County also reserves the right to negotiate separately with any source whatsoever in any manner necessary to attend to the best interests of the County, to waive irregularities in any proposal and to accept a proposal which best meets the needs of the County, irrespective of the bid price.

By submitting a bid, the bidder is acknowledging that there will be no contractual relationship between Tuscola County and the bidder until both parties have formally approved and signed a written contract to be developed by Tuscola County legal counsel. The County reserves the right to make an award without further discussion of any proposal submitted. Therefore, the proposal should be submitted initially on the most favorable terms which the offer can propose. There will be no best and final offer procedure. The County does reserve the right to contact an offer for clarification or its proposal.

#### Instructions

Vendors must respond to each requirement by placing an "X" into the correct column and adding comments as necessary.

- Yes Proposed solution meets or exceeds the requirement. Comment is optional.
- Future The proposed solution does not currently meet the requirement, but a planned future release will meet the requirement. Comment is **required**, and must include a date (mm/yy) when functionality will be built.
- Modify
   Proposed solution can be modified to meet the requirement.

   All modifications must be included in the price of the proposal.
   Comment is required, and must include a statement about the price being included in the proposal.
- No Proposed solution does not meet the requirement. Comment is *optional*.

A failure to enter a response for a given requirement will result in that requirement being defaulted to "No."

## **Computer Aided Dispatch (CAD)**

#### General

| ID   | Requirement  | Yes | Future | Modify | No | Comments |
|------|--|-----|--------|--------|----|----------|
| CA1  | The system should be multi-jurisdictional, allowing dispatching for multiple agencies, including law enforcement, fire, and medical responders.  |     |        |        |    |          |
| CA2  | The system should allow authorized users to design<br>and enforce an agency-wide standard CAD window<br>layout to ensure consistency among workstations,<br>but also to allow users flexibility in configuring their<br>own CAD displays as allowed by the agency. |     |        |        |    |          |
| CA3  | The system should include a minimum of the following for CAD window layout options: window sizes and arrangements, column options, widths, font types, font sizes, and default list-view filters.  |     |        |        |    |          |
| CA4  | The system should allow customized CAD windows to retain a user or agency's preference for all layout options.   |     |        |        |    |          |
| CA5  | The system should support both command line and point-and-click entry for all CAD commands.  |     |        |        |    |          |
| CA6  | The system should support drag-and-drop issuance of CAD commands.  |     |        |        |    |          |
| CA7  | The system should allow authorized users to maintain lists of beats and beat plans.  |     |        |        |    |          |
| CA8  | The system should allow authorized users to maintain a list of bulletin types in addition to BOLOs and special instructions.   |     |        |        |    |          |
| CA9  | The system should allow authorized users to maintain a list of CFS dispositions.   |     |        |        |    |          |
| CA10 | The system should allow multiple dispositions to be specified for a single CFS.  |     |        |        |    |          |
| CA11 | The system should allow calls for service to be set<br>up to require dispositions before they can be closed.   |     |        |        |    |          |
| CA12 | The system should allow authorized users to maintain a list of CFS link types (for example, Duplicate of and Related to) to tie multiple calls into the same physical event.   |     |        |        |    |          |

| CA13 | The system should allow authorized users to maintain a list of CFS list filters (to organize information on the primary CFS windows).                                      |  |  |  |
|------|--|--|--|--|
| CA14 | The system should allow authorized users to<br>maintain CFS priority levels.   |  |  |  |
| CA15 | The system should include inactivity alarm and unit status alarm values, along with the colors, for each CFS priority level.   |  |  |  |
| CA16 | The system should allow authorized users to maintain a list of CFS response codes.   |  |  |  |
| CA17 | The system should allow users to maintain a list of recurring scheduled calls for service, such as pager or siren tests.   |  |  |  |
| CA18 | The system should allow authorized users to maintain a list of fire and/or EMS stations.   |  |  |  |
| CA19 | The system should allow authorized users to maintain a list of CAD terminals.  |  |  |  |
| CA20 | The system should allow authorized users to maintain a list of dispatch timers used to alert call-<br>takers and dispatchers to calls waiting to be dispatched.            |  |  |  |
| CA21 | The system should allow authorized users to set up<br>additional web sites to open within CAD windows,<br>without the standard browser controls or navigation<br>features. |  |  |  |
| CA22 | The system should support Caller Location Query, CLQ, functionality.   |  |  |  |
| CA23 | System should allow for bulletin records to be linked to the master name index.  |  |  |  |
| CA24 | System should allow for bulletin records to be linked to the master vehicle index.   |  |  |  |
| CA25 | System should allow for bulletin records to be linked to the master address index.   |  |  |  |

#### **Calls for Service**

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CB1 | The system should track reporter/complainant data, including name, address, and call-back number. |     |        |        |    |          |
| CB2 | The system should allow unlimited narrative details to be added to a CFS.                         |     |        |        |    |          |

| CB3  | The system should provide automatic date/time<br>stamping and user ID tracking for all call-taker and<br>dispatcher actions to track CFS activity, unit activity,<br>radio log, etc.   |  |  |  |
|------|--|--|--|--|
| CB4  | The system should allow authorized users to<br>manage check-in times for units based on CFS type.<br>When a unit exceeds the allotted time, the system<br>should provide visible and audible warnings to the<br>call-taker or dispatcher.  |  |  |  |
| CB5  | The system should include an override/reset feature for the unit check-in time warnings.   |  |  |  |
| CB6  | The system should allow for filtering subsets or sorting the active or waiting calls within the CFS control panel.   |  |  |  |
| CB7  | The system should display key information about<br>each CFS, such as incident number, call for service<br>type, priority, status, assigned units, and incident<br>address within the CFS control panel.  |  |  |  |
| CB8  | The system should allow the information displayed<br>for a CFS within the CFS control panel to be<br>configured per user or per agency.  |  |  |  |
| CB9  | The system should allow authorized users to<br>manage dispatch timers based on CFS type and<br>priority. The system should provide a visible and/or<br>audible warning, alerting the call-taker or dispatcher<br>that too much time has elapsed without assigning a<br>unit(s) to the CFS. |  |  |  |
| CB10 | The system should make narrative details available to all stations in real time.   |  |  |  |
| CB11 | The system should clearly display the SOP to the call-taker and dispatcher when a CFS is created with an incident code that has an SOP.  |  |  |  |
| CB12 | The system should be able to display the active and waiting calls for service through the CFS control panel.   |  |  |  |
| CB13 | The system should allow the call-taker and dispatcher to enter free-text log entries for a CFS.  |  |  |  |
| CB14 | The system should auto-save narrative details after a specified period of inactivity on a CFS.   |  |  |  |

| CB15 | The system should allow a CFS to be created with a single click or keystroke from either the CAD product or from the mapping product.   |  |  |  |
|------|---|--|--|--|
| CP16 | The system should be able to immediately dispatch   |  |  |  |
| СВТО | a new CFS without any mandatory fields.   |  |  |  |
| CB17 | The system should allow users to create traffic stop<br>calls for service, with fields for entering key traffic<br>stop data, including location and license plate<br>number, in the order specified by the agency. |  |  |  |
| CB18 | The system should allow the dispatch display to<br>provide access to all CFS information, including<br>incident type, nature of call, address, reporter and<br>complainant names, and narrative.                    |  |  |  |
| CB19 | The system should provide duplicate CFS<br>suggestions based on address location.   |  |  |  |
| CB20 | The system should, after a dispatcher verifies a duplicated call, link the duplicate to the original call to provide access to the additional data.   |  |  |  |
| CB21 | The system should allow calls for service to be manually linked for any agency-defined reason.  |  |  |  |
| CB22 | The system should allow a "use caution" flag to be placed on any CFS.   |  |  |  |
| CB23 | The system should allow a CFS to be modified with priority modifiers such as Routine, Just Occurred, and In Progress throughout the life of the call.   |  |  |  |
| CB24 | The system should allow calls for service to be cleared at any time, including prior to dispatch.   |  |  |  |
| CB25 | The system should allow a call-taker and/or<br>dispatcher to specify an unlimited number<br>dispositions or reasons for clearing a CFS.   |  |  |  |
| CB26 | The system should allow authorized users to view cleared calls for service but prevent unauthorized users from making any modifications to these cleared calls.   |  |  |  |
| CB27 | The system should allow reactivation of recently cleared calls for service and should also allow additional activity and dispatching of units to the original CFS.  |  |  |  |
| CB28 | The system should be able to generate a sequential reference number for a CFS for each jurisdiction/responding agency.  |  |  |  |

| CB29 | The system should provide a list of all state/NCIC queries run and associated returns. This list should be filtered by date, query type, user, and/or terminal.                  |  |  |  |
|------|--|--|--|--|
| CB30 | The system should allow users to easily attach a state/NCIC query to a call for service so that the query and all returns are linked to the call.                                |  |  |  |
| CB31 | The system should allow NCIC queries to run automatically when a vehicle or name is added to a CFS.  |  |  |  |
| CB32 | The system should allow all information captured within a CFS to be transferred to and available via the resulting Case report.  |  |  |  |
| CB33 | The system should allow authorized users to create<br>unlimited custom form templates which are used to<br>associate agency-specified data with individual calls<br>for service. |  |  |  |
| CB34 | The system should allow users with access to calls<br>for service to use the custom forms to enter and<br>maintain the associated data.  |  |  |  |

#### Incident Codes

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CC1 | The system should allow authorized users to maintain a list of CFS types (incident codes), including default priority levels and default modifiers.                          |     |        |        |    |          |
| CC2 | The system should allow authorized users to determine if incident reports are required for given incident codes or if incident reports will be automatically created in CAD. |     |        |        |    |          |
| CC3 | The system should allow users to enter an unlimited number of incident codes for a CFS.  |     |        |        |    |          |
| CC4 | The system should allow incident codes to be associated with specific N-DEx codes for state and federal reporting.   |     |        |        |    |          |
| CC5 | The system should allow map icons to be assigned<br>to each incident code for display of that incident/CFS<br>on the map.  |     |        |        |    |          |

| CC6 | The system should allow incident codes to be changed at any time during the CFS.   |  |  |  |
|-----|--|--|--|--|
| CC7 | The system should allow incident codes to be defined by the agency such that they will trigger the appropriate response assistance from 911 EMD systems, if so configured. |  |  |  |

