



Shelby County Tennessee

Mark H. Luttrell, Jr., Mayor

Request for Proposal Shelby County Government Purchasing Department

160 N. Main, Suite 550
Memphis, TN 38103

Issued: June 26, 2013

Due: August 9, 2013, no later than 4:00 P.M. (Central Standard Time)

RFP # 13-006-87 Computer Aided Dispatch (CAD) System (Information Technology Services)

Shelby County Government is soliciting written proposals, on a competitive basis, from interested and qualified companies or professionals to provide a Computer Aided Dispatch (CAD) system for the Shelby County Sheriff's Office and the Shelby County Fire Department. Information regarding this request for proposal (RFP) is located on the County's website at www.shelbycountyttn.gov. At the top of the home page, click on the link "Departments," "Departments P – Z" for the "Purchasing Department" and "Bids" to locate the name of the above-described RFP.

A mandatory pre-proposal conference to address any questions will be held at 2:00 P.M. (CST) on July 10, 2013, in Information Technology's Executive Conference Room, 160 N. Main, Suite 700, Memphis, TN 38103. All interested respondents are required to attend this meeting either in person or send a representative. If you plan to attend, you must contact the Purchasing Department via e-mail at Nelson.Fowler@shelbycountyttn.gov to confirm your attendance with a representative's name, company and contact number. A confirmation e-mail will be returned with specific

information concerning the conference. Failure to attend this meeting will result in the rejection of any subsequent bid.

The proposal, as submitted, should include all estimated costs related to the services requested by the RFP specifications. The cost components of the proposal must be in a separate, sealed envelope and included in the same delivery as the technical components. If selected, your proposal will be the basis for negotiating a contract with Shelby County Government. Your proposal must be received in the Shelby County Purchasing Department **no later than 4:00 p.m. on Friday, August 9, 2013.** Proposals should be addressed to:

Nelson Fowler, Buyer
Shelby County Government
Purchasing Department
160 N. Main St., Suite 550
Memphis, TN 38103

The package containing three (3) original, signed proposals (clearly identified as original), six (6) copies, and three (3) complete electronic copies on CD, DVD or USB drive must be sealed and marked with the respondent's name and "CONFIDENTIAL, COMPUTER AIDED DISPATCH SYSTEM, RFP #13-006-87" noted on the outside.

Sincerely,

Nelson Fowler, Buyer
Shelby County Government
Purchasing Department

TABLE OF CONTENTS

<i>I. Introduction</i>	1
A. Demonstration of Project Understanding	1
<i>II. Minimum Proposer Requirements</i>	3
A. Vendor Characteristics	3
B. Preferred Vendor Solution	4
C. Single Point of Contact	4
D. Mandatory Items	5
<i>III. Correspondence</i>	8
<i>IV. Proposal Submission & Deadline</i>	8
<i>V. Proposal Timeline</i>	9
<i>VI. Proposal Conditions</i>	9
A. Contingencies	9
B. Modifications	10
C. Proposal Submission	10
D. Incurred Costs	10
E. Final Authority	10
F. Proposal Validity	10
G. Disclosure of Proposal Contents	11
H. Locally-Owned Small Business	11
<i>VII. General Requirements and Information</i>	14
A. Background	14
B. Current Environment	14
C. SCSO Backup Site	20
D. SCFD Backup Site	20
<i>VIII. Award of Contract</i>	21
<i>IX. Purpose/Scope of Work</i>	21
A. Project Overview	21
B. Project Expectations	21
C. System Characteristics	22
D. Workstation Requirements	23

- E. CAD Storage Requirements..... 24**
- F. System Interfaces 24**
- G. Third-party Partner Applications..... 25**
- H. Mobile Data 26**
- I. Records Management System (RMS) Interface..... 27**
- J. Automatic Vehicle Location (AVL) Interface (Optional)..... 27**
- K. SMART911 Interface (Optional) 28**
- L. Priority Dispatch ProQA..... 29**
- M. System Hardware and Software Requirements 29**
- N. Expandable 30**
- O. Fault Tolerance for CAD..... 30**
- P. System Uptime..... 30**
- Q. On-Line Maintenance and Repair..... 31**
- R. Data Communications/Networking..... 31**
- S. Data Warehouse 31**
- T. Training..... 32**
- U. Report Development 33**
- V. Data Migration..... 34**
- W. Environmental Considerations..... 35**
- X. Warranty..... 35**
- Y. Support / Maintenance 36**
- Z. Scope of Contract 42**
- AA. Project Timeframe..... 42**
- BB. Reservation of Rights 42**
- CC. Selection Criteria 43**
- DD. Additional Information and References 43**
- EE. Project Manager..... 43**
- FF. Disaster Recovery..... 44**
- GG. Information Technology (IT) Infrastructure 44**
- HH. Functional Requirements Spreadsheet..... 45**
- II. Scenarios..... 47**

X. Contract Requirements	47
A. General Requirements.....	47
B. Indemnification and Insurance Requirements.....	55
C. Right to Monitor and Audit.....	58
XI. Proposal Submission	58
A. General	58
B. Proposal Presentation	59
C. Proposal Format.....	60
XII. Proposal Evaluation and Selection	63
A. Evaluation Process	63
B. Evaluation Criteria.....	64
C. Product Demonstration	70
D. Preferred Vendor Selection	71
XIII. Contract Award	72
APPENDIX A – ACRONYMS.....	73
APPENDIX B – GLOSSARY	76
APPENDIX C – SAMPLE AGENCY REPORTS	83
ATTACHMENT A	90
ATTACHMENT B.....	95
ATTACHMENT C.....	142

I. INTRODUCTION

Shelby County Government (County) is seeking proposals from interested and qualified companies or professionals to provide and install a turnkey solution for a Computer Aided Dispatch (CAD) system and interfaces for the Shelby County Sheriff's Office and Shelby County Fire Department. This request for proposal (RFP) is being released to invite interested and qualified firms to prepare and submit proposals in accordance with instructions provided; one successful candidate will be selected and invited to enter into a contractual relationship with Shelby County for the services outlined in this RFP. In this RFP, the terms Proposer and Provider are used interchangeably unless the context indicates otherwise.

A. Demonstration of Project Understanding

In order to demonstrate total project knowledge and an understanding of the requirements, Vendors shall provide a paragraph-by-paragraph response for each section where indicated in the RFP.

- The required features are indicated by the use of the words *will*, *shall*, *must*, *requirement* or *required*. If in compliance, Vendors may detail how they will meet the requirement. If non-compliant, Vendors must detail why they cannot comply and address whether any part of a requirement can be met.
- Some of the features are listed as Important. They are represented by the words *should*, *desired* or *desirable*. Desirable feature responses will be considered when evaluating proposals, but only after requirements are addressed. These features are not required but desirable, and may be taken into consideration by the County in determining whether to award a contract.

Responses are limited to:

- **Understood**
The Vendor understands the statement.
- **Comply**
The Vendor's proposal complies with the requirement and the product/service is currently developed and available for shipment and installation.
- **Partial Comply or Alternative**
The Vendor's proposed system either does not fully meet the described requirement or addresses the requirement through methodology other than that described in the statement. (Additional comments or supporting documentation are recommended.)

- **Does Not Comply**

The Vendor's proposed system does not/cannot meet the requirement.

In this RFP, below each requirement will be either one "Understood" check box or three check boxes – "Comply," "Partial Comply or Alternative" and "Does Not Comply" – and the ability to provide supporting details. The response in a check box relates to the compliance of the statement or statements above the box, up to the previous check box.

Vendors are NOT to insert the response in this RFP. Vendor responses are to be recorded and returned using the Shelby County RFP #13-006-87 Electronic Response Forms available for download on the Shelby County website.

Vendors are also required to provide details in the appropriate area on the electronic form to support their answers where noted. The details must be concise, yet sufficient to properly convey the Vendor's intentions. Marketing materials are not considered appropriate in-line responses, but will be accepted if attached as separate documents.

Response Example 1:

Understood

Response Example 2:

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

A response is required for each statement. The addition of a detail statement is not required for "Comply" or "Partial Comply or Alternative." However, to receive positive consideration for a "Partial Comply or Alternative" response, a concise explanation of the alternative or partial compliance is expected. Vendors must provide a detail statement for a "Does Not Comply" response.

Vendors must not refer to other sections as a response. Even if the response is an exact duplicate, it must be provided in the section(s) associated with each relevant requirement.

Understood

II. MINIMUM PROPOSER REQUIREMENTS

A. Vendor Characteristics

1. All Vendors responding to this RFP must possess the requisite qualifications as described in this RFP to perform successfully under the terms and conditions set forth for this proposed procurement. It is also required that the Vendor provide qualified management, support and technical staff to work on this project, with a proven track record implementing the proposed solution.

The County may make such reasonable investigations as deemed proper and necessary to determine the ability of Vendors to perform the work. Vendors shall furnish the County all such information and data for this purpose as may be requested. The County reserves the right to inspect Vendors' physical facilities, and require demonstrations at the Vendor's or County's facilities prior to award to satisfy questions regarding Vendor capabilities. Costs for site visits and demonstrations shall be the sole expense of the Vendor.

Final contract negotiations and award (Notice to Proceed) will only be made with the responsible Vendor who possesses the ability to meet the requirements at a price and schedule considered to be acceptable to the County.

Understood

2. The selected Vendor will:
 - Have a proven track record of successful implementations of similar systems in similarly-sized agencies
 - Have a long-term commitment to development and support of software in the public safety market
 - Have a history of involvement in the public safety market, demonstrating proactive improvements to its product line
 - Have a proven track record for 24/7 customer support
 - Propose and provide skilled, knowledgeable staff throughout the proposal, implementation and maintenance phase of this procurement
 - Have a method of logging, reporting and escalating software trouble reports
 - Provide documentation suitable to demonstrate financial stability to the County

Understood

3. Consideration will also be given to such matters as software quality, contractor integrity, record of past performance, Vendor financial resources and the ability to deliver the proposed software and functionality at the current facility in a timeframe not to exceed 18 months of contract signing. Each Vendor submitting a response to this proposal must have proven experience and an established reputation (and document same within the proposal to the County) at the state, county and/or national level for their ability to plan, supply, install, integrate, train (end users), support, and maintain their systems. Vendors shall provide information detailing their credentials and provide a list of references of other public safety communications entities for which they have provided similar services.

Understood

B. Preferred Vendor Solution

The selected single prime Vendor will provide an integrated suite of products. However, consideration will be given to solutions that involve a partnership of vendors with a tightly integrated and seamless solution that has been effectively implemented in agencies of similar size to that of the County. Nevertheless, a single prime Vendor will be responsible for the success of such a proposed solution, and the selected Vendor must be responsible for the complete definition, delivery, integration, testing, implementation, support, and maintenance of the system.

Understood

C. Single Point of Contact

The single prime Vendor will be the single point of contact for all communications with the County regarding this project and be responsible for the success of the complete solution.

Understood

The single prime Vendor will be the single point of contact for warranty, support and maintenance issues throughout the lifecycle of the implementation project and the support for continued operations through the terms of the negotiated contract.

Understood

D. Mandatory Items

1. Vendors must have a minimum of ten (10) years of experience performing the work described in the RFP.

Understood

2. Vendors must have a minimum of ten (10) CAD systems installed and currently operational, with at least one (1) CAD system that is currently operating on the same version and platform as the system proposed and with an agency comparable in size, or larger, to the proposed system.

Understood

3. Vendors must have sufficient, competent and skilled staff, with experience in performing the services described in this RFP and be able to **pass a mandatory criminal background check before they are allowed entry onto the premises.**

Understood

4. Vendors must have all appropriate licenses and certifications required in the State of Tennessee to perform the services and procure all permits, pay all charges, taxes, and fees.

Understood

5. The proposal must meet all aspects of the Shelby County Emergency Communications District “Requirements for Integrated CAD/Mapping Systems” document, dated November 10, 2011 (Attachment A).

Understood

6. The selected Vendor must migrate the existing data from the current CAD system, Motorola Premier CAD, to the proposed system. The migration must include premises histories, alerts, hazards, event and unit records, and static tables (e.g., unit designators).

Understood

7. The proposed CAD system must meet applicable Criminal Justice Information Services (CJIS) requirements, described in the CJIS Security Policy, version 5.1, dated July 13, 2012 (CJISD-ITS-DOC-08140-5.1) and updated versions approved by the U.S. Department of Justice.

Understood

8. All components of the proposed CAD system must be compliant with the Health Insurance Portability and Accountability Act (HIPAA) of 1996 Privacy and Security Rules and any subsequent amendments, where applicable.

Understood

9. Vendors must attend the mandatory pre-proposal conference; details are provided in Section V.

Understood

10. Vendors must apply, qualify for, and obtain an Equal Opportunity Compliance (EOC) certification number through our EOC Administration **prior to submitting the response**. Responses from vendors not in compliance with this requirement will not be considered and will not be permitted to move forward in the evaluation process.

Understood

11. Vendors must attest compliance to all Title VI requirements and provide proof/documentation if necessary.

Understood

12. Independent contractors (sole proprietors) must adhere to State of Tennessee Public Chapter No. 436, known as the “Tennessee Lawful Employment Act” (effective date of January 1, 2012). Proof and documentation of employment eligibility must be included with the proposal.

Understood

13. Vendors must provide proof of minimum insurance requirements. Vendors should review those requirements closely.

Understood

14. Vendors must provide a Bid Bond in the amount of 5 percent (5%) of the proposal; this bond must be submitted with the proposal.

Understood

15. The selected Vendor must submit a performance/labor material bond in the amount of 100 percent (100%) of the amount of the contract.

Understood

Vendors can access the online application to receive the registration numbers indicated above at www.shelbycountyttn.gov. At the top of the home page, click on the links “Departments,” then “Departments P – Z,” then “Purchasing Department,” and then “Conducting Business with Shelby County.” The “Vendor Registration” link is at the bottom of the drop down box. Please download the application instructions and read thoroughly prior to accessing the application.

If you have any questions regarding the application, you may contact Purchasing at (901) 222-2250 or the EOC Administration at (901) 222-1100.

Understood

III. CORRESPONDENCE

All correspondence, proposals and questions concerning the RFP are to be submitted to:

Nelson Fowler, Manager A
Shelby County Government
160 N. Main St. Suite 550
Memphis, TN 38103

Respondents requesting additional information or clarification are to contact Nelson Fowler in writing at Nelson.Fowler@shelbycountyttn.gov or at the address listed above. Questions should reference the sections of the RFP to which the questions pertain and all contact information for the person submitting the questions.

IN ORDER TO PREVENT AN UNFAIR ADVANTAGE TO ANY RESPONDENT, VERBAL QUESTIONS WILL NOT BE ANSWERED.

The deadline for submitting questions will be Wednesday, July 19, 2013, by 12:00 P.M. (CST). These guidelines for communications have been established to ensure a fair and equitable process for all respondents.

Note: All written questions submitted by the deadline indicated above will be answered and posted on the County's website at www.shelbycountyttn.gov within 48 hours of the above cut-off date.

Please be aware that contact with any other personnel (other than the person clearly identified in this document) within Shelby County regarding this RFP may disqualify your company from further consideration.

Understood

IV. PROPOSAL SUBMISSION & DEADLINE

All proposals must be received at the address listed above no later than **Friday, August 9, 2013, at 4:00 P.M. (CST)**. Facsimile or e-mailed proposals will not be accepted since they do not contain original signatures. Postmarks will not be accepted in lieu of actual receipt. Late or incomplete proposals may not be opened and considered. Under no circumstances will this deadline be extended, regardless of weather conditions, transportation delays or any other circumstances.

Understood

V. PROPOSAL TIMELINE

Shelby County reserves the right to modify this timeline at any time. If the due date for proposals is changed, all prospective respondents shall be notified.

RFP Released	Wednesday, June 26, 2013
Mandatory Pre-proposal Conference	Wednesday, July 10, 2013
Question and Answer Period Ends	Friday, July 19, 2013
Proposal Due Date	Friday, August 9, 2013
Notification of Finalist Demonstrations	September 2013
Finalists' Demonstrations in Memphis	September 2013
Notification of Award	October 2013
Services to Commence	January 2014

A mandatory pre-proposal conference to address questions will be held at 2:00 P.M. (CST) on July 10, 2013, in Information Technology's Executive Conference Room, 160 N. Main, Suite 700, Memphis, TN 38103. All interested respondents are required to attend this meeting either in person or send a representative. If you plan to attend, you must contact the Purchasing Department via e-mail at Nelson.Fowler@shelbycountyttn.gov to confirm your attendance with a representative's name, company and contact number. A confirmation e-mail will be returned with specific information concerning the conference. Failure to attend this meeting will result in the rejection of a subsequent bid.

The County may reproduce any of the respondents' proposals and supporting documents for internal use or for any other purpose required by law.

Understood

VI. PROPOSAL CONDITIONS

A. Contingencies

This RFP does not commit the County to award a contract. The County reserves the right to accept or reject any or all proposals if the County determines it is in the best interest of the County to do so. The County will notify all respondents, in writing, if the County rejects all proposals.

Understood

B. Modifications

The County reserves the right to issue addenda or amendments to this RFP.

Understood

C. Proposal Submission

To be considered, all proposals must be submitted in the manner set forth in this RFP. It is the respondent's responsibility to ensure that its proposals arrive on or before the specified time.

Understood

D. Incurred Costs

This RFP does not commit the County to pay any costs incurred in the preparation of a proposal in response to this RFP and respondents agree that all costs incurred in developing this RFP are their responsibility.

Understood

E. Final Authority

The final authority to award a contract rests solely with the Shelby County Purchasing Department.

Understood

F. Proposal Validity

Proposals submitted hereunder will be firm for at least **one (1) year** (360 calendar days) from the due date unless otherwise qualified. Equipment may be purchased in several stages due to the availability of funds.

Understood

G. Disclosure of Proposal Contents

Respondents understand and acknowledge that the County is a governmental entity subject to the laws of the State of Tennessee and that any reports, data or other information supplied to the County is subject to being disclosed as a public record in accordance with the laws of the State of Tennessee. All proposals and other materials submitted become the property of Shelby County Government.

Understood

H. Locally-Owned Small Business

The County encourages the utilization of locally-owned small businesses as sources of subcontract work. The County notifies all respondents that all firms and/or individuals shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Title VI of the Civil Rights Act of 1964, as amended.

LOCALLY OWNED SMALL BUSINESS PURCHASING PROGRAM RULES AND REGULATIONS:

(i) The Administrator of Purchasing in conjunction with the Administrator of EOC shall identify certain goods and services required by the County to be set aside for special purchasing procedures for locally-owned small businesses.

(ii) Only certified locally-owned small businesses will be allowed to submit competitive bids on the goods or services identified above.

(iii) The Administrator of Purchasing shall, in conjunction with the Administrator of EOC, annually review the Shelby County Capital Improvement Program to determine those projects with a construction cost of \$250,000 or more. Contracts amounting to at least ten percent (10%) of the construction costs of such project shall be awarded to locally-owned small businesses as defined herein, except as set forth in sub-paragraph (vi) of this section, either as part of the conditions of the solicitation for general Providers bidding on these projects, or as separate bids issued by the County for subcontracts that may be assigned to general Providers.

(iv) After adhering to all other bidding and purchasing requirements of the County, not inconsistent with this part, if no bids are received from locally-owned small businesses, then the County may solicit bids for the goods or services from all other sources.

(v) On all purchases and/or contracts entered into by the County, the Purchasing Administrator or his or her designee shall have the right to negotiate with any supplier of goods or services to the County for the inclusion of locally-owned small business sub-Providers and/or suppliers in the contract award.

(vi) Failure by a supplier or Provider to include locally-owned small business sub-Providers or suppliers in its bid or contract may be grounds for rejection of said bid or contract unless the supplier or Provider can show documented evidence of good cause why none were included.

(vii) Any locally-owned small business awarded a contract or purchase order under this section shall not sublet, subcontract or assign any work or services awarded to it without the prior written consent of the Mayor or the Purchasing Administrator.

(viii) As to those purchases below the requirement for a formal bid solicitation (currently, under \$15,000) and not included in the locally-owned small business set aside, the Administrator of Purchasing shall determine if any locally-owned small business offers that product or service. If so, at least one such eligible locally-owned small business should be included in the vendors contacted for an opportunity to bid, and the Administrator of Purchasing may, at his discretion, designate in a purchase order the purchase of such goods and services from the identified locally-owned small business.

(ix) In those situations where a locally-owned small business as defined herein, engages in open competitive bidding for County contracts, the Administrator of Purchasing shall provide for a preference for the locally owned small business where responsibility and quality are equal. Said preferences shall not exceed five percent (5%) of the lowest possible bidder meeting specifications. The preference shall be applied on a sliding scale in the following manner:

- a. A preference of up to five percent (5%) shall be allowed for contracts up to \$500,000.00;
- b. A preference of up to three and five-tenths percent ($3\frac{5}{10}\%$) shall be allowed for contracts up to \$750,000.00;
- c. A preference of two and one-half percent ($2\frac{1}{2}\%$) shall be allowed for contracts up to \$1,000,000.00;
- d. A preference of two percent (2%) shall be allowed for contracts that exceed \$1,000,000.00.

(x) For construction contracts over \$2,000,000.00, the Administrator of Purchasing shall provide for a preference of two percent (2%) to general Providers meeting the requirements of Section 1, Subparagraph B, if fifty percent (50%) or more of the total work comprising the bid has been or will be awarded to certified locally-owned small businesses. The fifty percent (50%) subcontracting threshold must be met prior to contract execution.

(xi) The Administrator of Purchasing may divide a single bid package for any purchase of goods and services into two or more smaller bid packages in any case that the Administrator of Purchasing reasonably believes that the smaller bid packages will result in a greater number of bids by locally-owned small businesses.

(xii) The Administrator of Purchasing, upon approval of the County Mayor, may establish special insurance and bonding requirements for certified locally-owned small businesses so long as they are not in conflict with the laws of the State of Tennessee.

(xiii) The Administrator of Purchasing, with the approval of the County Mayor, shall adopt and promulgate, and may from time to time, amend rules and regulations not inconsistent with the provisions of this ordinance, governing the purchase of goods and services from locally-owned small business concerns to effectuate and implement the Locally-Owned Small Business Purchasing Program within the intent of this ordinance.

(xiv) The Administrator of EOC shall, in conjunction with the Administrator of Purchasing, provide a written quarterly report to the Mayor and Board of Commissioners which shall include a summary of the purchases selected for this program, a listing of the contracts awarded to locally-owned small businesses for the period, and the dollar amounts of each such contract, and the percentage which such contracts bear to the total amount of purchases for the period.

Understood

VII. GENERAL REQUIREMENTS AND INFORMATION

A. Background

Shelby County Government seeks proposals from qualified firms to provide a Computer Aided Dispatch (CAD) system for Shelby County Sheriff's Office (SCSO) and the Shelby County Fire Department (SCFD). The desired solution will interface to the radio system (currently Motorola CENTRACOM Gold Elite), E9-1-1, pre-arrival instruction applications for medical and law enforcement, mobile data terminal/computer (MDT/MDC) system, City of Memphis Law records management system (RMS), Fire RMS, fire alerting, SpectraCom NetClock, geographic information system (GIS), automatic vehicle location (AVL), automated digitized voice annunciator, the state criminal information/motor vehicles computer system, standard statistical reporting required by the state or federal authorities, any local and remote computer systems, paging or signaling devices, National Crime Information Center (NCIC)/National Law Enforcement Telecommunications System (NLETS) and Pictometry. Shelby County's desired solution will be a commercial-off-the-shelf (COTS) solution.

Shelby County, in western Tennessee, has a population of slightly less than one million with approximately 68 percent of the population residing in the major municipality of Memphis and the remainder residing in six smaller municipalities plus in unincorporated areas of the county.

According to the U.S. Census Bureau, the county has a total area of 783 square miles, 317 of which are within the city limits of Memphis. Shelby County has jurisdiction over all areas of the county and provides some major services within the City of Memphis.

Understood

B. Current Environment

1. Communications Center Operations

The 9-1-1 communications functions for SCSO and SCFD are housed at the Peggy W. Edmiston Administration Building, 1075 Mullins Station Road, Memphis. Although using the same CAD system application, Motorola Premier CAD, the operations for SCSO and SCFD are in separate areas of the building.

The Shelby County 911 Communications Center, a division of the SCSO, is the primary public safety answering point (PSAP) for Shelby County, with SCFD as

the secondary PSAP. All 911 calls are routed to the SCSO 911 Center and, as appropriate, calls are transferred to SCFD.

SCSO operates an off-site backup center with five workstations.

SCSO and SCFD work cooperatively in the support and administration of the CAD system. All CAD system workstations utilize Motorola Printrak Premier CAD version 6.6.8.65 with the Motorola Advanced Tactical Mapping integrated map version 5.9. The SCFD communications center is able to locate units on the map using AVL and communicates with field units through a mobile data system. SCSO currently communicates with units via MDTs and desires to incorporate AVL technology in the most accurate and effective manner.

Servers hosting the current Motorola Premier CAD; Emergency Technologies, Inc. (ETI) Fire RMS; SQL Fire RMS; NetClock; global positioning system (GPS); Premier MDC and AVL; and the MDC message switch are hosted by Shelby County IT and are connected to the PSAPs by County-owned fiber.

SCSO hosts the Motorola UDT server and the Open Query/NCIC controller. The CAD system application is hosted on a Microsoft Windows XP platform using a Microsoft SQL database.

Although other public safety agencies operate within Shelby County and provide law enforcement, fire and medical service to defined areas of the county, SCSO and SCFD have jurisdiction throughout the county. The proposed system must be configured and sized to operate throughout Shelby County.

Understood

2. Shelby County Sheriff's Office

SCSO is a full-service law enforcement agency and the pre-trial custodial keeper of those who are arrested for crimes. It is the mission of SCSO to protect the lives and property of the citizens of Shelby County, Tennessee; to preserve the peace; to maintain a safe and secure jail; and to prevent crime and disorder while constantly guarding personal liberties as prescribed by law. This must be done with honor and integrity, while conducting themselves by the highest fiscal and ethical standards to maintain public confidence.

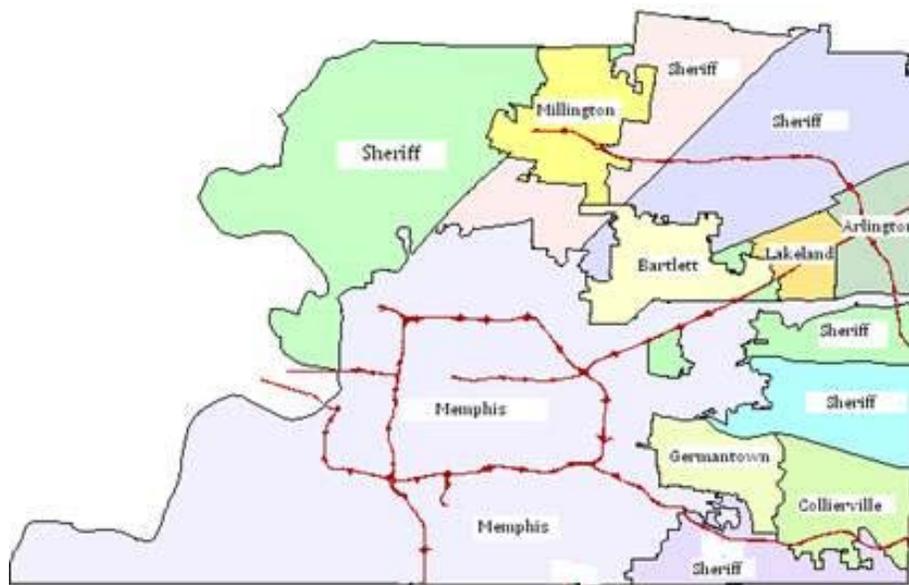


Figure 1 – SCSO Service Areas

Understood

3. Shelby County Fire Department

The mission of SCFD is to “protect the lives and property of the people of Shelby County from fires, natural disasters, and hazardous materials incidents; to save lives by providing emergency medical services; to prevent fires through prevention and education programs; and to provide a work environment that values cultural diversity and is free from harassment and discrimination.”¹

SCFD responds to more than 18,000 calls each year; operating ten engine companies out of ten stations dispersed throughout the county. The communications center also dispatches for Arlington Fire Department (2 stations), and Millington Fire Department (4 stations). There are two additional locations from which EMS units are dispatched that are not in fire stations.

The department employs 160 firefighters, inspectors and trainers. SCFD is licensed for 50 in-vehicle MDCs.

Understood

¹ <http://shelbycountyttn.gov/index.aspx?nid=443>

4. Current CAD System Network Diagrams

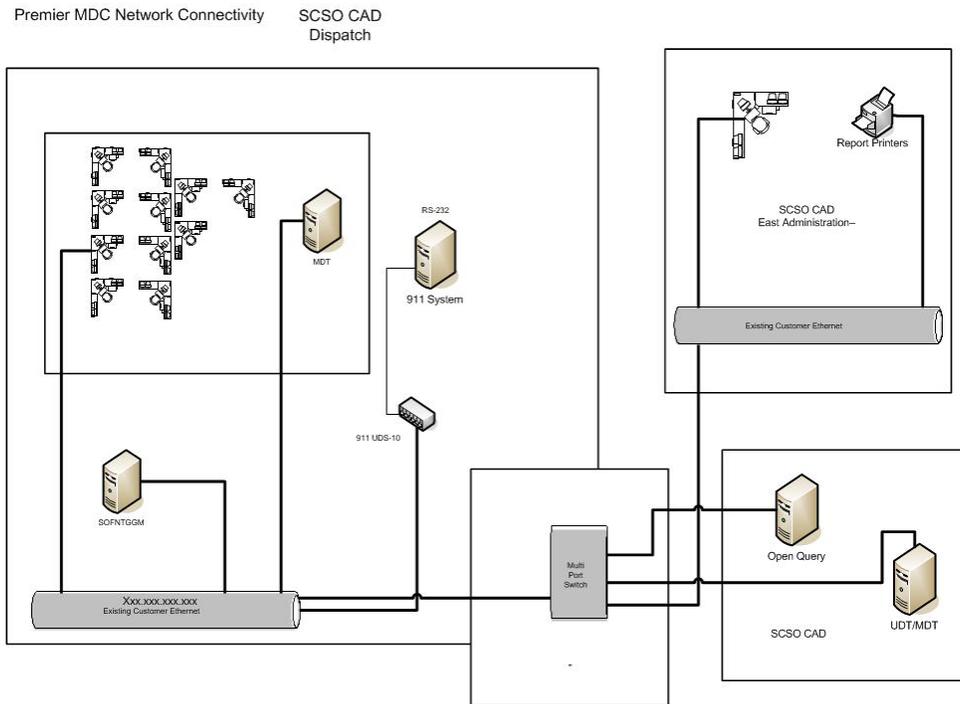


Figure 2 – SCSO CAD Network

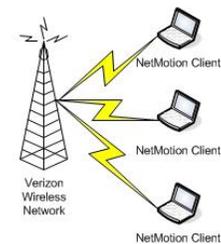
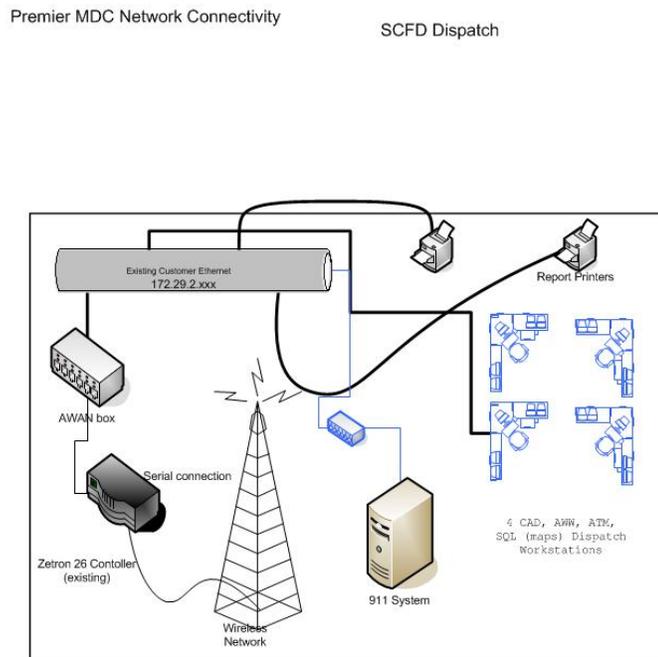


Figure 3 – SCFD CAD Network

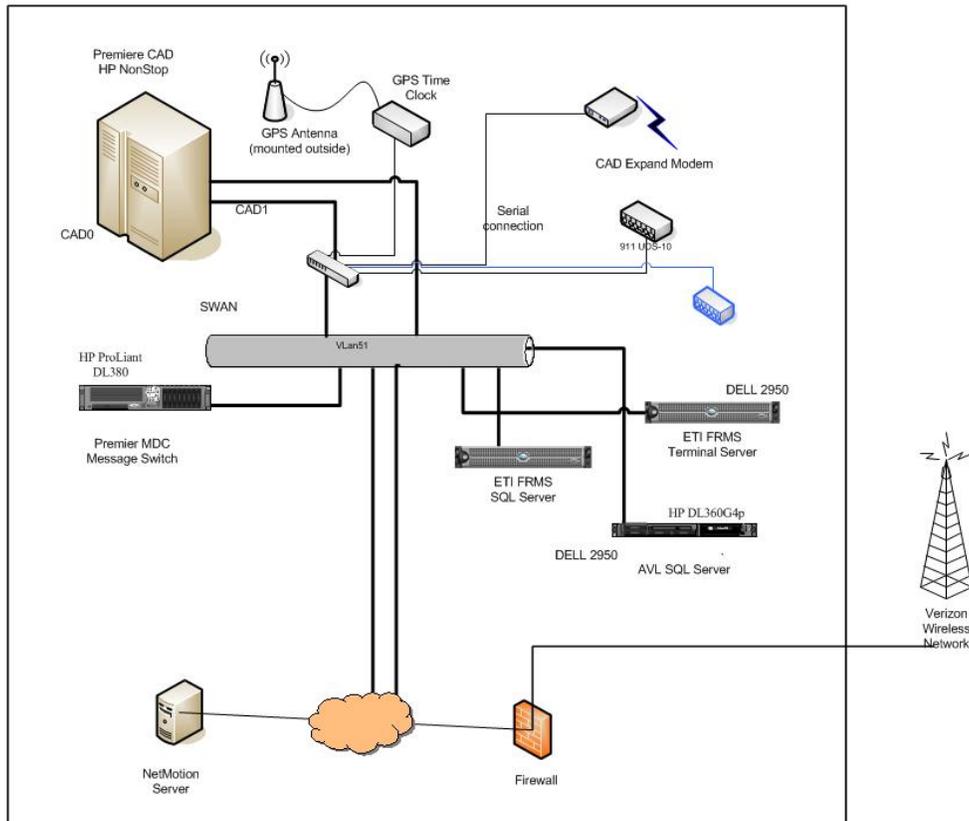


Figure 4 – SCSO CAD Remote Site

Understood

5. Sheriff's Office Communications Center

SCSO creates over 233,000 CAD system events annually. The SCSO 9-1-1 Center is staffed by 43 operators and administrators operating 12 Windows XP workstations, 8 of which are radio equipped; there are five Windows XP workstations at the backup site, four of which are radio equipped. Vendors should note that SCSO intends to maintain the 12 CAD workstations at the Communications Center and add three Administrative workstations at the Communications Center and one additional workstation at the backup site through this procurement.

McAfee anti-virus software is in place at the SCSO. Each workstation utilizes five monitors to provide 911 call answering, dispatching, unit status, integrated mapping and Pictometry to over 700 response units of varying types and purpose.

SCSO is licensed for 235 in-vehicle MDCs and anticipates the need for up to 350 licenses.

Understood

- a. Required Interfaces Specific to the SCSO Communications Center
 - Radio (currently Motorola CENTRACOM Gold Elite)
 - Integrated mapping
 - Pictometry
 - 911 customer premise equipment (CPE) and Telecommunications Device for the Deaf (TDD)
 - City of Memphis Police Department RMS
 - Pre-arrival instructions for Law Enforcement; ProQA for Law
 - Real-time Video
 - NCIC-Open Query
 - Local wants and warrants (not in current operation)
 - Mobile data
 - AVL
 - Personnel application
 - Alarm companies (Association of Public-Safety Communications Officials [APCO] Automated Secure Alarm Protocol [ASAP])
 - Master time source
 - Supervisory Control and Data Acquisition (SCADA) alarms monitored at Supervisor's workstation

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

6. Fire Department Communications Center

The SCFD Communications Center is staffed by 17 operators and administrators operating five primary workstations, each with six 24-inch monitors, and three backup workstations without radio equipment. Trend Micro anti-virus software is in place at the SCFD. SCFD handles over 18,000 calls for service annually.

Understood

- a. Required Interfaces Specific to the SCFD Communication Center
 - Integrated mapping

- Pictometry
- 911 CPE and TDD
- Fire Station alerting system using digitized voice with automated dispatching
- Text paging through CAD
- E-mail alerts of incidents
- Pre-arrival instruction system – Priority Dispatch ProQA for EMS, Fire
- ETI Fire RMS / Field-based Reporting
- Mobile data
- AVL
- Wireless Information System for Emergency Responders (WISER)
- Automated move up recommendation and tracking

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

C. SCSO Backup Site

SCSO currently operates an off-site backup center connected by 100 Mb connection to the primary site. There are five SCSO CAD workstations available at the backup site.

Vendors should note that the SCSO desires to maintain the five CAD workstations at the backup site through this procurement and add three additional CAD workstations.

Understood

D. SCFD Backup Site

SCFD does not operate an off-site backup center at this time. However, SCFD desires to establish and operate a backup site, location to be determined, and Vendors should include four CAD workstations in their response for this purpose.

Understood

VIII. AWARD OF CONTRACT

Respondents are advised that the lowest cost proposal will not necessarily be awarded the contract, as the selection will be based upon qualification criteria as deemed by the County and as determined by the CAD selection committee and approved by the County Mayor.

Understood

IX. PURPOSE/SCOPE OF WORK

A. Project Overview

Shelby County seeks to acquire a CAD, integrated map and integrated AVL system described in the following sections of this procurement document to support the operations of SCSO and SCFD. The component systems, subsystems and any third-party elements together will function to provide the services to effectively and efficiently manage the information, resources, records and interfaces needed to quickly and safely respond to law, fire and EMS calls for service and the safety needs of the citizens of Shelby County.

Mission Critical Partners, Inc. (MCP) has been selected to assist the County with the procurement process in the development of this RFP, response to Vendor questions and response to requests for clarifications.

Understood

B. Project Expectations

1. The County expects to utilize a commercially available CAD, mapping and AVL system, which has been successfully deployed by other public safety communications agencies to perform the core mission-related functions required of an emergency communications center. The County does not wish to embrace any software or systems that have not been fully tested and deployed in major live operational environments of comparable size or larger.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. The County expects to take advantage of the most current functionality at the time of installation offered by a Vendor(s), which may encompass functional features that

other similar agencies have requested and the Vendor has included as part of its current offering.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

3. The County requires that the source code for the software being offered is available on-site or in a mutually agreed upon escrow account to be paid by the successful Vendor.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

4. The Vendor(s) will provide a site license or equivalent licensing option that includes an unlimited number of workstations for all software applications deployed as part of this procurement. Vendors shall describe licensing options included with this procurement.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

5. The County will seek access to the City of Memphis Police Department's Vision/TriTech RMS for automated data input and inquiry from CAD workstations and MDTs. The proposal shall be all-inclusive and no future costs shall be incurred for the licensing of software related to stability releases or for future software upgrades.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

C. System Characteristics

The selected system will have the following general characteristics. It will:

- Meet the specified functional requirements as outlined in this RFP document.
- Meet or exceed the performance requirements as stated in the RFP.

- Be expandable and flexible enough to meet future functional requirements as projected in this RFP.
- Be highly configurable, allowing the County to meet current and future needs without extensive software customization.
- Meet applicable National Emergency Number Association (NENA) Next Generation 9-1-1 (NG9-1-1) capabilities of accepting and processing location protocol (Presence Information Data Format-Location Objects [PIDF-LO]) and various data (e.g., text, video, audio, X/Y coordinates) as presented to the CAD / 911 network interface.
- Utilize a commercially available CAD and mapping system.
- Meet applicable CJIS requirements, described in the CJISD-ITS-DOC-08140-5.1 and updated versions approved by the U.S. Department of Justice.
- Meet all security requirements of the State of Tennessee and Shelby County.
- Utilize an open systems-based Relational Database Management System.
- Utilize COTS components.
- Provide a hardware solution that is scalable.
- Provide a high-level of availability, security, and reliability.
- Allow secure access to both short-term and long-term stored data for the purposes of reporting and analysis.
- Provide an intuitive user interface for accessing stored data.
- Be installed and be operating successfully at sites of equivalent size and complexity.

Understood

D. Workstation Requirements

Each CAD system position requires, at a minimum, a single Windows 7 personal computer (PC) with up to five 27-inch (measured diagonally) high resolution monitors (HD) and a single keyboard and mouse. One screen is to be an "interactive" work screen and the second a status screen to be used for tracking units. The third monitor is to display an integrated map as well as other views of data being presented to the operator via Microsoft Windows. The fourth and fifth screens will be used based on agency-specific needs. The monitors must be capable of both portrait and landscape orientation. The system display of information at the workstation must capable of high resolution in both portrait and landscape presentation.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

E. CAD Storage Requirements

For the CAD system, the disk storage will be sized so as to provide migrated legacy data plus an additional minimum of ten years from implementation of on-line data retrieval. The current size of legacy data to be migrated is 6.3 GB.

Incident information retained will include the basic incident information plus all transactions (e.g., unit assignments, status changes, additional information, messages, historic playback, audit logs) recorded for the incident. Incident data should be stored in its entirety; storage of summary incident data only is not acceptable.

The system should also provide storage capability (Data Warehouse) outside of the boundaries of the CAD network that is accessible externally. The Data Warehouse will be isolated from the production CAD servers, resilient and secure.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

F. System Interfaces

The County will require the Provider to provide interfaces to the following applications and systems:

- Motorola CENTRACOM Gold Elite radio system for push-to-talk (PTT) display and messaging to portables
- CPE for E9-1-1 interface and TDD interface
- Integrated mapping with capability to interface to the County GIS/mapping system as described in Attachment A
- Integrated map system capable of integrating maps from surrounding counties (Fayette and Tipton, Tennessee; DeSoto and Marshall, Mississippi; Crittenden, Arkansas) into a seamless map
- Fire station alerting using digitized voice and automated dispatch
- Pictometry
- Priority Dispatch ProQA for emergency medical dispatch (EMD)
- Pre-arrival instruction application for SCSO
- County personnel application
- Real-time Video
- Mobile data
- NCIC State and Federal databases
- ETI Fire RMS / Field-based reporting

- City of Memphis Police Department RMS
- AVL
- SpectraCom NetClock
- Move up application
- Alarm company interface using APCO ASAP
- Paging
- County e-mail system
- Tennessee Division of Motor Vehicles (DMV)
- Uniform Crime Reporting (UCR)/ National Incident-Based Reporting System (NIBRS)
- National Fire Incident Reporting System (NFIRS)
- Local wants and warrants
- SCADA alarms monitoring

For each interface, Vendors must specify the following:

- Description of the system to be interfaced
- Information to be transferred to/from the other system
- Number and type of queries to be made to each system
- Description of how the interface is to function from the user's point of view (i.e., terminal emulation of the other system, file transfer)
- Communication protocol
- Which party is expected to provide connectivity where required

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

G. Third-party Partner Applications

The County will require the selected Vendor to procure, in the County’s name, the applications required to meet the digital voice with automated dispatching third-party software and the automated fire apparatus move up recommendation and tracking third-party software. The third-party vendors must have a proven track record with the selected Vendor. The third-party software finally selected must be approved by the County.

The cost of the software, installation and maintenance must be in in the cost proposal.

The licenses will reside with the County and the maintenance will be included with the overall maintenance plan in the proposal.

Understood

H. Mobile Data

Shelby County intends to implement a mobile data system. Vendors should include all hardware and software in their proposal to implement a full functioning mobile data application. The County currently utilizes NetMotion to enable mobile connectivity.

Understood

1. Shelby County Sheriff's Office

SCSO seeks the capability for the delivery of CAD events, in-vehicle mapping, AVL tracking and display on the in-vehicle map, messaging and, to the extent authorized, an interface to the City of Memphis Police Department RMS system.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. Shelby County Fire Department

SCFD currently has in-vehicle mobile data. SCFD seeks the capability for the delivery of CAD events, in-vehicle mapping, AVL tracking and display on the in-vehicle map and messaging.

SCFD currently is associated with Rural/Metro-MidSouth Corporation, which provides emergency ambulance services to areas covered by SCFD. As of July 1, 2013, the emergency ambulance service provider will be American Medical Response (AMR). AMR will have in-vehicle MDTs. The interface from CAD to the AMR in-vehicle terminal will provide CAD event data sufficient and narrowly limited to populate the appropriate ePCR fields for either active or closed events.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

I. Records Management System (RMS) Interface

The County intends to pursue interfaces to existing law enforcement and fire RMSs.

1. Shelby County Sheriff's Office

The Sheriff's Office currently interfaces to the City of Memphis Police Department Vision/TriTech RMS through in-vehicle mobile devices. The mobile devices can perform inquiries and implement field-based reporting capabilities into the Memphis Police Department RMS database. SCSO would continue that function and extend the inquiry capabilities to the proposed CAD system. The interface would enable inquiry capabilities from the SCSO Communications Center workstations to the Memphis Police Department RMS, enable automatic RMS Master Name, Vehicle and Location inquiries from the proposed CAD system as those elements are entered into CAD forms and provide the capability to copy CAD information queried through Tennessee Information Enforcement System (TIES), NLETS and NCIC directly into RMS.

The City of Memphis Police Department is currently undergoing an upgrade of the RMS to TriTech Inform RMS version 4.5.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. Shelby County Fire Department

SCFD interfaces to an ETI Fire RMS.

The proposed system must interface to the ETI Fire RMS, making CAD event information available to the fire mobile units.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

J. Automatic Vehicle Location (AVL) Interface (Optional)

Shelby County intends to implement an AVL function as a component of this CAD system procurement. The County will consider alternatives in the implementation of the AVL components, which include, but are not limited to, selecting the selected Vendor's version or pursuing an independent application. Regardless, an interface to an AVL

system will be required to be included in the Vendor's response to this RFP. Also, the inclusion of the description and cost of the Vendor's AVL module is required. The County, however, reserves the right to include, or not include, the selected Vendor's AVL system in this procurement.

Understood

K. SMART911 Interface (Optional)

The County desires to implement an interface to the Rave Mobile Safety SMART911 database when it becomes available in the Shelby County region. The data will be displayed to the Communications Centers' operators to assist in delivering needed service. This will be an optional selection by Shelby County.

Understood

If the Smart911 is implemented, the system will support the following:

1. IP connectivity on the local area network (LAN).

HTTP (TCP/80) to the Smart911 CPE from the workstations is needed in a proxy configuration. HTTPS (TCP/443) to the Internet is needed if workstations have Internet access.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. If there is a local firewall policy in effect, this must allow network traffic to and from the CPE server. Same ports as described in Section K.1 above as well as 1911/UDP.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

3. The system supports .net Framework 3.5+.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

L. Priority Dispatch ProQA

The County desires to include the pricing for the optional purchase of Priority Dispatch ProQA for EMD, Emergency Fire Dispatch (EFD) and Emergency Police Dispatch (EPD). The County currently has licenses for Priority Dispatch ProQA for EMD. SCFD intends to continue to use ProQA for EMD pre-arrival instructions and coding and is investigating the use of ProQA for EFD. SCSO is investigating the use of ProQA for EPD.

The County requires Vendors to submit costs for licenses for Priority Dispatch ProQA for EMD, EFD and EPD. The County requires Vendors to submit training costs for Priority Dispatch ProQA for EFD and EPD; training for EMD is not required. The submission of costs is required. The decision to include the purchase of licenses in the procurement will be determined by the respective agency. All Priority Dispatch licenses will be in the name of SCSO or SCFD as appropriate.

Understood

M. System Hardware and Software Requirements

1. The proposed CAD system will be the manufacturer's most recent model available for installation that substantially meets the requirements of this RFP. Vendors must describe the model proposed and its associated components. Vendors must include a configuration diagram as a graphical representation of the system to be provided.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. Vendors are expected to furnish costs related to all hardware and related components required for the installation of a complete, working system. Vendors will be responsible for the purchase, installation, warranty, maintenance, and support of all hardware components provided with this procurement.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

N. Expandable

The proposed CAD system will be directly expandable by adding, not replacing, hardware. Vendors must describe how the proposed system is expandable in terms of servers, storage and other system components. Vendors must also describe the ability to add hardware components without taking the system offline. To optimize the data center environment and management, a space and energy saving configuration is required, e.g., rack-mount server, blade server, rack-mount PC.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

O. Fault Tolerance for CAD

The proposed CAD system must be fully redundant and designed for high availability. In an environment in which any incident can potentially develop into a life or death situation, system reliability and availability are paramount. The extremely high reliability achieved by fault tolerance is therefore mandatory. A fault tolerant system is defined as one that will continue operation despite any single hardware or software failure. This means that all critical system components must have a backup that takes over automatically in the event of failure.

Vendors must describe the availability architecture of the proposed solution, including database mirroring and failover, network load balancing, exception handling, system logging, and system management. Additionally, Vendors must describe the redundant and fault tolerant capabilities of the proposed system hardware including servers, storage, power, and networking equipment.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

P. System Uptime

Because of the critical nature of a CAD system, the proposed solution must be capable of a minimum 99.999 percent uptime. Uptime is defined as the availability of the application to the user. Extended downtime so that maintenance, upgrades and application software enhancements can be performed is unacceptable.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

Q. On-Line Maintenance and Repair

The system will have established maintenance and repair schedules and procedures that can be performed while keeping the processes in operation. Providing cost effective maintenance alternatives will maximize availability of the application. The capability of the system must allow the user to maintain the system using commercially available management tools and without extensive training.

The system must provide for the hot-swap replacement of components. The user must be able to remove and replace servers, drives and network components while the application and system remain operational.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

R. Data Communications/Networking

Data communication is a fundamental component of a CAD system. The proposed system must include a robust networking solution that isolates the CAD system from the remainder of the network and provides firewall and network intrusion detection and protection to the CAD system. The networking solution must be redundant and fault tolerant.

Vendors must describe the network architecture for the proposed solution, including how the CAD network is isolated and protected from external threats. The existing network supporting the CAD application for SCSO and SCFD is fault tolerant and maintained by Shelby County. The solution must incorporate the existing network.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

S. Data Warehouse

Shelby County intends to implement a data warehousing component of this system. Vendors must describe any data warehousing capabilities available in their system. This discussion will include the scope of data that can be warehoused, accessibility of data and security capabilities. At a minimum, the data warehouse system must be isolated from the

CAD system network and be able to restrict the access to data by agency (e.g., SCSO, SCFD), by role (e.g., non-County guest, member of the media, County employee), and by data element (e.g., restrict access due to HIPAA requirements).

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

T. Training

1. Shelby County expects that the selected Vendor will provide customized training to each agency regarding the use and configuration of the CAD system and interfaces. The training will include operations and functional training to all users from each agency; train-the-trainer sessions to trainers selected from each agency; and administrative training to each agency's administrative staff, which covers all aspects of operating and managing the system. Mobile data training will be exclusively train-the-trainer.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. If applicable, the following are examples of topics to be included in the administrative training:
 - a. Workstation administration to include Microsoft Windows administration
 - b. Server administration to include Microsoft SQL server and SQL server reporting services
 - c. Infrastructure management to include Microsoft System Center Operations Manager
 - d. Embedded applications administration, such as applicable ESRI module and SDE administration

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

3. All Vendor-provided training will be completed prior to system go-live.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

4. Vendors must provide a sample training program incorporating the training components described above.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

U. Report Development

1. SCSO and SCFD have, with the assistance of the current CAD vendor, developed specific and customized reports; copies of which are attached. Vendors are expected to allocate time and costs for the translation of those reports to the selected CAD system.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. SCSO and SCFD require Vendors to provide a list of currently developed “canned” law, fire and EMS reports that will be provided with the CAD system being proposed.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

3. The system provides for the use of COTS report development software, e.g., SAP Crystal, IBM SPSS, with the CAD system data and with the Data Warehouse data for the creation, storage and editing of County-developed reports. The cost of licensing and training for the report development software shall be included in the Cost Data Form.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

4. The selected Vendor shall include a complete Data Dictionary for all data tables as a deliverable prior to go-live.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

5. If the AVL component is selected, SCSO and SCFD require the selected Vendor to develop and implement the following customized reports prior to go-live, if not included as a “canned” report:
 - a. A report showing “true” unit en route time using AVL data showing the time between unit dispatch time to first unit movement (speed over one mile per hour [mph]) as recorded by AVL.
 - b. A hospital wait time report incorporating the total time an EMS unit is at the hospital. The report will also calculate the average hospital wait time for a given timeframe.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

V. Data Migration

Legacy data migration will be required from the Motorola Premier CAD to the selected Vendor’s system. The County understands that intermediate steps may be required. This function includes system tables and historic call data. The County expects that data migration will be completed prior to go-live. Data migration should not affect the implementation timeline of the project.

System table data will include unit recommendation tables, unit ID and descriptors, nature codes, premises histories, premises alerts, and hazards.

Call data migrated will include three years for SCSO and five years for SCFD. The County expects that the migrated data will be available to the CAD workstations and integrated with the CAD system application. Setting up a process where legacy premises, alert, hazard, event and unit data is not available directly from the CAD system application is not acceptable. Running a parallel system to access the legacy data is not acceptable.

Vendors must describe the methodology and schedule for data conversion from the current CAD to their proposed CAD system.

Legacy data parameters, as of May 31, 2013:

1. 800,405 event records
2. 14.4 million "Audit records" consisting of comments, units, unit status, and other transaction-based records
3. 1,637 premises items related to address, e.g., hazards, alerts
4. Current disk space required for legacy data on present system: 6.3 GB

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

W. Environmental Considerations

Vendors must describe the proposed systems environmental operating requirements, including operating temperatures, floor space requirements and power and cooling specifications.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

X. Warranty

The following requirements are applicable to all maintenance and repair services supplied by Vendor or Vendors' subcontractors, both under and outside of warranty.

1. Vendors shall warrant that all hardware and software supplied by the vendor and the integration thereof will be free from defects in material, design and workmanship for the warranty and maintenance period purchased.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. Vendors shall provide a minimum one-year warranty period from the date of final system acceptance. Vendors shall warrant that all hardware and software supplied will be free from defects in material, design and workmanship for the warranty period and any extended warranty or maintenance period purchased. This warranty shall cover all parts, labor and travel necessary to affect a repair related to all the hardware and software supplied under this contract.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

3. Vendors shall provide a detailed description of the offered warranty and any available extended warranty. This description must include a description of hardware and software support services and system upgrades to be provided. The names, addresses, telephone numbers and contact person for all service facilities must be identified in the proposal.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

4. During the warranty period, Vendors must provide support services 24 hours a day and seven days a week (24/7). This service must be available any hour of the day via a toll-free dial-up number. A web-based trouble reporting system should be available for non-critical issues. Vendors or their subcontractors must have the ability to access the system remotely using the County's secure virtual private network (VPN) facility for troubleshooting and to perform system diagnostics.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

5. Vendors shall also provide a detailed statement of warranty exclusions. The County reserves the right to reject any proposal based upon stated exclusion of warranties.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

Y. Support / Maintenance

1. Vendors must provide support services 24 hours a day and 7 days a week (24/7). This service must be available any hour of the day via a toll-free dial-up number. Shelby County expects that a web-based trouble reporting system will be available for non-critical issues and is the preferred method for reporting non-critical issues. Vendors or their subcontractors must have the ability to

access the system remotely using the County's secure VPN facility for troubleshooting and to and perform system diagnostics.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

2. For all critical system problems reported, Vendors shall provide an immediate response to the incident and shall initiate corrective action no longer than 30 minutes from time of notification. Within two hours of any major failure, reporting personnel must be either on-site or logged into the system to analyze the cause of the problem and to effect corrective action. Equipment or components required on-site for emergency maintenance must be specified and provided.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

3. Any hardware procured for this system through the Vendor will require hardware support in the same manner as the software support described in this section.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

4. In all instances of a major system failure, whether hardware or software related, the Vendor, and/or the provided network support partner, must effect corrective action within one hour of problem reporting or escalate the problem to their senior support staff for their immediate resolution at no added cost to the County.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

5. Critical system failures are defined by the County as the inability of a telecommunicator to take calls or dispatch emergency responders to any reported event or the inability of field units to receive call information or

transmit service/status notifications. The severity of the system failure will be determined by the County and may be upgraded depending on the situation. One printer, call taker, dispatcher or mobile unit/position down will not constitute a critical or major system failure.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

6. Vendors must provide documentation of their escalation policies and procedures to be followed if either a hardware or software problem is not responded to or resolved within the timeframes referenced above. The advancement through the escalation levels will be based on the critical nature of the incident and a timeframe.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

7. The escalation policy will include the names and contact information of supervisors and/or managers of increasing levels of responsibility within the Vendor's organization; up to and including the Chief Executive Officer (CEO). The following is an example of an Escalation Policy for a critical issue:
 - 0 to 2 hours – Initial service request placed and begins working on the issue
 - 2 to 4 hours – The issue is escalated to the Customer Support Manager who assigns additional resources, reports the status of the issue to the client contact and notifies the director of customer support
 - 4 to 8 hours – The issue is escalated to the director of customer support, reports the status of the resolution to the client and notifies the vice president of system integration and vice president of customer support
 - 8 to 12 hours – The issue is escalated to the vice president of system integration and vice president of customer support and the president/CEO is notified.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

8. Vendors shall warrant that the system supplied under any contract will be operational and available 99.999 percent of the time during the warranty and

support periods. The warranty period or support period will be extended on a day-for-day basis for each day the system performance falls below this level.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

9. The cost of the support and maintenance periods will be itemized in the cost sheets, if applicable. The County reserves the right to purchase one or more additional years of support. The proposed system must include, at a minimum, first year warranty, and specify the availability of a multi-year support and maintenance agreements.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

10. The maintenance plan shall cover all parts, labor and travel related to all of the hardware and software supplied under any contract and shall provide financial rebates to the County if the terms of the maintenance agreement are not met.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

11. Any contract will include the first year's maintenance and support as the required Warranty Period, with an option to negotiate renewal for additional one year periods from July 1 through June 30, with the same terms and conditions and satisfactory performance of all criteria and subject to the availability of funds for each renewal period. The optional renewal periods will be annual and commence upon mutual written consent of both parties.

Understood

12. The selected Vendor shall provide a fixed cost for maintenance that extends for five years after warranty.

Understood

13. Funding for maintenance is subject to funding and approval by the Shelby County Board of Commissioners.

Understood

14. The costs associated with maintenance may not increase more than 5 percent annually.

Understood

15. It is important to note that due to the County fiscal cycle and funding availability, funds may not be available for transfer to cover contract obligations until August 31 in any fiscal cycle. The County expects that annual support agreements will account for this situation.

Understood

16. Vendors shall provide a detailed description of the offered maintenance plan. This description must include a description of hardware and software support services and hardware and software upgrades to be provided. The names, addresses, telephone numbers and contact person for all service facilities must be identified in the proposal. The equipment or components required on-site for emergency maintenance must be specified.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

17. The selected Vendor shall provide all labor, equipment, materials and expenses necessary to ensure that the system is in good operating condition for any period covered under the maintenance agreement. All services provided shall be in conformance with the manufacturer's specifications. Vendors shall provide software and other materials and expenses necessary to maintain the application software system in good operating condition, including upgrades, as part of the price for maintenance for those years which the County has purchased maintenance from the Vendor.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

18. Operating software updates for corrections, enhancements and refinements to purchased capabilities shall be provided by Vendors as part of the price for maintenance for those years in which the County has purchased maintenance from the Vendor.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

19. Hardware updates for the purpose of correcting errors or "engineering change" updates to hardware required routinely by the manufacturer shall be provided by Vendors as part of the price for support for those years in which County purchases maintenance and support from the Vendor and/or their chosen network support partner. Manufacturer support may also be offered.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

20. There shall be no system downtime for routine maintenance or system back-ups. Vendors must explain in detail any required (scheduled) system processes that may require downtime.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

21. The cost of the maintenance plan shall be itemized on the Cost Data Forms (Attachment C). The County may purchase one or more additional years of support and maintenance, and other specified ongoing services, on a year-by-year basis, or purchase a multi-year support agreement.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

22. The County reserves the right to accept or reject any and all proposed services, Vendors, and/or the use of any proposed service facilities, at the sole discretion of the County.

Understood

23. The support and maintenance plan must include procedures and costs for compliance to HIPAA Device and Media Control Standards regarding the disposal (HIPAA Security Rule 164.310(d)(2)(i)), final disposition and the subsequent replacement of media storage devices associated with electronic protected health information.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

Z. Scope of Contract

The County wishes to engage in a contractual relationship with the best-qualified respondent selected through a competitive process that will work well with the County's personnel in the performance of the services in a manner that is cost-effective and practical, of which price is but one of the selection criteria.

Understood

AA. Project Timeframe

The County anticipates issuing the notification of contract award in October 2013. Contract negotiations will begin upon notification of contract award. The County anticipates the services to commence in January 2014. The selected Vendor must be prepared to begin immediately upon receipt of a Notice to Proceed.

Understood

BB. Reservation of Rights

The County reserves the right, for any reason, to accept or reject any one or more proposals, to negotiate the term and specifications for the services provided, to modify any part of the RFP, or to issue a new RFP.

The County may at any reasonable time, at its expense, make an audit of a respondent's books relative to the accounts.

Understood

CC. Selection Criteria

Each proposal response will be evaluated on the criteria outlined in Section XII of this document. Each respondent should set out in its response to this RFP to clearly identify the qualifications of its company and each individual who will work on this project.

As part of the qualification process and as noted in Section II, D 10, each vendor will be required to apply for an EOC number and provide workforce utilization information.

Vendors can access the online application to receive the registration numbers indicated above at www.shelbycountyttn.gov. At the top of the home page, click on the links “Departments,” “Departments P – Z” for the “Purchasing Department” and “Conducting Business with Shelby County”. The “Vendor Registration” link is at the bottom of the drop down box. Please download the application instructions and read thoroughly prior to accessing the application.

If you have any questions regarding the application, you may contact Purchasing at (901) 222-2250 or the EOC Administration at (901) 222-1100.

During the evaluation process, Shelby County Government reserves the right to consider the vendor’s EOC rating in the evaluation.

Understood

DD. Additional Information and References

Any additional information that would be helpful to the County in evaluating a proposal, including a list of current and former clients with a similar profile to Shelby County, should be submitted. Any former clients who have terminated in the last five years should be included on this list.

Understood

EE. Project Manager

Vendors shall assign a project manager who has long-term, successful experience on similar projects of a similar size. The project manager, and his or her qualifications, shall be identified in the submittal of the RFP documents. The project manager must be present for any presentation of the product demonstration and must remain assigned to Shelby County

throughout the contract period. Vendors shall guarantee that the Project Manager included in the proposal shall be assigned to this project throughout the project term, unless they are no longer employed by the Vendor. Replacement of the project manager, if necessary, must have equal qualifications to those of the project manager originally identified and will require written approval by Shelby County.

Shelby County will assign two project managers, one with SCSO responsibilities and one with SCFD responsibilities. The two Shelby County project managers will work cooperatively to coordinate project objectives.

The Vendor-assigned project manager must work independently with each of the Shelby County project managers, yet provide a coordinated response regarding system implementation and project coordination. The selected Vendor will be the single point of contact.

Understood

FF. Disaster Recovery

Vendors must provide the necessary hardware and software for an on-line (hot) disaster recovery system that will be located at a geographically separate site away from the dispatch center or production server location. Disaster recovery failover to a full function (including interfaces to external systems, e.g., mobile data, AVL) disaster recovery system must be configurable to be both automatic and able to be initiated by manual operation. The failover process should be seamless and transparent to the operators. There will be a system message delivered to agency-selected workstations (e.g., supervisor, administrator) that primary operations have switched to the backup system.

Vendors must describe the proposed disaster recovery solution including data replication, server failover to the disaster recovery site, client failover, and fall back to the primary site.

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

GG. Information Technology (IT) Infrastructure

A CAD system is expected to be maintained for an extended lifecycle spanning many years. The solution should be based on standard IT components and managed using standard IT

tools. Vendors must describe the proposed system utilization of the following software components utilizing the current release version of:

- Microsoft Windows workstation operating system
- Microsoft Windows Server® operating system
- Microsoft SQL Server® database software
- Microsoft System Center Operations Manager® management software
- ESRI ArcGIS® geographic information system software and tools

Comply Partial Comply or Alternative Does Not Comply

Detail Statement:

HH. Functional Requirements Spreadsheet

1. The Functional Requirements Spreadsheet, printed as Attachment B, is a Microsoft Excel document listing the detailed expectations for the proposed system. The electronic version of the spreadsheet will be provided to all Vendors attending the mandatory pre-proposal conference.

Understood

2. The County expects that Vendors will respond to each specification, in a manner described below, and return the completed spreadsheet as an item of the response package in printed form and in electronic format as a Microsoft Excel document, unlocked and not password protected.

Understood

3. The elements of the Functional Requirements Spreadsheet are described below:

Spec ID

The unique identifier associated with each requirement.

Specification Description

The functional requirement.

Priority

M – Mandatory requirements express a minimal acceptable level of performance and Vendors must meet the requirement as written. If a Vendor cannot comply with a Mandatory requirement, they may be judged “non-responsive” and their proposal will be rejected in its entirety.

I - Important requirements represent core capabilities or functions that the County has a compelling need to fulfill. In order to be evaluated as highly responsive, Vendors must provide some means to satisfy the requirement. The process to meet the requirement may not match precisely with how the requirement is written, but the expressed outcome or an equivalent is achieved.

Response

Entry of responses to an individual specification is accomplished through the selection of an item from a drop down list. The responses can only be:

- **Comply**

The Vendor’s proposed system complies with the requirement and the product/service is currently developed and available for shipment and installation.

- **Partial Comply or Alternative**

The Vendor’s proposed system either does not fully meet the described requirement or addresses the requirement through methodology other than that described in the statement. (Additional comments or supporting documentation are recommended.)

- **Does Not Comply**

The Vendor’s proposed system does not/cannot meet the requirement.

Additional Comments

Supportive information and explanations can be provided. Please be concise.

Example:

Spec ID	Specification Description	Priority	Response	Additional Comments
1	System data tables are maintained via GUI-based forms.			

Note: Additional information, additional explanations, illustrative materials, etc. can be provided in a separate document clearly referencing the related Spec ID. Vendors should specifically identify any limitations.

Shelby County strongly recommends Vendors respond to each application. An omitted response will be scored the same as a response code of Does Not Comply.

Understood

II. Scenarios

The Shelby County procurement process allows for the possibility of a validation of functionality as part of a continuing selection process. As needed, Vendors may be invited to the County facility to demonstrate system operations using specific scenarios related to day-to-day County communications center tasks. Scenarios will be provided in advance to Vendors selected to attend.

Understood

X. CONTRACT REQUIREMENTS

The selected Vendor will be expected to enter into a contract incorporating the following terms and conditions, and such additional terms and conditions standard to services of this type.

A. General Requirements

1. Control. All services by the Provider will be performed in a manner satisfactory to the County, and in accordance with the generally accepted business practices and procedures of the County.

2. Provider's Personnel. The Provider certifies that it presently has adequate qualified personnel to perform all services required under this Contract. The Provider will supervise all work under this Contract. The Provider further certifies that all of its employees assigned to serve the County have such knowledge and experience as required to perform the duties assigned to them. Any employee of the Provider who, in the opinion of the County, is incompetent, or whose conduct becomes detrimental to the work, shall immediately be removed from association with services under this Contract.

3. Independent Status.
 - a. Nothing in this Contract shall be deemed to represent that the Provider, or any of the Provider's employees or agents, are the agents, representatives, or employees of the County. The Provider shall be an independent Provider over the details and means for performing its obligations under this Contract. Anything in this Contract which may appear to give the County the right to direct the Provider as to the details of the performance of its obligations under this Contract or to exercise a measure of control over the Provider is solely for purposes of compliance with local, state and federal regulations and means that the Provider shall follow the desires of the County only as to the intended results of the scope of this Contract.

 - b. It is further expressly agreed and understood by the Provider that neither it nor its employees or agents are entitled to any benefits which normally accrue to employees of the County; that the Provider has been retained by the County to perform the services specified herein (not hired) and that the remuneration specified herein is considered fees for services performed (not wages) and that invoices submitted to the County by the Provider for services performed shall be on the Provider's letterhead.