#### **Unit Management**

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CD1 | The system should allow authorized users to<br>maintain lists of unit information such as unit alarm<br>times, unit details, unit list filters, unit locations, unit<br>shifts, unit specialties, unit statuses, unit types, and<br>the units themselves. |     |        |        |    |          |
| CD2 | The system should allow authorized users to determine the length of unit alarm times and the frequency of the alarm tone.   |     |        |        |    |          |
| CD3 | The system should support filtering on the CAD window to select the units which meet specified criteria (has defibrillator, etc.).  |     |        |        |    |          |
| CD4 | The system should allow unit drill-down. That is, the user should be able to select a unit and use links to locate information about the personnel, vehicle, and equipment associated with that unit and jump to those records (if authorized).           |     |        |        |    |          |
| CD5 | The system should have one or more CAD unit control windows which allow filtering and sorting units by key data.  |     |        |        |    |          |
| CD6 | The system should include key information about<br>each unit in the CAD unit control window, such as<br>unit type, call sign, details, status, incident<br>assignment, beat, and location, configurable per<br>user or per agency.                        |     |        |        |    |          |
| CD7 | The system should allow a call-taker or dispatcher to<br>view a list of active and waiting calls for service from<br>the CAD control unit window and to dispatch the<br>units to calls for service.   |     |        |        |    |          |

| CD8  | The system should allow a call-taker or dispatcher to   |  |  |  |  |
|------|---|--|--|--|--|
|      | undate unit information such as status location and     |  |  |  |  |
|      | details from the CAD control unit window                |  |  |  |  |
|      |   |  |  |  |  |
| CD9  | The system should allow call-takers and dispatchers     |  |  |  |  |
|      | to dispatch units from a displayed list of available    |  |  |  |  |
|      | units in the CFS control panel.                         |  |  |  |  |
| CD10 | The system should allow call-takers and dispatchers     |  |  |  |  |
|      | to issue unit commands directly from the CFS            |  |  |  |  |
|      | window.   |  |  |  |  |
| CD11 | The system should support pre-built shift rosters and   |  |  |  |  |
|      | allow call-takers or dispatchers to place multiple      |  |  |  |  |
|      | units on shift with a single command.                   |  |  |  |  |
| CD12 | The system should be able to re-assign a unit from      |  |  |  |  |
|      | one CFS to another with a single command and            |  |  |  |  |
|      | stack the original CFS against the re-routed unit.      |  |  |  |  |
|      |   |  |  |  |  |
| CD13 | The system should provide unlimited unit stacking for   |  |  |  |  |
|      | calls for service.                                      |  |  |  |  |
| CD14 | The system should allow a re-assigned unit to be        |  |  |  |  |
|      | sent back to the original CFS when the unit is          |  |  |  |  |
|      | cleared.  |  |  |  |  |
| CD15 | The system should allow one unit to be exchanged        |  |  |  |  |
|      | with another, automatically recording in the log that   |  |  |  |  |
|      | the first unit was initially dispatched and then        |  |  |  |  |
|      | switched with the second unit.                          |  |  |  |  |
| CD16 | The system should be able to group units so that        |  |  |  |  |
|      | subsequent commands apply to all units in the           |  |  |  |  |
|      | group.  |  |  |  |  |
| CD17 | The system should support the use of cross-staffed      |  |  |  |  |
|      | units.  |  |  |  |  |
| CD18 | The system should allow the call-taker or dispatcher    |  |  |  |  |
|      | to enter free-text messages from an officer in the      |  |  |  |  |
|      | CFS log.  |  |  |  |  |
| CD19 | The system should allow the CFS log to be queried       |  |  |  |  |
|      | by unit to generate a record of an individual officer's |  |  |  |  |
|      | activity for a given time period.                       |  |  |  |  |

#### Addresses and GIS

|  | ID | Requirement | Yes | Future | Modify | No | Comments |  |
|--|----|-------------|-----|--------|--------|----|----------|--|
|--|----|-------------|-----|--------|--------|----|----------|--|

| CE1  | The system should display a list of potential matches<br>as characters for addresses are typed into the CFS<br>address field. These potential matches should be<br>reduced as additional characters are typed until only<br>the matching address(es) is/are listed. |  |  |  |
|------|---|--|--|--|
| CE2  | The system should allow users to suggest adding<br>new addresses when existing address information<br>does not exist.   |  |  |  |
| CE3  | The system should allow the call-taker to select a suggested match at any time to auto-populate the address field.  |  |  |  |
| CE4  | The system should, when possible, auto-populate<br>the city, state and zip code based on the street<br>address entered (if the address is already in the<br>master address database).   |  |  |  |
| CE5  | The system should allow intersections to be entered as CFS addresses.   |  |  |  |
| CE6  | The system should allow mile markers to be entered as CFS addresses.  |  |  |  |
| CE7  | The system should allow the assignment of common<br>address names such as "Sugarcreek Plaza" to<br>actual addresses, allowing call-takers and<br>dispatchers to enter either one in a CFS.  |  |  |  |
| CE8  | The system should allow the assignment of street<br>name aliases. For example, "Highway 81" might be<br>assigned as a street alias for "West Caro Road."<br>Call-takers and dispatchers may choose to enter<br>either the address or the alias.                     |  |  |  |
| CE9  | The system should automatically alert the call-taker<br>and/or dispatcher of a possible duplicate call based<br>on address data   |  |  |  |
| CE10 | The system should be integrated with GIS. Please describe the GIS integration.  |  |  |  |
| CE11 | The system should support specifying and auto-<br>populating the beat and/or zone for a CFS.  |  |  |  |

#### Command Line

ID Requirement

ent

Yes Future

Modify

No Comments

| CF1  | The system should allow authorized users to maintain a list of CAD commands, including the actions which the system performs within each command                 |  |  |  |
|------|--|--|--|--|
| CF2  | The system should allow call-takers and dispatchers to enter commands via the command line using a few keystrokes.   |  |  |  |
| CF3  | The system should allow authorized users to create agency-specific commands for the command line.  |  |  |  |
| CF4  | The system should allow the command line to use natural language rather than cryptic key codes or a specific information order.                                  |  |  |  |
| CF5  | The system should use business logic to dynamically<br>display only the necessary fields for the selected<br>command in the command line.                        |  |  |  |
| CF6  | The system should allow authorized users to arrange traffic stop fields in a CAD command to match the order they are called out to dispatchers at the agency.    |  |  |  |
| CF7  | The system should default the CFS number from the current CFS to the command line embedded in the CFS detail screen.   |  |  |  |
| CF8  | The system should support multiple instances of the command line on multiple displays from the same workstation.   |  |  |  |
| CF9  | The system should allow users to post brief<br>messages directly to Twitter from the command line<br>based on templates containing pre-defined call<br>elements. |  |  |  |
| CF10 | The system should allow users to run common state/NCIC queries directly from the command line.   |  |  |  |

### Call-taker/Dispatcher

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CG1 | The system should allow authorized users to take over any call-taker or dispatcher position.  |     |        |        |    |          |
| CG2 | The system should be able to be set up for a call-<br>taker and/or dispatcher workflow, or for one user to<br>fill both roles using the same windows. |     |        |        |    |          |

| CG3 | The system should support either local or remote call-taker and/or dispatcher positions.  |  |  |  |
|-----|---|--|--|--|
| CG4 | The system should support an unlimited number of call-taker and/or dispatcher positions.  |  |  |  |
| CG5 | The system should allow multiple call-takers or dispatchers or mobile users to enter data on the same CFS simultaneously.   |  |  |  |
| CG6 | The system should allow for units to be dispatched simultaneously with call-taking activities.  |  |  |  |
| CG7 | The system should make information immediately<br>available to all stations as soon as any dispatcher,<br>call-taker, or mobile unit updates a call. A CFS<br>update indicator (for example, flashing text) should<br>be visible to all stations. |  |  |  |
| CG8 | The system should make all functions available from<br>the call-taker and dispatcher positions for officer-<br>initiated incidents (quick calls) and traffic stops.   |  |  |  |

#### Relationships

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CH1 | The system should allow users to add unlimited<br>involved persons to a CFS.   |     |        |        |    |          |
| CH2 | The system should allow authorized users to set up<br>an unlimited number of custom, configurable<br>relationship types.   |     |        |        |    |          |
| CH3 | The system should allow authorized users to extend<br>the list of CFS relationship types to include such<br>types as arrestee, cited, reporter, driver of vehicle,<br>and passenger. |     |        |        |    |          |
| CH4 | The system should automatically check all involved persons' names against the master name index.   |     |        |        |    |          |
| CH5 | The system should allow for the entry of anonymous reporters such as concerned citizen or anonymous female without creating a master name record for these entries.                  |     |        |        |    |          |
| CH6 | The system should automatically transfer all names,<br>including any involved persons, from the CFS record<br>to any associated case reports.  |     |        |        |    |          |

#### **Service Vehicles**

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CI1 | The system should include a list of service vehicle<br>providers that need to maintain a rotation schedule,<br>such as wreckers or private ambulances.  |     |        |        |    |          |
| CI2 | The system should automatically position the second company in the first position after the first company has been selected.  |     |        |        |    |          |
| CI3 | The system should allow the user to dispatch the<br>next company, when unable to reach the first<br>company in line, without manually moving the first<br>company to the bottom of the rotation sequence. |     |        |        |    |          |
| CI4 | The system should allow the user to override the rotation in the event a specific provider is requested.  |     |        |        |    |          |
| CI5 | The system should track attempts to contact service vehicle providers and the results of each attempt.  |     |        |        |    |          |

#### Tow Calls

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CJ1 | The system should allow authorized users to<br>maintain lists of tow call information such as tow call<br>statuses, tow operators, and tow operator<br>schedules.                                    |     |        |        |    |          |
| CJ2 | The system should provide a means for recording<br>when a vehicle needs to be towed, including vehicle<br>identifying data, vehicle location, comments, and<br>attempts to contact service vehicles. |     |        |        |    |          |
| CJ3 | The system should allow vehicle data from a call for service to automatically populate the tow call.   |     |        |        |    |          |
| CJ4 | The system should ensure that tow calls are recorded as links for the related master vehicle records.  |     |        |        |    |          |
| CJ5 | The system should allow authorized users to create<br>unlimited custom form templates which are used to<br>associate agency-specified data with individual tow<br>calls.                             |     |        |        |    |          |

| CJ6 | The system should allow users with access to tow    |  |  |  |
|-----|---|--|--|--|
|     | calls to use the custom forms to enter and maintain |  |  |  |
|     | the associated data.                                |  |  |  |

#### **Unit Recommendations**

| ID   | Requirement  | Yes | Future | Modify | No | Comments |
|------|--|-----|--------|--------|----|----------|
| CK1  | The system should allow authorized users to              |     |        |        |    |          |
|      | maintain a list of run cards.                            |     |        |        |    |          |
| CK2  | The system should allow agency-configurable run          |     |        |        |    |          |
|      | cards to define the required responders for each         |     |        |        |    |          |
|      | incident code.   |     |        |        |    |          |
| CK3  | The system should allow authorized users to define       |     |        |        |    |          |
|      | run cards by particular map layer(s) or by individual    |     |        |        |    |          |
|      | addresses.   |     |        |        |    |          |
| CK4  | The system should allow run cards to be applied to a     |     |        |        |    |          |
|      | single incident code or to multiple incident codes.      |     |        |        |    |          |
|      |  |     |        |        |    |          |
| CK5  | The system should allow run cards to be based            |     |        |        |    |          |
|      | on/include the following additional criteria: day, time  |     |        |        |    |          |
|      | of day, number and type of units.                        |     |        |        |    |          |
| CK6  | The system should allow units which match up with        |     |        |        |    |          |
|      | run card criteria to be differentiated with a tiebreaker |     |        |        |    |          |
|      | (such as which one has been inactive for the longest     |     |        |        |    |          |
|      | period).   |     |        |        |    |          |
| CK7  | The system should prioritize units for                   |     |        |        |    |          |
|      | recommendation based on factors including the            |     |        |        |    |          |
|      | following:   |     |        |        |    |          |
|      | - Department/jurisdiction                                |     |        |        |    |          |
|      | - Specialties, training skills, and equipment            |     |        |        |    |          |
|      | - Closest path/shortest routing time to incident         |     |        |        |    |          |
|      | location   |     |        |        |    |          |
|      | - Time since last CFS assignment                         |     |        |        |    |          |
|      | - Unit status  |     |        |        |    |          |
| CK8  | The system should allow the dispatcher to assign a       |     |        |        |    |          |
|      | recommended unit, assign all recommended units,          |     |        |        |    |          |
|      | or expand the list of units to view more                 |     |        |        |    |          |
| 01/0 | Irecommendations.  |     |        |        |    |          |
| CK9  | The system should support the use of cascading unit      |     |        |        |    |          |
|      | recommendations.   |     |        |        |    |          |