4. Termination or Abandonment.
 - a. It shall be cause for the immediate termination of this Contract if, after its execution, the County determines that either:

- (1) The Provider or any of its principals, partners or corporate officers, if a corporation, including the corporation itself, has pled nolo contendere, or has pled or been found guilty of a criminal violation, whether state or federal, involving, but not limited to, governmental sales or purchases, including but not limited to the rigging of bids, price fixing, or any other collusive and illegal activity pertaining to bidding and governmental contracting.
 - (2) The Provider has subcontracted, assigned, delegated, or transferred its rights, obligations or interests under this Contract without the County's consent or approval.
 - (3) The Provider has filed bankruptcy, become insolvent or made an assignment for the benefit of creditors, or a receiver, or similar officer is appointed to take charge of all or part of Provider's assets.
- b. The County may terminate the Contract upon five (5) days written notice by the County or its authorized agent to the Provider for the Provider's failure to provide the services specified under this Contract.
 - c. This Contract may be terminated by either party by giving thirty (30) days written notice to the other before the effective date of termination. In the event of such termination, the Provider shall be entitled to receive just and equitable compensation for any satisfactory work performed as of the termination date; however, the Provider shall not be reimbursed for any anticipatory profits that have not been earned as of the date of termination.
 - d. All work accomplished by the Provider prior to the date of such termination shall be recorded and tangible work documents shall be transferred to and become the sole property of the County prior to payment for services rendered.
 - e. Notwithstanding the above, the Provider shall not be relieved of liability to the County for damages sustained by the County by virtue of any breach of the Contract by the Provider and the County may withhold any payments to the Provider for the purpose of setoff until such time as the exact amount of damages due the County from the Provider is determined.
5. Subcontracting, Assignment or Transfer. Any subcontracting, assignment, delegation or transfer of all or part of the rights, responsibilities, or interest of either party to this Contract is prohibited unless by written consent of the other

party. No subcontracting, assignment, delegation or transfer shall relieve the Provider from performance of its duties under this contract. The County shall not be responsible for the fulfillment of the Provider's obligations to its transferors or sub-Providers. Upon the request of the other party, the subcontracting, assigning, delegating or transferring party shall provide all documents evidencing the assignment.

6. Conflict of Interest. The Provider covenants that it has no public or private interest and shall not acquire, directly or indirectly, any interest which would conflict in any manner with the performance of its services. The Provider warrants that no part of the total contract amount provided herein shall be paid directly or indirectly to any officer or employee of the County as wages, compensation, or gifts in exchange for acting as officer, agent, employee, sub-Provider to the Provider in connection with any work contemplated or performed relative to this Contract.
7. Covenant against Contingent Fees. The Provider warrants that it has not employed or retained any company or person other than a bona fide employee working solely for the Provider, to solicit or secure this Contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Provider any fee, commission, percentage, brokerage fee, gift, or any other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, the County will have the right to recover the full amount of such fee, commission, percentage, brokerage fee, gift, or other consideration.
8. Employment of County Workers.
 - a. The Provider shall not engage, on a full or part-time or other basis during the period of the Contract, any professional or technical personnel who are in the current employment of the County.
 - b. Notwithstanding the foregoing, no prior County official or employee may be employed by or receive compensation, wages or benefits from the Provider for a period of one (1) year from employment separation from the County if during the period of employment with the County the employee or official had any direct or indirect involvement with the Provider's services or operations provided to the County.

9. Arbitration. Any dispute concerning a question of fact in connection with the work not disposed of by agreement between the Provider and the County will be referred to the Shelby County Contract Administrator or his/her duly authorized representative, whose decision regarding same will be final.

10. General Compliance with Laws.

a. If required, the Provider shall certify that it is qualified and duly licensed to do business in the State of Tennessee and that it will take such action as, from time to time, may be necessary to remain so qualified and it shall obtain, at its expense, all licenses, permits, insurance, and governmental approvals, if any, necessary to the performance of its obligations under this Contract.

b. The Provider shall, at all times, observe and comply with all federal, state, and local laws, ordinances, and regulations in any manner affecting the conduct of the work. The preceding shall include, but is not limited to, compliance with all Equal Employment Opportunity laws, the Fair Labor Standards Act, Occupational Safety and Health Administration (OSHA) requirements and the Americans with Disabilities Act (ADA) requirements.

c. This Contract will be interpreted in accordance with the laws of the State of Tennessee. By execution of this Contract the Provider agrees that all actions, whether sounding in contract or in tort, relating to the validity, construction, interpretation and enforcement of this Contract will be instituted and litigated in the courts of the State of Tennessee, located in Shelby County, Tennessee, and in no other. In accordance herewith, the parties to this Contract submit to the jurisdiction of the courts of the State of Tennessee located in Shelby County, Tennessee.

11. Nondiscrimination. The Provider hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Provider on the grounds of handicap and/or disability, age, race, color, religion, sex, national origin, or any other classification protected by Federal, Tennessee State constitutional, or statutory law. The Provider shall upon request show proof of such nondiscrimination, and shall post in conspicuous places available to all employees and applicants notices of nondiscrimination.

12. Entire Agreement. This Contract contains the entire Contract of the parties and there are no other promises or conditions in any other Contract whether oral or written. This Contract supersedes any prior written or oral Contracts between the parties.
13. Amendment. This Contract may be modified or amended, only if the amendment is made in writing and is signed by both parties.
14. Severability. If any provision of this Contract is held to be unlawful, invalid or unenforceable under any present or future laws, such provision shall be fully severable; and this Contract shall then be construed and enforced as if such unlawful, invalid or unenforceable provision had not been a part hereof. The remaining provisions of this Contract shall remain in full force and effect and shall not be affected by such unlawful, invalid or unenforceable provision or by its severance here from. Furthermore, in lieu of such unlawful, invalid, or unenforceable provision, there shall be added automatically as a part of this Contract a provision as similar in terms to such unlawful, invalid or unenforceable provision as may be possible, and be legal, valid and enforceable.
15. No Waiver of Contractual Right. No waiver of any term, condition, default, or breach of this Contract, or of any document executed pursuant hereto, shall be effective unless in writing and executed by the party making such waiver; and no such waiver shall operate as a waiver of either (a) such term, condition, default, or breach on any other occasion or (b) any other term, condition, default, or breach of this Contract or of such document. No delay or failure to enforce any provision in this Contract or in any document executed pursuant hereto shall operate as a waiver of such provision or any other provision herein or in any document related hereto. The enforcement by any party of any right or remedy it may have under this Contract or applicable law shall not be deemed an election of remedies or otherwise prevent such party from enforcement of one or more other remedies at any time.
16. Matters to be Disregarded. The titles of the several sections, subsections, and paragraphs set forth in this contract are inserted for convenience of reference only and shall be disregarded in construing or interpreting any of the provisions of this Contract.
17. Subject to Funding. This Contract is subject to annual appropriations of funds by the Shelby County Government. In the event sufficient funds for this Contract are

not appropriated by Shelby County Government for any of its fiscal period during the term hereof, then this Contract will be terminated. In the event of such termination, the Provider shall be entitled to receive just and equitable compensation for any satisfactory work performed as of the termination date.

18. Travel Expenses. All travel expenses payable under this Contract shall be in accordance with the County Travel Policy and Procedures. This includes advance written travel authorizations, submission of travel claims, documentation requirements, and reimbursement rates. The County will make no travel advances.

19. Incorporation of Other Documents.

a. The Provider shall provide services pursuant to this Contract in accordance with the terms and conditions set forth within the Shelby County Request for Proposals/Bids, as well as, the Response of the Provider thereto, all of which are maintained on file within the Shelby County Purchasing Department and incorporated herein by reference.

b. It is understood and agreed between the parties that in the event of a variance between the terms and conditions of this Contract and any amendment thereto and the terms and conditions contained either within the Request for Proposals/Bids or the Response thereto, the terms and conditions of this Contract as well as any amendment shall take precedence and control the relationship and understanding of the parties.

20. Contracting With Locally Owned Small Businesses. The Provider shall take affirmative action to utilized Locally Owned Small Businesses when possible as sources of supplies, equipment, construction and services.

21. Incorporation Of Whereas Clauses. The foregoing whereas clauses are hereby incorporated into this Contract and made a part hereof.

22. Waiver of Proprietary Interest. Notwithstanding anything to the contrary contained herein or within any other document supplied to the County by the Provider, the Provider understands and acknowledges that the County is a governmental entity subject to the laws of the State of Tennessee and that any report, data or other information supplied to the County by the Provider due to services performed pursuant to this Contract is subject to being disclosed as a public record in accordance with the laws of the State of Tennessee.

23. Organization Status and Authority.

- a. The Provider represents and warrants that it is a corporation, limited liability company, partnership, or other entity duly organized, validly existing and in good standing under the laws of the State of Tennessee; it has the power and authority to own its properties and assets and is duly qualified to carry on its business in every jurisdiction wherein such qualification is necessary.
- b. The execution, delivery and performance of this Contract by the Provider has been duly authorized by all requisite action and will not violate any provision of law, any order of any court or other agency of government, the organizational documents of the Provider, any provision of any indenture, agreement or other instrument to which the Provider is a party, or by which the Provider's respective properties or assets are bound, or be in conflict with, result in a breach of, or constitute (with due notice or lapse of time or both) a default under any such indenture, agreement or other instrument, or result in the creation or imposition of any lien, charge or encumbrance of any nature whatsoever upon any of the properties or assets.

24. Warranty. The Provider warrants to the County that all Services shall be performed in accordance with acceptable standards in the industry applicable to the Services. The Provider shall correct, at its sole cost and expense, any work reasonably deemed to be unsatisfactory by the County. The Provider warrants to the County that all Services shall be in strict compliance with the terms of this Contract, and all applicable governmental laws, rules and regulations.

25. Liquidated Damages. The time requirements and system availability specified herein are material and of essence to the contract. The parties acknowledge and agree that the damages sustained by the County due to an unapproved delay in performance by Provider are difficult to ascertain. As such, it is mutually agreed that should the system fail to be available, the system's response fails to comply within the time specified herein, or Provider fails to timely complete or deliver all components in time for the County to inspect, test, and accept such products and services by the agreed-upon acceptance date, the County shall be entitled to liquidated damages in the form of contract price reductions of one thousand dollars (\$1,000) per day for each delay after the scheduled acceptance date for each major system or phase of the project.

The aforesaid specified amount(s) shall not be construed as a penalty, but as liquidated damages for any such failure on the part of Provider and is a reasonable estimate of the damages to be suffered by the County in the event of any delay by the Provider. In any suit involving assessment or recovery of liquidated damages, the reasonableness of the charge shall be conclusively presumed, and the amount assessed shall be in addition to every other right or remedy now or hereinafter enforceable at law, in equity, by statute, or under this contract. Any such charges assessed against Provider may be deducted from monies due to or to become due to Provider, or may be collected from the surety bond.

26. Rights in Data. The County shall become the owner, and the Provider shall be required to grant to the County, or its successors, a perpetual, non-exclusive, non-transferable, royalty-free right, in the County's name, to use any deliverables provided by the Provider under this Contract, regardless of whether they are proprietary to the Provider or to any third parties.

27. Source Code. The Provider, at no additional cost to Shelby County, shall place the entire set of source code for the proposed solution with an authorized escrow agent. Setting aside the software in an escrow account provides Shelby County a method of obtaining the software in the event the Provider ceases to market and support the proposed software. The Provider shall provide all information to Shelby County relevant to placing the software with an authorized escrow agent, ensuring the most recent version of the software is in escrow within 10 working days of issuance of a new major or minor release of the solution.

Comply Partial Comply or Alternative Does Not Comply

B. Indemnification and Insurance Requirements

1. Responsibilities for Claims and Liabilities.

The Provider shall indemnify, defend, save and hold harmless the County, and its elected officials, officers, employees, agents, assigns, and instrumentalities from and against any and all claims, liabilities, losses or damages—including but not limited to Title VII and 42 USC 1983 prohibited acts arising out of or resulting from any conduct; whether actions or omissions; whether intentional, unintentional, or negligent; whether legal or illegal; or otherwise that occur in connection with, or in breach of, this Contract or in the performance of the duties hereunder, whether performed by the Provider, its sub-Providers, agents,

employees or assigns. This indemnification shall survive the termination or conclusion of this Contract.

The Provider expressly understands and agrees that any insurance protection required by this Contract or otherwise provided by the Provider shall in no way limit the responsibility to indemnify, defend, save and hold harmless the County or its elected officials, officers, employees, agents, assigns, and instrumentalities as herein provided.

The County has no obligation to provide legal counsel or defense to the Provider or its sub-Providers in the event that a suit, claim, or action of any character is brought by any person not party to this Contract against the Provider as a result of or relating to obligations under this Contract.

Except as expressly provided herein, the County has no obligation for the payment of any judgment or the settlement of any claims against the Provider as a result of or relating to obligations under this Contract.

The Provider shall immediately notify the County, c/o Shelby County Government, Contracts Administration, 160 N. Main Street, Suite 550, Memphis, TN 38103, of any claim or suit made or filed against the Provider or its sub-Providers regarding any matter resulting from or relating to Provider's obligations under this Contract and will cooperate, assist and consult with the County in the defense or investigation thereof.

The Provider shall immediately notify the County, c/o Shelby County Government, Contracts Administration, 160 N. Main Street, Suite 550, Memphis, TN 38103, of cancellation or changes in any of the insurance coverage required.

Insurance Requirements. The Provider will provide evidence of the following insurance coverage through insurers authorized to do business in the State of Tennessee and with Best's rating of A- or better with limits of no less than:

1) *Commercial General Liability Insurance* \$1,000,000 limit per occurrence bodily injury and property damage/\$1,000,000 personal and advertising injury/\$2,000,000 General Aggregate/\$2,000,000 Products-Completed Operations Aggregate. Shelby County Government, its elected officials, appointees, employees and members of boards, agencies, and commissions shall be named as additional insureds. The insurance shall include coverage for the following:

- a) Premises/Operations
- b) Products/Completed Operations
- c) Contractual
- d) Independent Providers
- e) Broad Form Property Damage, if applicable
- f) Personal Injury and Advertising Liability
- g) Cyber Liability – minimum limit of \$300,000

2) *Business Automobile Liability Insurance* - \$1,000,000 each accident for property damage and personal injury. Coverage is to be provided on all:

- a) Owned/Leased Autos
- b) Non-owned Autos
- c) Hired Autos

3) *Workers Compensation and Employers' Liability Insurance* – Including coverage for sole proprietors, partners, and officers, regardless of requirement by Tennessee State Statute. Policy is to be specifically endorsed to include these individuals for coverage. Employers Liability Coverage is \$1,000,000 per accident. Provider/Provider waives its right of subrogation against Shelby County for any and all workers' compensation claims.

4) *Professional Liability/Errors & Omissions Insurance* – minimum of \$1,000,000 per claim or occurrence/\$3,000,000 annual aggregate.

5) *Employee Dishonesty* – minimum limit of \$50,000 per employee, including Third Party coverage.

All policies will provide for thirty (30) days written notice to Shelby County of cancellation of coverage provided. Ten (10) days' notice is applicable to non-payment of premium. If the insurer is not required by the policy terms and conditions to provide written notice of cancellation to Shelby County, the Provider/Provider will provide immediate notice to Shelby County.

All insurance policies maintained by the Provider/Provider shall provide that insurance as applying to Shelby County shall be primary and non-contributing irrespective of such insurance or self-insurance as Shelby County may maintain in its own name and on its own behalf.

Comply Partial Comply or Alternative Does Not Comply

C. Right to Monitor and Audit

Access to Records. During all phases of the work and services to be provided hereunder the Provider agrees to permit duly authorized agents and employees of the County to enter the Provider's offices for the purpose of inspections, reviews and audits during normal working hours. Reviews may also be accomplished at meetings that are arranged at mutually agreeable times and places.

The Provider will maintain all books, documents, papers, accounting records, and other evidence pertaining to the fee paid under this Contract and make such materials available at their offices at all reasonable times during the period of this Contract and for three (3) years from the date of payment under this Contract for inspection by the County or by any other governmental entity or agency participating in the funding of this Contract, or any authorized agents thereof; copies of said records to be furnished if requested.

Comply Partial Comply or Alternative Does Not Comply

XI. PROPOSAL SUBMISSION

A. General

1. All interested and qualified Vendors are invited to submit a proposal for consideration. Submission of a proposal indicates that the Vendor has read and understands this entire RFP, including all attachments, exhibits, schedules, and addenda (as applicable) and all concerns regarding this RFP have been satisfied.

Understood

2. Proposals must be submitted in the format described below. Proposals are to be prepared in such a way as to provide a straightforward, concise description of capabilities to satisfy the requirements of this RFP. Expensive bindings, colored displays, promotional materials, etc. are neither necessary nor desired. Emphasis should be concentrated on conformance to the RFP instructions, responsiveness to the RFP requirements, and on completeness and clarity of content.

Understood

3. Proposals must be complete in all respects as required in this section. A proposal may not be considered if it is conditional or incomplete.

Understood

4. Hard copy proposals and the required Electronic Response Forms, including copies of the Functional Requirements Spreadsheet (Appendix B) and Cost Data Forms (Appendix C), must be received by **Friday, August 9, 2013, at 4:00 P.M. (CST)** at Shelby County Government Purchasing Department, 160 N. Main St., Suite 550, Memphis, TN 38103.

Understood

5. Vendors agree to provide the County with any additional information deemed necessary to accurately determine their ability to perform the services proposed. Furthermore, submission of this proposal constitutes permission by a Vendor for the County to verify all information contained in the proposal. Failure to comply with any request for additional information may disqualify the Vendor from further consideration. Such additional information may include evidence of financial ability to perform.

Understood

B. Proposal Presentation

1. Three (3) original proposals (clearly identified as original), six (6) copies of the proposal and three (3) complete electronic copies on CD, DVD or flash drive are required. The Microsoft Excel versions of the Electronic Response Forms (Functional Requirements Spreadsheet, the RFP Response Spreadsheet and the Cost Data Forms) must be completed and returned without additional form locks or password protection on a CD, DVD or USB drive.

Understood

2. The technical and cost proposals should be submitted together; however, the three (3) original cost proposals shall be in separate, sealed envelopes, submitted with the original proposals.

Understood

3. The package containing the originals and copies must be sealed and marked with the Vendor's name and "CONFIDENTIAL, COMPUTER AIDED DISPATCH SYSTEM, RFP # 13-006-87" with due date and time indicated.

Understood

4. Hard copy proposals must be typed. Erasures and "white-out" are not permitted. Mistakes may be crossed out, and corrections may be typed adjacent and initialed in ink by the person signing the proposal. Please identify all attachments, literature and samples, etc., with your firm name and our RFP number.

Understood

5. Proposals must be verified before submission as they cannot be withdrawn or corrected after being opened. The County will not be responsible for errors or omissions on the part of the Vendors in preparing their proposals. A responsible officer or employee must sign the proposal. Tennessee sales tax shall not be included in the Provider's proposal.

Understood

C. Proposal Format

Response to this RFP must be in the form of a proposal package that must be submitted in the following format: The Proposal Response Sheet (required document) should be the first page of your written response.

1. Cover Page – Submit on letterhead stationery, signed by a duly authorized officer, employee, or agent of the organization/firm.

Understood

2. Comprehensive Response (Minimum Requirements and Services Required)

- a. Address all services and requirements outlined in Section II – Minimum Requirements and Section IX – Services Required/Scope of Work.
- b. Outline how respondent can meet or exceed the minimum requirements.
- c. Detail how the respondent is qualified to provide the services required.

- d. Describe, in detail, the approach for accomplishing the services (include a time schedule for completion of each element).
- e. Complete all understanding and compliance check box responses throughout the RFP, adding details where appropriate.
- f. Complete the matrix of Functional Requirements Spreadsheet described in Section IX, HH.

Understood

3. Cost and Fees

All pricing information must be submitted in a separate, sealed envelope labeled “Cost Proposal.” No price or cost information may be submitted as part of the technical proposal.

- a. Provide all applicable itemized costs and any commissions included in the proposal for the services for each element in the scope of work (this includes a break-down of the cost proposed for any sub-Provider working in conjunction with your organization on the project) in the attached Cost Data Form (Attachment C). Only costs included on the Cost Data Forms will be considered as part of the proposal.
- b. Provide the itemized cost information on Cost Data Forms as described above in an electronic format in an open, unprotected format, not password protected on a CD, DVD or a USB drive in the same sealed envelope as the printed Cost Data Forms.
- c. Explain any assumptions or constraints in your price proposal to perform the services.
- d. Explain any additional charges or fees in the proposal.

Understood

4. Experience of the Respondent

A sufficient description of the experience and knowledge base of the respondent to show the Vendor's capabilities should be included in the proposal. At a minimum, the description should include, but not necessarily be limited to, the following:

- a. A brief description of the history and mission of the Vendor, including the background and mission statement, the length of time the Vendor has been in business, a description of the organizational structure and a description of customer make-up
- b. A statement of how long the Vendor has provided services similar to the services requested herein
- c. A general description of the Vendor's experience and background in providing services similar to the services requested herein
- d. Any other relevant information about the experience and knowledge base of the Vendor that is deemed to be material
- e. Resume of each employee engaged in the services, including the role of each and an overview of their previous experience with similar projects.

Understood

5. References

References of the Vendor, including at least three other clients for whom the Vendor has provided services similar to the services (with preference given to clients comparable to Shelby County Government) and, for each such reference, the business name, the identification of a contact person, the title of the contact person and a telephone number.

Understood

6. Additional Information

- a. A description of any other resources available to the Vendor that will be useful in providing the services.

- b. A description of the methods used by the Vendor to measure the satisfaction of its client.
- c. Any other relevant information about the capabilities of the Vendor deemed to be material.

Understood

XII. PROPOSAL EVALUATION AND SELECTION

A. Evaluation Process

1. Initial Review – All proposals will be initially evaluated to determine if they meet the following minimum requirements:
 - a. The proposal must be complete, in the required format, and be in compliance with all the requirements of the RFP.
 - b. Vendors must meet the Minimum Proposer Requirements outlined in Section II of this RFP.
 - c. Any Vendor determined to be technically unqualified, or whose proposal is deemed to be non-responsive, will not be considered further.

Understood

2. Technical Review – Proposals meeting the above requirements will be evaluated on the basis of the following criteria:
 - a. Each proposal will be reviewed by a special ad-hoc committee comprised of representatives of Shelby County. The committee may elect to schedule a Vendor presentation and interview with one or more of the respondents.
 - b. Technically qualified and responsive proposals submitted in response to this RFP will be evaluated and ranked based on the factors listed in Section XII, B, 1–5.

Understood

B. Evaluation Criteria

These criteria are not necessarily listed in order of importance.

1. Factor 1 - Company Qualifications

Proposals will be evaluated on the qualifications and experience of both the primary contractor (Vendor) and all major subcontractors. Vendors should submit sufficient information to enable the County to understand and evaluate the experience of the Vendor on similar projects. At a minimum, provide the following:

a. General Company Information

1) Company Profile

- a. Identify all company locations.
- b. Identify the number of employees.
 1. Employed by the company in total
 2. Dedicated to sales
 3. Dedicated to technical support
 4. Dedicated to research and development

2) Company Longevity

- a. Indicate the number of years in business.
- b. Indicate the number of years in business selling the CAD system solution solicited herein (minimum of ten years of experience).
- c. Subcontractors, if applicable, will be required to have a minimum of three years of experience in their respective discipline.

3) Financial Stability

- a. Provide certification of current bonding capacity and current obligation.
- b. Provide audited financial statements for the past two years, current booked work and projected volume for the next two years. **(Include this only with the Cost Data Form in the sealed cost proposal.)**
- c. List any litigation initiated by or against the Vendor with a brief discussion of the issues involved and the outcome (including any settlement or awards paid).
- d. Indicate if the Vendor has been in bankruptcy, reorganization or receivership in the last five years and, if applicable, provide an explanation.

- e. Indicate if the Vendor, or any of its principals, has/have been disqualified by any public agency from participation in public contracting opportunities and, if applicable, provide an explanation.

- b. Capacity
 - 1) Time is of essence for this project; therefore, the successful firm must be able to perform the work in a timely manner. Present an outline of the Vendor's current workload, present capacity for additional work and projected future workload, demonstrating ability to respond to County project requirements.

- c. Research and Development
 - 1) Provide the percentage of overall revenue that is being allocated back into Research and Development.

- d. Vendor's Key Personnel
 - 1) Vendors should provide information demonstrating the technical knowledge (including all training and certifications) of all key personnel involved in the implementation in the scope of work. Vendors should confirm NCIC and Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA) standards will be met for secure access by its key personnel.

 - 2) Provide resumes of the Vendor's project manager and other key design and implementation personnel (identified on the organization chart) that will be assigned to this project that illustrates their qualifications, educational levels, experience, licenses and/or certificates, technical skills and availability. For each key person, provide a list of relevant projects they have worked on within the past five years with the following information:
 - a. Project title and location
 - b. Role, responsibility and decision authority
 - c. Point of contact with the customer

e. Subcontractors' Key Personnel (if applicable)

The County understands that Vendors may engage subcontractors to provide services and equipment requested in this RFP.

- 1) Provide resumes of each of the subcontractors' team leads and other key design and implementation personnel that will be assigned to this project. For each key person, provide a list of relevant projects they have worked on within the past five years with the following information:
 - a. Project title and location
 - b. Role, responsibility and decision authority
 - c. Point of contact with the customer

Understood

2. Factor 2 - References/Past Performance

Consideration will be given to input from other clients of the Vendor's solutions and services, including ability to manage a project of this size and scope, past performance and the ability to provide the desired solution in the necessary timeframe. The County will also pursue independent means of contact, when available and appropriate.

a. References

- 1) Provide a list of all installations that the Vendor has implemented during the past five years that are relevant to the scope of this project. Each project reference shall include:
 - a. Project title and location
 - b. Project start and finish dates
 - c. Client point of contact (name and title)
 - d. Current telephone number and e-mail address of point-of-contact
 - e. Description of the work/services provided
 - f. Percentage of the overall project actually performed by the Vendor
 - g. Initial bid price and final contract amount, including the quantity and dollar value of contract modifications
- 2) The County may contact client references to validate the information provided by the Vendor and to determine the client's overall satisfaction with the solutions and services provided; therefore, it may prove beneficial to the Vendor to contact its referenced clients to ensure their contact

information provided is up-to-date and that the reference will be available during the period of time that the County will be validating references (approximately the next 120 days).

3) Vendors may include letters of commendation from customers.

b. Past Performance

1) Vendor

- a. Provide a list of any projects completed within the last five years that were more than two months behind schedule and an explanation of why
- b. Provide a list of any projects that Vendor failed to complete and an explanation of why

2) Subcontractors

If applicable, identify all subcontractors to be used for this project and provide a list of their installations completed within the last five years that are relevant to the scope of this project. Each project description shall include:

- a. Project title and location
- b. Project start and finish dates
- c. Short description of subcontracted work
- d. Subcontract value

3) The County reserves the right to contact the listed owners for confirmation or clarification of the information submitted.

Understood

3. Factor 3 - Proposed Solution / RFP Narrative Evaluation

a. Submitted Proposal

Vendors will be evaluated on the quality and responsiveness of the proposed CAD system solution as presented in the response to the RFP.

b. Management Plan

The proposal should provide sufficient information to evaluate the Vendor's approach to managing, designing and implementing the project. At a minimum, Vendors should provide the information listed below.

- 1) An organizational chart with information sufficient to understand and evaluate the Vendor's organizational structure. The organizational chart only needs to identify those persons who will be assigned to this project.
- 2) Describe the portions of the work that will be undertaken directly by the Vendor and that which will be subcontracted (if applicable).
- 3) Specifics regarding project management areas such as a communications plan, risk assessment and mitigation, issue tracking, punch list development, change control and escalation process.

c. Project Schedule

- 1) Provide a proposed project schedule, in Microsoft Project format, beginning at the Notice to Proceed and ending at Go-Live (as defined herein). The timeline should be expressed in terms of calendar days or weeks from the issuance of the Notice to Proceed rather than actual dates and should include specific major events, milestones and deliverables. Identify any assumptions used that support this timeline.

d. Training Plan

- 1) Provide details regarding the training plan for the CAD solution
 - a. Detailed outline for training classes for CAD
 - b. Detailed schedules for training with consideration of maintaining dispatch center staffing requirements
 1. Number of classes
 2. Class size
 3. Class schedule

e. County Required Resources

- 1) Provide a list of all County required resources (including staff and materials) required to support the implementation of the CAD solution.
- 2) Vendors must clearly identify tasks that are the responsibility of the County and communicate required completion dates to fulfill the project schedule. A matrix of tasks versus responsibility (Vendor, County, or other) is a preferred approach.
- 3) Provide a description of the training and skills needed for County resources in order to properly support the system. For example, DBA level skills, SQL training, Microsoft Active Directory certification, etc.

f. Maintenance and Operation

Proposals will be evaluated on the useful life expectancy of the CAD solution, particularly guarantees against early obsolescence. The County will not accept acquisition of a solution which the Vendor does not intend to support for the next 10–15 years.

- 1) Provide details regarding the operation and maintenance of the CAD solution.

g. Proposed Solution

Vendors will be evaluated on the quality of the proposed CAD solution, to include, but not limited to:

- 1) The degree to which the proposal addresses the stated goals.
- 2) Adherence to the solicitation requirements.
- 3) The extent to which the components of the CAD are integrated to provide a single-system appearance to the end users and an integrated solution.
- 4) The extent to which the CAD solution incorporates effective processing methods, state-of-the-art technology and programming languages, and well defined system interfaces.

- 5) General ease of use, future modification/expansion and change.
- 6) Detailed security rights and ease of administration.
- 7) Comprehensiveness of the documentation (e.g., training materials and manuals).
- 8) Product life expectancy (Vendor should identify all versions of the CAD solution since inception and any on-going research and development efforts).
- 9) Third-party hardware and software selection.
- 10) Intuitiveness and aesthetic appeal of the software.

Understood

4. Factor 4 - Functional Specifications

Proposals will be evaluated on the responses provided with the Microsoft Excel-based Functional Specifications.

Understood

5. Factor 5 - Cost

Proposals will be evaluated on the responses provided with the Microsoft Excel-based Cost Data Forms. Vendors are expected to align cost elements with the formatted Cost Data Forms. No other costs will be considered other than those included with the Cost Data Forms.

Understood

C. Product Demonstration

Shelby County Government reserves the right to interview, or to require an oral presentation from, any respondent for clarification of information set forth in the Vendor's response. In this regard, at the discretion of the evaluation committee, some or all respondents who submit a proposal in response to this RFP may be asked to submit to an interview or give a product demonstration of their respective proposals to the evaluation committee. If so, this is not to be

a presentation restating the proposal, but rather an in-depth analysis of certain qualifications of the Vendor.

The interview or oral presentation, if utilized, is intended to provide an opportunity for the Vendor to clarify or elaborate on its qualifications without restating the proposal. The product demonstration is to be a fact finding and explanation session only and is not to be used to negotiate any terms of the contract. If required, the time and location of such interview or product demonstration will be scheduled by the Administrator of Purchasing or his designee. Product demonstrations in this phase of the evaluation process are strictly an option of Shelby County Government or its evaluation committee and, consequently, may or may not be conducted. All travel expenses to and from the product demonstration shall be the responsibility of the Vendor.

If the Vendor is selected as a finalist, each finalist will be required to provide a demonstration of the proposed product in Memphis, during the established demonstration period (see the procurement schedule in Section V). The schedule will provide time for the finalists to demonstrate the capabilities of each component of their solution.

Finalists will be expected to follow the script provided. Each finalist will be required to show how each scenario would be addressed using its proposed solution. It is recognized that the Vendor's system will not yet be configured to work in Shelby County, and this will be taken into account during the demonstrations. Demonstration of any substitute applications/version (e.g., while the proposed application/version is being developed) will negatively affect the score assigned to the finalist.

Understood

D. Preferred Vendor Selection

Selection will be based on determination of which proposal best meets the needs of the County and the requirements of this RFP.

Shelby County Government reserves the right to consider the vendor's EOC rating in all evaluations.

Understood

XIII. CONTRACT AWARD

The proposals submitted will be evaluated by the County. Contract(s) will be awarded based on a competitive selection of proposals received. The County will award a contract to the responsible Vendor whose proposal conforms to the requirements of the RFP and provides the most advantageous proposal to the County, all factors considered.

Vendors are advised that the lowest cost proposal will not necessarily be awarded the contract, as the selection will be based upon qualification criteria as deemed by the County and as determined by the selection committee and the approval County Mayor. All decisions are made at the discretion of the County.

The contents of the proposal of the selected Vendor will become contractual obligations and failure to accept these obligations in a contractual agreement may result in cancellation of the award.

The County reserves the right to negotiate any portions of the selected Vendor's fees and scope of work or utilize their own resources for such work.

Understood

APPENDIX A – ACRONYMS

Acronym	Description
ADA	Americans with Disabilities Act
ATP	Acceptance Test Plan
ALI	Automatic Location Identification
ANI	Automatic Number Identification
API	Application Program Interface
ASCII	American Standard Code for Information Interchange
AVL	Automatic Vehicle Location
AVRR	Automatic Vehicle Recommendation and Routing
CAD	Computer Aided Dispatch
CAMA	Centralized Automated Message Accounting
CJIS	Criminal Justice Information Services
COTS	Commercial Off The Shelf
CPE	Customer Premises Equipment
CPU	Central Processing Unit
CSV	Comma Separated Variables
E9-1-1	Enhanced 9-1-1
ECC	Emergency Call Center
ECT	Emergency Call Taker
ECRF	Emergency Call Routing Function
EMD	Emergency Medical Dispatch
EMS	Emergency Medical Services
EOC	Emergency Operations Center
ePCR	Electronic Patient Care Report
ESInet	Emergency Services Internet Protocol Network
ESN	Emergency Services Number
ESZ	Emergency Services Zone
ETA	Estimated Time of Arrival
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FRMS	Fire Records Management System
GIS	Geographic Information System
GPS	Global Positioning System
GUI	Graphical User Interface
IM	Instant Messaging
IP	Internet Protocol
IRR	Instant Recall Recorder

Acronym	Description
ISDN	Integrated Services Digital Network
LE	Law Enforcement
LERMS	Law Enforcement Records Management System
LoST	Location to Service Translation
LVF	Location Validation Function
MF	Multi-frequency
LEC	Local Exchange Carrier
LMP	Limited Manpower
LNG	Legacy Network Gateway
LNS	Legacy Network Switch
MDD	Mobile Data Device
MDT	Mobile Data Terminal
MIS	Management Information System
MLI	Master Location Index
MNI	Master Name Index
MVI	Master Vehicle Index
MS	Microsoft
MSAG	Master Street Address Guide
NCIC	National Crime Information Center
NENA	National Emergency Number Association
NLETS	National Law Enforcement Telecommunications System
NTP	Network Time Protocol
PCR	Patient Care Report
POTS	Plain Old Telephone Service
PSAP	Public Safety Answering Point
PSTN	Public Switched Telephone Network
PVR	Private Ringing
RADIUS	Remote Authentication Dial-In User Service
RFP	Request for Proposal
RMS	Records Management System
SBC	Session Border Control
SIP	Session Initiation Protocol
SLA	Service Level Agreement
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol
SNTP	Simple Network Time Protocol
SOG	Standard Operating Guideline
SOP	Standard Operating Procedure

Acronym	Description
SR	Selective Routing
TAP	Telelocator Alphanumeric Protocol
TCP/IP	Transmission Control Protocol / Internet Protocol
TDD	Telecommunications Device for the Deaf
TIES	Tennessee Information Enforcement System
UPS	Uninterruptible Power Supply
VoIP	Voice over Internet Protocol
VPN	Virtual Private Network
WiFi	Wireless Fidelity
WSP	Wireless Service Provider
XML	eXtensible Markup Language

APPENDIX B – GLOSSARY

Term	Definition
9-1-1	A three-digit telephone number to facilitate the reporting of an emergency requiring response by a public safety agency.
Active event	An event that has at least one unit dispatched to it.
Active workstation	A workstation with the appropriate CAD software installed and configured that has a valid user logged on.
Administrator/System Administrator	Administrator/System Administrator is security role (permission set) granted to users of CAD system that allows them to perform privileged functions within the CAD system.
Agency/Agencies	Agency refers to the Shelby County emergency response provider that is participating in the CAD administration and operation: Shelby County Sheriff’s Office and the Shelby County Fire Department.
Agency Trainer	An Agency Trainer is the staff member designated by each agency to be trained on the system to then become trainers of the system themselves.
Application	Application is a synonym for Software Component.
Authorized User(s)	An Authorized User is a user who has been given specific permissions (rights/roles as defined by security level clearance) to perform a CAD function. An Authorized User may be assigned multiple roles. For this document, a user is synonymous with Authorized User.
Business Day	A Business Day is Monday through Friday.
Border Control Function (BCF)	Provides a secure entry into the ESInet for emergency calls presented to the network. The BCF incorporates firewall, admission control, and may include anchoring of session and media as well as other security mechanisms to prevent deliberate or malicious attacks on PSAPs or other entities connected to the ESInet.
Call	A session established by signaling with two-way real-time media and involves a human making a request for help. We sometimes use “voice call,” “video call” or “text call” when specific media is of primary importance. The term “non-human-initiated call” refers to a one-time notification or series of data exchanges established by signaling with at most one-way media, and typically does not involve a human at the “calling” end. The term “call” can also be used to refer to a “voice call,” “video call,” “text call” or “data-only call” since they are handled the same way through most of NG9-1-1.
Commercial-Off-The-Shelf (COTS)	COTS is a software package that is commercially available, leased, licensed, or sold to the general public and

Term	Definition
	which requires no special modification or maintenance.
Computer Aided Dispatch (CAD) System	Computer-based software that assists in the data entry, emergency event location, emergency responder assignment, event tracking and recording keeping related to response to emergency situations.
County	The County is Shelby County, Tennessee.
County Facilities	County Facilities are buildings owned/operated by Shelby County located in Shelby County, Tennessee.
Criminal Justice Information Services (CJIS)	CJIS is a division of the Federal Bureau of Investigation (FBI) providing state, local and federal law enforcement and criminal justice agencies with access to critical, personal information such as fingerprint records, criminal histories, and sex offender registrations.
Data Base Management System (DBMS)	A system of manual procedures and computer programs used to create, store and update the data required to provide selective routing and/or automatic location identification for E9-1-1 systems.
Defect	A defect is an imperfection, flaw, or deficiency in the CAD system.
Duly Qualified Service Technician	A Duly Qualified Service Technician is a person who is trained and certified by the system provider to maintain the system.
Emergency Alert Systems (EAS)	Radio or television based broadcast of emergency event information.
Emergency Call Routing Function (ECRF)	A functional element in an ESInet which is a LoST protocol server where location information (either civic address or geo-coordinates) and a Service Uniform Resource Name (URN) serve as input to a mapping function that returns a Uniform Resource Identifier (URI) used to route an emergency call toward the appropriate PSAP for the caller's location or towards a responder agency.
Emergency Communications Center (ECC)	A set of call takers operating under common management which receives emergency calls for service and asynchronous event notifications and processes those calls and events according to a specified operational policy.
Emergency Medical Services (EMS)	Fire, hospital, poison control, etc. response centers
Emergency Notification Systems (ENS)	General category for any systems used to notify persons of an emergency. May include changeable message signs, sirens, telephone and other media.
Emergency Service Number (ESN)/ Emergency Service Zone (ESZ)	An ESN is a three to five digit number representing a unique combination of emergency service agencies (Law Enforcement, Fire, and Emergency Medical Service) designated to serve a specific range of addresses within a

Term	Definition
	particular geographical area, or Emergency Service Zone (ESZ). The ESN facilitates selective routing and selective transfer, if required, to the appropriate PSAP and the dispatching of the proper service agency(ies).
Emergency Services IP Network (ESInet)	An ESInet is a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core functional processes can be deployed, including, but not restricted to, those necessary for providing NG9-1-1 services. ESInets may be constructed from a mix of dedicated and shared facilities. ESInets may be interconnected at local, regional, state, federal, national and international levels to form an IP-based inter-network (network of networks).
Enhanced 9-1-1 (E9-1-1)	A telephone system which includes network switching, data base and PSAP premise elements capable of providing automatic location identification data, selective routing, selective transfer, fixed transfer, and a call back number. The term also includes any enhanced 9-1-1 service so designated by the Federal Communications Commission in its Report and Order in WC Docket Nos. 04-36 and 05-196, or any successor proceeding.
Geographic Information System (GIS)	A computer software system that enables one to visualize geographic aspects of a body of data. It contains the ability to translate implicit geographic data (such as a street address) into an explicit map location. It has the ability to query and analyze data in order to receive the results in the form of a map. It also can be used to graphically display coordinates on a map i.e. Latitude/Longitude from a wireless 9-1-1 call.
Global Justice XML Data Model (GJXDM)	The GJXDM is a data reference model for the exchange of information within the justice and public safety communities.
Go-Live	Go-Live is the first day, after the County has approved the system for live operation, that the system is actually used in production system by system users.
Health Insurance Portability and Accountability Act (HIPAA)	Federal regulation protecting patients from unauthorized disclosure of medical information.
Incident / Event	A real-world occurrence such as a heart attack, car crash or a building fire for which one or more calls may be received.
Incident Based Reporting (IBR)	IBR is the method of collecting individual incident and arrest records, as opposed to the aggregate/ summary numbers collected under Summary-Based Reporting.

Term	Definition
Instant Messaging (IM)	A method of communication generally using text where more than a character at a time is sent between parties nearly instantaneously.
Key Personnel	Individuals considered critical to the project, i.e., their absence from the project would have a significant impact on the successful implementation of the system. Examples would include, but not be limited to, the Project Manager, Technical Leader or Training Leader.
Local Area Network (LAN)	A transmission network encompassing a limited area, such as a single building or several buildings in close proximity.
Location Information Server (LIS)	LIS is a functional entity that provides locations of endpoints. A LIS can provide Location-by-Reference, or Location-by-Value, and, if the latter, in geo or civic forms. A LIS can be queried by an endpoint for its own location, or by another entity for the location of an endpoint. In either case, the LIS receives a unique identifier that represents the endpoint, for example an IP address, circuit-ID or MAC address, and returns the location (value or reference) associated with that identifier. The LIS is also the entity that provides the dereferencing service, exchanging a location reference for a location value.
Location to Service Translation (LoST) Protocol	A protocol that takes location information and a Service URN and returns a URI. Used generally for location-based call routing. In NG9-1-1, used as the protocol for the ECRF and LVF.
Location Validation	Refers to the action of ensuring that a civic address can be used to discern a route to a PSAP.
Logical Entity Exchange Specification (LEXS)	LEXS defines a data model, syntax, semantics, and usage guidelines for implementers of information exchanges. LEXS was created to minimize the impact of changing requirements and varied demands for information sharing between sources and consumers of data.
Maintenance	The ongoing processes of modifying the System, after Warranty, to correct defects, improve performance and continually adapt the System to changes in work environment.
Management Information System (MIS)	A program that collects, stores and collates data into reports enabling interpretation and evaluation of performance, trends, traffic capacities, etc.
Master Clock	An accurate timing device that generates synchronization signals to control other clocks or equipment. (Ref. NENA 04-002)
Master Street Address Guide (MSAG)	A data base of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZs) and their associated Emergency

Term	Definition
	Service Numbers (ESNs) to enable proper routing of 9-1-1 calls.
Mobile Data Terminal (MDT)	An MDT is a laptop computer or personal digital assistant, running the Windows operating system, located in an Agency vehicle or a portable device that will utilize the CAD / RMS System.
Module	A Module is a synonym for Software Component.
National Academy of Emergency Dispatch (NAED)	The NAED is a non-profit standard-setting organization promoting safe and effective emergency dispatch services world-wide. Comprised of three allied Academies for medical, fire and police dispatching, the NAED supports first-responder related research, unified protocol application, legislation for emergency call center regulation, and strengthening the emergency dispatch community through education, certification, and accreditation.
National Crime Information Center (NCIC)	NCIC is an automated database of criminal justice and justice-related records maintained by the FBI. The database includes the "hot files" of wanted and missing persons, stolen vehicles and identifiable stolen property, including firearms.
National Emergency Number Association(NENA)	The National Emergency Number Association is a not-for-profit corporation established in 1982 to further the goal of "One Nation-One Number." NENA is a networking source and promotes research, planning and training. NENA strives to educate, set standards and provide certification programs, legislative representation and technical assistance for implementing and managing 9-1-1 systems.
National Information Exchange Model (NIEM)	NIEM is a national initiative supported by the federal government. NIEM provides a means of connecting communities of people who share a common need to exchange information. NIEM is designed to develop, disseminate, and support enterprise-wide information exchange standards and processes that will enable jurisdictions to automate information sharing.
Network Time Protocol (NTP)	A powerful utility for synchronizing system clocks over a TCP/IP network.
Next Generation 9-1-1 (NG9-1-1)	NG9-1-1 is an IP-based system comprised of managed IP-based networks (ESInets), functional elements (applications), and databases that replicate traditional E9-1-1 features and functions and provide additional capabilities. NG9-1-1 is designed to provide access to emergency services from all connected communications sources, and provide multimedia data capabilities for PSAPs and other emergency service organizations.

Term	Definition
Originating Agency Identifier (ORI)	The ORI is a code assigned to designate the originating agency in a law enforcement system.
Personal Digital Assistant (PDA)	Small, handheld device used to store address book information, telephone numbers, personal contacts and other personal information.
Primary Unit	Unit assigned to write an incident report
Policy Routing Function (PRF)	That functional component of an Emergency Services Routing Proxy that determines the next hop in the SIP signaling path using the policy of the nominal next element determined by querying the ECRF with the location of the caller.
Presence Information Data Format – Location Object (PIDF-LO)	The Presence Information Data Format is specified in IETF RFC 3863; it provides a common presence data format for Presence protocols, and also defines a new media type. A presence protocol is a protocol for providing a presence service over the Internet or any IP network.
Primary Public Safety Answering Point (PSAP)	A PSAP to which 9-1-1 calls are routed directly from the 9-1-1 Control Office. (see Public Safety Answering Point)
Remote Authentication Dial-In User Service (RADIUS)	The attributes for conveying access network ownership and location information based on a civic and geospatial location format.
Service Level Agreement (SLA)	A contract between a service provider and the end user, which stipulates and commits the service provider to a required level of service.
Session Initiation Protocol (SIP)	An IETF defined protocol (RFC3261) that defines a method for establishing multimedia sessions over the Internet. Used as the call signaling protocol in VoIP, i2 and i3
Short Message Service (SMS)	A service typically provided by mobile carriers that sends short (160 characters or fewer) messages to an endpoint. SMS is often fast, but is not real time.
Signature Pad	A Signature Pad is a device used to capture the electronic signature of a person.
Simple Network Management protocol (SNMP)	A protocol defined by the IETF used for managing devices on an IP network.
Simple Network Time Protocol (SNTP)	A utility for synchronizing system clocks over a TCP/IP network. This protocol is similar to NTP and is used when the ultimate performance of the full NTP implementation is not needed.
Software Component	A subset of the overall CAD System.
Standard Operating Procedure (SOP)	A written directive that provides a guideline for carrying out an activity. The guideline may be made mandatory by including terms such as “shall” rather than “should” or “must” rather than “may”
System	The System is the Computer Aided Dispatch System.

Term	Definition
System Provider	Refers to the CAD software developer or authorized software value added reseller responding to the RFP.
Telecommunications Device for the Deaf (TDD)	A device capable of information interchange between compatible units using a dial up or private-line telephone network connections as the transmission medium. ASCII or Baudot codes are used by these units. (per EIA PN-1663)
Virtual Private Network (VPN)	A virtual private network (VPN) is a network that uses a public telecommunication infrastructure, such as the Internet, to provide remote offices or individual users with secure access to their organization's network.
Voice over Internet Protocol, Voice over IP (VoIP)	Provides distinct packetized voice information in digital format using the Internet Protocol. The IP address assigned to the user's telephone number may be static or dynamic.
Warranty	A Warranty is the agreement the System Provider provides to repair any and all defects in the CAD System for a period of not less than one year.
Wireless Service Provider (WSP)	Cellular, satellite or other radio based telephony or data transport commercial entity.
eXtensible Markup Language (XML)	An internet specification for web documents that enables tags to be used that provide functionality beyond that in Hyper Text Markup Language (HTML). Its reference is its ability to allow information of indeterminate length to be transmitted to a PSAP call taker or dispatcher versus the current restriction that requires information to fit the parameters of predefined fields.

APPENDIX C – SAMPLE AGENCY REPORTS

**Shelby County Sheriff's Office
Elapsed Time Report
Count of Incidents by Type**

Date Range: MONTHLY

Incident Type	Incident Description	Elapsed time between call received and call dispatched (unit enroute status)	Hour of day

Sample Shelby County Fire Department Elapsed Time Report

Shelby County Fire Department

Incidents Elapsed Times for Unincorp Shelby County

Date/Time Range Selected: 1/1/2009 00:00:00 - 1/2/2009 23:59:59

Time Threshold Selected: 10.50 minutes (630.00 seconds)

	<u>Address</u>	<u>Type</u>	<u>First Dispatch</u>	<u>First Arrival</u>	<u>Last Unit Clear</u>	<u>Incident Closed</u>	<u>Elapsed Time</u>
F100	1						
FFD090101000042	S COLLIERVERVILLE ARLINGTON&RALEI	ACCU	20:14:50	20:21:16	20:42:14	20:42:14	00:06:26
F107	1						
FFD090102000080	1028 WOODLAND GLADE CV S	DIABET	16:01:47	16:08:51	17:53:27	17:53:27	00:07:04
F108	1						
FFD090101000019	175 N COLLIERVERVILLE ARLINGTON	FALL	11:33:46	11:40:14	12:38:32	12:38:32	00:06:28
F200	2						
FFD090101000005	4809 ASHCROFT DR	HEART	1:35:17	1:41:15	2:15:09	2:15:09	00:05:58
FFD090102000072	4974 LAUREL LAKE DR E	ACCI	13:24:30	13:27:27	14:20:17	14:20:17	00:02:57
F306	1						
FFD090102000075	6779 SHORELINE CIR	UNCON	14:35:16	14:41:31	15:33:51	15:33:51	00:06:15
F307	3						
FFD090101000013	7114 E HOLMES RD	ACCENT	6:53:23	6:57:43	8:25:21	8:26:01	00:04:20
FFD090101000018	5470 HARVEY POINTE LN	DIABET	11:32:53	11:38:10	12:55:03	12:55:03	00:05:17
FFD090101000037	5373 BRADLEY RIDGE CV	UNCON	18:50:53	18:57:58	20:10:42	20:10:42	00:07:05
F401	1						
FFD090101000047	6295 N HIGHWAY 51	BACKP	22:09:17	22:19:55	23:17:44	23:17:44	00:10:38
F403	1						
FFD090101000031	3822 N OLD BROWNSVILLE RD	ARREST	15:24:28	15:34:57	15:50:31	15:50:31	00:10:29
F404	1						
FFD090102000066	4707 ALLENDALE DR	BREATH	10:56:00	11:02:06	11:43:19	11:43:19	00:06:06

Sample Shelby County Fire Department Elapsed Time Report ALS Pumpers on County Calls

Shelby County Fire Department

Incidents Elapsed Times for Unincorp Shelby County

Date/Time Range Selected: 2/1/2013 00:00:00 - 2/28/2013 23:59:59

Time Threshold Selected: 10.50 minutes (630.00 seconds)

	<u>Address</u>		<u>Type</u>	<u>First Dispatch</u>	<u>First Arrival</u>	<u>Last Unit Clear</u>	<u>Incident Closed</u>	<u>Elapsed Time</u>
F101	4							
	FFD130203001635	10138 WOODLAND HILLS DR	31D2	0:02:26	0:08:11	0:28:03	0:46:20	00:05:45
	SQ5	1 2/4/2013 12:02:26AM	2/4/2013	12:08:11AM	2/4/2013	12:28:03AM		
	FFD130204001654	1087 W RED FERN CIR	26C1	14:19:00		14:28:53	15:49:35	00:09:53
	SQ5	1 2/4/2013 2:19:00PM			2/4/2013	2:28:53PM		
	FFD130226002633	10345 DAEVA CV	19D2	13:48:12		13:56:04	14:53:10	00:07:52
	SQ5	1 2/26/2013 1:48:12PM			2/26/2013	1:56:04PM		
	FFD130228002720	1230 N HOUSTON LEVEE RD	10C4	7:41:57	7:44:39	8:04:57	8:04:57	00:02:42
	SQ5	1 2/28/2013 7:41:57AM	2/28/2013	7:44:39AM	2/28/2013	8:04:57AM		
F105	7							
	FFD130201001536	10093 WOODLEE CV	24D3	21:49:45	22:00:02	22:10:54	23:06:47	00:10:17
	SQ5	1 2/1/2013 9:49:45PM	2/1/2013	10:00:02PM	2/1/2013	10:10:54PM		
	FFD130207001791	1519 CARLTON RIDGE DR	10D4	7:43:58	7:50:45	7:58:55	8:58:40	00:06:47
	SQ5	1 2/7/2013 7:43:58AM	2/7/2013	7:50:45AM	2/7/2013	7:58:55AM		
	FFD130221002403	1430 ARCHSTONE DR	21D3	11:59:15	12:09:22	12:16:53	13:22:51	00:10:07
	SQ5	1 2/21/2013 11:59:15AM	2/21/2013	12:09:22PM	2/21/2013	12:16:53PM		
	FFD130221002438	1394 SUTTON MEADOW LN	17D3	23:02:42	23:11:29	23:21:11	0:31:56	00:08:47
	SQ5	1 2/21/2013 11:02:42PM	2/21/2013	11:11:29PM	2/21/2013	11:21:11PM		
	FFD130223002519	10420 MABRY MILL RD	17D0	22:16:18	22:26:09	22:35:54	23:28:25	00:09:51
	SQ5	1 2/23/2013 10:16:18PM	2/23/2013	10:26:09PM	2/23/2013	10:35:54PM		
	FFD130225002570	1872 TALISKER DR	13D1	6:06:31	6:15:18	6:44:52	7:38:41	00:08:47
	SQ5	1 2/25/2013 6:06:31AM	2/25/2013	6:15:18AM	2/25/2013	6:44:52AM		
	FFD130228002716	N HOUSTON LEVEE RD&BLOOMSBURY	12C1	6:37:32	6:45:22	6:57:22	8:09:11	00:07:50

Sample Shelby County Fire Department Elapsed Time Report Smoke Detector Report Millington Fire

Shelby County Fire Department

Smoke Detectors - Comments

Date/Time Range Selected: 1/1/2008 00:00:00 - 11/5/2008 23:59:59

	<u>Address</u>		<u>First Dispatch</u>	Enroute	<u>First Arrival</u>	<u>Last Unit Clear</u>	<u>Incident Closed</u>	<u>Elapsed Time</u>
MLF1	5							
FFD080415004595	4936 BUFORD INSTALLED A WORKING SMOKE DET.	BREATH	22:14:19	22:15:49	22:17:03	22:37:36	22:37:36	00:02:44
FFD080417004667	7804 NEWPORT INSTALLED A SMOKE DET	SEIZUR	17:46:37	17:48:12	17:49:16	18:02:33	18:46:24	00:02:39
FFD080518005997	4944 SARATOGA INSTALLED WORKING SMOKE DET	CHEST	14:16:29	14:17:58	14:19:47	14:35:01	15:14:50	00:03:18
FFD080819009840	8623 GREENHILL INSTALLING SMOKE DETECTOR	GASST	9:05:22	9:05:35	9:19:27	9:50:34	9:50:34	00:14:05
FFD080913010887	7969 HARROLD INSTALLING A SMOKE DETECTOR.	BREATH	20:44:50		20:51:01	21:12:42	21:12:42	00:06:11
SC1	1							
FFD081006011808	3774 SHELBY RD INSTALLED BATTERIES IN SMOKE DET	TRAMA	6:32:08	6:33:04	6:37:27	6:50:32	6:50:32	00:05:19
SC2	5							
FFD080114000587	6213 JAYBIRD LN INSTALLED TWO WORKING SMOKE DETECTORS	RESF	7:48:23	7:48:42	7:51:17	8:04:35	8:04:39	00:02:54
FFD080121000882	6709 LOUISE DR INSTALLED TWO BATTERIES IN TWO SMOKE DETECTORS	GRASS	17:06:58	17:07:47	17:10:03	17:23:16	17:23:16	00:03:05
FFD080508005539	7782 ARMOUR INSTALLED WORKING SMOKE DET	LIFT	8:39:09	8:39:51	8:42:52	9:03:37	9:03:37	00:03:43
FFD080521006146	6331 LEAMONT INSTALLED A SMOKE DET	ARES	20:34:13	20:35:30	20:37:26	20:51:05	20:51:05	00:03:13
FFD080918011095	7805 SHAMROCK INSTALLED SMOKE DET	SEIZUR	2:24:25	2:27:09	2:31:24	3:30:03	3:30:07	00:06:59

Sample Shelby County Fire Department Elapsed Time Report Incident Elapsed Time for Municipalities

Shelby County Fire Department

Incidents Elapsed Times for Municipalities

Date/Time Range Selected: 1/1/2009 00:00:00 - 1/2/2009 23:59:59

Time Threshold Selected: 9.00 minutes (540.00 seconds)

	<u>Address</u>	<u>Type</u>	<u>First Dispatch</u>	<u>First Arrival</u>	<u>Last Unit Clear</u>	<u>Incident Closed</u>	<u>Elapsed Time</u>
AF1	1						
FFD090102000070	11199 MARQUIS CT	SICK	12:43:44	12:47:58	13:42:31	13:42:31	00:04:14
AF2	2						
FFD090101000014	11287 SUMAC RD	ABPAIN	7:20:40	7:29:31	8:35:11	8:35:11	00:08:51
FFD090102000057	12110 DONNELSON RD	603	5:48:34	5:53:58	6:32:42	6:32:42	00:05:24
CFD1	7						
FFD090101000003	238 GLEN ECHO RD	UNCON	0:58:40	1:06:45	1:47:51	1:47:51	00:08:05
FFD090101000044	E POPLAR&PROGRESS	SICK	20:44:25	20:49:53	20:58:24	20:58:24	00:05:28
FFD090102000064	193 SYCAMORE RD	ASSLT	10:31:09	10:36:25	10:46:57	10:46:57	00:05:16
FFD090102000069	156 N ROWLETT EAST	ASSLT	12:17:08	12:21:33	13:33:59	13:33:59	00:04:25
FFD090102000089	97 S BYHALIA RD	ACCI	19:27:32	19:34:21	21:09:59	21:09:59	00:06:49
FFD090102000091	208 W SOUTH	BREATH	19:55:54	20:02:36	20:58:09	20:58:09	00:06:42
FFD090102000100	895 TEN OAKS	FALL	22:29:24	22:33:33	22:39:25	22:39:25	00:04:09
CFD2	3						
FFD090101000035	130 LAUREL WOOD PL	ALLEG	16:19:00	16:27:26	16:54:33	16:54:33	00:08:26
FFD090102000061	WINCHESTER RD&BAILEY STATION R	ACCI	9:08:38	9:11:00	10:26:42	10:26:42	00:02:22
FFD090102000077	94 PEYTON RIDGE DR	BREATH	14:51:08	14:56:59	16:08:55	16:08:55	00:05:51
CFD4	1						
FFD090102000099	3616 W TAPLOW WY	SICK	22:17:09	22:20:55	23:44:38	23:44:38	00:03:46
GFD1	7						
FFD090101000009	2512 MOORE	DIABET	4:25:39	4:30:33	5:20:22	5:20:22	00:04:54
FFD090102000062	2100 EXETER	CVA	9:38:12	9:39:37	10:30:45	10:30:45	00:01:25
FFD090102000065	6933 REDFIELD DR	SICK	10:43:25	10:48:53	10:49:56	10:49:56	00:05:28
FFD090102000074	1341 BROOKSIDE DR	SICK	13:37:45	13:47:02	14:48:22	14:48:22	00:09:17
FFD090102000079	8040 WOLF RIVER BLVD	BREATH	15:53:57	15:57:41	17:15:16	17:15:16	00:03:44
FFD090102000084	7820 WALKING HORSE CIR	CHEST	18:16:45	18:18:21	19:15:19	19:15:19	00:01:36
FFD090102000085	7105 PADDOCK CV	OD1	18:41:44	18:46:21	19:13:54	19:13:54	00:04:37

Sample Shelby County Fire Department Elapsed Time Report County of Incidents by Type

Shelby County Fire Department

Count of Incidents by Type

Date/Time Range Selected: 1/1/2009 00:00:00 - 12/31/2009 23:59:59

<u>Incident Type Code</u>	<u>Incident Type Description</u>	<u>All Calls</u>	<u>Calls Dispatched</u>
603	PSYCHIATRIC/ABNORMAL	6	11
AASSTL	ASSISTED LIVING ALAR	2	2
ABPAIN	ABDOMINAL PAINS	3	3
ACARB	CARBON MONOXIDE ALAR	3	3
ACCENT	ACCIDENT W/ENTRAPMEN	10	10
ACCI	ACCIDENT W/INJURIES	54	95
ACCSB	ACCID INV SCHOOL BUS	1	2
ACCU	ACCIDENT UNK INJ	42	58
ACHURC	CHURCH ALARM	11	16
ACOMM	COMMERCIAL ALARM	11	13
ADAYC	DAYCARE ALARM	5	5
ALLEG	ALLERGIES-STINGS & B	6	6
AMEDIC	MEDICAL ALARM	1	1
ANIMAL	ANIMAL BITES	1	1
ARES	RESIDENTIAL ALARM	116	203
ARREST	CARDIAC ARREST/DEATH	11	15
ASCHOO	SCHOOL ALARM	28	46
ASSLT	ASSAULT	3	4
ASSTPD	ASST LAW ENFORCEMENT	2	2
BACKP	BACK PAIN	1	1
BLEED	LACERATIONS/HEMORRHA	18	38
BOMBT	BOMB THREAT	1	1
BREATH	BREATHING PROBLEMS/D	92	114
CHEST	CHEST PAINS	30	49
CHOKIN	CHOKING	6	6
COMM	COMMERCIAL BLDG FIRE	10	11
CVA	STROKE/CVA	16	18
DIABET	DIABETIC EMERGENCY	29	46
ETOH	INTOXICATED PARTY	4	15
EXPLO	EXPLOSION	1	1
FALL	FALLEN PARTY W/INJ	52	57
GASL	GAS LEAK - PROP/NATU	1	1
GASST	GENERAL ASSISTANCE	4	5
GEN	GENERATOR CALL	2	2
GRASS	GRASS FIRE	31	49
GSW	SHOOTING/GUN SHOT WO	2	4
HAZMAT	HAZ-MAT INCIDENT	2	2
HEART	HEART PROBLEMS	18	34
LIFT	LIFTING ASSISTANCE	14	19
LOCKO	LOCK OUT	4	4
MANDOW	MAN DOWN	2	2
OB	PREGNANCY	2	3
OD1	OVERDOSE	16	25
ODOR	SUSPICIOUS ODOR	1	3
OUT	OUT BUILDING FIRE	3	5
POWLD	POWER LINES DOWN	1	1
RESCUE	RESCUE CALL	1	1
RESF	RESIDENTIAL FIRE	73	86
RESFI	RESIDENTIAL FIRE - W	5	6
SEIZUR	SEIZURES	29	31
SICK	SICK PARTY	9	23
SMELL	SMELL OF SMOKE	7	9
SMOKE	SMOKE IN THE AREA	5	5
SPILL	SPILL/NOT HAZMAT	2	2

ATTACHMENT A

**Shelby County TN Emergency Communication District
Requirements for Integrated CAD/Mapping Systems
November 10, 2011**

To receive funding for CAD/Mapping systems from SCECD, the following requirements are necessary:

Incorporation of Esri Technology

Both mapping and CAD systems should directly utilize Esri based technology. No proprietary GIS formats. Examples are:

- Dispatch mapping should utilize Esri ArcGIS files in all formats including shapefile, SDE, file-based, or personal geodatabase without conversion to another format. There should be no need to reformat or convert the data from its native Esri format in order to propagate to the mapping system.
- Dispatch mapping should incorporate the use of Esri MXD files for map display and configuration. The system should allow for configuration of the MXD such as labels, symbology, layering, rendering, zoom scales, etc. The MXD file should be directly incorporated into the dispatch mapping system for use in configuration and map display (i.e. directly display ESRI ArcGIS layers).
- Dispatch mapping systems should be compatible with currently supported versions of Esri ArcGIS software.
- **The GIS data utilized in the CAD/Mapping system must be built according to the Tennessee Information for Public Safety (TIPS) database schema.**

Automated Updates

Dispatch mapping systems should include tools to automate updates of map data and configuration files on each workstation. The system should allow for a single database to be updated then automatically propagated to other workstations. The automated distribution functionality should support both full and delta updates via VPN or Metro Ethernet connections.

Updates to CAD

The CAD system should have the ability to pull certain information from the GIS data contained within the dispatch mapping system (i.e. CAD geofile should be built from the attributes of the GIS street centerline file).

Updates Performed in ArcGIS

The dispatch mapping system should allow the data used to be updated via ArcGIS ArcMap. With the exception of an ArcGIS extension, no proprietary software should have to be used to perform updates to the map data.

Bi-directional Communication

The CAD and mapping system should have bi-directional communication. Bi-directional communication allows for information generated in either system to be transferred and shared with the other system. A good example of this would be unit assignment: by dragging an AVL unit on the map to a CAD incident on the map allows dispatchers to see the closest available unit for assignment.

CAD Call Initialization from the Map

The mapping system should allow the dispatcher to create a CAD incident from the map. A good application of this feature involves traffic stops. During a traffic stop the responding officer may not know the exact location or nearby address. He or she may simply refer to a street intersection. The dispatcher should have the ability to interactively use the map to create the CAD incident and record the location of the unit. At a minimum, the location should be recorded as an address or Lat/Long coordinate. Accurate map generated locations in CAD greatly improve accuracy in report generating.

CAD/Mapping Supports Hierarchical Address Matching

- Address Points
- Street Centerlines with Alternate Names
- Common Places
- Intersection Lookups

The system should also support spatial queries, reverse geocoding, and the ability to return the closest match when no match is found.

Address Validation

The CAD system should have the ability to pull address validation information from the map. Typically, CAD systems perform address validation via a CAD geofile. The CAD geofile should be maintained in synchronization with the mapping system. Ultimately, the CAD system should incorporate tools for periodically updating the CAD geofile. It is not recommended that this validation be a real-time connection to the mapping system. If a real-time connection is utilized, a point of failure is introduced into address validation. If the mapping system should go down, then all address validation is lost. By separating the address validation from the mapping you create a more reliable system for a mission critical environment. It is also important to note that address validation should be kept in sync between mapping and CAD. Tools should be included in both mapping and CAD to periodically pull address validation information from the mapping system to the CAD system without performing a real-time connection.

Map Display of CAD Information

The mapping system should have the ability to consume and utilize information contained in the CAD system. The display of this information in the map should be performed automatically when the incident is created in CAD and should incorporate address validation based on map generated validation tables. Examples are:

- Display of CAD Incident Location - the mapping system should have the ability to display the location of a CAD incident using the address validation features.

- Display of CAD Incident Type - the mapping system should have the ability to display the type of incident recorded in the CAD system. This display should be symbolized based on the type of incident (EMS, fire, law).
- Display of the CAD Incident Number - the mapping system should have the ability to display the CAD incident number based on the incident recorded in CAD.
- Display of the Assigned Unit - the mapping system should have the ability to display the assigned unit number and type of unit.

Routing

The mapping system should have some form of routing capabilities so the system can be used to:

- Communicate driving directions to first responders
- Determine quickest routes (e.g. routing around barriers, impedances, etc.)
- Calculate drive times
- Search for map features along a route (e.g. to find addresses for notification)

Historical Analysis

The mapping system should have the ability to map historical CAD call activity for post incident analysis. Users may select incident types, geographic areas, and dates to generate a map display of historical activity matching the query parameters. This enables users to discover different patterns based on incident types.

Additional Requirements

Listed below are additional requirements for funding assistance through Shelby County Emergency Communications District for integrated CAD/Mapping Systems:

- Each PSAP/Agency must designate a project manager for the coordination of the integrated CAD/Mapping Project.
- Prior to RFP issuance the PSAP/Agency must provide a copy to SCECD for review.
- Prior to vendor selection SCECD must review the vendor proposal to see if all minimum mapping requirements are met and may schedule a software demonstration for this purpose.
- The selected CAD/Mapping system must utilize the address points, ESN boundaries, and street centerlines **in the TIPS database schema** as provided and maintained by SCECD.
- The PSAP/Agency agrees to incorporate the aforementioned map updates in a timely fashion and certify to SCECD that said updates have been applied.
- Any additional ESRI layers desired to be incorporated into the main MXD (e.g. police precincts, fire hydrants, etc.) must be provided to SCECD for implementation into a revised MXD.
- The PSAP/Agency must provide a single point of contact responsible for map updates.

- One designated representative from each respective PSAP/Agency will be made available on a periodic basis to meet and discuss CAD/Mapping related technical issues.
- The CAD/Mapping system must provide the ability to geocode ALI data received in legacy format by the use of translation tables or similar methods until full implementation of State of Tennessee Next-Generation 9-1-1 delivery of ALI data.

Ultimately, the CAD and mapping system should consider the needs of both the dispatchers in the PSAPs and the GIS, CAD, and IT staff who maintain the system. Discover what solutions you prefer and then procure them.