#### Vehicles

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CL1 | The system should store all vehicle information   |     |        |        |    |          |
|     | which is added to a CFS entry in the master vehicle   |     |        |        |    |          |
|     | index.  |     |        |        |    |          |
| CL2 | The system should allow multiple vehicles to be   |     |        |        |    |          |
|     | added to a CFS.   |     |        |        |    |          |
| CL3 | The system should include the following vehicle relationship types: traffic stops or traffic accidents, |     |        |        |    |          |
|     | towed vehicles, abandoned vehicles, and unlimited agency-defined relationships types.                   |     |        |        |    |          |
| CL4 | The system should automatically transfer vehicle  |     |        |        |    |          |
|     | information from a CFS to any associated case   |     |        |        |    |          |
|     | reports.  |     |        |        |    |          |

#### Hazards and Alerts

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CM1 | The system should visibly notify call-takers,<br>dispatchers and officers of any alert information for<br>names, addresses, and vehicles involved in a CFS.  |     |        |        |    |          |
| CM2 | The system should integrate hazards and alerts<br>between all products so that alerts entered in one<br>area are available in all others.  |     |        |        |    |          |
| CM3 | The system should allow unlimited narrative text for an alert.   |     |        |        |    |          |
| CM4 | The system should include both urgent and non-<br>urgent alerts.   |     |        |        |    |          |
| CM5 | The system should allow alerts to be deactivated, if no longer relevant, but still maintained in the alert history.  |     |        |        |    |          |
| CM6 | The system should allow users to set an expiration date for each alert. Expired alerts should be retained but clearly marked as expired and non-urgent.  |     |        |        |    |          |
| CM7 | The system should display alerts triggered from any<br>non-CAD area of the system to dispatchers in real-<br>time based on the people involved, addresses,<br>vehicles, etc. For example, any alerts for warrant hits<br>or sex offender status should display when a<br>reporting party name is entered in CAD. |     |        |        |    |          |

| CM8  | The system should allow authorized users to create        |   |  |  |
|------|---|---|--|--|
|      | other name alert types, such as medical alerts,           |   |  |  |
| CM9  | The system should directly link alerts (such as           |   |  |  |
|      | warrant hits) to the triggering information.              |   |  |  |
| CM10 | The system should alert the call-taker and dispatcher     |   |  |  |
|      | and/or officer if hazardous material is stored at a       |   |  |  |
|      | site, including material name, amount, location on        |   |  |  |
|      | site, and cutoff information (if the data is available on |   |  |  |
|      | the master address record).                               |   |  |  |
| CM11 | The system should link hazardous material alerts to       |   |  |  |
|      | the relevant text from the Hazmat Guide stored in         |   |  |  |
|      | the system.   |   |  |  |
| CM12 | The system should alert the call-taker and dispatcher     |   |  |  |
|      | and/or officer to protection system details for an        |   |  |  |
|      | address, such as fire alarm panel locations and           |   |  |  |
|      | sprinkler system details (if the data is available on     |   |  |  |
|      | the master address record).                               |   |  |  |
| CM13 | The system should be able to alert the call-taker and     |   |  |  |
|      | dispatcher and/or officer to water supply details for     |   |  |  |
|      | an address (if the data is available on the master        |   |  |  |
|      | address record).  |   |  |  |
| CM14 | The system should alert the call-taker and dispatcher     |   |  |  |
|      | and/or officer to any officer safety warnings for an      |   |  |  |
|      | address such as unlocked firearms, and vicious dogs       | 5 |  |  |
|      | (if the data is available on the master address           |   |  |  |
|      | record).  |   |  |  |
| CM15 | The system should allow authorized users to create        |   |  |  |
|      | other address alerts such as known crash pads, drug       |   |  |  |
|      | sites, etc.   |   |  |  |
| CM16 | The system should allow authorized user to create         |   |  |  |
|      | agency-defined vehicle warnings.                          |   |  |  |
| CM17 | The system should alert the call-taker and dispatcher     | • |  |  |
|      | and/or officer to any vehicle warnings.                   |   |  |  |
| CM18 | The system should allow name, address, and vehicle        |   |  |  |
|      | alerts to be created during the call-taking and/or        |   |  |  |
|      | dispatch process.   |   |  |  |

| CM19 | The system should provide a means of granting or      |  |  |  |
|------|---|--|--|--|
|      | denying users permission to view or create specific   |  |  |  |
|      | name, address, and vehicle alert types so that these  |  |  |  |
|      | alerts can be used to store data such as confidential |  |  |  |
|      | investigative information.                            |  |  |  |

#### Call Scheduling

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CN1 | The system should allow scheduling calls for future<br>dispatch to help manage special events such as  |     |        |        |    |          |
|     | transport.   |     |        |        |    |          |
| CN2 | The system should automatically create a CFS when the scheduled activity occurs.   |     |        |        |    |          |
| CN3 | The system should allow scheduled calls to be set<br>up to notify call-takers and dispatchers in advance of<br>the actual event.   |     |        |        |    |          |
| CN4 | The system should allow a user, when scheduling a CFS, to specify which terminal will handle the CFS.  |     |        |        |    |          |
| CN5 | The system should remind a user who schedules a CFS to check the CFS date when calls are scheduled for dates that are not in the near future.                                |     |        |        |    |          |
| CN6 | The system should allow scheduled calls to include unlimited narrative details.  |     |        |        |    |          |
| CN7 | The system should support location overrides for<br>scheduled calls.   |     |        |        |    |          |
| CN8 | The system should be able to display a list of scheduled calls, either future or past.   |     |        |        |    |          |
| CN9 | The system should allow a CFS to be scheduled to recur according to a number of different times (for example, daily, the first Friday of the month, every other month, etc.) |     |        |        |    |          |

#### **External Messaging**

| ID  | Requirement                                      | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CO1 | The system should include the ability to send    |     |        |        |    |          |
|     | messages externally via smtp and sms.            |     |        |        |    |          |
| CO2 | The system should support rip and run messaging  |     |        |        |    |          |
|     | via email or fax for communication with external |     |        |        |    |          |
|     | agencies.  |     |        |        |    |          |

| CO3 | The system should allow authorized users to maintain lists of paging groups and paging message types.              |  |  |  |
|-----|--|--|--|--|
| CO4 | The system should send automatic pages based on incident types.  |  |  |  |
| CO5 | The system should be able to notify users or groups via smtp or sms when specified calls for service are received. |  |  |  |

#### Internal Messaging

| ID   | Requirement  | Yes | Future | Modify | No | Comments |
|------|--|-----|--------|--------|----|----------|
| CP1  | The system should allow instant messages to be         |     |        |        |    |          |
|      | sent to multiple recipients, such as via a public      |     |        |        |    |          |
|      | message room accessible by all on-duty call-takers,    |     |        |        |    |          |
|      | dispatchers and officers.                              |     |        |        |    |          |
| CP2  | The system should allow instant messages to be         |     |        |        |    |          |
|      | sent to specified user(s).                             |     |        |        |    |          |
| CP3  | The system should provide visible and/or audible       |     |        |        |    |          |
|      | alerts or to bring the alert to the front of all other |     |        |        |    |          |
|      | open windows when the user receives an instant         |     |        |        |    |          |
|      | message.   |     |        |        |    |          |
| CP4  | The system should allow for the inclusion of a         |     |        |        |    |          |
|      | number of different tones to designate different       |     |        |        |    |          |
|      | types of audible alerts.                               |     |        |        |    |          |
| CP5  | The system should include an e-mail function that is   |     |        |        |    |          |
|      | internal to the system, allowing users to send e-mail- |     |        |        |    |          |
|      | style messages to other users on the system.           |     |        |        |    |          |
| 0.00 |  |     |        |        |    |          |
| CP6  | I he system should allow e-mail-style messages to      |     |        |        |    |          |
| 007  | Include links to records within the system.            |     |        |        |    |          |
| CP7  | I ne system should allow a single e-mail-style         |     |        |        |    |          |
| 0.00 | message to be sent to one or more users.               |     |        |        |    |          |
| CP8  | I ne system should allow users to store or delete      |     |        |        |    |          |
| CDO  | received e-mail-style messages.                        |     |        |        |    |          |
| CP9  | The system should log all sent e-mail-style            |     |        |        |    |          |
| CD40 | messages.  |     |        |        |    |          |
| CPIU | The system should provide a note pad function that     |     |        |        |    |          |
|      | allows call-takers and dispatchers to type in          |     |        |        |    |          |
|      | unimited text and store the text within the system.    |     |        |        |    |          |
| CP11 | The system should stamp note pad entries with the      |     |        |        |    |          |
|      | date and time and user who created them.               |     |        |        |    |          |

| CP12 | The system should allow note pad entries to be set to automatically expire.  |  |  |  |
|------|--|--|--|--|
| CP13 | The system should be able to notify users or user groups via internal system messaging, or e-mail when specified calls for service are received.                   |  |  |  |
| CP14 | The system should allow for call-takers and/or dispatchers to notify users and/or user groups of a CFS during any point of the call-taking or dispatching process. |  |  |  |
| CP15 | The system should allow bulletins such as BOLOs<br>and special instructions to be issued to groups of<br>officers based on type, jurisdiction, beat, etc.          |  |  |  |
| CP16 | The system should immediately make BOLOs available to the system's mobile units.   |  |  |  |
| CP17 | The system should allow BOLOs to have files attached to them via upload or scanner.  |  |  |  |

#### Alarm Billing

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| CQ1 | The system should allow an alarm billing record to     |     |        |        |    |          |
|     | be created from an incident code with a false alarm    |     |        |        |    |          |
|     | disposition when the CFS is completed.                 |     |        |        |    |          |
| CQ2 | The system should integrate the alarm billing with     |     |        |        |    |          |
|     | the financial product provided by the same vendor.     |     |        |        |    |          |
| CQ3 | The system should be able to automatically create      |     |        |        |    |          |
|     | invoices to bill persons or businesses for false       |     |        |        |    |          |
|     | alarms.  |     |        |        |    |          |
| CQ4 | The system should allow users to manually select       |     |        |        |    |          |
|     | charges for alarm billing.                             |     |        |        |    |          |
| CQ5 | The system should allow users to save, print or        |     |        |        |    |          |
|     | email an alarm billing record directly from the record |     |        |        |    |          |
|     | window.  |     |        |        |    |          |
| CQ6 | The system should allow users to sort and filter       |     |        |        |    |          |
|     | alarm billing records within the list-view window.     |     |        |        |    |          |
| CQ7 | The system should allow users to save, print or        |     |        |        |    |          |
|     | email a summary list of alarm billing records from     |     |        |        |    |          |
|     | the list-view window.                                  |     |        |        |    |          |
| CQ8 | The system should allow authorized users to create     |     |        |        |    |          |
|     | unlimited custom form templates which are used to      |     |        |        |    |          |
|     | associate agency-specified data with alarm billing     |     |        |        |    |          |
|     | records.   |     |        |        |    |          |

| CQ9 | The system should allow users with access to alarm   |  |  |  |
|-----|--|--|--|--|
|     | billing records to use the custom forms to enter and |  |  |  |
|     | maintain the associated data.                        |  |  |  |

### CAD Reporting

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CR1 | The system should provide a report generator for        |     |        |        |    |          |
|     | building custom statistical and analytical reports from |     |        |        |    |          |
|     | CAD data. The report generator should be provided       |     |        |        |    |          |
|     | by the same vendor and should not be a third-party      |     |        |        |    |          |
|     | application.  |     |        |        |    |          |
| CR2 | The system should restrict access to the report         |     |        |        |    |          |
|     | generator and individual report templates by user or    |     |        |        |    |          |
|     | user group.   |     |        |        |    |          |
| CR3 | The system should not allow a user who does not         |     |        |        |    |          |
|     | have access to particular data via the application      |     |        |        |    |          |
|     | user interface to gain access to that data via the      |     |        |        |    |          |
|     | report generator.                                       |     |        |        |    |          |
| CR4 | The system should allow the creator of the report       |     |        |        |    |          |
|     | template to build reports for any data entered into     |     |        |        |    |          |
|     | the CAD product.  |     |        |        |    |          |
| CR5 | The report generator should allow the creator of the    |     |        |        |    |          |
|     | report template to control layout and formatting        |     |        |        |    |          |
|     | options for each CAD report template. This includes     |     |        |        |    |          |
|     | such options as field arrangements, column widths,      |     |        |        |    |          |
|     | label text, font sizes, and line spacing.               |     |        |        |    |          |
| CR6 | The report generator should allow the creator of        |     |        |        |    |          |
|     | each CAD report template to choose which users          |     |        |        |    |          |
|     | can access and/or run the report and/or modify the      |     |        |        |    |          |
|     | report template.  |     |        |        |    |          |
| CR7 | The report generator should support the use of          |     |        |        |    |          |
|     | aggregate (math) functions including Sum, Average,      |     |        |        |    |          |
|     | Count, Count Blank, Minimum, and Maximum.               |     |        |        |    |          |
|     |   |     |        |        |    |          |
| CR8 | The report generator should allow data to be            |     |        |        |    |          |
|     | grouped or sorted by any data element.                  |     |        |        |    |          |
| CR9 | The report generator should allow multiple data         |     |        |        |    |          |
|     | filters to be applied using "and/or" logic.             |     |        |        |    |          |

| CR10 | The report generator should allow CAD reports to be saved (as PDF, .XLS, or .CSV), printed, or emailed directly from the report.  |  |  |  |
|------|---|--|--|--|
| CR11 | The report generator should allow CAD report templates to be saved and modified at a later time.  |  |  |  |
| CR12 | The report generator should support adding the CAD reports to user's dashboards.  |  |  |  |
| CR13 | The report generator should allow recurring CAD reports to be scheduled and automatically uploaded to a file-system or e-mailed to specified users on certain days and times.   |  |  |  |
| CR14 | The report generator should support ad-hoc queries.   |  |  |  |
| CR15 | The report generator should support creation of<br>CAD reports such as the following:<br>- Area/section activity<br>- CFS priority analysis<br>- Daily or shift-based CFS summary<br>- CFS by month, by day of week, by hour of day<br>- CFS by nature of call<br>- CFS by source, by disposition<br>- CFS by station, by call-taker or dispatcher<br>- Response time analysis by area, section, priority<br>- Summary of activity for an address or business<br>name<br>- Unit assignments |  |  |  |

#### **ANI/ALI Interface**

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CT1 | The system should include an interface to the 911 service provider.   |     |        |        |    |          |
| CT2 | The system should receive the raw spill data from<br>the 911 service and import it into the CFS via a<br>serial or IP connection. |     |        |        |    |          |
| СТ3 | The system should intelligently handle ANI/ALI rebids through the interface.  |     |        |        |    |          |

| CT4 | The system should allow E911 calls, upon being   |  |  |  |
|-----|--|--|--|--|
|     | answered, to automatically generate and populate |  |  |  |
|     | the CFS entry window with all known data (for    |  |  |  |
|     | example, address, registered name, and phone     |  |  |  |
|     | number) from the call-in number.                 |  |  |  |

#### **Rip and Run Interface**

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| CU1 | The system should include an interface to fax and email services.   |     |        |        |    |          |
| CU2 | The system should allow CFS information to be transmitted via this interface to third-parties (such as fire departments). |     |        |        |    |          |
| CU3 | The system should allow authorized users to manage the settings for this interface (SMTP configurations, etc.)            |     |        |        |    |          |

#### Interface A

| ID | Requirement | Yes | Future | Modify | No | Comments |
|----|-------------|-----|--------|--------|----|----------|
|    |             |     |        |        |    |          |
|    |             |     |        |        |    |          |

#### Interface B

| I | D | Requirement | Yes | Future | Modify | No | Comments |
|---|---|-------------|-----|--------|--------|----|----------|
|   |   |             |     |        |        |    |          |
|   |   |             |     |        |        |    |          |

## Mapping

#### General

| ID   | Requirement  | Yes | Future | Modify | No | Comments |
|------|--|-----|--------|--------|----|----------|
| MA1  | The system should use mapping functionality which is based on ESRI-compatible mapping components.  |     |        |        |    |          |
| MA2  | The system should allow for unlimited map layers,<br>including ESNs, counties, roads, railroads, postal<br>zones, and aerial imagery.  |     |        |        |    |          |
| MA3  | The system should allow users to click on any point<br>on the map to view information such as an ESN,<br>county boundaries, postal zones, address,<br>coordinates, and nearest intersection. |     |        |        |    |          |
| MA4  | The system should include map panning and zooming functions.   |     |        |        |    |          |
| MA5  | The system should allow the user to re-center the map on a CFS, unit, or default location.   |     |        |        |    |          |
| MA6  | The system should allow users to calculate the distance between two points on the map.   |     |        |        |    |          |
| MA7  | The system should allow users to toggle aerial imagery for the map.  |     |        |        |    |          |
| MA8  | The system should allow authorized users to maintain a list of map marker types and assign corresponding map icons.  |     |        |        |    |          |
| MA9  | The system should ignore city, state and zip code data when searching for addresses if there are no matches.   |     |        |        |    |          |
| MA10 | The system should allow authorized users to configure any of the standard map actions as system hot keys.  |     |        |        |    |          |
| MA11 | The system should allow for geo-verification of<br>addresses within CAD when the client map<br>application is not open.  |     |        |        |    |          |
| MA12 | The system should allow agency GIS personnel to maintain map data.   |     |        |        |    |          |
| ID   | Requirement  | Yes | Future | Modify | No | Comments |

CAD

| MB1 | The system should integrate the mapping product        |  |  |  |
|-----|--|--|--|--|
|     | with a single click or keystroke from the CAD          |  |  |  |
|     | product.   |  |  |  |
| MB2 | The system should allow all dispatch functions to be   |  |  |  |
|     | available from the map.                                |  |  |  |
| MB3 | The system should include map functions, such as       |  |  |  |
|     | zooming and plotting, on other dispatch windows.       |  |  |  |
| MB4 | The system should allow users to issue CAD             |  |  |  |
|     | commands directly from the map.                        |  |  |  |
| MB5 | The system should automatically plot active and        |  |  |  |
|     | waiting calls for service on the map as they are       |  |  |  |
|     | entered, and automatically remove them from the        |  |  |  |
|     | map as they are cleared.                               |  |  |  |
| MB6 | The system should display key CFS data on the          |  |  |  |
|     | map, including address, coordinates, nearest           |  |  |  |
|     | intersection, cross streets, incident code, priority   |  |  |  |
|     | level, and assigned units.                             |  |  |  |
| MB7 | The system allows the map to filter units so that only |  |  |  |
|     | certain units are displayed on the map.                |  |  |  |
| MB8 | The system should display dispatch alerts (if a CFS    |  |  |  |
|     | has been waiting past an agency-defined time to be     |  |  |  |
|     | dispatched) on the map.                                |  |  |  |

#### Markers

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| MC1 | The system should allow the user to filter the units which are viewable on the map, such as on-duty  |     |        |        |    |          |
|     | units and/or off-duty units, or by unit type (law enforcement, fire, and EMS).   |     |        |        |    |          |
| MC2 | The system should display key unit data on the map, such as call sign unit type, and status.   |     |        |        |    |          |
| MC3 | The system should display unit alerts for officer safety checks (based on agency-defined times) on the map.  |     |        |        |    |          |
| MC4 | The system should allow map markers to expire and<br>should allow those expired markers to either be<br>removed from the map or grayed out upon<br>expiration. |     |        |        |    |          |

| MC5 | The system should roll-up multiple markers for units<br>so that they take up less space, if those units are all                                 |  |  |  |
|-----|---|--|--|--|
| MC6 | The system should allow users to place agency-  |  |  |  |
|     | customizable map markers, without creating a CFS, for items such as controlled burns and road construction.                                     |  |  |  |
| MC7 | The system should allow users to search on<br>customized map markers.   |  |  |  |
| MC8 | The system should plot the ESN on the map for<br>Phase II calls.  |  |  |  |
| MC9 | The system should display a shaded area which represents the uncertainty distance around the origination points for Phase I and Phase II calls. |  |  |  |

#### Routing

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| MD1 | The system should include a routing function on the map which allows routes to be drawn between any combination of unit locations, CFS addresses, and other addresses, including intersections, mile markers, and latitude/longitude coordinates. |     |        |        |    |          |
| MD2 | The system should be able to mark road segments<br>as closed for routing purposes. Barriers or closed<br>segments should be displayed on the map.   |     |        |        |    |          |
| MD3 | The system should allow users to create bookmarks<br>which capture both the location on the map as well<br>as the zoom level and any currently enabled map<br>layers.   |     |        |        |    |          |
| MD4 | The system should allow users to create a print preview of mapping routes.  |     |        |        |    |          |
| MD5 | The system should allow users to create a PDF of mapping routes and send them in an email.  |     |        |        |    |          |

#### Search

| ID Requirement Yes Future Modify No | o Comments |  |
|-------------------------------------|------------|--|
|-------------------------------------|------------|--|

| ME1 | The system should include geospatial search which    |  |  |  |
|-----|--|--|--|--|
|     | supports the following:                              |  |  |  |
|     | - Searching and pinning specific addresses           |  |  |  |
|     | including intersections, mile markers, and           |  |  |  |
|     | latitude/longitude coordinates                       |  |  |  |
|     | - Searching for addresses within a radius            |  |  |  |
|     | - Searching for addresses within an area (polygon)   |  |  |  |
|     | drawn by the user                                    |  |  |  |
|     | - Searching and pinning addresses by person or       |  |  |  |
|     | business name  |  |  |  |
| ME2 | The system should allow all of the search results to |  |  |  |
|     | be exported to a CSV file.                           |  |  |  |