ATTACHMENT B

**Shelby County TN Sheriff's Office and Fire Department
Computer Aided Dispatch Functional Requirements Spreadsheet**

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
	System Administration	
1	System data tables are maintained via GUI based forms.	M
2	Access to data table administration screens is restricted by operator and workstation.	M
3	Standard MS Windows edit features are available when using System Administration forms, including:	M
4	Cut	M
5	Paste	M
6	Copy	M
7	Insert	M
8	Delete	M
9	System data tables can be initially loaded via import of CSV or MS Excel files using agency created data.	I
10	The administration of system tables for all modules of the proposed system can be maintained from a single, authorized workstation.	M
11	The administration of system tables for all modules of the proposed system can be maintained from multiple workstations.	I
12	The administration of system tables for all modules of the proposed system can be maintained from remote workstations.	I
13	System data table data can be exported to a CSV or MS Excel format file.	I
14	The system provides a network monitoring capability that will send messages to County defined workstations or operator accounts when pre-defined network problems are detected.	I
15	All data associated with the system including, data entered as static table entries, data records created as a result of information entry for a call for service and response, all messages, audit log records, etc. are the property of Shelby County and may be exported as determined by the County.	I
16	The system handles errors and error correction in a consistent manner throughout the application.	I
17	The system displays descriptive messages for data entry issues and system related problems.	I
18	The system provides editing capabilities for correction of errors.	I
19	When errors are encountered within a data entry form, the system will automatically place the cursor on the field in error and display a descriptive error message.	I
	System table maintenance	
20	Event record data will be migrated from the current Motorola Premier CAD to the Proposer's CAD system.	M
21	Premises history data will be migrated from the current Motorola Premier CAD to the Proposer's CAD system.	M
22	Current hazard / alert data will be migrated from the current Motorola Premier CAD to the Proposer's CAD system.	M
23	Static table data will be migrated from the current Motorola Premier CAD to the Proposer's CAD system.	M
24	System tables can be updated without requiring a system restart.	M
25	System tables can be updated without requiring workstation restart.	I
26	Data for system tables can be imported from standard format (e.g., MS Excel) file.	I
27	Performing system table maintenance does not degrade system performance.	I
	Maintenance for system tables allows the following actions:	
28	Cut	I
29	Paste	I
30	Copy	I
31	Insert	I
32	Delete	I
33	Table maintenance operations are logged.	I
34	Table maintenance logs are searchable, retrievable and reportable.	I
35	System table data can be exported to a standard format file, e.g., CSV, to be used to create a printable listing.	I
36	The system utilizes a forms based user interface for data table maintenance.	I
37	The system allow system maintenance to be performed using a remote terminal, utilizing security features associated with log on roles and workstation restrictions.	M
	The system able to create and maintain support data files used in dispatch center operations, including:	
38	Street closures	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
39	Special equipment file	I
40	Telephone number lists	I
41	Notification lists	I
42	Personnel file	I
43	Special skills (e.g., foreign language, K-9)	I
44	Public agency referral lists (e.g., Board of Water Supply)	I
45	Special resource files	I
46	Files necessary for unit recommendation	I
	Time synchronization	
47	The system accepts time standard from a master clock device.	I
48	The time standard synchronizes across all CAD databases, workstation, and servers.	I
	Date and time	
49	System time can be displayed as 24 hour format.	I
50	The system time will auto-adjust for DST without impacting system operation.	M
51	All times are displayed and stored as local time.	I
	Definable function keys	
52	The system allows the execution of CAD functions using predefined keyboard function keys.	I
53	The function keys can be defined to perform any CAD function.	I
54	The Agency can define the function keys using a system enabled process through the System Administration functions.	I
55	The system allows any CAD function to be defined with a function key.	I
	Operating environment	
56	The workstation operating environment is a minimum of Microsoft Windows 7 or later version.	M
57	The operating environment utilizes standard MS Windows 7 functionalities.	I
58	The system is multi-jurisdictional, i.e., the system assigns resources based on jurisdiction for a nature code. For example, Jurisdiction A will require 2 Engines and a Truck to a structure fire while Jurisdiction B will require 2 Engines and 2 Trucks.	M
59	The system handles multiple disciplines, e.g., EMS, Fire, Law Enforcement.	M
60	The system handles multiple jurisdictions within a discipline.	M
61	The system handles multiple disciplines within a jurisdiction.	M
	MS Windows functionalities at a minimum:	
62	Cut	I
63	Copy	I
64	Paste	I
65	Cut / copy / paste between forms	I
66	Delete	I
67	Sorting	I
68	Insert	I
69	Print screen	I
70	Tab through the fields of the form	I
71	Back-tab through the fields of the form	I
72	Move windows	I
73	Resize windows	I
74	Find	I
75	Replace	I
76	Ability to use the numeric keypad for number entry	I
77	Ability to use an external numeric keypad for number entry	I
78	Point and click	I
79	Drag and drop	I
80	Drop down lists	I
81	Vertical scroll bar when the vertical display is larger than the defined area.	I
82	Word wrap when the display when the horizontal display is larger than the defined area.	I
83	Word wrap is configured with line breaks between words, not within words.	I
84	Ability to engage spell check on narrative fields as selected by the operator.	I
85	The server operating environment uses MS Server 2012, or later version.	I
86	The database operating environment uses the latest version of Microsoft SQL.	I
87	The CAD application availability is 99.999%.	I
88	The system has the capability to allow users to create, view, and modify event data if the workstation connection to the CAD server is lost (offline) for any reason.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
89	The system has the ability to restore the workstation connection and synchronize the event data updated while offline.	I
	The system response times for the following actions are less than 1 second of elapsed time 90% of the time. These actions are performed in less than 3 seconds 100% of the time.	
90	Display blank event entry form.	I
91	Assign a single unit to an event.	I
92	Change a single unit's status.	I
93	Clear a single unit from an event.	I
	The system response times for the following actions are less than 2 seconds of elapsed time 90% of the time. These actions are performed in less than 4 seconds 100% of the time.	
94	Verification of a location.	I
95	Return a list of location matches when an location can not be uniquely verified with the information entered.	I
96	Provide unit recommendation based on a verified location.	I
97	Assign up to 10 units to an event from a single command.	I
	The system response times for the following actions are less than 5 seconds of elapsed time 100% of the time.	
98	Display a closed event queried by event number.	I
99	Sending of a message, 80 Characters.	I
100	Sending an event notification from a workstation to a mobile device.	I
101	Display of Premises / Hazard data.	I
102	Display a list of events queried by unit ID for a single shift.	I
103	The system network protocol is TCP/IP.	I
104	The proposed system is configured to accommodate a minimum of 10 years of data storage assuming growth and expansion estimated at 5% per year.	I
105	The system provides a means to perform regular (e.g., daily, weekly) backups.	I
106	Backups can be complete or incremental, as determined by County IT.	I
	Backups will include	
107	Static datafiles	I
108	Working datafiles	I
109	Performing the backup procedure will not degrade the system performance.	I
110	The system will report on the status of the backup process, if successful or not successful.	I
111	The system will include a method to test and restore the viability of the backup on a regular basis (e.g., monthly, quarterly).	I
112	The System has the capability to roll-back to the date of the last backup in event of system failure.	I
113	The System has the capability of point-in-time recovery in case of system failure.	I
114	When a failure occurs, the System creates an error log which will provide sufficient documentation for a technical support person to establish the cause of the failure.	I
115	Once a failed server has been restored to operational capability it should automatically restart without operator intervention.	I
116	In the event that any disk or other synchronized storage device is out of sync, the System will automatically synchronize the deficient storage device without operator intervention and without degrading the performance of the System.	I
117	System Administrators or supervisors must be notified of failures by alerts or automated messages.	I
118	After installation, the vendor will notify the County as CAD application and module updates are developed and certified to work with Microsoft Windows and Server updates.	I
	Equipment	
119	The vendor will specify and procure all required hardware for a fully functional CAD system as described in this RFP and resulting contract and Statement of Work, with interfaces and Third Party applications as required.	I
120	The successful Bidder will certify that all components purchased by the successful Bidder are fit for use and supported under warranty provisions.	I
121	All proposed components are new.	I
122	All components proposed include all updates and upgrades to fully function on the proposed system.	I
	Notepad	
123	The system provides for the capability of entry of free form text entered from a workstation by any operator.	I
124	The entered text can be stored in a file.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
125	The entered text can be accessible to all operators.	I
126	The entered text can be shared or private.	I
127	The entered text can be attached to an event record.	I
	Printers	
128	CAD workstations will be assigned a default printer.	I
129	System printers will be networked and available to all workstations on the network.	I
130	When generating a print job, the operator does not have to select a printer. The default printer will be automatically selected.	I
131	The operator may select a printer when needed, e.g., plotter to print maps, color printer when printing reports.	I
	Printing	
132	Event data can be printed at any time during an event.	I
133	Closed events can be printed.	I
134	Event data may be printed to any CAD networked printer.	I
135	Print of event data may be restricted to print at a designated, secure printer at the discretion of the Agency.	I
136	When an item is submitted for printing, a confirmation message is returned to the workstation initiating the print request when completed.	I
137	Print transactions (including print screen) are recorded in the transaction / audit log and will include the Operator ID and Workstation ID initiating the print function.	I
	Security	
138	System access can be controlled by the SCSO.	I
139	System access can be controlled by the SCFD.	I
140	System access can be controlled by workstation.	I
141	The Agency System Administrators are capable of restricting the addition of devices (e.g., workstations, printers) to the system.	I
142	The proposed system must meet applicable CJIS requirements, described in the Criminal Justice Information Services Security Policy, version 5.1, dated 7/13/2012 (CJISD-ITS-DOC-08140-5.1) and updated versions approved by U.S. Department of Justice.	I
143	The system provides the ability to protect from view or access HIPAA related information from appearing on unauthorized monitors or in unsecured reports.	I
144	The system supports multi-level security features.	I
145	Access to CAD functions can be granted / restricted by each Agency System Administrator.	I
146	Access to CAD functions can be granted / restricted per workstation.	M
147	Access to CAD functions can be granted / restricted per individual.	M
148	The system logs each login in attempt, whether successful or not successful.	I
149	Security authorizations can be assigned by individuals and by groups.	I
150	An operator can be associated with multiple security groups.	I
151	All system and operator accounts are security / password protected.	I
152	All operator accounts are required to have a unique ID.	I
153	All operator accounts require a secure password.	I
154	All passwords are stored in encrypted form.	I
155	The system allows the operators to change their own passwords.	I
156	The system can require the operators to change their passwords at regular intervals which are determined by the Agency.	I
157	The system is configured with a single operator security table across all modules.	I
158	Operator accounts and passwords are synchronized across all system modules.	I
159	The system provide single sign on capability across all system functions.	I
160	Individual accounts and passwords for the system are controlled by the Agency where operator IDs, passwords, security accounts can be created, modified and deleted an authorized Agency operator.	I
161	Security setting for all components of the proposed system can be maintained from a single, authorized workstation.	I
162	The CAD system must provide a customer configurable password management system. Passwords may be configured for expiration, minimum length, character types and numbers.	I
163	The system data access rules allow each user agency to define agency specific security parameters.	I
164	The system provides the ability to log all database transactions and track by operator ID, workstation ID, date / time, and transaction description.	I
165	There are no default accounts configured in the system.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
166	There are no hidden or "backdoor" accounts configured in the system.	I
167	Each Vendor access account must be disclosed to the Agency.	I
168	Security for each account has a lock-out provision that will lock-out access to an account after a Agency defined number of unsuccessful login attempts.	I
169	An account that has been locked-out may be reset by an operator with the appropriate security setting.	I
170	The system provides a configurable screen saver with password protection for desktop and wireless devices.	I
171	The individual Agency IT Department maintains all security aspects of the system, without reliance on the vendor to perform security functions.	I
172	The system supports remote maintenance.	I
173	The application is compatible with the Agency's standard anti-virus software for workstations and servers; currently Trend Micro.	I
174	The workstation software operates with the Agency's anti-virus software without conflict or performance degradation.	I
175	Anti-virus data files can be maintained and updated from a single workstation or server.	I
176	Anti-virus data files can be maintained and updated at the individual workstation level.	I
	The operator is prevented from logging off when:	
177	The operator has sole responsibility for events or units that will not be handled on log off. A system message will be generated.	M
178	An operator (#2) can log on to an active workstation without requiring the current operator (#1) to perform the log off function, the system will automatically log off the current operator (#1). The system will not require the events or resources to be transferred to another dispatcher during the log on process. For example, a change operator function.	I
	Off-site redundant servers	
179	The system is capable of mirroring data between a minimum of two databases for redundancy.	I
180	The system is capable of mirroring data to remotely hosted (off-site) databases.	I
181	The system supports redundant servers in hot standby mode to take over operation should primary servers fail.	I
182	The redundant servers can be updated and maintained without degradation to primary system operation.	I
183	If placed off-line, the back-up servers will come on-line automatically and synchronize without degradation to primary system operation.	I
184	The switch to the backup servers will be seamless and transparent to the workstation operators.	I
185	The system will deliver a system message to selected workstations (e.g., supervisor, administrator) that primary operations have been switched to the backup system.	I
186	Vendor will describe how the system will function when system server is offline.	I
	Off-site failover facility	
187	The fail-over system can be set up at a location remote from the primary PSAP.	I
188	The fail-over system can be operated and maintained from remote location.	I
189	Switch of operations to the fail-over facility can be performed by the either Agency.	I
190	Switch of operations from the fail-over facility to the primary facility can be performed by the either Agency.	I
191	The server at the fail-over facility can be switched to run as the primary server and the workstations at the fail-over facility and the primary facility can operate as live CAD workstations.	I
192	The workstation at the backup facility can be configured to operate on the primary system as additional workstations.	I
193	If connection is lost to the recovery site, the system will send a notification message to Agency designated positions and send email to Agency designated recipients.	I
	Data Warehouse (DW) capability	
194	The system maintains a separate external database outside of CAD network, secure, but accessible to CAD users and Agency authorized non-CAD, external users.	I
195	The system provides a method to write CAD record data to the DW automatically at regular intervals, e.g., on event closure, as determined by the individual Agency.	I
196	The system supports DW security that allows view only rights to the data.	I
197	All external inquiries are directed to the DW.	I
198	The DW platform and storage utilize COTS applications.	I
199	The DW supports automatic requests for data from external applications.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
200	The DW supports record and field based security to restrict viewing of records and fields based on the assigned role and agency at logon. For example, the DW security features allow data related to Sheriff's Office be accessible to only operators that log into the DW with that role clearly defined.	I
	Remote access workstation	
201	The system supports access to the CAD system from workstations not directly connected to the CAD network, e.g., remote workstations using secure communication such as VPN.	M
202	The access to the system from a remote workstation supports the use of Virtual Private Network (VPN) technology.	I
203	Remote access is restricted to those authorized through system security function and secured passwords, e.g., dual factor authentication.	I
204	The access to the system from a remote workstation supports the Advanced Encryption Standard (AES) without degrading system throughput.	I
205	The vendor will list equipment required to establish secure remote workstations.	M
206	Remote access capability includes the ability to support the system remotely.	I
207	Remote workstation access to the CAD system complies with CJIS, State of Tennessee and Shelby County security requirements.	I
	The remote workstation can perform the following:	
208	Event inquiry	I
209	Event status	I
210	Unit status	I
211	Update an active event	I
212	Perform administrative updates, e.g., updating shift based Roll Call information	I
213	Server administration	I
214	Call entry and self dispatch, e.g., walk-ins to the Station Desk Clerk	I
215	Execute and print reports	I
	Transaction logging (Audit log)	
216	The system logs each transaction, and includes:	I
217	Date and time	M
218	Operator ID	M
219	Workstation ID	M
220	Transaction	M
221	Each transaction will be logged whether it was successful or not successful.	M
222	Retention time for the system transaction logs is defined by the Agency.	I
223	The system transaction logs can be searched and retrieved by any parameter stored with the transaction.	I
224	The system transaction logs can be sorted by any parameter stored with the transaction.	I
225	The system maintains transaction logs for each transaction across all modules.	I
226	Viewing of events are recorded in the transaction / audit log and will include the Operator ID and Workstation ID from which the event is viewed.	I
227	Executing the historic playback feature is recorded in the transaction / audit log and will include the Operator ID and Workstation ID initiating the playback function.	I
228	The system allows each Agency to specify and toggle the types of transactions that are recorded in the transaction log.	I
	Alias names for CAD functions	
229	The system supports the creation of alias names for CAD commands.	I
230	The command alias names are maintained by the Agency.	I
231	When a CAD command is referenced in an inquiry or report, the search feature will select records that include the alias of the referenced CAD command as well.	I
	Command Line	
232	The system supports CAD function processing from a command line.	M
233	Commands entered on the command line are stored and available for reuse.	I
234	The operator may use the backspace, delete and arrow key functions to edit commands from the command line.	I
235	Command line processing supports positional command parameters.	I
236	Command line processing supports parameter processing using field identifiers.	I
237	The order of parameters on the command line are customizable by the Agency.	I
238	Command parameters can be entered in any order. For instance, a command to update the status of unit 1A11 could be entered in as 1A11 EN or EN 1A11.	I
239	The command line has "word wrap" capability.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
240	The system provides a guided command line entry experience that will prompt the operator for the next required parameter and command line typing progresses.	I
241	The guided command line entry experience may be toggled on / off by the operator.	I
242	The system allows multiple command lines to be active simultaneously.	M
243	Command line entries do not disrupt operations in the work areas.	M
	Form field data entry	
244	The system supports function processing from a predefined data entry form.	M
245	The system supports operations from multiple work areas.	M
246	The system supports operations from multiple work areas simultaneously.	M
247	The functions processing in a work area do not impact function processing in other work areas.	M
248	The operator can move from field to field using tab (to the right and down) and back-tab (to the left and up).	I
249	The order of the fields of the form can be moved to align with the Agency SOP on caller interview procedure.	I
250	The system supports pre-fill fields in appropriate pre-formatted screens.	I
251	The order of the tab function movement from field to field can be defined by the Agency.	I
252	The system allows the use of a function key to direct the focus of entry to the field determined by the function key, e.g., ALT L to direct the focus of entry to the Location field.	I
253	Fields of the data entry form that are mandatory entry are clearly marked.	M
254	The system has the ability to distinguish between system mandatory data entry fields and those fields required by Agency Standard Operating Procedures.	I
255	The system allows the Agency to select fields for mandatory entry.	I
256	The form cannot be processed until all mandatory fields are entered.	I
257	The operator can enter data into any field, in any field order.	I
258	The operator may enter an unlimited amount of comments to each event.	M
259	The comment field accepts free form text using word wrap to handle comments that do not fit on a single line.	I
260	All comments added to an event record are date / time stamped and with the operator's ID and workstation.	I
	CAD to CAD interface (Optional)	
261	The system supports CAD to CAD system interfaces.	I
262	The CAD to CAD system interface is bi-directional.	I
263	The CAD to CAD interface facilitates the transfer or receipt of incident data between the systems.	I
264	The vendor will provide the ability for future CAD to CAD interfaces.	I
265	Future CAD to CAD interfaces will not require addition cost to the County. Explanation required.	I
	Messaging – General	
266	All messages are logged and available for review and inquiry.	I
267	The messaging component is an internal component of the CAD system.	I
	The messaging component supports:	
268	Creating free-form messages.	I
269	Displaying messages via a single command	I
270	Audible and visual signaling of received messages.	I
271	Forward, reply to, and delete messages.	I
272	Read reply.	I
273	Priority messages.	I
274	The messaging component allows messages to be routed to any system printer.	I
275	The system can differentiate between CAD system messages and messages returning from the message switch/NCIC.	I
276	Messages can be added to an incident history.	I
277	Messages can be generated from the command line	I
278	Attachments can be added to messages.	I
279	Messages are searchable and retrievable by any field.	I
280	Messages can be sent and received from single workstation to all other workstations and MDTs / PDAs.	I
281	The system is capable of sending automatic email event notifications using email lists based on Agency, location and event type.	I
282	The system is capable of sending automatic text event notifications using lists based on Agency, location and event type.	I
283	Messages can be sent and received by operator ID and console ID	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
284	The system is capable of sending SMS and MMS messages to 10-digit "Non-carrier specific" phone numbers from all CAD.	I
285	The system is able to send a message to user definable social networking websites. This message will simultaneously be logged in the event history.	I
286	The system allows the Agency to restrict the ability to send a message to a social networking website by Operator ID.	I
287	The system supports the creation of groups for messaging and status changes.	I
288	Messages can be received by predefined groups, e.g., dispatchers, supervisors, CAD support, dispatcher workstations, mobile data devices.	I
289	The operator can select the message group used in sending email / text messages related to event, unit and notification activity.	I
290	The system supports the creation of dynamic messaging groups (i.e., when users sign on, the system shall determine what groups they are members of, based on rules that are managed by the system administrator).	I
291	The system supports the ability to send recurring messages. Messages can be defined for sending a prescribed number of times per hour, day, week, or month.	I
	The system includes the following parameters with stored messages:	
292	Sender (operator and workstation)	I
293	Intended receiver (operator and workstation)	I
294	Date / time sent	I
295	Date / time viewed	I
296	Messages will be displayed in a separate area dedicated to messaging, e.g., window.	I
297	Messages both sent and received will be displayed using the word wrap feature without word break.	I
298	Receipt of messages will not interfere with CAD functions, e.g., calltaking, dispatching.	I
299	Pop up messages do not cover the active work area.	I
300	The operator will be notified of the receipt of a message with an audible (optional through system configuration) and visual alert.	I
301	The message notification alert can be defined by the Agency.	I
302	The system allows all unread messages associated with a workstation to be deleted using a single command. The deletion of the message does not remove the log entry.	I
303	A message can be designated a "high priority" messages which will enable that message to be placed at the top of a message queue for a particular workstation.	I
304	The system supports a central Address Book for storing contacts, businesses and numbers to be used to address messages and look up information.	I
305	Entries are automatically added to the address book for access to emergency contacts and numbers.	I
306	The system can create multiple address books.	I
307	The system is capable of restricting edit and access to the address book features based on security associated with the Operator ID.	I
308	The system supports the creation of custom fields for address book entries.	I
309	The system supports searching address books from a form and command line.	I
310	The system supports key word searching for address book entries.	I
311	The system supports attaching documents and hyperlinks to address book entries.	I
	Messaging - CAD	
312	Messages can be sent and received between CAD PSAP workstations.	I
313	Messages can be sent between a CAD PSAP workstation and a group of workstations e.g., Calltakers, Dispatchers, Station B.	I
314	Messages can be sent and received between a CAD PSAP workstation and remote workstations.	I
315	Messages can be sent and received between a CAD PSAP workstation and Web based workstations.	I
316	Messages can be sent and received between a CAD PSAP workstation and MDTs / PDAs.	I
317	Messages can be sent and received between specific CAD PSAP workstation and a specific MDT / PDA.	I
318	Messages can be sent and received between a CAD PSAP workstation and an MDT / PDA group.	I
319	The system provides a method of messaging between mobile devices with the characteristics of Instant Messaging.	I
	Messaging - System	
320	System messages originate from the application as the result of a system function or notification of an error message.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
321	System messages are in plain English.	I
322	System messages can be directed to a specific operator or workstation group e.g., Calltakers, Dispatchers, Station B.	I
323	System messages can be automatically directed to a workstation group depending on function or event location.	I
324	System messages can be classified by the agency as urgent or normal.	I
325	System messages classified as normal system messages do not interrupt operator operations.	I
326	System messages classified as normal system messages may require acknowledgement from operator as defined by the agency.	I
327	System messages classified as urgent require acknowledgement from the operator before continuing operations, e.g., officer in need of assistance, as defined by the agency.	I
328	System messages or notifications can be sent to system administrators using email and SMS, as determined by the Agency.	I
329	The system is able to create messages that may be delivered upon logon.	I
330	The system is able to create and maintain automatic reminders of scheduled activities.	I
331	Daily	I
332	Weekly	I
333	Monthly	I
334	Annually	I
335	Multiple activities or reminder per time slot	I
	Personnel data record	
336	The system stores and tracks user, operational and field personnel associated with the CAD system.	I
337	The system will associate CAD system access and operational security rights with the personnel record.	I
	At a minimum, the following data will be associated with the personnel record:	
338	County Employee ID (minimum 6 characters)	M
339	S-number (minimum 6 characters)	M
340	Unit ID (the Unit ID is directly associated with the County Employee ID)	M
341	Home Address	I
342	Telephone number	I
343	Emergency Contact information	I
344	Standard assignment	I
345	Special skills	I
346	CAD functional security information, e.g., password history, allowed functions, allowed module access.	I
347	Medical condition (Y/N)	I
348	Blood type (authorized only viewing)	I
349	The personnel data records are searchable from all CAD workstations, e.g., rolodex.	I
350	The ability to create a one-way interface with the County's Personnel Tracking and Payroll system for a pull of selected personnel data from the Personnel and Tracking system to the CAD personnel table.	I
	Premises - Display of premises hazards, alerts and history	
351	On location validation, the system automatically checks for premises history, hazards and alerts.	I
352	Based on an exact match of the location.	I
353	Based on the type of premises data.	I
354	Based on the distance parameter established by the Agency between the location of the event and the location of the premises data. For example, a 1000-foot search for police premise, a 500-foot search for inoperable hydrants, a 1500-foot search for street closures.	I
	When information is associated with a displayed location, the system will:	
355	Create an audible (optional using system configuration) and visual alert to the operator, as defined by the Agency. A pop up message is acceptable as long as it does not get in the way of dispatching functions. A notification at the bottom of the screen is not acceptable.	I
356	Mark the message as urgent.	I
357	When an urgent message is associated with an event record, the message will display with the CAD event is viewed.	I
358	Visually differentiate the premises notification between "in the area of" match and an exact location match	I
359	Make the information available to the mobile device, if MDCs are implemented.	I
360	Display the information in a separate work area	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
	Premises information can be displayed with:	
361	Civic address	I
362	Intersection	I
363	Apartment complex	I
364	Building number	I
365	Individual apartments	I
366	Common name	I
367	Agency defined radius from the specified location	I
368	Map polygon	I
369	Street segment	I
370	Contact name	I
371	Contact telephone number	I
	Premises information displayed	I
	For history associated with the location:	
372	Event number	
373	Event type code	I
374	Date / time of event	I
375	Location (when displayed with radius)	I
376	Disposition	I
377	Hyperlink to event record	I
	For Alerts and Hazards associated with the location:	
378	Date / time of entry	I
379	ID of person authorizing the alert entry	I
380	Message	I
381	Expiration date / time	I
382	File attachment	I
383	The system will record in the event record when an operator views the premise data.	I
384	The Agency can determine the time frame of how far back the system will search for premises history, by device (a portable device time frame can be different than the timeframe of workstations).	I
	Premises - Storage of premises hazards, alerts and history	
	Premises information will be associated with:	
385	Civic address	I
386	Intersection	I
387	Apartment complex	I
388	Building number	I
389	Individual apartments	I
390	Common name	I
391	Contact name	I
392	Contact telephone number	I
393	Map polygon (e.g., neighborhood, response area)	I
394	Premises hazards and alert information can be maintained by the agency.	I
395	Premises hazards and alert information can be restricted to display by agency or for all agencies.	I
396	The creation of Premises records is by authorized users only.	I
397	The system is able to capture and maintain premises information in user defined categories or types.	I
398	The system is able to define criteria for automatic premises information purges.	I
399	The system is able to activate or deactivate the automatic premises purge feature.	I
400	The system is able to define valid date ranges for time limited premises information at a given location (e.g., information valid between <start date> and <end date>).	I
	The following maintenance functions can be utilized with stored hazards and alerts	
401	Add	I
402	Modify	I
403	Delete	I
	Information will include:	
404	Hazard, alert, history narrative	I
405	Links to attached files, e.g., photographs, hazard substance lists	I
406	Location	I
407	ID of person authorizing the information	I
408	Date and time when entered	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
409	Expiration date and time	I
410	Date and time range of a time limited premises information	I
411	The system will send a notification message to designated system accounts when a hazard or alert is about to expire. The Agency can define the time frame for the notification message.	I
412	Premises history is automatically created and associated with a location on event entry with a verified location.	I
413	The premises history record is available for viewing by the operator on location verification.	I
	At a minimum, the following data is included with premises history:	
414	Incident number	I
415	Event type code	I
416	Caller name and contact information	I
417	Date and time	I
418	Disposition	
419	Hyperlink to the full event description	I
	Roll Call / Roster	
420	The system allows multiple active roll calls to be established in advance by an authorized operator.	I
421	Each roll call can be independently maintained and approved.	I
422	Each roll call can be uniquely identified for storage and retrieval.	I
423	The roll call allows a single unit / officer item to be specified per roll call entry.	I
424	The roll call allows multiple units (with associated officers) per roll call entry.	I
425	The roll call allows up to 4 officers to be specified by unit.	I
426	A roll call can be specific to a dispatching group (e.g., precinct) or County-wide (e.g., special task force).	I
427	The system provides the capability to create shift schedules, including the following data:	I
428	Roll call designator	I
429	Unit ID (alphanumeric) up to 10 char	I
430	Officer ID (one or more officers per unit, up to 4 per unit)	I
431	Response area	I
432	Vehicle ID	I
433	Radio ID	I
434	Date and time scheduled for on-duty	I
435	Date and time scheduled for off-duty	I
436	Shift designator	I
437	Special equipment or response capabilities, e.g., shotgun, pro2, MAV, sponge gun, bean bag	I
438	The system provides the capability to schedule shift/roster information up to 12 months in advance.	I
439	The system provides the capability to upload shift/roster information to CAD based on scheduled shift start time.	I
440	The system provides the capability to modify shift/roster information up to scheduled shift start time.	I
441	The system provides the capability to automatically (without operator intervention) notify responsible dispatcher of a new shift ready to be logged-on.	I
442	The system provides the capability to pre-program and override shift change information, e.g., hours of shift.	I
443	The roll call specific to a dispatching group can be put in service by the operator responsible for that dispatching group, or a supervisor.	I
444	The units associated with a roll call specific to a dispatching group can be placed out of service by the operator responsible for that dispatching group, or a supervisor.	I
445	An authorized operator may change the standing version of the roll call.	I
446	The standing version of the roll call will remain in effect until changed by the authorized user.	I
447	The roll call may be temporarily updated as required for each shift prior to submission.	I
448	The temporary update of the roll call changes the assignments for only that submission.	I
449	During the shift, changes can be made to the roll call / roster without affecting the master record.	I
450	Roll call updates can be submitted by an authorized user from a remote workstation.	I
	Workstations	
451	CAD workstations are controlled by a single processing unit.	M
452	The functions of the workstation (e.g., event processing, mapping) can be controlled with a single set of keyboard and mouse.	M