## Mobile

#### General

| ID    | Requirement   | Yes | Future | Modify | No | Comments |
|-------|---|-----|--------|--------|----|----------|
| OA1   | The system should allow mobile users to manage      |     |        |        |    |          |
| 0.4.0 | their own passwords.                                |     |        |        |    |          |
| OA2   | The system should allow authorized users to         |     |        |        |    |          |
|       | maintain a list of mobile user locations so that    |     |        |        |    |          |
|       | mobile users do not have to manually type           |     |        |        |    |          |
| 0.4.0 | commonly used locations.                            |     |        |        |    |          |
| OA3   | I ne system should allow authorized users to        |     |        |        |    |          |
|       | fact" or "bac percenter" on that mobile users do    |     |        |        |    |          |
|       | not have to enter commonly used details             |     |        |        |    |          |
|       |   |     |        |        |    |          |
| OA4   | The system should allow authorized users to         |     |        |        |    |          |
|       | configure default intervals for check-in reminders. |     |        |        |    |          |
| OA5   | The system should include options for visible and   |     |        |        |    |          |
|       | audible alerts, as well as allowing the window      |     |        |        |    |          |
|       | showing the alert to come to the front of other     |     |        |        |    |          |
|       | programs which may be running.                      |     |        |        |    |          |
| OA6   | The system should allow an authorized user to       |     |        |        |    |          |
|       | identify which mobile users are logged in.          |     |        |        |    |          |
| OA8   | The mobile system should be completely              |     |        |        |    |          |
|       | integrated with the non-mobile CAD product.         |     |        |        |    |          |
| OA9   | The mobile system should be completely              |     |        |        |    |          |
|       | integrated with the non-mobile mapping product.     |     |        |        |    |          |
| OA12  | The mobile system should include a UI which was     |     |        |        |    |          |
|       | specifically designed for entering data and         |     |        |        |    |          |
|       | navigating within a mobile environment. For         |     |        |        |    |          |
|       | example, users should be able to perform basic      |     |        |        |    |          |
|       | functions via the touch-screen or mouse, with       |     |        |        |    |          |
|       | minimal typing.                                     |     |        |        |    |          |
| OA13  | The mobile system should allow the user to adjust   |     |        |        |    |          |
|       | the font size for the display to ensure mobile      |     |        |        |    |          |
|       | readability.  |     |        |        |    |          |
| 0A14  | The mobile system should include large buttons to   |     |        |        |    |          |
|       | support touch-screen access.                        |     |        |        |    |          |

| OA15 | The system should use highly visible color-coding for UI elements such as windows and buttons.   |  |  |  |
|------|--|--|--|--|
| OA16 | The system should be easily switched between day and night mode display configurations.  |  |  |  |
| OA17 | The system should provide a mobile user-<br>customizable dashboard that displays summary<br>information from any modules which the user has<br>permission to access. |  |  |  |
| OA18 | The system should display a mobile user's assigned tasks and overdue tasks on the user's dashboard.  |  |  |  |

#### Network

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| OB1 | The system should synchronize data between<br>mobile workstations and system servers so that<br>CAD data entered on mobile units is immediately<br>available on desktop workstations at the agency<br>and vice versa, as long as the connection is<br>maintained.   |     |        |        |    |          |
| OB2 | The system should use TCP/IP over HTTP with<br>web service type calls for communication between<br>the mobile workstation and the server.   |     |        |        |    |          |
| OB3 | The system should be compliant with FIPS-140 for all network communication, wireless and wired.   |     |        |        |    |          |
| OB4 | The system should support dual-factor<br>authentication with a username and password and<br>a USB dongle that meet FBI Security Addendum<br>Requirements.   |     |        |        |    |          |
| OB5 | <ul> <li>The system should support the mobile application<br/>on any modern mobile data terminal with the<br/>following specifications:</li> <li>Modern Intel processor or equivalent</li> <li>512 MB RAM</li> <li>4 GB storage</li> <li>1024x768 touch-screen</li> <li>Windows 7 or 8.x (32-bit or 64-bit)</li> <li>Air card connection</li> </ul> |     |        |        |    |          |

| OB6  | The system should provide core mobile functionality on slower connections.  |  |  |  |
|------|---|--|--|--|
| OB7  | The system should manage data transfers based on network speed to optimize performance.   |  |  |  |
| OB8  | The system should allow authorized users to set<br>upload and download limits and configure what<br>types of data can be uploaded and/or downloaded<br>based on connection speed. |  |  |  |
| OB9  | The system should rely on intelligent connection<br>handling, including reusing connections and<br>retrying failed connections.   |  |  |  |
| OB10 | The system should require that the mobile<br>application automatically check for software<br>updates from the server when a user logs onto that<br>mobile workstation.            |  |  |  |
| OB11 | The system should ensure that the server<br>automatically pushes new updates to mobile<br>workstations.   |  |  |  |

#### CAD

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| OC1 | The system should provide silent dispatch for mobile users.  |     |        |        |    |          |
| OC2 | The system should allow the mobile user to configure the mobile CAD screen to display the data most useful or relevant at any given time.  |     |        |        |    |          |
| OC3 | The system should allow screen layouts to be defined at the agency or user level.  |     |        |        |    |          |
| OC4 | The system should support fine-grained control of UI elements, which would allow common layouts of one area, but individual control of other areas.  |     |        |        |    |          |
| OC5 | The system should support individual user control of assignment responses.   |     |        |        |    |          |
| OC6 | The system should display data on the mobile CAD screen about on-duty units such as call sign, status, location, and key details (for example, has a ride-along). Information to be shown should be configurable per user or per agency. |     |        |        |    |          |

| 0C7  | The system should display data on the mobile CAD      |  |  |  |
|------|---|--|--|--|
| 001  | screen about active calls for service such as CES     |  |  |  |
|      | number priority nature of call address and            |  |  |  |
|      | assigned units. Information to be shown should be     |  |  |  |
|      | configurable per user or per agency                   |  |  |  |
| 000  | The system should allow mobile users to cort the      |  |  |  |
| 000  | The system should allow mobile users to sort the      |  |  |  |
|      | units display to show only a subset of units, such    |  |  |  |
|      | as units in a specified beat, available units of      |  |  |  |
| 000  | The system should allow mobile users to see which     |  |  |  |
| 003  | units are using mobile CAD and are therefore          |  |  |  |
|      | available to receive communications through the       |  |  |  |
|      | mobile CAD system                                     |  |  |  |
| 0010 | The system should allow mahile users to shoose to     |  |  |  |
| 0010 | The system should allow mobile users to choose to     |  |  |  |
|      | assigned calls for service                            |  |  |  |
| OC11 | The system should allow multiple call-takers          |  |  |  |
|      | dispatchers and/or mobile users to enter data on      |  |  |  |
|      | the same CFS simultaneously.                          |  |  |  |
| OC12 | The system should allow mobile users to view all      |  |  |  |
|      | incident information available to call-takers and     |  |  |  |
|      | dispatchers. This includes:                           |  |  |  |
|      | - Incident location                                   |  |  |  |
|      | - Nature of call                                      |  |  |  |
|      | - Priority  |  |  |  |
|      | - Beat  |  |  |  |
|      | - Complainant/reporter data and contact               |  |  |  |
|      | information   |  |  |  |
|      | - Narrative details                                   |  |  |  |
|      | <ul> <li>Any duplicate or linked incidents</li> </ul> |  |  |  |
|      | - Attached state/NCIC queries and returns             |  |  |  |
| OC13 | The system should allow mobile users to update        |  |  |  |
|      | data about their assigned CFS which was originally    |  |  |  |
|      | entered by call-takers or dispatchers. For example,   |  |  |  |
|      | they can update the street address if it was entered  |  |  |  |
|      | incorrectly or change the nature of the CFS after     |  |  |  |
|      | arriving on scene. All changes should be              |  |  |  |
|      | immediately viewable to call-takers, dispatchers      |  |  |  |
|      | and other mobile users.                               |  |  |  |

| OC14 | The system should allow mobile users to add            |   |  |  |
|------|--|---|--|--|
|      | unlimited narrative details to an assigned CFS.        |   |  |  |
|      | These details should be viewable by call-takers,       |   |  |  |
|      | dispatchers and other mobile users.                    |   |  |  |
| OC15 | The system should allow mobile users to create         |   |  |  |
|      | officer-initiated calls for service. This should       |   |  |  |
|      | automatically assign the initiating officer to that    |   |  |  |
|      | CFS.   |   |  |  |
| OC16 | The system should ensure that all information          |   |  |  |
|      | entered into an officer-initiated CFS is immediately   |   |  |  |
|      | viewable by call-takers, dispatchers and other         |   |  |  |
|      | mobile users.  |   |  |  |
| OC17 | The system should allow a mobile user to add a         |   |  |  |
|      | use caution flag on any CFS. This flag should be       |   |  |  |
|      | visible to all users viewing that CFS.                 |   |  |  |
| OC18 | The system should allow mobile users to create         |   |  |  |
|      | officer-initiated traffic stop calls for service. This |   |  |  |
|      | should be done with a single press, click, or          |   |  |  |
|      | keystroke and should automatically assign the          |   |  |  |
|      | initiating officer to that CFS.                        |   |  |  |
| OC19 | The system should allow mobile users to assign         |   |  |  |
|      | themselves to calls for service with a single press,   |   |  |  |
|      | click, or keystroke.                                   |   |  |  |
| OC20 | The system should allow mobile users to self-          |   |  |  |
|      | status, that is to change the status on their own unit |   |  |  |
|      | as though they were a call-taker or dispatcher. Self-  | - |  |  |
|      | statusing should be done with a single press, click,   |   |  |  |
|      | or keystroke. Status updates should be                 |   |  |  |
|      | immediately visible to call-takers, dispatchers and    |   |  |  |
|      | other mobile users.                                    |   |  |  |
| OC21 | The system should include the self-statusing           |   |  |  |
|      | actions such as the following for mobile users:        |   |  |  |
|      | - Mark self as on duty and available for dispatch      |   |  |  |
|      | - Assign self to an incident                           |   |  |  |
|      | - Mark self as enroute or on scene at an incident      |   |  |  |
|      | - Mark self as leaving scene or completing             |   |  |  |
|      | incident   |   |  |  |
|      | - Mark self as busy/unavailable for dispatch           |   |  |  |
|      | - Mark self as off-duty or on-call                     |   |  |  |

|       |   | 1 |  |   |  |
|-------|---|---|--|---|--|
| OC22  | The system should allow mobile users to update          |   |  |   |  |
|       | their own locations. Common locations (for              |   |  |   |  |
|       | example, North Station, South Station, Jail, and        |   |  |   |  |
|       | Hospital) should be accessible with a press or click.   |   |  |   |  |
|       | Location updates should be immediately visible to       |   |  |   |  |
|       | call-takers, dispatchers and other mobile users.        |   |  |   |  |
| OC23  | The system should allow mobile users to update          |   |  |   |  |
|       | their own key details. Common key details (for          |   |  |   |  |
|       | example, Has Ride-along, Has Prisoner, and On           |   |  |   |  |
|       | Foot) should be accessible with a button or click.      |   |  |   |  |
|       | Detail updates should be immediately visible to call    |   |  |   |  |
|       | takers, dispatchers, and other mobile users.            |   |  |   |  |
| OC24  | The system should allow call-takers and                 |   |  |   |  |
|       | dispatchers to continue to update statuses,             |   |  |   |  |
|       | locations, details, etc. for mobile users should an     |   |  |   |  |
|       | officer lose connection, step out of his/her vehicle,   |   |  |   |  |
|       | etc.  |   |  |   |  |
| OC25  | The system should ensure that mobile users are          |   |  |   |  |
|       | visibly alerted when the agency-defined check-in        |   |  |   |  |
|       | time for officer safety has passed. The mobile user     |   |  |   |  |
|       | should be able to check in with a single press,         |   |  |   |  |
|       | click, or keystroke.                                    |   |  |   |  |
| OC26  | The system should ensure that mobile users are          |   |  |   |  |
|       | visibly alerted when a call for service's agency-       |   |  |   |  |
|       | defined dispatch timer (based on nature of incident     |   |  |   |  |
|       | and priority) has passed without any units having       |   |  |   |  |
|       | been assigned.  |   |  |   |  |
| OC27  | The system should allow a mobile user assigned to       |   |  |   |  |
|       | a call to stack himself/herself on a second call,       |   |  |   |  |
|       | providing a visible indication to call-takers,          |   |  |   |  |
|       | dispatchers and other mobile users that he/she will     |   |  |   |  |
|       | respond to the stacked call after handling the          |   |  |   |  |
| 0.000 | current call.   |   |  |   |  |
| OC28  | The system should allow a mobile user assigned to       |   |  |   |  |
| 1     | a call to reassign himself/herself to a higher priority |   |  |   |  |
|       | call and stack himself/herself to the initial call.     |   |  |   |  |
| 1     |   | 1 |  | I |  |

| OC29 | The system should make all name, address and<br>vehicle alerts highly visible to mobile users. Alert<br>types may include outstanding warrants, officer<br>safety threats, medical alerts, hazardous materials<br>alerts, protection system or water supply<br>information, and other agency-defined alert types. |  |  |  |
|------|---|--|--|--|
| OC30 | The system should allow authorized mobile users<br>to access all previous data for persons,<br>businesses, addresses, and vehicles, such as prior<br>calls for service, traffic stops, case relationships,<br>tickets, jail stays, warrants, parking tickets, etc.  |  |  |  |
| OC31 | The system should allow mobile users to access common state/NCIC queries with a single press, click, or keystroke.  |  |  |  |
| OC32 | The system should automatically display the returns for state/NCIC queries to the initiating mobile user.   |  |  |  |
| OC33 | The system should allow instant messages to be<br>sent to multiple recipients from the mobile CAD<br>screen, such as via a public message room<br>accessible by all on-duty call-takers, dispatchers<br>and officers.   |  |  |  |
| OC34 | The system should allow mobile users to send and receive private instant messages.  |  |  |  |
| OC35 | The system should allow mobile users to send and receive private email-style messages.  |  |  |  |
| OC36 | The system should ensure that mobile users<br>receive bulletins issued by call-takers and/or<br>dispatchers such as BOLOS and special<br>instructions (for example, an extra patrol at a<br>specified address).   |  |  |  |

| OC37 | The system should allow authorized users to          |  |  |  |
|------|--|--|--|--|
|      | configure alerts for mobile users for events such as |  |  |  |
|      | new CFS assignments for themselves and/or other      |  |  |  |
|      | responders, new state/NCIC query returns, new        |  |  |  |
|      | instant messages, new e-mail style messages, and     |  |  |  |
|      | new bulletins. Options include visible and audible   |  |  |  |
|      | alerts as well as forcing the mobile CAD display to  |  |  |  |
|      | the front of all other open windows.                 |  |  |  |
|      | ·  |  |  |  |

#### Mapping

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| OF1 | The system should allow mobile users to interact    |     |        |        |    |          |
|     | with and perform all functions which are accessible |     |        |        |    |          |
|     | from the desktop mapping product.                   |     |        |        |    |          |
| OF2 | The system should allow the map to automatically    |     |        |        |    |          |
|     | zoom to a call or a location based on the mobile    |     |        |        |    |          |
|     | unit's status.                                      |     |        |        |    |          |
| OF3 | The system should allow the mobile user to launch   |     |        |        |    |          |
|     | the map as an embedded window.                      |     |        |        |    |          |

## System (Global)

#### General

| ID   | Requirement   | Yes | Future | Modify | No | Comments |
|------|---|-----|--------|--------|----|----------|
| SA1  | The system should allow all software products (CAD, Mapping, Mobile, etc.) to be configured and managed from one system window.   |     |        |        |    |          |
| SA2  | The system should allow authorized users to change<br>commonly altered variables without intervention from<br>the vendor or IT.   |     |        |        |    |          |
| SA3  | The system should allow multiple (unlimited) users to<br>be logged into the system and using the same<br>applications simultaneously.                                     |     |        |        |    |          |
| SA4  | The system should allow multiple (unlimited) users to view, add, and edit information in the same records simultaneously.   |     |        |        |    |          |
| SA5  | The system should provide global search functions for names, addresses, phone numbers, and vehicles.  |     |        |        |    |          |
| SA6  | The system should ensure that these search functions include SOUNDEX, partial, and wild-card searches.  |     |        |        |    |          |
| SA7  | The system should be able to generate a summary of each record displayed within these search results, including digital images.   |     |        |        |    |          |
| SA8  | The system should be able to print, save or email the search summary directly from the summary window.  |     |        |        |    |          |
| SA9  | The system should be able to print, save or email a list directly from the list view window.  |     |        |        |    |          |
| SA10 | The system should be able to print, save or email a record directly from the record detail window.  |     |        |        |    |          |
| SA11 | The system should allow the creation of an agency-<br>specified header for use within printouts from the<br>system. This header should include both an image<br>and text. |     |        |        |    |          |
| SA12 | The system should allow authorized users to maintain a list of phone number types.  |     |        |        |    |          |

| SA13 | The system should allow authorized users to maintain a list of relationships (for example, spouse, neighbor, stranger, etc.)  |  |  |  |
|------|---|--|--|--|
| SA14 | The system should allow authorized users to maintain a list of agencies.  |  |  |  |
| SA15 | The system should allow authorized users to electronically redact reports from within the built in print preview option.  |  |  |  |
| SA16 | The system should allow authorized users to identify<br>text or images within the report by drawing a box<br>overtop of the item, and then the system should<br>replace the underlying item with the box. |  |  |  |
| SA17 | The system should convert redacted text to an image so that the text itself is no longer searchable or retrievable in any other fashion.  |  |  |  |

#### Security

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SB1 | The system should provide multiple levels of data security control, including access by user and user |     |        |        |    |          |
|     | group.  |     |        |        |    |          |
| SB2 | The system should be FIPS 140 compliant for all   |     |        |        |    |          |
|     | network communication, including wired and  |     |        |        |    |          |
|     | wireless communication.   |     |        |        |    |          |
| SB3 | The system should verify access by a username and   |     |        |        |    |          |
|     | its corresponding password.   |     |        |        |    |          |
| SB4 | The system should support integration with Active   |     |        |        |    |          |
|     | Directory.  |     |        |        |    |          |
| SB5 | The system should support integration with multiple   |     |        |        |    |          |
|     | Active Directory servers.   |     |        |        |    |          |
| SB6 | The system should support dual-factor   |     |        |        |    |          |
|     | authentication with a username and password and a   |     |        |        |    |          |
|     | USB dongle that meets FBI Security Addendum   |     |        |        |    |          |
|     | Requirements.   |     |        |        |    |          |
| SB7 | The system should never display passwords and   |     |        |        |    |          |
|     | should store passwords as hashed values in the  |     |        |        |    |          |
|     | database.   |     |        |        |    |          |
| SB8 | The system should provide each user with a single   |     |        |        |    |          |
|     | username and password for the entire system.  |     |        |        |    |          |
|     |   |     |        |        |    |          |

| SB9         | The system should include the following agency-     |   |  |   |
|-------------|---|---|--|---|
|             | configurable password parameters:                   |   |  |   |
|             | - Minimum length                                    |   |  |   |
|             | - Case sensitive                                    |   |  |   |
|             | - Required to use uppercase and lowercase           |   |  |   |
|             | - Required to include a numeral                     |   |  |   |
|             | - Frequency of password changes                     |   |  |   |
|             | - Number of previous passwords which cannot be      |   |  |   |
|             | reused  |   |  |   |
| SB10        | The system should be able to display agency-        |   |  |   |
|             | defined password parameters when users create or    |   |  |   |
|             | change a password.                                  |   |  |   |
| SB11        | The system should allow authorized users to         |   |  |   |
|             | determine when any user's password was last         |   |  |   |
|             | changed and to change any user's password.          |   |  |   |
| SB12        | The system should provide access levels, including  |   |  |   |
|             | view, edit, delete, and admin for each component of |   |  |   |
|             | the system for users and user groups.               |   |  |   |
|             |   |   |  |   |
| SB13        | The system should track the user who last entered   |   |  |   |
|             | or updated any record as well as the date and time  |   |  |   |
|             | of the modification.                                |   |  |   |
| SB14        | The system should store a read-only checksum for    |   |  |   |
|             | digital files and provide a means of determining if |   |  |   |
| 0545        | anyone has tampered with the file.                  |   |  |   |
| SB15        | The system should be able to create an audit record |   |  |   |
|             | each time a record is created, edited, or viewed.   |   |  |   |
| SB16        | The system should create an audit record each time. |   |  |   |
| 3010        | The system should create an addit record each time  |   |  |   |
|             | an audio of video allached to a case report is      |   |  |   |
| <b>SB17</b> | The system should include a screen that displays    |   |  |   |
| 3017        | users who are currently logged in                   |   |  |   |
| SB18        | The system should include a screen that displays    |   |  |   |
|             | successful and unsuccessful log-ins and password    |   |  |   |
|             | changes   |   |  |   |
| I           | Ionanyes.   | L |  | L |

#### Architecture

| ID  | Requirement                                   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SC1 | The system should use an n-tier architecture. |     |        |        |    |          |
| SC2 | The system should use an SQL database.        |     |        |        |    |          |

| SC3 | The system should allow connections to the SQL database via free ODBC drivers.  |  |  |  |
|-----|---|--|--|--|
| SC4 | The system should include all server hardware.<br>Network equipment and workstations will be<br>furnished by the agency.  |  |  |  |
| SC5 | The system should include 30-minute rolling backups<br>of all data to an offsite location (not within the city or<br>county) during which the system performance<br>cannot be degraded.                                   |  |  |  |
| SC6 | The system should include a testing/training server.  |  |  |  |
| SC7 | The system should ensure that the testing/training<br>server includes the physical servers, server<br>operating system software, server application and<br>database software, installation, testing and<br>configuration. |  |  |  |
| SC8 | The system should ensure that the testing/training<br>server allows the users to work with a copy of the<br>production data without influencing the production<br>environment.  |  |  |  |