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
453	The CAD workstation can be configured with multiple digital display monitors, up to 5. The vendor will include the video card with the procurement.	M
454	The workstation monitors can be a minimum of 27 inches, measured diagonally.	I
455	The system supports the monitors being positioned in either landscape or portrait orientation.	I
456	The system supports high resolution display.	I
457	CAD mapping component runs on the same workstation as the CAD application client software.	M
458	The CAD workstation monitors allow the operator to move between the displays via keystrokes or utilize the mouse.	I
459	The CAD workstation monitors allow the operator to view more incidents or vehicles than will fit on a single window using a scroll bar.	M
	The functions can be separated as follows:	
460	Map display	I
461	Status windows, e.g., pending event, active events, unit status.	I
462	Interactive event information display and data entry.	I
463	The functionality of the workstation is reconfigurable by the Agency System Administrator, as needed.	I
464	Changing the default workstation configuration is restricted to the Agency System Administrator.	I
465	Workstations can be rebooted without affecting the system or other workstations.	I
466	A workstation can be configured as a single function workstation, e.g., calltaker.	I
467	A workstation can be configured for multiple functions, e.g., calltaker and dispatcher.	I
468	While working as a combined function workstation, the operator is not required to change workstation function when alternating between calltaker and dispatcher operations, e.g., calltaker and dispatcher entry forms, status windows, functions.	I
469	A workstation can be configured with a limited span of control, e.g., control events and units for a single precinct.	I
470	A workstation can be configured without a limitation, e.g., County-wide responsibility.	I
471	Workstations can be configured with overlapping event responsibility.	I
472	Workstations can be configured with overlapping unit responsibility.	I
473	The system allows a workstation configuration to be associated with an operator profile and saved. When the operator successfully logs in to a workstation, the saved configuration will be implemented, as appropriate.	I
474	Status monitors associated with a workstation will display event and units within the established workstation span of control.	I
475	A workstation span of control can be changed without an application restart or disruption to other operators.	I
476	At least one workstation must be logged in to the application as long as the application is active.	I
	Workstation groups	
477	The system is capable of defining groups of workstations to enable effective communications. For example, messages may be sent all dispatchers using a single command.	I
478	Workstation groups can be predefined or created as needed.	I
	Workstation groups can be comprised of the following types:	
479	CAD PSAP workstations	I
480	Call taker	I
481	Dispatcher	I
482	Supervisor	I
483	NCIC inquiry (information station)	I
484	Administrative	I
485	Mobile Data devices (including PDAs)	I
486	Remote workstations	I
487	Mixture of types.	I
	Event entry (Call Taker)	
488	The system automatically transfers call and caller information, when available, from the CPE.	I
489	The system is capable of receiving call information and initiate incidents from regular 7- or 10-digit lines.	I
490	The interface from CAD to the CPE is compliant with the most recently approved NENA i3 standards document, e.g., NENA Technical Standards Document 08-003, Detailed Functional and Interface Standards for the NENA i3 Solution.	I
491	The system accepts and processes and saves alternative media data (e.g., video, text, audio) as data with which to process an event.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
492	The system will transfer Wireless Phase I and Phase II data to the CAD entry form.	I
493	Rebids of wireless caller location can be initiated by the operator without creating a new CAD event.	I
494	Location changes as a result of rebids will update the CAD map.	I
495	The system will provide a visual and audible (optional using system configuration) notification when a 911 call has been sent to the workstation for processing.	I
496	The system will store all location changes resulting from wireless rebids with the event record.	I
497	Rebid of wireless caller location will update the CAD event location.	I
498	Location verification will be performed on the return of the rebid.	I
499	The system will transfer location data to the CAD map.	I
500	The system will auto-fill appropriate event entry form fields from the CPE / 911 data.	I
501	The system automatically detects and assigns the appropriate source of the call and includes the following instances:	I
502	911 call	I
503	Field initiated incident	I
504	MDT initiated incident	I
505	Alarm interface	I
506	Default value if none of the above is detected assigned as a non-emergency phone request	I
507	The system supports the creation and assignment of user defined sources of the call.	I
508	The system is capable of maintaining a list of Alarm Companies for use as a drop down list for selection during event entry and inclusion in the event record.	I
509	Labels on the event entry form are customizable by the Agency.	I
510	Field order of entry is customizable.	I
511	Required fields on all data entry forms are clearly identified by color and symbol, e.g., a mandatory field will have a red field outline with an asterisk beside the field.	I
512	Fields on form are customizable.	I
513	Multiple operators can add data to the same event at the same time.	M
514	When multiple operators are adding data to the same event, the system will append the data from the multiple operators instead of overwriting the data.	M
515	Events may be created that require the response of more than one discipline.	I
516	Events may be created that require the response of more than one jurisdiction.	I
517	The operator can associate events together through operator function.	I
518	Events may be associated automatically by the system, based on incident type or location.	M
519	The associated events can be accessed via hyperlink from the event display.	I
520	Associated events will be clearly denoted to indicate that there are other agencies responding. For example, when a Fire incident is displayed, if there is an associated Police or EMS incident, the corresponding incident number shall be displayed.	I
521	Associated events may be disassociated by the operator by use of a command.	I
522	The system will notify associated incidents when updates are made to any other associated incident.	I
523	An event may selected to be displayed or updated by referencing the fewest number of significant digits of the event number.	I
524	An event may selected to be displayed or updated by referencing the unit ID of any unit assigned to the event.	I
525	An event may be selected for display or update from the command line or form.	I
526	The system supports the ability to attach files to an event from the CAD workstation.	I
527	The system supports the ability to attach files to an event from the mobile client.	I
528	The ability to attach files to an event from the mobile client is controlled by the Agency System Administrator.	I
529	Attachments to events are can be viewed from the event display form.	I
530	The system will provide an indicator in the event form if the event record included attached files.	I
531	An operator is able to designate an event as a "hot call" which is classified as an urgent call.	I
	An event designated as a "hot call" will:	
532	Notify all dispatcher workstations	I
533	Require all dispatch workstations receiving the "hot call" to acknowledge the receipt of the call, e.g., press a function key	I
534	Record each acknowledgement in the event record with the operator ID and workstation ID	I
535	Create a "BOLO like" notification sent to all dispatch workstations for radio broadcast, which is stamped with the operator ID and workstation ID when broadcast	I
536	An operator is able to designate an event as a "high priority" event.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
537	All high priority events entered into the system will generate an agency-defined notification to designated workstation/persons/groups as assigned by the System Administrator or supervisor. For example, on a homicide, the Chief of Police, and PIO are notified.	I
538	An unlimited number of "high priority" notifications are allowed for any event type as determined by the System Administrator.	I
539	"High priority" notifications can be triggered by Event type, location, and specific addresses, etc.	I
540	The individuals/groups notified of a "high priority" event receive an alert at their MDC/Workstation if they are logged on to CAD.	I
541	The system will send "high priority" event notifications to any wireless communication device (e.g. SMTP, MAPI, SMS).	I
542	Personnel receiving "high priority" event notifications via CAD messaging who acknowledge the message will have the acknowledgment captured with the event history.	I
543	The Agency can designate who has the capability to send high priority notifications.	I
544	An event can be forwarded from the calltaker to the dispatcher requiring only location (either valid location or manually entered precinct) and the event type of the call.	I
545	An operator may continue to enter or update information of the event after the event has been transferred to the dispatcher.	I
546	The operator does not have to take action to receive the updated information for the event (dynamic updates).	I
547	When an event in the pending queue is updated, the responsible dispatcher will receive an audible (optional through system configuration) and visual notification.	I
548	An operator is able to designate an event as a "details to follow" event. The system allows the operator to route the event to a dispatcher with the minimum required fields and invoke a system-definable indicator to the dispatcher that there is more information to follow.	I
549	The system allows the "details to follow" notification to remain active until all responsible operators have acknowledged the viewing of the details.	I
550	After this action is invoked, the event entry remain active with all information entered. The call taker is able to continue entering additional information into their original event entry screen.	I
551	The system is capable of requiring an acknowledgment of details to follow. The time and ID of the operator acknowledging the update is tracked as part of the event record.	I
552	The system allows the system administrator to define the users, workstations and/or dispatch groups that receive the details to follow	I
	Event data elements	
	Event data record will be comprised of the following minimum data fields:	
553	Unique event number	I
554	Event location and all location changes	I
555	X /Y coordinates	I
556	Proximity indicator (e.g., "in front of", "in area of")	I
557	Response area information (e.g., reporting area, zone)	I
558	Event type code (initial, all changes, final)	I
559	Event sub-type code (initial, all changes, final)	I
560	Priority (initial, all changes, final)	I
561	Caller name, location, contact information	I
562	Alarm company	I
563	No callback checkbox	I
564	Fire / Ambulance notified checkbox	I
565	Source of the call	I
566	Alternate call back number	I
567	Event status times	I
568	Call received at PSAP from call spill data	I
569	Call received at Calltaker workstation	I
570	Event received at the dispatch workstation	I
571	First unit dispatched	I
572	First unit arrived	I
573	Last unit cleared	I
574	Event Closed	I
575	Others??	I
576	Initial unit system recommendations (both pre-defined and AVL)	I
577	Actual unit system recommendations	I
578	Primary unit	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
579	Remarks	I
580	Disposition codes	I
581	Links to premises history, alerts and hazards	I
582	Links to operator attached files	I
583	Associated event number(s)	I
584	Link to associated event(s)	I
585	Operator IDs (initial, all updates and changes, close)	I
586	Workstation ID (initial, all updates and changes, close)	I
	Event cloning	
587	The system provides the ability to clone incidents. Incident cloning allows for the creation of cloned (or linked) incidents after a parent incident has been created.	I
588	Event cloning may be initiated from the command line or from a form.	I
589	The system allows the operator to clone events with a pending, new, active, or closed status.	I
590	Cloned incidents maintain the current date and time as well as the date and time of the original incident, for the purposes of reporting incident response time data.	I
591	The system allows the operator to route the event to any designate the agency and the geographic area that will receive the incident during the cloning process.	I
592	Each cloned incident shall have its own incident number.	I
593	Events may be created that require the response of more than one discipline.	I
	Event record numbering	
594	The system automatically generates sequential record identifiers for the following:	I
595	Event numbers	I
596	The system will automatically assign a unique event number for each created event. No duplicates allowed.	I
597	The system will automatically assign a unique event number per discipline for each created event. No duplicates.	I
598	The system will automatically assign a unique event number per jurisdiction for each created event. No duplicates.	I
599	An event number is assigned to each event entered into the system.	I
600	Event numbers are at least 10 alphanumeric characters	I
601	Event numbers can have leading alpha characters, with digits following	I
602	Event numbers can support Julian Date in the format.	I
603	Event numbers are system generated.	I
604	Case numbers	I
605	The system can assign a unique case number per agency for each event at the discretion of the operator or when determined by policy established by the Agency. No duplicates allowed.	I
606	The system allows multiple case numbers to be assigned to a single incident per agency.	I
607	Case numbers will be referenced back to the incident event number.	I
608	Case numbers are system generated.	I
609	The event and case number format can be defined by the Agency.	M
610	The event number will automatically reset annually.	M
611	The event number can be distinguished between SCFD and SCSO.	I
612	Each Agency may define the fiscal reset date for the event number.	I
613	The system allows each Agency to determine if agency event numbers are automatically reset daily, monthly, or yearly.	I
614	The Agency can adjust the event number manually.	I
	Priority	
615	The system supports pre-defined priorities associated with event types codes.	I
616	The system provides a minimum of five priority levels (numbered 1 through 5) for the purpose of assigning priority levels to incident types.	I
617	The priority of an event is automatically assigned by the system according to the event type and location of the event from a pre-defined list of priorities	I
618	After the priority is assigned, it can be manually overridden by the operator.	I
619	The system will track and capture as a component of the event record if the priority was overridden by the operator.	I
620	The priority of an event, when listed on a status monitor, will be distinguished by color and by priority level.	I
621	The color representing each priority can be determined and maintained by the Agency.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
622	The priority of an event, when listed on a status monitor, can be distinguished by symbol and by priority level.	I
623	The symbol representing each priority can be determined and maintained by the Agency.	I
624	The priority of an event may be changed at any time during an active event.	I
625	When an event type is updated, the priority will be updated as well, if needed.	I
	Suspension of event entry	
626	The system permits the suspension of data entry into a form to initiate a new event entry form.	I
627	The system permits the suspension of data entry of a form to perform other system functions, e.g., dispatching, unit status update.	I
628	When suspended, the data already entered in the form will be saved for future processing.	I
629	The system can return to the partially entered form for completion.	I
630	Entry of data into a form may be cancelled and the data discarded at the discretion of the operator.	I
631	The system will notify the operator when a form has been opened beyond a Agency determined length of time.	I
	Scheduled event	
632	The system allows an event to be scheduled for a later time.	I
633	Scheduled by date / time	I
634	Scheduled by Unit ID	I
635	Scheduled by event number	I
636	The system allows a unit to be automatically assigned to a scheduled event.	I
637	The system allows for a unit to be manually assigned to a scheduled event.	I
638	If a unit is automatically assigned to a scheduled event, the system requires an acknowledgement from the unit to acknowledge the new status.	I
639	The system allows scheduled events to occur on a recurring basis.	I
640	Responses to the Priority Dispatch program should be captured in the comments or audit trail of the event.	I
	Event closure	
641	An event can be closed by the operator.	I
642	All units can be cleared from an event and the event closed with a single command.	I
643	When the final unit is cleared from the event, the event is closed.	I
644	An event can be closed before having a unit assigned. The event record will require an appropriate disposition code.	I
645	The system allows an "incident close" command. The incident close command closes out the incident with a single disposition, regardless of how many units were on the assignment.	I
646	Remarks can be added to a closed event.	I
647	A closed event can be reopened.	I
648	Any changes made to the event while reopened will appear in the event record.	I
649	When an event is reopened, the existing data record is not affected. For example, time codes remain intact.	I
650	The reopened event will be returned to the pending list and will have an indicator showing it is a reopened event.	I
651	Prior to closing a reopened event, the system requires the operator to validate or provide a disposition if necessary.	I
	Advise only event entry	
652	The system permits the entry of an event without forwarding to a dispatch pending queue.	I
653	The event will be assigned an event number but will require no resources to be assigned.	I
654	The advise only event will be recorded as advise only.	I
	Catch up mode	
655	The system provides a method for the Agency to enter event data into CAD that was manually recorded while the CAD system was not operational (catch-up mode).	I
656	The system will indicate in the event record when event data is entered in catch-up mode.	I
657	Unit status and times may be recorded with an event that is being entered in catch-up mode.	I
658	The system allows the Agency to reserve a block of event numbers for use with entering event records in catch-up mode.	I
659	The system allows the Agency to reserve a block of case numbers for use with entering event records in catch-up mode.	I
660	The event record number is automatically assigned to the catch-up event from a pool of unassigned numbers set aside for this purpose.	I
661	Records entered in catch-up mode are flagged as such.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
	Location validation	
662	The system utilizes the progressive filtering of the possible street names on entry of the characters in the street name field beginning with the first character entered.	M
663	The system can verify a location by a street address using an abbreviated process. For example, entering "100 S" would display all streets that have a 100 block and that start with "S".	M
664	The system can verify a location by a common place using an abbreviated process. For example, entering "L" would display all common places that start with "L".	M
665	The system can verify a location by an intersection using an abbreviated process. For example, entering "L/S" would display all streets that start with "L" that intersect with a street that starts with "S").	M
666	The system has the ability to accept a valid street name and, as a result, present a list of cross streets and associated address ranges.	I
667	Addition of the address number adds to the filter for location validation, further focusing the search.	I
668	The results of the progressive filtering process is displayed as a drop down list.	I
669	The system is able to provide a list of possible matches to a misspelled location.	I
670	The system generates a list of possibilities to pick from if an exact match is not found during location validation.	M
671	The operator can pick a possibility from the list to continue the location validation process or continue entry of the location manually.	I
672	The system is able to preview detail of possible location matches by displaying cross streets, responder information and displaying the location points on the integrated map.	I
673	The system will accurately process complex street names, e.g., East North Broadway Street.	I
674	The system will accurately process street numbers with fractions, e.g., 32 ½ E North Broadway St.	I
675	The system will accurately process a location with an apartment number.	I
676	The system will validate a location without creating an event.	I
677	Can use a hot key to display an entry form.	I
678	In this case, the system will process the location and return the recommendations without creating an event.	I
679	If an event location is changed, the system will automatically initiate the location validation process.	I
680	It is possible to bypass or override the automatic location validation process.	I
681	The system allows the user to bypass an unverifiable location and select a valid location for purposes of jurisdictional assignment	I
682	If the location is bypassed to another valid location, the system shall keep the unverified location as the Incident Location and note the location used for verification as a note in the Incident History	I
683	When the event is processed with an overridden location, the event will be flagged for later reporting.	I
684	A Soundex function is available when entering a location for validation.	I
685	Upon location validation, the system will display location on the map.	I
686	Upon location validation, the system will display the valid address with Common Place name, when applicable.	I
	The system is able to display the following information regarding a valid location:	
687	High and low cross streets	I
688	City	I
689	Neighborhood	I
690	Common place or business name	I
691	Response area	I
692	Map page	I
693	Premises warnings or hazards by exact address	I
694	Premises warnings or hazards within a configurable radius	I
695	Prior incidents at exact address within a configurable period of time	I
	The following are valid verifiable locations:	
696	Civic address	I
697	X/Y Coordinates	I
698	From 911 data	I
699	From map click	I
700	Direct entry	I
701	In the following formats:	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
702	Degrees, minutes, seconds	I
703	Degrees, decimal minutes	I
704	Decimal degrees	I
705	MGRS	I
706	Intersection	I
707	Cell towers	I
708	Block	I
709	Common name	I
710	Apartment complex	I
711	Apartment building name or number	I
712	Mile markers	I
713	Point from the integrated map	I
714	Emergency call boxes	I
715	Interstate (limited access roadway)	I
716	Interstate exits	I
	The following are valid elements of a locations eligible for location validation:	
717	Directional prefix	I
718	Numeric address, including fraction	I
719	Street Name	I
720	Alias street name	I
721	Street type	I
722	Directional suffix	I
723	Apartment number (separate field)	I
724	including 1/2 apartment numbers, e.g., 32 1/2	I
725	alphanumeric, e.g., 2D	I
726	Building ID (separate field)	I
727	Floor number (separate field)	I
728	Subdivision (separate field)	I
729	Neighborhood	I
730	Municipality	I
731	Mile marker	I
732	Exit number	I
733	The system can process an event without a validated location, which will then use a designated response area entered by the operator to route the event to the appropriate dispatch workstation.	I
734	An event processed without a valid location is flagged.	I
735	The system is capable of validating the location associated with a self initiated event, e.g. traffic stop.	I
736	The system is able to generate a report of location overrides including all data, operator ID, date, time, and workstation ID.	M
737	More than one operator at a time can update event data on the same event record.	I
738	The system will record location changes resulting from wireless caller location and rebid results.	I
739	The system is capable of accepting and processing location information in PIDF-LO format.	I
740	The system meets applicable NENA NextGen 911 capabilities of accepting and processing location protocol (PIDF-LO) and various data (e.g., text, video, audio, X/Y coordinates) as presented to the CAD / 911 network interface	I
	Street name alias	
741	The system can associate an alias name for a street name, e.g., (EP for Elvis Presley Blvd, Dr. Martin Luther King Drive for Linden).	I
742	An alias name can associate with an Interstate e.g., (385 for Bill Morris Parkway).	I
743	When validated with an alias street name, the system will display the civic address and not display the alias name.	I
	Common Place names	
744	The system can associate multiple common place names with a single address, e.g., shops at a shopping mall, structure known by several names.	I
745	An event may be created using a validated common place name and event type.	I
746	The system can associate multiple locations with a single common place name, e.g., multiple locations for a fast food chain within the County.	I
747	When validated, the actual civic address will be displayed along with the Common Place name.	I
	Intersections	

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
748	The system can process intersection locations requiring an intersection to have only a single entry in the location table, if a location table (geofile) is used.	I
749	The system will accurately process an intersection location without regard to the order of the streets stored in the datafile or order presented for validation.	I
750	The system can automatically process intersection locations from GIS data files.	I
751	When streets intersect more than once, the system will provide the operator with a list of intersections from which to choose the appropriate location.	I
752	The system can process and can correctly recommend resources for an intersection location at which multiple political or precinct boundaries meet.	I
	Duplicate event detection	
753	The system will automatically check an entered event for possible match of existing events (active and closed) as duplicate events.	I
754	Based on an exact match of the location.	I
755	Based on the distance parameter established by the Agency between the location of the original event and the event being evaluated as a duplicate event.	I
756	Based on the event type of the events.	I
757	Closed events based on a time parameter established by the Agency, e.g., within 10 minutes of the closing of an event.	I
758	The system will display a list of possible duplicate events when detected in a separate work area.	I
759	The operator can select and view the full details of a possible duplicate event from the list.	I
760	The operator can reject the supposition that events are duplicates and continue to enter the event as a unique event.	I
	When events are identified as duplicate events by the operator, the operator can:	
761	Associate the event being entered and the already established event.	I
762	If the established event is still active, allow the operator to update the information in the established event.	I
763	The system will notify the dispatcher that additional information was added to the established event. Close the event being entered.	I
764	If the established event is closed, cross-reference the current event with the established event. Close the event being entered.	I
765	Cancel the event being entered.	I
766	If the event to be cancelled has been assigned an event number, the cancelled event is marked as a duplicate and cross-referenced to the active event that will be handled.	I
	Event type code	
767	The event type code of an event can be keyed in by the operator.	I
768	The event type code must be up to six characters in length.	M
769	The system allows for an unlimited number of event types.	I
770	The event type of an event may be selected from a drop down list.	I
771	The event type codes on the list are selected from the characters entered by the operator.	I
772	The drop down list of the event type codes becoming more focused as more characters are added.	I
773	Update of the event type code data table does not require the system to be restarted.	M
774	A event type code description will be associated with the event type code.	I
775	The event type code description will be displayed as part of the event entry and dispatch entry forms.	I
776	The system may associate multiple alias codes for a event type code.	I
777	The system may configure event type codes with sub event type codes the supplement, or further describe, the main event type codes.	I
778	The system can distinguish between active ("person with a gun") and past ("seeing a person with a gun yesterday") and allow differing response priority.	I
779	The alias event type codes will function as the parent event type code.	I
780	The system permits the event type of an event to be updated at any time during the event.	I
781	The system will track the changes in event type, record the ID of the operator that changed the event type and store the change in the event record.	I
782	The change in event type will trigger unit recommendation.	I
783	The system will display the updated unit recommendation.	I
784	The system will not automatically alter the unit recommendation currently in effect.	I
785	The operator may change the current unit recommendation that are in effect.	I
786	The system will notify the operator with an audible and visual alert when the event type is changed for an event. Notification is configurable by Agency.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
787	The system will automatically send a message (either SMS and email) to selected personnel depending on event type.	I
788	The system allows for the capability of adding optional remarks associated with the event type parameter.	I
	Remarks	
789	Remarks are entered as narrative text.	I
790	The system will allow unlimited text to be entered in a remark line.	M
791	Pressing the return key indicates end of remark line and the remark is then entered as an element of the event record.	I
792	On the completion of a remark entry, the remark is stamped with date, time, operator ID, workstation ID.	I
793	All remarks entered during event entry may be changed at any time prior to transmitting the event.	I
794	Remarks for an event are displayed in a remarks area allowing the operator to navigate all remarks in the remarks area using arrow keys.	I
795	Remarks are associated with event.	I
796	Remarks are viewed in chronological order of entry.	I
797	Multiple remark lines can be entered with each event.	I
798	Any authorized operator can add remarks to any active or pending event.	I
799	The system allows remarks to be added to closed events without reopening the event.	I
800	Remarks added to closed events are notated in the event record.	I
801	Multiple operators may enter remarks to the same event at the same time.	I
802	The system allows an unlimited number of remarks added to an event.	I
803	The system alerts the operator responsible for an event when additional information is added to an event.	I
804	This notification does not require operator action.	I
805	The alert can then be cleared by the user after reviewing the update.	I
806	Throughout the remarks narrative, the system provides the ability to automatically highlight keywords (e.g., gun, knife).	I
807	The keyword list is created and maintained by the Agency.	I
808	Throughout the remarks narrative, the system provides the ability to activate a "spell check" feature, at the discretion of the operator.	I
809	The dispatcher will be notified when remarks are added to an event for which the dispatcher is responsible.	I
810	Additional remarks added to an event will automatically insert the remarks area and will display in a different color until viewed or acknowledged	I
	Resource assignment and control (Dispatcher)	
	Dispatching workstations can be differentiated by:	
811	Geographic area of responsibility, e.g., Police precinct, Countywide.	I
812	Function, e.g., NCIC inquiry, Dispatcher, Supervisor.	I
813	Special assignment, e.g., Task Force.	I
	Routing of the event to the dispatching workstation	
814	The system will automatically route an entered event to the dispatching workstation(s) based on the geographic location of the event.	I
815	The system will automatically route an entered event to the dispatching workstation(s) based on the nature of the event.	I
816	The routing assignment for the event can be manually assigned or overridden by the operator.	I
817	The system allows multiple workstations to monitor and have responsibility for an event simultaneously.	I
818	Active remote workstations, when authorized, can be included in event call routing, e.g., workstations in the command vehicle, at the EOC.	I
819	Events may be transferred from one dispatching area of responsibility to another.	I
820	Events may be transferred from one dispatching group to another.	I
	Workstation sections for dispatching	
	Event display and data entry area	
821	Event details are displayed when the event is selected from either the pending or active event lists by the operator.	I
822	The location of the event becomes the focus of the map.	I
823	The event display record will indicate priority using color code and symbol.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
824	The event display record colors and symbols are defined and maintained by the Agency.	I
825	The event display record can include the responding units.	I
	Pending event display area	
826	Pending event list displayed can be limited to the scope of the dispatcher workstation, e.g., the dispatch workstation for Airport Station will show only that precinct's events.	I
827	Pending event list can be sorted by any available field.	I
828	Pending event list can be filtered by any available field.	I
829	A visual and audible (option using configuration setting) indication is provided when a new event is added to a pending event list.	I
830	A visual and audible (option using a configuration setting) indication is provided when a pending event is updated.	I
831	Notification is provided to the operator when the event has exceeded the Agency defined amount of time in the pending list Defined by priority and event type code.	I
832	The pending event list is sorted by priority. The higher the priority, the higher the ranking.	I
833	When there are multiple events on the pending event list of the same priority, the events of the same priority are sorted by length of time spend in the pending events list. The event with the longer duration in the pending queue is higher ranked.	I
	The pending list is automatically updated as pending events are:	
834	Added to the list	I
835	Modified	I
836	Removed from the list, either cancelled or selected to be dispatched.	I
837	Events on the pending list can be cancelled by any authorized operator or supervisor.	I
838	Other operators, e.g., calltakers, supervisors, can place a "request to cancel" for an event on the pending list to the operator responsible for the event.	I
	The pending list includes the following fields:	
839	Event number	I
840	Event type code	I
841	Priority	I
842	Sub-priority	I
843	Civic address / Common Place name / Building and Apartment number	I
844	Beat	I
845	ID of workstation initiating the event	I
846	Elapsed time on pending list	I
	Active event display area	
	The active event display can be sorted by:	
847	Priority	I
848	Age of event / time received	I
849	Event number	I
850	Precinct	I
	The active event list includes the following fields:	
851	Flags	I
852	Event start time	I
853	Agency	I
854	Event number	I
855	Event type code	I
856	Priority	I
857	Sub-priority	I
858	Civic address / Common Place name / Building and Apartment number	I
859	Beat	I
860	All columns, except for Event Number, may be hidden at the discretion of the operator.	I
861	The active event display may be sorted by any field available.	I
862	Active event list can be filtered by any available field.	I
863	The status of an event, when listed on a status monitor, will be distinguished by color and by priority level.	I
864	The color representing each event status can be determined and maintained by each Agency.	I
	Unit display area	
	Unit display can be sorted by:	
865	Unit ID	I
866	Assignment, e.g., patrol, task force, special duty	I
867	Assigned event number	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
868	Civic address / Common Place name / Building and Apartment number	I
869	1 man / 2 man	I
870	Status	I
871	Time in status	I
872	Precinct	I
873	Special equipment indicator	I
874	All columns, except for Unit ID, may be hidden at the discretion of the Agency System Administrator.	I
875	The unit display may be sorted by any field available.	I
876	The unit status display record will be color coded by status.	I
877	The unit status record colors are defined and maintained by the respective Agency.	I
878	The unit status display can be separated by unassigned and assigned unit status.	I
879	The system display area-specific units separately from roaming units.	I
	Dispatch related activities	
880	The operator may use a hot key to select the highest ranked event on the pending event list for dispatch processing.	I
881	The operator may select any event on the pending event list for dispatch processing.	I
882	The system does not limit the number of users that can review and update a single incident at the same time	I
	When a pending event is selected by the operator for dispatch processing:	
883	The event data is displayed in the dispatch event form	I
884	The selected event is displayed on the workstation map.	I
885	The system presents recommended units for assignment from the predetermined assignment records.	I
886	The location of the event becomes the focus of the map.	I
	The operator may select an event for viewing or updating through the following actions:	
887	Function key selecting the highest priority, longest in the queue.	I
888	Specifying the event number (partial number) on the command line or a form.	I
889	Specifying a unit assigned to the event from the command line or a form.	I
890	Point and click from the list of active events.	I
891	Point and click on the event icon displayed on the map.	I
892	The display will include all activity associated with that event.	I
893	The selected event is not removed from the pending list until processed, e.g., dispatch units assigned, cancelled by the operator.	I
894	The dispatcher may create an event, e.g., traffic stop.	I
895	For a traffic stop, the unit(s) assigned to the event will have a status of "arrived".	I
896	An operator may open a data entry form, perform calltaking activities (e.g., data entry, location validation) and perform dispatching activities on the same call. Also known as a "single shot" activity.	I
897	A "single shot" activity sets a flag in the pending list event record.	I
898	On selecting a pending event for dispatch processing, the operator may transfer the event to another workstation or workstation group.	I
899	The operator can select an event from the unit's event stack for assignment to the unit or assign the unit to an event from the operator's pending list.	I
900	The transferred event will be added to the receiver's pending event list if no units have been specified for dispatching.	I
901	The transferred event will be added to the receiver's active event list if units have been specified for dispatching.	I
902	The responsibility for those units will be transferred as well.	I
903	On closing the event, responsibility for transferred units will returned to the home workstation.	I
904	An event may be reserved for dispatch to a specific unit, even if the unit is not logged on or is busy, by assigning it to the unit's event stack.	I
905	The operator may accept the default resource assignment recommendations from the system and dispatch the event with a single command or function key, e.g., "Dispatch [event number]", "Dispatch" button on the dispatch event form.	I
906	The operator may make any changes to the event, location and assignment recommendations and dispatch the event.	I
907	The system allows an unlimited number of updates to a event.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
	The system will respond to the initial execution of the dispatch command by automatically performing the following:	
908	Assign the selected resources to the event	I
909	Remove the event from the dispatcher's pending queue	I
910	Update the status of the dispatched units in all map windows.	I
911	Start the status timers for the dispatched resources.	I
912	Log the resources dispatched in the event history.	I
913	Create or update the appropriate resource history record(s).	I
914	Time stamp all key event actions.	I
915	Send event information to the mobile device, should the unit having mobile device be dispatched.	I
916	Generate required tones via the toning / paging interface, if appropriate.	I
917	Generate and send rip and run information to involved resources and/or stations, if appropriate.	I
918	Generate and send alphanumeric text notifications, if appropriate.	I
919	An unlimited number of event notifications are allowed for any event type as determined by the system administrator.	I
920	The content of automatic external event notifications should be agency specific based on user definable available event information.	I
	The trigger for automatic external event notification should include any or all of the following:	
921	Unit dispatched	I
922	Event type with specified status, e.g., pending, dispatched	I
923	Event Benchmarks	I
924	Event Priority	I
925	The system allows manual initiation of event notification to a specified unit, unit type or operator ID.	I
926	The acknowledgment by an operator of a received notification should be placed into the event history.	I
927	The system has the ability to transmit specific agency-definable information from the event to specified MMS and SMS capable wireless devices and workstations.	I
928	The system can initiate an emergency notification to a logged on field unit without having to dispatch the unit to the event.	I
929	The system allows the event data to be updated after dispatch. The system will reevaluate the event, making adjustments to unit recommendations, if necessary. Units already assigned to the call will not be automatically removed.	I
930	The system will send the updated event information to the mobile device.	I
931	The system allows the event type to be updated, resulting in a change to the unit recommendation. Units already assigned to the call will not be automatically removed.	I
932	Active events may be transferred to other workstations and will include all units and related information.	I
933	Active events may be transferred to other dispatch groups and will include all units and related information.	I
934	The system allows self-initiated events.	I
935	The unit reporting the event can be assigned to the event	I
936	The unit status is marked arrived; e.g., traffic stop.	I
	Event disposition code	
937	The system allows an event disposition code to be added to an event on event closing.	I
938	The disposition code can be a required parameter depending on the event type of the event.	I
939	The disposition codes are created and maintained by the respective Agency.	I
940	Remarks can be added to the disposition entry by the operator.	I
941	Disposition codes have to be related to the event type.	I
942	The system able to restrict the addition of a specific disposition code based on event type.	I
943	On closing a event, the system can send a request to the unit or officer Mobile Data Device / PDA to add the event disposition.	I
944	The multiple disposition codes may be associated with an event, e.g., event, arrest.	I
945	The system supports the ability to add unlimited dispositions per incident.	I
946	The system allows the entry of an event disposition before closing the event.	I
947	The last unit cleared from an event will require the declaration of an event disposition.	I
948	Every event must have a disposition.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
949	An event disposition may be changed after the event is closed. The Operator and Workstation ID of the operator adding the disposition to a closed event is recorded.	I
	Time stamps and timers	
	Time stamps will include:	
950	Current date and time	I
951	Operator ID	I
952	Workstation ID	I
	The following time stamps will be recorded and associated with a event, at a minimum:	
953	Time call received at the PSAP	I
954	Start of event entry form	I
955	Addition of an event to the pending list	I
956	Dispatcher first viewed the event	I
957	Unit dispatch time	I
958	Unit status changes	I
959	Time event closed	I
960	Each time a change is made to the event	I
961	Event status changes	I
962	Each time a remark is added to the event	I
963	Each time a remark is added to the unit	I
964	Each time a timer is activated	I
965	Each time a timer is reset	I
	The following timers will be provided by the system:	
966	Elapsed time of an event in the pending list	I
967	Dispatcher initial event view to the dispatch of first unit.	I
968	Initial dispatch to first unit to arrive on scene.	I
969	Elapsed time of units on scene.	I
970	Elapsed time a unit is on scene without communication to dispatch (Officer safety)	I
971	The system will allow the creation of Agency defined time stamps.	I
972	The system will allow the creation of Agency defined timers using defined time stamps.	I
973	The respective Agency can determine the length of time that a timer will be active before notifying the operator.	I
974	The system provides an audible (optional through system configuration) and visual notification to the operator when an event timer exceeds a predetermined time period in a status.	I
975	The visual notification for the event timer will be displayed for the event's map icon.	I
976	The event status timer's time periods are established and maintained by the Agency.	I
977	Event status timer can vary by event type code.	I
978	Event status timer can vary by event priority.	I
979	The system allows the operator to reset the timer operation for any event or unit related timer, with the following conditions:	I
980	The timer restarts at 0.	I
981	Notifications are reset.	I
982	The operator can select a default time period or specify a time period.	I
983	Timer resets are recorded in the event history	I
984	The system allows the operator to disregard the timer operation for any event or unit related timer, with the following conditions:	I
985	The timer continues to run.	I
986	Future notifications can be turned off.	I
987	Future notifications can be reset ("snooze").	I
988	The system tracks time in status for each unit separately	I
989	The system allows each unit to be dynamically assigned different time-out values.	I
	Unit recommendation	
990	The number and types of units recommended are determined by event type code, unit capability and event location/area.	I
991	There is no limit to the number of units that may be dispatched to an incident. All units are tracked individually.	I
	The system supports the following factors in unit recommendation	
992	Agency defined response zones/beats/boxes	I
993	Agency defined station order responses	I
994	Agency defined responses	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
995	Agency defined location or premises classifications	I
996	Agency defined equipment or apparatus types	I
997	Special equipment	I
998	Minimum staffing	I
999	Split crew	I
1000	Shared crew	I
1001	The system provides the capability to designate apparatus in a "shared crew" configuration. A single crew operates a Hazardous Materials Van and an Engine. For example, when the Hazardous Materials Van leaves the station, the system will place the shared Engine out of service. This is action is performed by the system without operator intervention.	I
1002	If a unit under consideration to be selected for a recommendation is not available, the system will automatically select the next most reasonable unit from the available units list as a substitute.	I
1003	The substitute unit will be selected using algorithms determined by the Agency.	I
1004	The system can use the AVL location for units when developing a recommendation list.	I
1005	IF AVL is employed, the substitute unit will be the closed unit of the needed unit type, accounting for road conditions, obstacles, interstate access and interstate lane direction.	I
1006	If AVL is employed, the system will consider neighboring jurisdiction's box assignments (Fire) for mutual aid responses	I
1007	The operator can accept the complete list of system recommended units using a function key.	I
1008	The operator can select any units from the recommended units list for dispatch.	I
1009	The system allows for recommendation of units by alarm level.	I
1010	The system supports alternate dispatch recommendations based on Agency selected criteria, e.g., severe weather, special events.	I
1011	The system is able to recommend units for dispatch using special equipment as a selection parameter.	I
1012	The operator can manually enter any valid unit ID or multiple unit IDs for assignment on an event, even IDs not on the recommended unit list.	I
1013	The operator can return the event to the pending list without making a unit assignment.	I
1014	The system allows for the addition of units to an event.	I
1015	The system is able to dispatch additional units to an incident from the command line, an incident dispatch form, or using drag and drop from the available units list functionality.	I
1016	As units are added to an event, the system recognizes when the assigned units reach an upgraded alarm level. The system will add a notation to the event but will not change the existing alarm level.	I
1017	The system has the ability to configure and designate mutual aid responses.	I
1018	The system can formulate location specific recommendations.	I
1019	The system is able to adjust the recommendation list and account for:	I
1020	Time of day	I
1021	Unit availability.	I
1022	Special skills assigned to the unit.	I
1023	Special equipment assigned to the unit.	I
1024	Closest units to the location of the event.	I
1025	Units already assigned to the event.	I
1026	The system can display extended unit recommendations in addition to the initial recommendation, e.g., next alarm level.	I
1027	The system will log the recommendations displayed for the user in the incident's history, whether dispatched on substituted.	I
	Unit activity	
1028	The system allows units assigned to separate events to exchange assignments without creating a new event.	I
1029	The system updates all log files when units are exchanged.	I
1030	The action of assignment of a unit to an event can be restricted to the operator responsible for the unit.	I
1031	The system can allow the assignment of a unit by an operator not responsible for the unit, with authorization from the operator responsible for the unit.	I
1032	When a unit exchange is function is executed, the system will seek any required authorization from the responsible operators prior to the exchange.	I
1033	The system allows units to be placed on duty from a preformatted screen.	I
1034	The system allows units to be placed on duty from a command line.	I
1035	The on-duty entry can include the unit crew assignment.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1036	The system supports a temporary unit feature (up to eight-character unit number), allowing units that are not predefined in the system or not on duty to be placed on duty and dispatched via a single function.	I
1037	Once created, the temporary unit has all of the characteristics of a defined unit until removed.	I
1038	When the unit logs off, the temporary unit will be removed from the system.	I
1039	If an Officer ID number being assigned to a unit already has an assignment, the system will prompt the operator to either change the Officer ID number to the new assignment or maintain the old assignment.	I
1040	When an assignment is closed, the system maintains the Officer ID number(s) associated with the assignment for audit purposes.	I
1041	The system allows the name of a ride-along to be entered at unit sign-on. Multiple rider names can be added to a unit.	I
1042	The system is able to assign vehicles to individual officers and maintain that vehicle assignment through shift changes.	I
1043	The system provides notifications to the operators responsible for the individual units involved in the exchange on completion of the exchange.	I
1044	The system allows an assigned unit and an unassigned unit to be exchanged without creating a new event.	I
1045	A single unit or multiple units can be assigned to an event.	I
1046	By selection as part of a recommended unit list	I
1047	As a parameter of a function entered on a command line	I
1048	Drag and drop from a list of available units.	I
1049	A unit may be unassigned and unavailable for assignment.	I
1050	A unit may be assigned to backup or assist another unit.	I
1051	A unit may be place out-of-service and not available for assignment.	I
1052	A unit may be "pre-assigned" to an event.	I
1053	When a unit clears its assignment, it can automatically dispatched to the next "pre-assigned" incident.	I
1054	The responsibility for a unit may be transferred from one area of responsibility (e.g., precinct, County-wide) to another.	I
1055	The system allows one unit to cover the assigned area of another unit.	I
1056	The system allows remarks to be added to the unit (specifically) by the operator.	I
1057	The system provides the capability to capture odometer reading, when:	I
1058	a unit goes on duty	I
1059	goes off duty	I
1060	unit status changes	I
1061	initiate unit transport status	I
1062	arrive unit transport status	I
	Unit data elements	
1063	The system supports a central unit table for the creation of Unit IDs.	I
	The system unit record contains the following elements:	
1064	Unit ID (between 4 and 10 characters)	I
1065	Unit type	I
1066	Capabilities	I
1067	Number of personnel assigned to the unit	I
1068	Personnel assigned	I
1069	Push-to-talk ID	I
1070	Vehicle ID	I
1071	MDT ID	I
1072	Special equipment	I
1073	Area designation	I
1074	Zone designation	I
1075	Home assignment	I
1076	Controlled / Uncontrolled	I
	Unit status	
1077	The status of a unit may be updated using a function executed on the command line.	I
1078	The status of a unit may be updated using form.	I
1079	The status of a unit may be updated using a mouse.	I
1080	The status of a unit may be updated from the integrated map.	I
1081	The system allows comment information to be entered during unit status updates.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1082	The unit status comment information is logged in the unit history.	I
1083	The unit status comment information is logged in the event record, if the unit is assigned to an incident.	I
	The CAD system allows the definition of the following types of unit status parameters:	
1084	Special status colors	I
1085	Allowing a unit to be available for dispatch while in a status.	I
1086	Allowing a unit to be available for recommendation while in a status	I
1087	Time allowed in a status	I
1088	Status codes	I
1089	The status of multiple units assigned to an event may be updated with a single command.	I
1090	The system allows the respective Agency to create and maintain unit status codes.	I
1091	The status of a unit is reflected on the display of the unit ID on the status display.	I
1092	The unit status indicator for the map and the status display can be the same color.	I
	The following are unit status codes that may be assigned to a unit:	
1093	Available	I
1094	Dispatched – not enroute	I
1095	Enroute	I
1096	In area	I
1097	At station – available	I
1098	At station – not available	I
1099	Staging – available	I
1100	Staging – not available	I
1101	Arrived	I
1102	Enroute to hospital	I
1103	Arrived at hospital	I
1104	Enroute to move-up	I
1105	Arrived at move-up	I
1106	Pre-empting	I
1107	Exchanged	I
1108	Transporting	I
1109	Transport complete	I
1110	Out of service	I
1111	Motor vehicle (out of service due to vehicle problem)	I
1112	Equipment (Available, picking up equipment)	I
1113	Signal Q (radio traffic held)	I
1114	OK (OK for routine radio traffic)	I
1115	Report	I
1116	Cleared – available	I
1117	Cleared – not available	I
1118	On break - available	I
1119	On break – not available	I
1120	Off duty	I
1121	The system allows unit status codes to be defined by the Agency.	I
1122	The system will differentiate unit status using color.	I
1123	The colors associated with unit status can be assigned and maintained by the Agency.	I
1124	The status of a unit is reflected on the display of the unit icon on the map.	I
1125	The status of a unit, when displayed on the map, will be distinguished by color.	I
1126	The color representing each unit status on the map can be determined and maintained by the Agency.	I
1127	The system provides the ability of distinguishing the status of unit visually with other than color (to accommodate color blindness).	I
1128	The system provided for the ability for the operator to add comments / remarks to the unit status record.	I
1129	The system allows off-duty units to be tracked for off duty employment.	I
1130	The system allows off-duty units to be recommended for assignment, e.g., the off-duty unit can be assigned to a high priority event at the discretion of the operator.	I
	Unit status timer	
1131	The system provides an audible (optional using system configuration) and visual notification to the operator when a unit exceeds a predetermined time period in a status.	I
	The following unit status timers are enabled:	