#### User Interface

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SD1 | The system should be able to perform data validation/error checking for fields in the system.   |     |        |        |    |          |
| SD2 | The system should allow specific fields to be designated as required to force users to enter essential information before saving a record.  |     |        |        |    |          |
| SD3 | The system should visibly identify required fields (for<br>example, by color-coding them). If a user attempts<br>to save a record without completing all required<br>fields, The system should visibly notify the user of<br>the remaining required fields (for example, by<br>causing the required fields to flash). |     |        |        |    |          |
| SD4 | The system should provide auto-completion for<br>frequently entered information. Once the user begins<br>typing, the appropriate data should automatically<br>populate into the record.   |     |        |        |    |          |
| SD5 | The system should use the tab key to move between fields.   |     |        |        |    |          |

| SD6 | The system should include a spellchecker for           |  |  |  |
|-----|--|--|--|--|
|     | narrative fields throughout the system. Users should   |  |  |  |
|     | be able to add words such as local place names to      |  |  |  |
|     | the spellchecker's dictionary.                         |  |  |  |
| SD7 | The system should allow users to use a shortcut key    |  |  |  |
|     | to jump to any menu or submenu link on an open         |  |  |  |
|     | screen, even if that screen is not currently in focus. |  |  |  |
|     |  |  |  |  |

#### Integration

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| SE1 | The system should ensure that all of its modules<br>integrate with other modules (CAD, Mapping,<br>Mobile, etc.), are provided by the same vendor, and<br>are not third-party applications.  |     |        |        |    |          |
| SE2 | The system should use a single database, capable of being hosted on a single server, for all modules.  |     |        |        |    |          |
| SE3 | The system should allow all modules (CAD,<br>Mapping, Mobile, etc.) to be accessible to authorized<br>users from the same application window.  |     |        |        |    |          |
| SE4 | The system should allow all modules (CAD,<br>Mapping, Mobile, etc.) to be accessible based on<br>assigned permissions. All modules should be<br>accessible with a single click or keystroke, without<br>launching a separate program or application. |     |        |        |    |          |
| SE5 | The system should provide a one-time, single point<br>of data entry to allow information to be accessible<br>from other modules in the system once it has been<br>entered.   |     |        |        |    |          |
| SE6 | The system should have consistent user interface design throughout.  |     |        |        |    |          |
| SE7 | The system should ensure that all modules share the same master records for names, addresses, property and vehicles and that these master indices are located within a single database.  |     |        |        |    |          |
| SE8 | The system should integrate alerts between all modules so that alerts entered in one area are available in all others.   |     |        |        |    |          |

| SE9  | The system should provide an agency and user-<br>customizable dashboard that displays summary |  |  |  |
|------|---|--|--|--|
|      | Information from any modules which the user has   |  |  |  |
|      | case reports, the current jail roster, or a list of   |  |  |  |
|      | recently added warrants).   |  |  |  |
| SE10 | The system should be able to display dashboard  |  |  |  |
|      | reminders of overdue and soon-to-be-due tasks for   |  |  |  |
|      | users or user groups.   |  |  |  |
| SE11 | The system should be able to display web links on   |  |  |  |
|      | the dashboard to provide direct links to third-party websites via the default browser.        |  |  |  |

#### Master Name Index

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| SF1 | The system should use a single database, accessed<br>from all modules, for storing the master name<br>records. The system should link all activity of a<br>person (or business) to a single master name<br>record. If the system does not do the above, please<br>explain the master name index architecture and<br>functionality. |     |        |        |    |          |
| SF2 | The system should link the master name record to<br>and provide a list of all activity with which the person<br>was involved, including calls for service, case<br>reports, jail bookings, citations, parking tickets,<br>warrants, registered vehicles, and anything built with<br>custom modules.                                |     |        |        |    |          |
| SF3 | The system should include links from the activity list<br>on the master name record to any other record in<br>which the person was involved, in the module the<br>activity originated. Access to these records should<br>be controlled by user permissions.  |     |        |        |    |          |
| SF4 | The system should include links to the master name index from name fields found throughout the system.   |     |        |        |    |          |
| SF5 | The system should support advanced name searching based on any combination data elements in a master name record.  |     |        |        |    |          |
| SF6 | The system should allow first, middle and last names to be entered in any order in name fields.  |     |        |        |    |          |

| SF7  | The system should not require separate search fields for first, middle, and last names.   |  |  |  |
|------|---|--|--|--|
| SF8  | The system should allow searching for persons and businesses by full or partial names.  |  |  |  |
| SF9  | The system should connect the alias and the master<br>name record so that searching for an alias finds that<br>master record.   |  |  |  |
| SF10 | The system should include the option of using SOUNDEX when searching for names.   |  |  |  |
| SF11 | The system should permit the use of age ranges, as well as specified ages on master name records.   |  |  |  |
| SF12 | The system should eliminate the need to duplicate<br>any name information after it has been entered into<br>the system.   |  |  |  |
| SF13 | The system should allow users to update any basic data fields and add or modify other information on the master name record once it has been created.                       |  |  |  |
| SF14 | The system should display the last modified date on each master name record.  |  |  |  |
| SF15 | The system should cross-reference each master<br>name record to all other records associated with a<br>person or business.  |  |  |  |
| SF16 | The system should automatically add names to the master name index when entered elsewhere in the system.  |  |  |  |
| SF17 | The system should allow users to manually enter names directly into the master name index.  |  |  |  |
| SF18 | The system should have built-in checking to reduce<br>the possibility of creating duplicate master name<br>records for the same person or business.                         |  |  |  |
| SF19 | The system should have the ability to merge duplicate name entries, giving the user the choice of which name data elements to keep for the merged record.                   |  |  |  |
| SF20 | The system should allow users to select, view and<br>merge multiple names at once to a single master<br>name record rather than having to merge them one<br>name at a time. |  |  |  |

| SF21 | The system should store narrative comments linked<br>to a name and display it upon inquiry for its master<br>name record.   |  |  |  |
|------|---|--|--|--|
| SF22 | The system should display an address history for persons including dates of address changes.  |  |  |  |
| SF23 | The system should check all coded entries in the master name index for validity at the time of data entry.  |  |  |  |
| SF24 | The system should automatically check a name against outstanding warrants, known sex offenders and current jail inmates and notify or alert users accordingly.              |  |  |  |
| SF25 | The system should automatically display any user-<br>entered name alerts (medical alerts, gang alerts,<br>officer safety threats, and other agency-defined alert<br>types). |  |  |  |
| SF26 | The system should allow users to create new name alerts from or for a master name record.   |  |  |  |
| SF27 | The system should allow users to specify expiration dates on name alerts. Expired name alerts should remain attached to master name records for historical purposes.        |  |  |  |

#### Master Address Index

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SG1 | The system should link all activity occurring at an address to a single master address record.  |     |        |        |    |          |
| SG2 | The system should eliminate the need to duplicate<br>any address information after it has been entered<br>into the system.  |     |        |        |    |          |
| SG3 | The system should allow users to update any basic data fields and add or modify other information on the master address record once it has been created.  |     |        |        |    |          |
| SG4 | The system should use a single database, accessed<br>from all software modules, for storing the master<br>address index. If the system does not do the above,<br>please explain the master address index architecture<br>and functionality. |     |        |        |    |          |

| SG5  | The system should ensure that the each master<br>address record includes a listing of all persons and<br>businesses known to reside at the address, which<br>are included in the master name index.  |  |  |  |
|------|--|--|--|--|
| SG6  | The system should display the following related<br>activities with master address records: calls for<br>service, case reports, and civil process service.<br>Activities should be listed in reverse chronological<br>order for each master address record. |  |  |  |
| SG7  | The system should include links from the activity list<br>to any record in which the address was involved, in<br>the module where the activity originated. Access to<br>these records should be controlled by user<br>permissions.                         |  |  |  |
| SG8  | The system should provide a notification to the user<br>that an address is either valid or invalid. For invalid<br>addresses, the system should display a list of<br>potential valid addresses.  |  |  |  |
| SG9  | The system should link to the master address index from address fields anywhere in the system.   |  |  |  |
| SG10 | The system should cross-reference each master address record to all other records associated with that address.  |  |  |  |
| SG11 | The system should allow users to manually enter addresses directly into the master address index.  |  |  |  |
| SG12 | The system should provide a report that shows manually added addresses.  |  |  |  |
| SG13 | The system should have built-in checking to<br>automatically merge differently-typed addresses that<br>correspond to the same location (for example, "840<br>West Frank Street" and "840 w. frank st." should not<br>create duplicate address records).    |  |  |  |
| SG14 | The system should be able to merge address<br>records (for example, "Star Vision Center" and "170<br>North State Street" are the same address and<br>should be treated as such).   |  |  |  |

| SG15 | The system should automatically display any user-<br>entered address alerts (hazardous materials, alarm<br>system, water supply information, officer safety<br>threats, and other agency-defined alert types). |  |  |  |
|------|--|--|--|--|
| SG16 | The system should allow users to create new address alerts from a master address record.   |  |  |  |
| SG17 | The system should allow users to specify expiration dates on address alerts. Expired address alerts should remain attached to the master address record for historical purposes.                               |  |  |  |
| SG18 | The system should allow searching for address by house number, full or partial street name, state, or zip code.  |  |  |  |
| SG19 | The system should ensure that searching for a merged address record finds the appropriate master address record (for example, searching on "Star Vision Center" finds "170 North State Street").               |  |  |  |