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1132	Dispatched – the length of time in the dispatched status to marking enroute or arrived/on-scene	I
1133	Enroute – from dispatch to arrived/on-scene	I
1134	Arrived – the length of time from on-scene to clear.	I
1135	Unit safety / well-being timer - length of time established by the each Agency that the unit reports status to the dispatcher.	I
1136	The visual notification for the unit timer will be displayed for the unit's map icon.	I
1137	The visual notification for the unit timer triggering can including blinking of the unit ID or map icon.	I
1138	Unit status timer time periods are established and maintained by the each Agency.	I
1139	If an PDA is associated with the unit and a wellness check unit timer trigger is activated for that unit, the system will pass the notification along the PDA of the associated unit.	I
1140	Unit status timer can vary by event type code.	I
1141	Unit status timer can vary by unit status code.	I
1142	The operator can reset the timer for any unit.	I
1143	The timer restarts at 0.	I
1144	Notifications are reset.	I
1145	The operator can disregard the timer for any unit.	I
1146	The timer continues to run.	I
1147	Future notifications can be turned off.	I
1148	Future notifications can be reset ("snooze").	I
	Pre-emption of units	
1149	A unit can be pre-empted from an assigned event. The unit will be available for assignment.	I
1150	A unit can be pre-empted from an assigned event and reassigned to a different event with a single command.	I
1151	A unit that has been pre-empted from an assigned event and reassigned to a different event may be marked as arrived status without having to be "dispatched" to the reassigned event.	I
1152	A unit pre-empted from an event may have that event placed in the unit's event stack, as determined by the operator.	I
1153	If all of the units assigned to an event are pre-empted, the event will be placed back on to the pending events list. This event will be flagged as one previously dispatched.	I
1154	Pre-empted units are tracked in the event record / audit trail.	I
	Unit Move-up / Cover	
1155	The system supports cover assignments where a unit 1 will be recommended for the assignments of unit 2.	I
1156	The system will automatically recommend cover assignment under circumstances determined by SCFD.	I
1157	The system allows cover assignments to be manually created with a CAD command.	I
1158	The system will visually notate a unit in a cover assignment status on the unit status monitor lists.	I
1159	Units put into a covering status are recommended from the station for which they are covering.	I
1160	The system supports move-up assignments where unit 1 is moved to the Station of unit 2 in order to fill gaps in coverage areas.	I
1161	The system will automatically recommend move-up assignments under circumstances determined by SCFD.	I
1162	The system allows move-up assignments to be manually created with a CAD command.	I
1163	The system will visually notate a unit in a move-up assignment status on the unit status monitor lists.	I
1164	The system supports Fire units put into a move-up status are recommended from the station to which they have been moved.	I
1165	Units that are moved-up to compensate for coverage gaps based on a particular event/call can be automatically returned to their home station upon clearing of the event/call that required the move-up, or manually returned, at the discretion of an authorized user.	I
1166	The system provides for individual dispatcher discretion to allow override of cover and move-up recommendations.	I
1167	The system provides a visual alert that units involved in a move-up recommendation have returned to service.	I
1168	A command is available to return moved-up or cover units to original/primary station.	I
	Primary unit for an event.	
1169	The system can automatically assign a unit as the primary unit for an event based on Agency requirements.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1170	The operator can assign a unit to be the primary unit for an event.	I
1171	The operator can change the primary unit during an event.	I
1172	The system records the change of primary unit in the event record.	I
1173	The system supports a visual indication of the primary unit on the active event display.	I
1174	The system supports a visual indication of the primary unit on the unit display.	I
1175	The primary unit will be responsible for the report, if a report is required.	I
1176	The primary unit will require a disposition when cleared, if a disposition is required.	I
	Cleared units.	
1177	A single unit can be cleared from an event.	I
1178	Cleared units will be available for assignment.	I
1179	A unit may be cleared from an event and held as not available for assignment.	I
1180	Multiple units can be cleared from an event with a single command.	I
1181	All units may be cleared from an event with a single command.	I
1182	When all units a cleared from an event, the event automatically initiate the event close process.	I
1183	Each event must include a disposition code on closure.	I
	Units logging on	
1184	A unit may be logged on and off as necessary.	I
1185	A unit may be logged on but out of service.	I
1186	The system allows groups of units to be logged on and off with a single function.	I
1187	While logging the unit on, the operator may specify:	I
1188	The officer ID(s) to be associated with the unit. This activity will override (but not replace) any previously entered roster entries for that tour of duty.	I
1189	Special equipment, e.g., special weapons, DUI kits.	I
1190	MDT ID	I
1191	District (SO) / Beat (FD) (Unit will auto transfer to correct dispatcher.)	I
1192	If a unit is logged on with a designated district / beat, the system will automatically assign unit to the appropriate dispatcher.	I
1193	If a unit is logged on with a designated district / beat, the system will automatically display the unit on the appropriate dispatcher's workstation.	I
1194	The system allows unit staffing, weapons and equipment to be updated by the operator while the unit is logged on.	I
1195	The system allows the unit data table information to be updated at any time by authorized personnel.	I
	Unit disposition code	
1196	The unit disposition codes are created and maintained by the Agency.	I
1197	A unit disposition code is added to the unit record on clearance of a call by a unit.	I
1198	A unit disposition code can be required depending on the event type of the event, as determined by the Agency.	I
1199	Each unit assigned to an event may record a disposition code.	I
1200	The system allows multiple disposition codes per unit.	I
	Unit type	
1201	The system supports the association of a unit type to a unit ID.	I
1202	The Agency can create and maintain the unit types.	I
	Wrecker rotation	
1203	The system provides a method for creating and maintaining list used for the recommendation of rotating external services, e.g., wrecker company rotation plans.	I
1204	The Agency can create and maintain a list of wreckers companies to include on the rotation plan.	I
1205	The system allows for the development of a separate wrecker company recommendation plan based on wrecker coverage polygons.	I
1206	Wrecker company rotation plans can be based on location.	I
1207	The system can automatically assign a wrecker company from the wrecker company rotation list.	I
1208	The operator may override the system recommended wrecker company selection.	I
1209	The wrecker company selection can be based on a wrecker company rotation cycle as determined by the agency, e.g., the same wrecker or company selected for a week, followed by the next selection on the list.	I
1210	The system can use some or all the following parameters to determine the wrecker company selection:	I
1211	Length of time since the last assignment	I
1212	Location of the assignment	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1213	The system allows the operator to remove / suspend a wrecker company from the wrecker rotation list for an Agency determined period of time	I
1214	The system will create a history for wrecker company event for inquiry and printing.	I
1215	An operator can print the wrecker company assignment logs.	I
1216	An operator can electronically deliver (email) the wrecker company assignment logs.	I
1217	The system allows an operator to select if wrecker stays at top of a wrecker rotation or select a wrecker company to go to bottom of the wrecker rotation list depending on circumstances.	I
1218	The system allows the operator to manually assign / override wrecker company selection.	I
	Contractor rotation	
1219	The system supports a module for rotating contractor or support personnel.	I
1220	The system supports the temporary removal of a contractor from a rotation.	I
1221	The system supports the request for a contractor from a person or vehicle record.	I
1222	The system supports the ability to cancel a contractor request.	I
1223	The system supports storage of information about a contractor request within the incident record.	I
	Integrated Mapping	
1224	Due to funding requirements, proposals must meet all GIS and mapping requirements as stated in the Shelby County TN Emergency Communications District (SCECD) Requirements for Integrated CAD/Mapping Systems dated November 10, 2011, Attachment A of this RFP. Throughout the SCECD Requirements document, consider the word "should" as equivalent to "will".	M
	The Additional Requirements section of the SCECD Requirements document is not applicable to vendors except for the following items:	
1225	The selected CAD/Mapping system must utilize the address points, ESN boundaries, and street centerlines in the TIPS database schema as provided and maintained by SCECD.	M
1226	The CAD/Mapping system must provide the ability to geocode ALI data received in legacy format by the use of translation tables or similar methods until full implementation of State of Tennessee Next-Generation 9-1-1 delivery of ALI data.	M
1227	The system supports map overlays.	I
	The system support the following overlays, at a minimum:	
1228	Digital Orthophotographic	I
1229	Pictometry	I
1230	Parcel	I
1231	Parks	I
1232	Building footprints	I
1233	Agency developed map layers	I
1234	Waterways	I
1235	Agency developed polygons, e.g., Police Precincts	I
1236	Political boundaries	I
1237	Neighborhoods	I
1238	Hydrants	I
1239	Railroad lines	I
1240	Communication towers, e.g., cell phone, commercial broadcast	I
1241	Live traffic data.	I
1242	The County integrated CAD map can utilize the map for the entire County.	I
1243	The CAD map system can integrate maps for Shelby County and all counties surrounding Shelby County (Fayette and Tipton, TN; DeSoto and Marshall, MS; Crittenden, AR), if available in ESRI format.	I
1244	The map system supports the ability to share the keyboard and mouse function with CAD.	I
1245	The map displays active events.	I
1246	The map displays pending events.	I
1247	The map symbols representing events and units are configurable by the Agency.	I
1248	The map symbols will distinguish between function, e.g., events and units, by color and shape.	I
1249	The map symbols representing units will distinguish unit status, e.g., enroute, arrived, available.	I
1250	Unit status representations (e.g. color, symbology) on the map matches status representations used on CAD status monitors.	I
1251	The operator can display detail information about the event or unit by selecting the representative icon displayed on the map.	I
1252	The operator can perform event related functions (e.g., update event information, add remarks) from an event form by selecting the representative event icon displayed on the map.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1253	The system support the ability to visually notate available premises information and link to appropriate documents via a single map click	I
1254	The system supports the ability to select unit(s) and have the map automatically size to display the requested units within the map	I
1255	With AVL enabled, the map will automatically pan to follow a unit selected by the operator.	I
1256	Map overlays may be toggled on and off by the operator.	I
1257	The system is able to accept location information based on FCC Wireless Phase I and Phase II standards.	I
1258	The system is able to display of the location of Wireless Phase I and Phase II callers.	I
1259	An operator can initiate an event from a mouse click on the map using the map point from the click as the location.	I
1260	An operator is capable of perform a map location lookup based on the following:	I
1261	Validated civic address	I
1262	Validated intersection	I
1263	Geographic coordinates, e.g., Latitude / Longitude	I
1264	Mouse click on the map	I
1265	Validated common place name	I
1266	When initiation an event from a mouse click on the map, the system will use the closest valid address as the location to validate, but the point on the map will remain at the point selected.	I
1267	The system is able to link files to map structures, e.g., photos, PDFs, audio.	I
1268	The system is able to create links to the Web via points on the map.	I
1269	The system is able to create, store and execute hyperlinks.	I
1270	The system supports ability to toggle feature displays.	I
1271	The system is able to toggle feature annotation.	I
1272	The system is able to pan and zoom.	I
1273	The map zoom levels are defined by the Agency.	I
1274	The map zoom levels are able to be defined by the Agency by municipality. For instance, Municipality A wants the map zoomed to 1000 feet when recalling a dispatch, while Municipality B wants the map zoomed to 2000 feet for the same function.	I
1275	The map feature annotation font size automatically adjusts with map focus.	I
1276	The map supports both English and metric measurements.	I
1277	Map symbology can be defined and changed by the Agency.	I
1278	During event entry, dispatching and inquiry, the integrated map will center the map focus on the location and zoom to an extent specified by the Agency.	I
1279	The system can print the map display.	I
1280	The system supports initiating event creation from the map.	I
1281	The event created from the map will use the map location as the event location.	I
1282	An event created from a map can default to the closest intersection.	I
	GIS interface	
1283	The system is compatible with ESRI software.	I
1284	The system supports ESRI file formats.	I
1285	All GIS related files can be maintained by the agency.	I
1286	GIS files can be imported to CAD by Agency using built in utilities.	I
1287	Updates to the Mapping module does not affect CAD operations.	I
1288	A GIS report writing module is included.	I
	Road closures	
1289	The system is able to accept and process road closures.	I
1290	The road closure will be visually represented on the map.	I
1291	An authorized user is able to enter a road closure using CAD functions.	I
1292	Road closures are shared with all workstations and mobile devices.	I
1293	Road closures can be established to be of any duration.	I
1294	Unit recommendations will be adjusted due to active road closures.	I
1295	During road closure the operator can designate if an intersection should be treated as "open" so support crossing by public safety personnel.	I
	Unit routing	
1296	Unit routing uses the street network.	I
1297	Unit event routing assistance will be adjusted due to active road closures.	I
1298	The system can utilize the unit's AVL location as the starting point for unit routing.	I
1299	The system supports unit routing based on shortest route from the unit's location to the assigned event location.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1300	The system supports unit routing based on fastest route from the unit's location to the assigned event location.	I
1301	The system supports unit routing with operator designated start and end point.	I
1302	Unit routing accounts for road closures.	I
1303	Unit routing accounts for detours.	I
1304	Unit routing accounts for road attributes, e.g., speed limits, one-way streets.	I
1305	The system will highlight the calculated route on the map.	I
1306	The system supports annunciated turn by turn directions between any 2 points on the map on the mobile device.	I
1307	Annunciated turn by turn directions may be toggled on and off at the operator's discretion.	I
1308	The routing module is capable of resetting the route based on the current unit location.	I
1309	When the route is reset, the system will annunciate based on the reset route.	I
	Interfaces	
1310	The system provides a integrated set of application modules offering a consistent user interface.	I
	Law Enforcement Records Management System (LRMS)	
1311	The system is able to fully integrate with Vision / TriTech Inform RMS.	I
1312	The system is able to fully integrate with TriTech Inform LRMS version 4.5.	I
1313	The integration includes automatic, seamless transfer of event information between CAD and the LRMS.	I
1314	The system transfers the CAD incident information automatically, on incident closure.	I
1315	The system transfers the CAD incident information automatically, when units are initially dispatched.	I
1316	The system transfers the CAD incident information automatically, when an incident number is assigned.	I
1317	The RMS Administrator can determine when the CAD incident information is transferred to RMS.	I
1318	Name information transferred from the CAD system to the RMS will be associated into the Master Name Index of the RMS system	I
1319	Vehicle information transferred from the CAD system to the RMS will be associated into the Master Vehicle Index of the RMS system	I
1320	Location information transferred from the CAD system to the RMS will be associated into the Master Location Index of the RMS system	I
1321	The CAD system provides access to the RMS database for lookup of vehicle information, e.g., Tag, VIN, description, entered in the CAD event record.	I
1322	The CAD system provides access to the RMS database for lookup of person information, e.g., missing person, warrants, alerts, based on entries in the CAD event record, e.g., name, description, DL.	I
1323	The CAD system provides access to the RMS database for lookup of locations entered in the CAD event record.	I
1324	Inquiries initiated from CAD into RMS are returned to the initiating workstation or mobile device.	I
1325	Inquiries from CAD into RMS are returned to a separate window on the initiating workstation ro mobile device.	I
1326	The CAD workstation operator is notified of a return of an inquiry with a visual and audible alert.	I
1327	The CAD workstation has the ability to run inquiries on LRMS data.	I
1328	The results of the LRMS inquiry may be displayed on the terminal, printed on a selected network printer or both.	I
	Fire Records Management System (FRMS)	
1329	The system is able to be fully integrated with Emergency Technologies, Inc. (ETI) FRMS.	I
1330	All CAD data fields are available to the FRMS for inclusion in the FRMS record.	I
1331	The integration includes automatic, seamless transfer of event information between CAD and the FRMS.	I
1332	The CAD workstation has the ability to run inquiries on FRMS data.	I
1333	The results of the FRMS inquiry may be displayed on the terminal, printed on a selected network printer or both.	I
1334	All run data required for initiating and completing incident reports, is available to an authorized user at any time. A unit will not have to wait until an event is closed before the data is available to complete the report.	I
1335	The system supports providing access to CAD data for the purpose of initiating an ePCR report at any time during an event.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
	The system supports, at a minimum, the capture/transfer from CAD of the following data elements for each CAD event:	
1336	Incident number	I
1337	Report number	I
1338	Call location	I
1339	Call type - initial	I
1340	Call type - final	I
1341	Alarm levels	I
1342	Caller location	I
1343	Fire district	I
1344	Caller name	I
1345	Alternate call back number	I
1346	Call priority.	I
1347	Call Back field (date and time)	I
1348	Remarks	I
1349	Disposition (unlimited)	I
1350	Time call received	I
1351	Time dispatched	I
1352	Time first unit responded	I
1353	Time first unit arrived	I
1354	Time first unit cleared	I
1355	Time last unit cleared	I
	The system supports, at a minimum, the capture/transfer from CAD of the following data elements for each unit logged on during a day/shift:	
1356	Unit ID	I
1357	Vehicle ID	I
1358	Unit in-service times	I
1359	Unit out-of-service times	I
1360	Personnel assigned	I
	The system supports, at a minimum the capture/transfer from CAD of the following data elements for each event to which the unit was assigned:	
1361	Time dispatched	I
1362	Time acknowledged	I
1363	Time enroute	I
1364	Time arrived	I
1365	User defined milestones (e.g., staging, fire under control, fire knocked down, rescue complete)	I
1366	Time departed for transport	I
1367	Time arrived for transport	I
1368	Destination hospital	I
1369	Time at hospital	I
1370	Time clear from hospital	I
1371	Time available	I
1372	Time cleared	I
	Digitized Voice Station Alerting System	
1373	The digitized voice station alerting system is current and compliant with all existing NFPA standards, including the current version of NFPA 1221	I
1374	The Proposer must provide all hardware, software and accessories necessary to implement the proposed FSAS to ensure it is fully functional.	I
1375	The digitized voice station alerting system integrates with the CAD, through vendor-supplied APIs or equivalent technology.	I
1376	The digitized voice station alerting system is re-configurable by software changes without requiring changes to the actual hardware devices.	I
1377	The digitized voice station alerting system handles a minimum of 20 individual Fire/Rescue Stations or facilities and provide for future expansion as needed.	I
1378	The digitized voice station alerting system supports the use of customized tones so that different tones can be used to indicate the type of call during the alert notification.	I
1379	The digitized voice station alerting system supports the use of digitized voice to announce incident location, assigned units, and dispatch time.	I
1380	The digitized voice station alerting system is integrated into workstation headsets.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1381	The digitized voice station alerting system announcements are recorded on the logging recorder.	I
1382	The digitized voice station alerting system date / time is synchronized with the PSAP master time synchronization device.	I
1383	The digitized voice station alerting system is able to send a notification to all Fire/Rescue Stations simultaneously.	I
1384	The digitized voice station alerting system is able to send a notification to selected Fire/Rescue Stations.	I
1385	The digitized voice station alerting system provides a primary and secondary method of delivering station notifications.	I
1386	The digitized voice station alerting system provides visible messaging of active dispatching.	I
1387	The digitized voice station alerting system is capable of performing pre-alert functions.	I
1388	The messaging can be disabled for any station or group of stations by the SCFD.	I
1389	The digitized voice station alerting system records a date / time stamp as each station is alerted.	I
1390	The digitized voice station alerting system allows the alerting sequence to be customized by the SCFD.	I
1391	The digitized voice station alerting system provides a notification when a critical event or failure is detected within the alerting system using all or a combination of the following methods: visually, audibly, e-mail, or pager.	I
1392	The digitized voice station alerting system has a test feature that the individual Fire/Rescue Station can activate without impacting the CAD operations.	I
1393	The digitized voice station alerting system provides adequate and adjustable audio levels to all areas in each Fire/Rescue Station.	I
1394	The digitized voice station alerting system data tables can be backed up without affecting system operations or performance.	I
1395	The digitized voice station alerting system provides reports that track times on dispatch, receiving of the alert/message by the station, and reaction time.	I
1396	The digitized voice station alerting system provides for customized reports capable of inquiry using all data fields.	I
1397	The digitized voice station alerting system is able to export queried data to external software such as Word, Excel, Access database, HTML format, PDF format and others as needed.	I
1398	The digitized voice station alerting system is able create different level of user access based on needed functionality (inquire only, update capability).	I
1399	The digitized voice station alerting system audit trail includes changes to the configuration of the digitized voice system that includes, at a minimum what changed, who made the change and when the change was made.	I
1400	The digitized voice station alerting system will function when the CAD server is operating on the primary or backup server, without agency intervention.	I
	Pre-arrival instructions (PAI)	
1401	The responses provide the operator with the determination of a event type code.	I
1402	The PAI will interface with Priority Dispatch ProQA Paramount for Law.	I
1403	The PAI will interface with Priority Dispatch ProQA Paramount for Medical.	I
1404	The PAI will interface with Priority Dispatch ProQA Paramount for Fire.	I
1405	The system can interface with a third party pre-arrival instructions software (e.g., Priority Dispatch)	I
1406	The system provides for the development, entry and maintenance pre-arrival instructions by the Agency which is internal to the system.	I
1407	The Agency can create pre-arrival instructions based on Agency's SOPs.	I
1408	Agency created pre-arrival instructions are based on event type code.	I
1409	The system will select the Agency created pre-arrival instructions when the event type code is entered.	I
1410	Dialog and response associated with the PAI are stored with the event record.	I
	Quality Assurance / Quality Improvement	
1411	All event record data is available for export to a QA application (e.g., Priority Dispatch AQUA).	I
1412	The QA / QI module must comply with the most recently approved Quality Assurance Program from the National Academies of Emergency Dispatch.	I
1413	The proposed system provides a QA module. If comply, describe the system.	I
	Master clock interface	
1414	The system is capable of establishing a time synchronization interface connection to a PSAP Master Clock.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1415	The system is able to establish the time synchronization in compliance with NENA-04-002 document.	I
1416	The system is able to establish the time synchronization interface using an RS-232 serial ASCII communications connection.	I
1417	The system is able to establish the time synchronization interface using an IRIG communications connection.	I
1418	The system is able to establish the time synchronization interface using an Ethernet 10/100 Base-T network connection.	I
1419	The system accepts time codes that utilize Network Time Protocol (NTP).	I
1420	The system accepts time codes that utilize Simple Network Time Protocol (SNTP).	I
1421	The system is capable of accepting broadcast time codes from the PSAP Master Clock via the interface connection.	I
1422	The system is capable of requesting time codes from the PSAP Master Clock via the interface connection.	I
1423	The system automatically adjusts the time settings for all CAD servers using the time codes from the PSAP Master Clock.	I
1424	The system automatically adjusts the time settings for all CAD workstations using the time codes from the PSAP Master Clock.	I
1425	The system maintains a continuous time accuracy of +/- 0.25 seconds relative to the PSAP Master Clock.	I
1426	The PSAP Master Clock interface conforms to the specifications described in NENA 04-002 v4 or later version of the standards document.	I
	CPE interface	
1427	The system supports an interface to the currently installed Cassidian Vesta M1 Customer Premises Equipment (CPE).	I
1428	The CAD to CPE interface is able to accept NENA i3 compliant data transfer, when available.	I
1429	The CAD to CPE interface is able to accept and process call location data in PIDF-LO format, when it becomes available.	I
1430	The system is capable of accepting emergency call and location data originating with SIP with location conveyance.	I
1431	The call data based on basic 9-1-1 data is transferred appropriately to CAD call entry form.	I
1432	The call data based on enhanced 9-1-1 data is transferred appropriately to CAD call entry form.	I
1433	Call data containing Wireless Phase 1 data is transferred to the CAD call entry form.	I
1434	Call data containing Wireless Phase 2 data is transferred to the CAD call entry form.	I
1435	The system accepts X / Y coordinates, e.g., latitude / longitude, for conversion to the closest civic address, address point or common place.	I
1436	The system is FCC Wireless Phase 2 compliant.	I
1437	Location rebid can be initiated from CAD by a user.	I
1438	The system displays the caller location on the CAD Mapping system.	I
1439	The resultant rebid location data will update the associated incident location and the CAD Mapping system.	I
	Telephone Device for the Deaf interface	
1440	The system supports an interface to a TDD device.	I
1441	The system attaches the TDD dialog to the event record.	I
1442	The TDD interface window displays the caller and the Emergency Call Taker's conversation separately as it takes place (real-time).	I
1443	The TDD interface window displays the caller and the Emergency Call Taker's conversation as different colors of text.	I
1444	The TDD interface window contains all the user pre-programmable messages grouped into related categories.	I
	SMART911 interface	
1445	The system supports the ability to interface to SMART911 external database, if available.	I
1446	The system has the ability to accept and process SMART911 data if available and provided by the SMART911 system.	I
1447	The system will present the SMART911 data provided to the dispatcher in a view only mode.	I
1448	The system has the ability to attach the SMART911 data provided to the event record.	I
1449	The system supports IP connectivity on the Local Area Network. The system allows:	I
1450	HTTP (TCP/80) to the Smart911 CPE from the workstations is supported in a proxy configuration.	I
1451	HTTPS (TCP/443) to the internet is supported if workstations have Internet access.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1452	If the system utilizes a local firewall policy, the firewall policy allows network traffic to and from the CPE Server. The system allows:	I
1453	HTTP (TCP/80) to the Smart911 CPE from the workstations is supported in a proxy configuration.	I
1454	HTTPS (TCP/443) to the internet is supported if workstations have Internet access.	I
1455	The system supports 1911/UDP.	I
1456	The system supports .net Framework 3.5+	I
	Pictometry	
1457	The system supports an interface with Pictometry data.	I
1458	Pictometry data is included as an overlay with the integrated mapping module.	I
1459	The system supports the integration of CAD event data with Pictometry orthogonal views.	I
1460	The system supports the integration of CAD event data with Pictometry oblique views.	I
1461	The system supports the calculation and display of Pictometry measurement capabilities, e.g., height, distance, angles, location).	I
1462	The system supports the use of Pictometry annotation tools.	I
	Real Time Live Video (RTLTV)	
1463	The mobile environment is capable of real-time live video interface.	I
1464	The RTLTV component is capable of video delivery without buffering.	I
1465	The RTLTV component adapts to situational bandwidth availability.	I
1466	The RTLTV component allows video sharing among fixed resources and mobile clients.	I
1467	The RTLTV component adapts to hardware capabilities of the mobile client.	I
1468	The RTLTV component supports private, third-party sources.	I
	ePCR	
1469	The system provides the capability to complete Patient Care Reports (PCR's) in the field.	I
1470	The system can interface with American Medical Response (AMR) ePCR system.	I
1471	CAD event data will be available for transfer to the AMR ePCR system for use by the PCR system to populate CAD related fields in the PCR.	I
1472	The CAD event data is available for transfer to the ePCR system while the event is active or closed.	I
	External interface	
1473	The system supports the ability to interface to external databases.	I
1474	The system has the ability to interface directly to the State of Tennessee wants and warrants system.	I
	Alarm company interface	
1475	The system is capable of a bi-directional interface to external alarm monitoring companies.	I
1476	The external alarm monitoring company interface utilizes the most recently developed Automated Secure Alary Protocol (ASAP) specification.	I
	Personnel / Staffing interface	
1477	The system has the ability to interface with a third party personnel scheduling software, e.g., Telestaff.	I
1478	The system provide a vendor developed personnel scheduling software.	I
	Radio system interface	
1479	The system has the ability to interface with the County Motorola CENTRACOM Gold Elite radio console.	I
1480	The system supports the ability to interface with GPS enabled portable radios that include messaging capabilities.	I
1481	The system supports radio alias synchronization with the Motorola radio system to avoid duplicate maintenance of radio IDs.	I
1482	The system is able to send alerts and alarms over the radio.	I
1483	The system is able to display and search for radio assignment information.	I
1484	Through the radio console interface is capable of displaying the unit radio callsign (Push-to-Talk) on the CAD monitor screen when the field unit depresses the transmit key.	I
1485	On activation of the field radio emergency button function, the radio console interface provides the field unit's radio callsign and last known location to all dispatch group workstation.	I
	Alphanumeric / Text Paging	
1486	The system supports alphanumeric / text paging.	I
1487	Based on event status	I
1488	Based on event type	I
1489	Based on priority	I
1490	Based on stations	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1491	Based on agency	I
	The data contained in the alphanumeric / text page of an event includes:	
1492	incident number	I
1493	incident type	I
1494	location	I
1495	common place name, if exists	I
1496	community / municipality	I
1497	units dispatched	I
1498	narrative	I
1499	The format of the alphanumeric / text page is Agency configurable.	I
1500	The alphanumeric / text paging system supports paging to groups.	I
1501	The system supports sending updates based on event status, e.g., dispatch, unit recall, working fire.	I
1502	The system supports alphanumeric / text paging from the command line.	I
1503	The system supports alphanumeric / text paging by employee ID.	I
1504	The system supports alphanumeric / text paging by unit ID.	I
1505	The system supports alphanumeric / text paging using pre-programmed text.	I
1506	The system supports alphanumeric / text paging using free text.	I
1507	The system supports alphanumeric / text paging to all units of an event.	I
1508	The system supports creating alphanumeric / text page groups based on call type, by municipality.	I
1509	The system logs all paging activity with the associated event.	I
1510	The system supports the delivery of the alphanumeric / text page to a fax device.	I
1511	The system supports the delivery of the alphanumeric / text page in the form of an e-mail message.	I
1512	The system supports the delivery of the alphanumeric / text page in the form of a text message to a cell phone enabled for text messaging.	I
1513	The system supports the delivery of the alphanumeric / text page in the form of a message to a Blackberry or other PDA-type device.	I
1514	The system supports the TAP protocol.	I
1515	The system supports SMS protocol.	I
1516	The system allows for a CAD-initiated page to require an acknowledgement.	I
	Toning and Paging	
1517	The system provides an interface with the existing radio console to perform tone alert paging, if the capability exists in the radio system.	I
1518	The system provides an interface with a dedicated programmable encoder to perform tone alert paging, if the capability exists in the radio system.	I
1519	The tone alert interface will issue tone alert commands from CAD automatically:	I
1520	Based on event type	I
1521	Based on units dispatched	I
1522	Based on station due	I
1523	Based on any combination of the above conditions.	I
	When the system is interfaced with a toning/paging system, the following features are available:	
1524	Automatic and manual dispatch notification (toning).	I
1525	Visual indication of when Public Announcement (PA) systems are activated for broadcasts during toning sequences	I
1526	Manual control of Fire station bay doors and other toning system devices	I
1527	Automatic resetting of status lights on the control panels of the toning/paging systems	I
1528	The Tone Alerting interface can require some type of user interaction prior to sending tones so the dispatcher can make the determination to send tones.	I
1529	The Tone Alerting interface allows the tone encoding of a unit from the command line, e.g., "ENCODE ENG1".	I
1530	The Tone Alerting interface recognizes recommended multiple units with identical tones (such as multiple units from a single station) and only sends a single set of tones for those units.	I
1531	The tone alerting interface provides the capability for tone signaling to initiate and monitor the paging progress for call notification of responding personnel.	I
1532	The system provides a method to allow the training module to simulate the function of the tone alerting interface, providing feedback but not actually performing activations.	I
1533	The tone alerting interface capable of operation in live, test and training modes simultaneously.	I
	State / NCIC interface	
	The system supports the following transactions to the State of Tennessee and NCIC data systems:	