#### Master Vehicle Index

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SH1 | The system should link all activity for a vehicle to a single master vehicle record.  |     |        |        |    |          |
| SH2 | The system should eliminate the need to duplicate<br>any vehicle information after it has been entered into<br>the system.  |     |        |        |    |          |
| SH3 | The system should allow users to update any basic data fields and add or modify other information on the master vehicle record once the master vehicle record has been created.   |     |        |        |    |          |
| SH4 | The system should use a single database, accessed<br>from all software modules, for storing the master<br>vehicle index. If the system does not do the above,<br>please explain the master vehicle index architecture<br>and functionality. |     |        |        |    |          |
| SH5 | The system should include a listing in the master vehicle record, with history, of the vehicle's registered owners.   |     |        |        |    |          |

| SH6  | The system should display the following related        |  |  |  |
|------|--|--|--|--|
|      | activities with the master address index: calls for    |  |  |  |
|      | service, traffic stops, tow calls, case reports.       |  |  |  |
|      | citations, field identifications, and parking tickets. |  |  |  |
|      | Activities should be listed in reverse chronological   |  |  |  |
|      | order for each master vehicle record.                  |  |  |  |
| SH7  | The system should include links from the activity list |  |  |  |
| 0    | to any record in which the vehicle was involved in     |  |  |  |
|      | the module where the activity originated Access to     |  |  |  |
|      | these records should be controlled by user             |  |  |  |
|      | nermissions  |  |  |  |
| SH8  | The system should link to the master vehicle record    |  |  |  |
|      | from vehicle fields anywhere in the system.            |  |  |  |
| SH9  | The system should cross-reference the master           |  |  |  |
| 0110 | vehicle record to all other records associated with    |  |  |  |
|      | the vehicle.   |  |  |  |
| SH10 | The system should allow users to manually enter        |  |  |  |
|      | vehicles directly into the master vehicle index.       |  |  |  |
| SH11 | The system should have built-in checking to reduce     |  |  |  |
|      | the possibility of creating duplicate master vehicle   |  |  |  |
|      | records for the same vehicle.                          |  |  |  |
| SH12 | The system should check all coded entries in the       |  |  |  |
|      | master vehicle record for validity at the time of data |  |  |  |
|      | entry.   |  |  |  |
| SH13 | The system should automatically display any user-      |  |  |  |
|      | entered vehicle alerts (including agency-defined alert |  |  |  |
|      | types).  |  |  |  |
| SH14 | The system should allow users to create new vehicle    |  |  |  |
|      | alerts from a master vehicle record.                   |  |  |  |
| SH15 | The system should allow users to specify expiration    |  |  |  |
|      | dates on vehicle alerts. Expired vehicle alerts should |  |  |  |
|      | remain attached to the master vehicle record for       |  |  |  |
|      | historical purposes.                                   |  |  |  |
| SH16 | The system should support searching for vehicles by    |  |  |  |
|      | full or partial plate numbers.                         |  |  |  |
| SH17 | The system should allow vehicles to be searched by     |  |  |  |
|      | any data element or combination of data elements       |  |  |  |
|      | (for example, vehicles registered to the name          |  |  |  |
|      | "Smith" and/or red pickup trucks).                     |  |  |  |

#### Notifications/Messages

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SI1 | The system should support "if", "then" and "when" business rules for notifications throughout the system.   |     |        |        |    |          |
| SI2 | The system should include system-wide business<br>rules that allow authorized users to configure<br>unlimited notification scenarios for users and<br>workgroups.   |     |        |        |    |          |
| SI3 | The system should provide business logic which,<br>from information entered into certain required fields,<br>will automatically display other required and/or<br>corresponding fields which pertain to the data<br>already entered. |     |        |        |    |          |
| SI4 | The system should include business rules that notify<br>users and/or open up the next sequential required<br>field(s) and/or window(s) based on the information<br>added to the record.   |     |        |        |    |          |
| SI5 | The system should include system-wide business<br>rules that allow users and user groups to be notified<br>via multiple communication channels including<br>internal system messaging, e-mail, paging, and/or<br>SMS.               |     |        |        |    |          |
| SI6 | The system should include an internal e-mail-style messaging system that supports the secure transmission of messages with attachments within the agency's network.   |     |        |        |    |          |
| SI7 | The system should warn users that they have unfinished tasks when they attempt to log out.  |     |        |        |    |          |

#### Statutes

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| SJ1 | The system should include federal, state, and local  |     |        |        |    |          |
|     | statutes.  |     |        |        |    |          |
| SJ2 | The system should allow authorized users to create<br>and update local statutes and/or ordinances in the<br>system.  |     |        |        |    |          |
| SJ3 | The system should provide a hotkey that can be<br>used from anywhere in the system to search statutes<br>by statute numbers, title, and/or text within a statute<br>description. |     |        |        |    |          |

#### Attachments

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| SK1 | The system should allow the attachment of files (for<br>example, .DOC, .XLS, .JPG, .WAV) to specified<br>record types. Attached files should be able to be<br>opened or viewed on any workstation by authorized<br>users who have the necessary third-party<br>applications (such as MS Word or MS Excel). |     |        |        |    |          |
| SK2 | The system should support scanning and attaching documents directly to records in the system without the need to first save them elsewhere.  |     |        |        |    |          |
| SK3 | The system should store attached files on the vendor's server within the vendor's software (not on an open network folder) for security and ease of access.  |     |        |        |    |          |

#### **Custom Forms**

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| SL1 | The system should allow authorized users to create custom data collection forms to support agency-specified functionality, without any intervention from the vendor or IT. |     |        |        |    |          |
| SL2 | The system should ensure that each custom form is associated with, and subordinate to, a non-custom form (the parent form).  |     |        |        |    |          |
| SL3 | The system should allow authorized users to create an unlimited number of custom forms.  |     |        |        |    |          |
| SL4 | The system should ensure that the custom forms are<br>integral with the rest of the system and not provided<br>via a third-party application.                              |     |        |        |    |          |
| SL5 | The system should support printing the data from custom forms via an agency-defined output template and process similar to a mail merge.                                   |     |        |        |    |          |
| SL6 | The system should allow authorized users to add<br>unlimited data items from the parent form when<br>creating a custom form.   |     |        |        |    |          |

| SL7  | <ul> <li>The system should allow authorized users to include<br/>as many fields for data collection as are necessary<br/>on custom forms, including entirely new fields (not<br/>previously stored in the database) as well as the<br/>following: <ul> <li>Names from the Master Name Index</li> <li>Vehicles from the Master Vehicle Index</li> <li>Addresses from the Master Address Index</li> <li>Personnel, units, and other agency-defined lists</li> </ul> </li> </ul> |  |  |  |
|------|---|--|--|--|
| SL8  | The system should support the following types of<br>agency-defined fields for custom forms:<br>- Address<br>- Automatic record sequence numbers<br>- Multiple item select boxes<br>- Vehicles/Dates/Times<br>- Dollar value<br>- Free form text<br>- Names<br>- Numbers<br>- Signatures (for electronic signatures)<br>- Checkboxes<br>- Yes/No drop-downs<br>- Drop-downs from agency-defined lists  |  |  |  |
| SL9  | The system should allow a custom form to create a relationship on master name or master address records when those fields are specified within the custom form.   |  |  |  |
| SL10 | The system should allow authorized users to specify<br>the label for each field and data item on a custom<br>form.  |  |  |  |
| SL11 | The system should allow authorized users to specify if each field on a custom form is required or not required.   |  |  |  |
| SL12 | The system should allow for setting the default value for each field.   |  |  |  |
| SL13 | The system should allow the authorized users to arrange the data items and fields in any order on the form.   |  |  |  |
| SL14 | The system should make the data items and fields<br>on custom forms available to the built-in report<br>generator.  |  |  |  |

| SL15 | The system should allow records captured via  |  |  |  |
|------|---|--|--|--|
|      | custom forms to be saved to an external file, |  |  |  |
|      | emailed and/or printed.                       |  |  |  |

#### **Custom Modules**

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SM1 | The system should permit authorized users to create<br>custom modules designed to meet specific data<br>collection, management, reporting, and output needs<br>without intervention from the vendor or any<br>additional costs.   |     |        |        |    |          |
| SM2 | The system should ensure that custom modules are part of the main software solution and not a third-<br>party application.  |     |        |        |    |          |
| SM3 | The system should allow authorized users to create as many custom modules as desired.   |     |        |        |    |          |
| SM4 | The system should allow information captured in<br>custom modules to be output from the system in<br>accordance with agency-defined output templates.   |     |        |        |    |          |
| SM5 | <ul> <li>The system should allow authorized users to include<br/>as many fields for data collection as are necessary<br/>within custom modules, including entirely new fields<br/>(not previously stored in the database) as well as the<br/>following: <ul> <li>Names from the Master Name Index</li> <li>Vehicles from the Master Vehicle Index</li> <li>Addresses from the Master Address Index</li> <li>Personnel, units, and other agency-defined lists</li> </ul> </li> </ul> |     |        |        |    |          |
| SM6 | The system should support the following types of<br>agency-defined fields for custom modules:<br>- Dates/times<br>- Dollar value<br>- Free form text<br>- Names<br>- Numbers<br>- Signatures (for electronic signatures)<br>- Checkboxes<br>- Yes/No drop-downs<br>- Drop-downs from agency-defined lists   |     |        |        |    |          |

| SM7  | The system should allow authorized users to specify all of the field labels for a custom module.  |  |  |  |
|------|---|--|--|--|
| SM8  | The system should allow authorized users to arrange and display custom module fields in any order.  |  |  |  |
| SM9  | The system should allow all data included in a<br>custom module to be searched and included in<br>statistical reports.  |  |  |  |
| SM10 | The system should allow a custom module to create<br>an relationship on master name or master address<br>records when those fields are specified within the<br>custom module. |  |  |  |
| SM11 | The system should allow authorized users to define<br>and filter the list view of the data included within the<br>custom module.  |  |  |  |
| SM12 | The system should allow records from custom modules to be directly converted to PDF files within the system.  |  |  |  |
| SM13 | The system should allow records from custom modules to be attached to emails.   |  |  |  |

#### **Support and Maintenance**

| ID  | Requirement  | Yes | Future | Modify | No | Comments |
|-----|--|-----|--------|--------|----|----------|
| SN1 | The vendor should provide a minimum of 3-4 major<br>software updates (not bug fixes) per year as part of<br>the vendor's software maintenance agreement.<br>Please include contact information for 5 existing<br>customers older than 3 years who can verify this. |     |        |        |    |          |
| SN2 | The vendor should schedule and perform software<br>updates at no additional cost to the agency as part<br>of the standard maintenance agreement.   |     |        |        |    |          |
| SN3 | The vendor should load all software updates on the vendor-provided testing/training server(s) before loading them on vendor-provided production servers.   |     |        |        |    |          |
| SN4 | The vendor should provide server operating system software and database software as part of the complete system.   |     |        |        |    |          |

| SN5 | The vendor should include all updates,<br>enhancements, new versions, and upgrades of the<br>server operating system software and database<br>software as part of its standard software<br>maintenance agreement.   |  |  |  |
|-----|---|--|--|--|
| SN6 | The vendor should ensure that the agency will not<br>have to purchase any third-party server operating<br>system software updates and/or newer versions as<br>long as its software maintenance agreement is<br>maintained.  |  |  |  |
| SN7 | The vendor should be responsible for the vendor-<br>provided physical server(s). As necessary to support<br>proper system functions, the vendor should either<br>replace components and/or the entire server(s) as<br>part of the standard maintenance agreement. This<br>includes ensuring that system performance criteria<br>are met and that the server(s) continue to meet the<br>server operating system and database software<br>requirements. |  |  |  |
| SN8 | The vendor should provide, as part of the standard maintenance agreement, real-time 24x7x365 monitoring of the vendor-provided physical server(s) and operating system software to detect and manage any potential issues with the system.  |  |  |  |
| SN9 | The vendor should load all system software updates<br>to the server and then automatically load updates to<br>each client machine at next startup without any<br>intervention from the vendor or IT.  |  |  |  |

#### Data Conversion

| ID  | Requirement   | Yes | Future | Modify | No | Comments |
|-----|---|-----|--------|--------|----|----------|
| SO1 | The vendor should perform data conversion as part of the project.   |     |        |        |    |          |
| SO2 | The vendor should convert the following data:<br>- <system x=""><br/>- <system y=""><br/>- <system z=""></system></system></system> |     |        |        |    |          |
| SO3 | The vendor should complete all data conversion before the go live date for the new system.  |     |        |        |    |          |