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1534	Vehicle Registration	I
1535	Drivers License (DL)	I
1536	Vehicle Identification Number (VIN)	I
1537	Social Security Number (SSN)	I
1538	Wanted persons	I
1539	Warrants	I
1540	Criminal History	I
1541	The system automatically executes the State of Tennessee / NCIC inquiry based on information entered during events, as determined by the SCSO. For example, when a license plate and/or name entered into the proper fields of an incident, or from the command line, the CAD system is able to perform automatic NCIC queries on the information.	I
1542	The system meets applicable CJIS requirements, described in the Criminal Justice Information Services Security Policy, version 5.1, dated 7/13/2012 (CJISD-ITS-DOC-08140-5.1) and updated versions approved by U.S. Department of Justice.	M
1543	The function is capable of utilizing Advanced Authentication security protocols.	I
1544	The system allows access to the State of Tennessee / NCIC inquiry function is based on operator and terminal authentication.	I
1545	The system provides the capability of Single Sign On (SSO) which is capable of coordinating logon attributes between CAD logon, NCIC logon and logon to other external system that require a separate logon	I
1546	The State of Tennessee / NCIC interface meets all applicable security protocols for access, storage, retrieval and reporting.	I
1547	Returns from the State of Tennessee / NCIC inquiry can be attached to the CAD event record.	I
1548	The system will scan returned State of Tennessee / NCIC inquiry, highlighting certain key words, e.g., "wanted person," "stolen vehicle".	I
1549	The list of words to be highlighted can be entered and maintained by the Agency.	I
1550	An audit log is maintained for each successful and unsuccessful State of Tennessee / NCIC inquiry request.	I
1551	The audit log meets State of Tennessee and NCIC (CJIS) requirements.	I
1552	The log is permanently stored.	I
1553	The log records are searchable and reportable.	I
	Logging Recorder interface	
1554	The system is able to establish an interface with the County's Agency logging system.	I
1555	The system provides a hyperlink from CAD record in CAD system to the incident record stored on the Logging Recorder.	I
1556	The system is able to store screen shots of the CAD workstation with the incident record in the Logging Recorder.	I
1557	The system provides the CAD incident data to the Logging Recorder, identified by the CAD incident number.	I
1558	The system is capable of attaching Logging Recorder records to the CAD incident record in CAD.	I
	Automatic Vehicle Location (AVL) interface	
1559	The interface to a AVL module can be used to determine real-time unit location.	I
1560	The unit AVL location data is used in unit recommendation.	I
1561	The unit AVL location used in vehicle routing.	I
1562	The unit AVL locations are displayed on the CAD map.	I
1563	The unit AVL locations are updated on the map automatically.	I
1564	The unit AVL locations are updated on the map by the operator using a CAD function.	I
1565	The frequency of AVL location updates can be adjusted by unit and status	I
1566	The system can interface with the AVL application without Mobile Data infrastructure.	I
1567	The AVL module can be toggled on and off without degradation of CAD responsiveness.	I
1568	The system can interface with the AVL application to produce event and unit playback activity using the existing CAD mapping module.	I
1569	The system will interface with the AVL application to capture unit data regarding current unit conditions, e.g., status of emergency lights and sirens.	I
1570	The system will interface with the AVL application to capture unit data and reflect current unit conditions on the unit icon on the CAD status map.	I
1571	The system supports AVL playback function for units on a map.	I
1572	The system will interface with the AVL application to capture unit data to enable the following reports:	I
1573	Vehicle activity	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1574	speed	I
1575	location	I
1576	Geofence violations	I
1577	Supervisor will be notified when violation of Agency protocol on driving is violated, e.g., geofence, speed violation.	I
	Be On the Lookout Messages (BOLO)	
1578	The entry of a BOLO can occur via a form or via command line.	I
1579	A BOLO can include information on persons or vehicles.	I
	Any CAD workstation can perform the following with regards to BOLO messages:	
1580	Create	I
1581	Modify	I
1582	Display	I
1583	Delete	I
1584	Print	I
1585	Save a version of the BOLO for electronic distribution, e.g., email.	I
1586	Based on the requirements of the SCSO, the system can restrict the ability to delete a BOLO.	I
1587	The system provides the ability to send a BOLO to groups of workstations or individual workstations.	I
1588	The BOLO can be tied to an event.	I
1589	The workstation ID and operator ID initiating the BOLO will be recorded with the message.	I
1590	The active BOLO list can be displayed.	I
1591	The operator can select an active BOLO from the list to view the details.	I
1592	The system supports the automatic query of active BOLO data whenever a person or vehicle is entered into the system. The system will search by:	I
1593	Vehicle tag ID	I
1594	Subject information	I
1595	Vehicle identifier, e.g., make, model	I
1596	The BOLO can have an expiration date and time.	I
1597	The system can automatically expire BOLOs based on the expiration date.	I
1598	An operator can manually mark a BOLO expired.	I
1599	A BOLO can be marked cancelled by an authorized operator.	I
1600	The BOLO can be terminated by an authorized operator from an authorized workstation.	I
	The BOLO message includes:	
1601	Date and time	I
1602	Initiating operator ID and workstation ID	I
1603	BOLO message	I
1604	Expiration date	I
1605	Date and time terminated	I
1606	Terminating operator ID and workstation ID	I
1607	The BOLO messages can be searched by any field of the message.	I
1608	A BOLO message can be printed.	I
1609	A summary list of BOLOs can be printed.	I
	The BOLO summary list can be limited by:	
1610	Active	I
1611	Closed / expired	I
1612	Date range	I
1613	BOLO data is available for inquiry, retrieval and reports.	I
1614	The BOLO list is available to mobile devices.	I
1615	The system supports the distribution of BOLO messages, and includes the following:	I
1616	all users	I
1617	a selection of users	I
1618	mobile devices	I
1619	units	I
1620	The BOLO message can be scheduled for redistribution, if still active. For example, an active BOLO message can be redistributed every 4 hours.	I
	Law Enforcement contact tracking	
1621	The system provides the capability of tracking Law Enforcement contact with citizens.	I
	The following parameters can be captured as part of the tracking entry:	
1622	race / ethnicity	I
1623	sex	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1624	age	I
1625	probable cause	I
1626	arrests	I
1627	citation	I
1628	search conducted	I
1629	findings / comments	I
1630	Data may be entered by any authorized operator at a workstation or mobile device.	I
	Mobile Data interface	
1631	The mobile data interface provides the incident data from CAD to the mobile device associated to the unit dispatched to an incident.	I
1632	The CAD operator with responsibility of a mobile data unit has the ability to log off the mobile data device.	I
1633	The system provides a method of allowing unit capabilities to be specified at Mobile Device log on.	I
1634	The system provides a method of changing the unit capabilities (e.g., unit type, station assignment, manpower updates) from the Mobile Device without logging off.	I
1635	The system is able to restrict specific actions based on user designation, e.g., firefighter, police officer, sergeant, supervisor, Chief. These should include, add comment to call, access to any form or function, self-dispatch, user-initiated calls.	I
1636	The system supports the ability to update the CAD unit status via the Mobile Device interface.	I
1637	The system supports mapping on the Mobile Device.	I
1638	The system supports mapping functionality on the Mobile Device identical to that of the CAD workstation.	I
1639	The system supports printing from the Mobile Device to any printer available on the network.	I
1640	The system supports printing from the Mobile Device to a locally attached printer, e.g., in-vehicle.	I
1641	Print jobs initiated from the Mobile Device will be logged.	I
1642	The Mobile Device print log is available for use in reports.	I
1643	The Mobile Device print log can be printed.	I
1644	The system supports sending and receiving messages between CAD workstations and Mobile Devices.	I
1645	The system supports messaging between Mobile Devices.	I
1646	The mobile application is capable of text to voice translation.	I
1647	The mobile application provides for day and night time modes of illumination.	I
1648	The system provides a method of allowing an authorized agency user to send alerts and IM to any individual mobile device, group or combination of groups of mobile devices under the control of that agency.	I
1649	The system supports the ability to perform bi-directional communications and inquiries between CAD and the Mobile Device.	I
1650	The system supports the transport of location data (AVL) from the Mobile Device to CAD.	I
1651	The system supports adjustable frequency of AVL location data refresh based on unit status, defined by the Agency.	I
1652	The system supports the use of an Emergency Button on the Mobile Device, notifying CAD workstations of a situation requiring urgent attention.	I
1653	The activation of the Emergency Button on the Mobile Device causes the CAD system to send an alert message to dispatching group CAD workstations associated to the Mobile Device as determined by the Agency.	I
1654	The emergency alert message will display the identity of the Mobile Device and current known location.	I
1655	The alert message requires acknowledgment of the CAD workstation operator, which will silence the alert.	I
1656	The alert message will include audible (optional using system configuration) and visual indicators.	I
	The system provides audible notification of receipt of, but not limited to, the following:	
1657	dispatched event	I
1658	message from dispatch	I
1659	DMV / NCIC hit	I
1660	event as determined by the agency	I
1661	The system uses audible message(s) to help users process information.	I
1662	The system support an Out of Vehicle function.	I
1663	For Out of Vehicle functionality, a button is provided for a mobile user to set Out of Vehicle mode.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1664	For Out of Vehicle functionality, a notification is sent to dispatch when unit set to Out of Vehicle mode.	I
1665	The Mobile Data interface complies with Tennessee, NCIC and CJIS security requirements, including Advanced Authentication.	M
1666	The system supports access to NCIC databases, enabling all required security.	I
1667	The mobile data interface supports communication via wireless commercial carrier.	I
1668	The mobile data interface supports communication via County owned RF based system.	I
1669	Mobile must allow for various broadband connectivity using commercial carrier(s) and associated functional aspects of them in the field, e.g., aircard, hotspot , Wi-Fi.	I
1670	All synchronization and connection to server must be seamless to user.	I
1671	The mobile data interface supports roaming communication between the Mobile Device and the CAD. The connection between CAD and the Mobile Device is maintained and does not require the Mobile Device to re-login as the unit moves between communication coverage areas.	I
1672	No user intervention required to sync mobile database to server once connectivity is reacquired.	I
1673	The system supports the ability for mobiles to seamlessly roam across available wireless networks.	I
1674	The system supports CAD data inquiry from the Mobile Device, such as:	I
1675	query active incidents	I
1676	query pending incidents	I
1677	query premises alerts	I
1678	query closed incidents	I
1679	inquiries to NCIC and CJIS databases	I
1680	inquiries to Tennessee DMV databases	I
1681	The system provides a method of restricting the return of query results to data related to the agency of the requestor.	I
1682	The Mobile Data module is capable of utilizing Advanced Encryption Standard (AES) without degradation of system throughput.	I
1683	The system shall utilize, at a minimum, end-to-end 192 bit encryption.	I
1684	Device functionality can be restricted by discipline, i.e., access to law enforcement functions can be restricted to devices under the control of a law enforcement agency.	I
1685	The system allows the sharing of information (e.g., events, unit history) between SCSO and SCFD.	I
1686	Logging into mobile client requires, at a minimum, user name and password verification within the mobile systems server.	I
1687	The system is capable of using Advanced Authentication security measures.	I
1688	Security for the mobile data system access, function authorization capabilities is maintained by each Agency.	I
1689	Updates to the mobile client can be pushed to the Mobile Device to avoid the requirement of physically touching each unit.	I
1690	Updates to the mobile device software can be pushed to the Mobile Device to avoid the requirement of physically touching each unit.	I
1691	The mobile application is capable of accessing file downloads from hotspot connection.	I
1692	The mobile application is capable of accessing file downloads from Wi-Fi connection.	I
1693	The mobile application is capable of accessing file downloads from Ethernet connection.	I
	The system supports, at a minimum, the following user equipment options:	
1694	Removable vehicle mounted laptop computers using vehicle mounted radio modems and radios.	I
1695	Portable hand-held data terminals using radio modems and portable radios.	I
1696	Status/Message terminals using radio modems and mobile radios.	I
1697	Portable printers	I
1698	The mobile client application automatically logs out a user when there has been no user activity for an Agency Administrator(s) determined interval.	I
1699	The mobile interface with CAD will log inbound requests to the interface and outbound commands from the interface.	I
	Network	
1700	The network provided through this procurement meets Shelby County, CJIS and State of Tennessee security requirements.	M
1701	The network provided through this procurement is firewalled from external access.	I
1702	The network provided through this procurement is IP based.	I
	Browser based interface	
1703	The system supports a browser based interface to CAD.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1704	The browser based access to CAD can be restricted to Inquiry only.	I
1705	The browser based access to CAD can be restricted to View only.	I
1706	The browser based access can be restricted to only access to data warehouse.	I
1707	The browser based access to CAD can be restricted to only view event and status monitors.	I
1708	The browser based interface utilizes the similar user-associated security as network based clients.	I
	Testing software updates and patches	
1709	The system will be capable of testing all vendor provided updates and patches prior to implementation of the live system.	I
1710	The system used for testing is equivalent to the live system.	I
1711	Testing updates and patches will not impact the live system. The testing can operate concurrently with the live system without system degradation.	I
1712	The testing system can be physically separate from the live system.	I
1713	The testing system can operate independently for each Agency without effecting the other Agency.	I
1714	The selection of a workstation working with either the live or test system is performed at the workstation.	I
1715	The testing system will be able to stay current with the versions of all components of the live system. The Agency is able to perform the functions to synchronize the live and testing systems.	I
1716	The testing system can be updated and restarted without impacting the live system.	I
1717	The Agency will have full control of the maintenance of the testing system.	I
1718	The testing system be set up at a location remote from the primary PSAP.	I
	Training	
1719	The system used for training is equivalent to the live system.	I
1720	The vendor will provide system operation training to all Agency operators of the system.	I
1721	The vendor will provide system administration training to Agency defined administrators of the system.	I
1722	The vendor will provide train the training to Agency defined personnel designated as trainers of the system for Train the Trainer.	I
1723	Operating the training system will not impact the live system.	I
1724	The training system can operate concurrently with the live system without system response degradation.	I
1725	The selection of a workstation working with either the live or training system is performed at the workstation.	I
1726	The workstation can be switched between the training and live system without impacting the live system.	I
1727	The training system is capable of training on the full suite of CAD functions.	I
1728	The training system can be physically separate from the live system.	I
1729	Web based training for the system and components is available.	I
1730	The training system will be able to stay current with the versions of all components of the live system to stay in sync with the live system. The Agency is able to perform the functions to synchronize the live and training systems.	I
1731	The Agency can clear all incidents from training databases and reset the incident and case numbering sequences.	I
1732	The training system can be updated and restarted without impacting the live system.	I
1733	Training documentation will be provided by the Vendor.	I
1734	Training documentation will be provided in hard copy and electronic format.	I
1735	The training documentation provided by the Vendor can be edited / customized by the Agency.	I
1736	The Vendor provides a training system simulation module.	I
1737	System will operate with a Third Party simulation application.	I
1738	The training system will accept a dump of live data from CAD to facilitate training for the purpose of working with historic data	I
1739	The training system can be set up at a location remote from the primary PSAP.	I
1740	The training system can be operated and maintained from remote location.	I
	Performance Metrics	
	The system response times for the following actions are less than 1 second of elapsed time 90% of the time. These actions are performed in less than 3 seconds 100% of the time.	
1741	Display blank event entry form	I
1742	Assign a single unit to an event	I
1743	Change a single unit's status	I
1744	Clear a single unit from an event	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1745	Verification of a unique address	I
1746	Return a list of possible address matches when an address can not be uniquely verified with the information entered	I
1747	Provide unit recommendation based on uniquely verified address	I
1748	Assign up to 10 units to an event from a single command	I
	The system response times for the following actions are less than 2 seconds of elapsed time 90% of the time. These actions are performed in less than 4 seconds 100% of the time.	
1749	Display a closed event queried by event number	I
1750	Sending of a CAD-to-CAD Message, 80 Characters	I
1751	Sending a CAD-to-Unit Dispatch Message	I
1752	Retrieve message	I
1753	Display of Premises/Hazard File Data	I
1754	Display a unit history queried for a unit ID for a single shift	I
1755	Center map location on CAD event	I
	Documentation	
1756	The responding vendors will provide a network diagram with the proposal for the proposed system.	I
1757	Prior to final system acceptance, the successful Bidder will provide an as-built network diagram for the installed system components.	I
1758	The successful Bidder will provide complete technical, operations and maintenance instructions to support all systems prior to Final System Acceptance.	I
1759	The successful Bidder will provide a complete database schema and data description for all data elements for all components and data sets.	I
1760	The successful Bidder will provide a complete set of application User's Guides prior to the start of User training.	I
1761	The successful Bidder will provide a complete set of system Administrative guides prior to the start of Administrator training.	I
1762	The final copies of User and Administration guide will be provided prior to system go-live.	I
1763	The successful Bidder will provide a complete set of Interface operation and administration guides prior to Final System Acceptance.	I
1764	The successful Bidder will provide all documentation and licenses that came with all equipment and software purchased for use in this system, e.g., including Third party licenses, Operating System licenses.	I
1765	All documentation and reference material is updated with each version release.	I
1766	All vendor created documentation will be provided in electronic and hard copy formats.	I
1767	The successful Bidder will provide a complete set of operation and administration guides related to backup and recovery processes prior to Final System Acceptance.	I
1768	The successful Bidder will provide a complete set of Release Notes and resulting changes to documentations prior to each system version update.	I
	MIS – CAD system reporting	
1769	All stored information is available for inquiry and reporting.	M
1770	The system provides formatted inquiry forms that can be tailored to a specific use.	I
1771	Inquiry forms can utilize short cut codes. For example, P for person, in which only the specific fields are used; or the code VIN will only use the VIN, vehicle year, vehicle make and state fields; and a V code (vehicle) will have license, license year, etc. plus the VIN fields.	I
	At a minimum, the system provides the ability to create an inquiry and report using any, some or all of the following information:	
1772	Alarm type and alarm company code	I
1773	All associated geofile information	I
1774	ANI/ALI data including address and phone number	I
1775	Available mobile to available at station	I
1776	Available mobile to unavailable	I
1777	Business or premises name	I
1778	Call-Taker/Dispatcher ID	I
1779	Comments/narrative (unlimited)	I
1780	Commonplace name (e.g., parks, streets, schools)	I
1781	Date and time call received by 911	I
1782	Date and time incident entered	I
1783	Date and time of held incidents	I
1784	Date range	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1785	Disposition	I
1786	Geographical areas defined by the user	I
1787	Event number	I
1788	Event type	I
1789	Event type/priority	I
1790	Location address, description, supplemental location	I
1791	On-scene to close of call by officer who arrive at scene	I
1792	On-scene to transporting	I
1793	Premises and prior information flag	I
1794	Premises type (e.g., building, location, person)	I
1795	Priority	I
1796	Reporting areas	I
1797	Reporting party information, including name, address and phone	I
1798	Reporting zone	I
1799	Responding to on-scene	I
1800	Source (e.g., 911 or 10-digit, radio, other codes as defined by PPD)	I
1801	Time range (any time-stamped event to any other time-stamped event)	I
1802	Unit/officer ID	I
1803	Operator name and ID of all operators associated with the incident	I
1804	Workstation ID associated with all CAD functions performed on incident	I
	At a minimum, the system provides the ability to query and print the following incident details:	
1805	Incident entry or incident number	I
1806	Date/time received	I
1807	Reporting zone	I
1808	Activity code/incident type	I
1809	Location or partial location	I
1810	All incidents in a geographical region defined by the user	I
1811	All incidents within a radius for a specified location	I
1812	Priority	I
1813	Reporting party/complainant/caller name	I
1814	Phone number	I
1815	Narrative	I
1816	Vehicle description	I
1817	License plate	I
1818	Cancelled call	I
1819	Disposition	I
1820	Officers/units assigned	I
1821	Time dispatched	I
1822	En-route time	I
1823	On-scene time	I
1824	Available time	I
1825	Officer reporting	I
1826	All Call-Taker/Dispatchers handling incident	I
1827	Any time-stamped event	I
1828	Changes made to data fields (as determined by the Agency)	I
1829	The results of the inquiry or report is able to be printed at any available network printer.	I
1830	The results of the inquiry or report is able to be printed at any locally attached printer.	I
1831	The system allows print preview prior to printing.	I
1832	Access to stored information is restricted based on log on role and agency.	I
1833	The reports writing package is capable of creating reports across all modules.	I
	Search criteria will include:	
1834	Exact match	I
1835	Partial match (wild cards)	I
1836	A range of values	I
1837	Delimiters for each field type	I
1838	Any combination of criteria	I
	Information can be displayed by:	
1839	Workstation ID	I
1840	Operator ID	I
1841	Shift	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1842	Hour of the day	I
1843	Day of the week	I
1844	Monthly	I
1845	Quarter	I
1846	Annual	I
1847	Operator specified date range	I
1848	Event type	I
1849	Priority	I
1850	Unit ID	I
1851	Location	I
1852	Common Place name	I
1853	Execution of reports and inquiries have no impact on the performance of CAD operations.	I
1854	All data tables are available for inquiry and reports, e.g., registered operators, units.	I
1855	The system is able to print audit report of changes to event records, which include the following:	I
1856	Date/time of change	I
1857	Workstation/terminal ID	I
1858	Call-Taker/Dispatcher ID	I
1859	Transaction type (deletion, edit, etc.)	I
1860	Field modified (saving previous information)	I
1861	Event location	I
1862	Actual dispatch location	I
1863	All audit logs are available for inquiry and reports.	I
1864	The system allows operator defined inquiries, i.e., ad hoc inquiries.	I
1865	The system can save, store and reuse Agency developed inquiries and report formats.	I
1866	Standard reports are provided by the vendor.	I
	The system is able to generate the following standard reports:	
1867	Activity analysis by day of week	I
1868	Activity analysis by geographic area or any agency-defined layer	I
1869	Activity analysis by hour of day	I
1870	Activity analysis by shift	I
1871	Incidents – active by geographic area by hour of day	I
1872	Incidents – closed by geographic area by hour of day	I
1873	Response time by method of receipt	I
1874	Response times by geographic area	I
1875	Response times by type of call/priority	I
1876	Total and average time on call – by day of week	I
1877	Total and average time on call - by geographic area	I
1878	Total and average time on call - by hour of day	I
1879	Total calls for service by date by nature or disposition	I
1880	Total incidents by date by nature or disposition	I
1881	Total reports by date by disposition	I
1882	Agency-defined query	I
1883	Standard Incident Detail Report by a single command, that includes all data associated with a specific incident.	I
1884	Chronological incident and/or incident report listing	I
1885	Daily listing of incidents and officers assigned including:	I
1886	Incident number	I
1887	Unit ID	I
1888	Officer name (if available)	I
1889	Officer ID (P number)	I
1890	Disposition	I
1891	Location	I
1892	Date/time received	I
1893	The system provides the ability for the Agency to define, store and maintain report templates as needed to standardize report formats.	I
1894	The system provides the ability for the Agency to edit the report templates that are provided by the vendor and included with the system.	I
1895	The system displays a list or menu of all stored or vendor provided reports.	I
1896	COTS report generation applications are supported, e.g., Crystal Reports.	I

ATTACHMENT B - Shelby County Sheriff's Office and Fire Department - Computer Aided Dispatch Specifications

Spec ID	Specification Description	Priority
1897	Vendor and Agency created reports can be scheduled for execution and distribution, e.g., daily log reports scheduled for electronic distribution.	I
1898	Inquiry results can be viewed, printed and/or exported in an operator defined format.	I
1899	The system includes the capability of redacting sensitive or confidential information prior to release to the public or for use outside of the Agency.	I
1900	Inquiry results can be attached to an event record.	I
1901	Results of inquiries and reports can be converted to Adobe Acrobat .PDF files	I
1902	The resulting data can be converted to CSV format exportable files.	I
1903	Results can be exported to other software applications, e.g., MS Excel, Word.	I
1904	Results can be formatted and exported to intranet and internet web sites for publication.	I
1905	The system will scan returned inquiry, highlighting certain key words, e.g., "wanted person," "stolen vehicle".	I
1906	The list of words to be highlighted in the returned inquiry can be entered and maintained by the Agency.	I
1907	The system is able to perform statistical analysis of CFS.	I
1908	Report and inquiry results can be printed to any CAD system defined printer.	I
1909	Report and inquiry results can be distributed via electronic means: email or fax.	I
1910	Report and inquiry results can be saved.	I
	Daily Activity Report	
1911	The system allows an operator to create a summary report (Daily Activity Report), e.g., a notable public safety activity in the County.	I
1912	The system generates a unique number for each Daily Activity Report.	I
1913	There is no limit on the amount of alphanumeric and special characters used in the narrative section of the Daily Activity Report.	I
1914	The system retains the form in which the narrative was written, including punctuation and spacing.	I
1915	The system will store the Daily Activity Reports for a period of time defined by the Agency.	I
1916	The operator is able to send the reports to designated workstations, mobile data devices or printers either individually or as a group.	I
1917	The reports have a formatted header which, includes the following:	I
1918	date/time	I
1919	event type	I
1920	event number	I
1921	response area	I
1922	officer handling the report	I
1923	author of the report	I
1924	designator of the unit handling the report	I
1925	event location	I
1926	The operator can search for the report by date/time.	I
1927	The operator can search for the report by its report number.	I
1928	The operator can search by location.	I

ATTACHMENT C

**Shelby County TN Sheriff's Office and Fire Department
Computer Aided Dispatch Cost Data Forms**

Company Name

Vendors' proposals must complete the comprehensive cost statement presented on the following pages. All costs are to be contained in this statement. This statement shall also include payment terms required for services rendered.

The prices included must represent the Vendor's actual costs that will be associated with implementing and delivering the proposed system.

Cost information must include all expected implementation and operating costs, both one-time and on-going. Specific model numbers and capacities should be included. Information about license sizes must be provided. Vendors should describe and quote optional components -- including query tools, report writers, etc. -- as individual and separate items. Any upgrade to the base system needed for optional components must include all applicable taxes. Add more lines to the table as necessary.

Notes:

- 1 Provide pricing for the hardware and operating system software required to support the Application. Proposed hardware solution cost should be based on five year projections.
- 2 Any sections marked "Optional" designate components for which the County seeks pricing, but may or may not decide to include in the overall project. The Vendor, however, is required to respond to that section.
- 3 Indicate maximum annual cost escalation % in Comments. Increases in annual recurring costs shall not exceed 5% from the previous year.

COST STATEMENT DESCRIPTION

STATEMENT COLUMN	DESCRIPTION
Cost Item	This column presents the items for which cost information must be provided.
Unit cost	Indicate Vendor's discounted price for the item.
Extended cost	Indicate the total cost for the item (Units x Unit Cost)
Recurring Cost	Indicate all expected costs which the County would incur on an ongoing basis. Annualize this number and indicate in the comments when the County would begin incurring this cost (e.g., 1 year after acceptance, etc.). Also describe what is provided with your annual maintenance fee, include application, and third party sub-component specifics).
Comments	In this column, please provide additional information about your costs.

Computer Aided Dispatch (CAD)

Company Name

In the table below, provide the associated costs of the proposed Computer Aided Dispatch (CAD) solution. Include a line for each major software component/module. Document interface cost in Interface Section below.

Item – Detail	Units	Unit Cost	Extended Cost	Recurring Costs	Comment
Vendor Software					
Seat-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Site-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Enterprise-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Custom Development					
Item		\$ -	\$ -	\$ -	
Item		\$ -	\$ -	\$ -	
3rd Party Components (list each)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Warranty Period (min one year)					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Vendor Hardware:					
Client hardware (list)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Client system software (itemize)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Server/Message Switch (list)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Server hardware (make/model)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Server system software (itemize)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
HW Warranty Period (min 1 year)					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
CAD Section Total:		\$ -	\$ -	\$ -	

Mobile Data

Company Name

In the table below, provide the associated costs of the proposed Mobile Data solution.

Include a line for each major software component/module. Document interface cost in Interface Section below.

Item – Detail	Units	Unit Cost	Extended Cost	Recurring Costs	Comment
Vendor Software					
Seat-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Site-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Enterprise-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Custom Development					
Item		\$ -	\$ -	\$ -	
Item		\$ -	\$ -	\$ -	
3rd Party Components (list each)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Mobile Data Client					
		\$ -	\$ -	\$ -	
SW Warranty Period (min 1 year)					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Client hardware					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Client system software (itemize)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Server/Message Switch					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Server hardware (make/model)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Server system software (itemize)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
HW Warranty Period (min 1 year)					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Mobile Data Section Total:					
		\$ -	\$ -	\$ -	

Automatic Vehicle Location

Company Name

In the table below, provide the associated costs of the proposed Automatic Vehicle Location (AVL) solution. Include a line for each major software component/module. Document interface cost in Interface Section below.

Item – Detail	Units	Unit Cost	Extended Cost	Recurring Costs	Comment
Vendor Software					
Seat-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Site-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Enterprise-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Custom Development					
Item		\$ -	\$ -	\$ -	
Item		\$ -	\$ -	\$ -	
3rd Party Components (list each)					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Mobile Data Client		\$ -	\$ -	\$ -	
Warranty Period (min one year)					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Vendor Hardware:					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Third Party Hardware:					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
HW Warranty Period					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
AVL Section Total:					

Interfaces

Company Name

In the table below, provide the associated costs of the proposed Interface software. List other interfaces if required.

Item – Detail	Units	Unit Cost	Extended Cost	Recurring Costs	Comment
Common Interfaces					
Master Time Clock		\$ -	\$ -	\$ -	
Email Interface		\$ -	\$ -	\$ -	
CAD Interfaces					
Radio system interface		\$ -	\$ -	\$ -	
CPE interface		\$ -	\$ -	\$ -	
GIS / Mapping interface		\$ -	\$ -	\$ -	
NCIC Data Access		\$ -	\$ -	\$ -	
Digitized voice interface		\$ -	\$ -	\$ -	
Pictometry		\$ -	\$ -	\$ -	
ProQA		\$ -	\$ -	\$ -	
County Personnel		\$ -	\$ -	\$ -	
CPE - ANI/ALI Controller Interface		\$ -	\$ -	\$ -	
Vision LERMS interface for SO		\$ -	\$ -	\$ -	
ETI FRMS interface for FD		\$ -	\$ -	\$ -	
PDA Interface		\$ -	\$ -	\$ -	
AVL interface		\$ -	\$ -	\$ -	
Mobile data interface		\$ -	\$ -	\$ -	
Real Time Video interface		\$ -	\$ -	\$ -	
Move up application interface		\$ -	\$ -	\$ -	
Other Interface (Specify)		\$ -	\$ -	\$ -	
Other Interface (Specify)		\$ -	\$ -	\$ -	
Warranty Period (min 1 year)					
		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Interfaces Section Total:					
		\$ -	\$ -	\$ -	

Operating System , Other Software

Company Name

In the table below, provide the associated costs of the proposed Other software. Item should include the name of the software manufacture. Include a line for each major software component/module.

Item – Detail	Units	Unit Cost	Extended Cost	Recurring Costs	Comment
Vendor Software					
Seat-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Site-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Enterprise-license pricing		\$ -	\$ -	\$ -	Indicate units threshold for each level
Custom Development					
Item		\$ -	\$ -	\$ -	
Item		\$ -	\$ -	\$ -	
3rd Party Components					
SQL Server		\$ -	\$ -	\$ -	
Move up application		\$ -	\$ -	\$ -	
Digitized voice		\$ -	\$ -	\$ -	
Other (Specify)		\$ -	\$ -	\$ -	
Other (Specify)		\$ -	\$ -	\$ -	
Warranty Period (min 1 year)		NC	NC	NC	Included with Initial licensing
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Other SW Items Section Total:		\$ -	\$ -	\$ -	

Other Hardware Costs

Company Name

In the table below, provide the associated costs of the proposed system hardware not shown on other sections of the CDF. Include the name of the hardware manufacture.

Include a line of each major hardware component. Hardware to be sized to addition of (future) municipal agencies.

Item – Detail	Units	Unit Cost	Extended Cost	Recurring Costs	Comment
Other Hardware Costs					
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Component		\$ -	\$ -	\$ -	
Warranty Period (min one year)		NC	NC	NC	Included with Initial purchase
Maintenance Year 1		\$ -	\$ -	\$ -	
Maintenance Year 2		\$ -	\$ -	\$ -	
Maintenance Year 3		\$ -	\$ -	\$ -	
Maintenance Year 4		\$ -	\$ -	\$ -	
Maintenance Year 5		\$ -	\$ -	\$ -	
Total:		\$ -	\$ -	\$ -	
Other HW Section Total:		\$ -	\$ -	\$ -	

Conversion Costs

Company Name

In the table below, provide the associated conversion costs of the proposed system solution. Cost should include all cost associated with conversion.

Item - Detail	Units ²	Unit Cost	Extended Cost	Recurring Costs	Comment
CAD Data		\$ -	\$ -	\$ -	
Other (Specify)		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
		\$ -	\$ -	\$ -	
Conversion Section Total:		\$ -	\$ -	\$ -	

END OF ATTACHMENTS