



## REQUEST FOR PROPOSALS (RFP)

Department of Administration  
County of Dane, Wisconsin

### COUNTY AGENCY

Public Safety Communications

### RFP NUMBER

110098

### RFP TITLE

**Computer Assisted Dispatch System and Mobile Data Computer System**

### PURPOSE

The purpose of this document is to provide interested parties with information to enable them to prepare and submit a proposal for an **INTEGRATED COMPUTER ASSISTED DISPATCH SYSTEM AND MOBILE DATA COMPUTER SYSTEM**

### DEADLINE FOR PROPOSAL SUBMISSIONS

Friday, March 25, 2011 at 2:00 P.M. CDT

LATE, FAXED, ELECTRONIC MAIL OR UNSIGNED PROPOSALS WILL BE REJECTED

### SUBMIT PROPOSAL TO THIS ADDRESS

DANE COUNTY PURCHASING DIVISION  
ROOM 425 CITY- COUNTY BUILDING  
210 MARTIN LUTHER KING JR BLVD  
MADISON, WI 53703-3345

### VENDOR CONFERENCE

Friday, February 25, 2011 at 1:00 P.M. CST

### SPECIAL INSTRUCTIONS

- Label the lower left corner of your sealed submittal package with the RFP number
- Place the Signature Affidavit as the first page of your proposal
- Submit one original and ten (10) copies of your technical proposal
- Submit one original and two (2) copies of your cost proposal
- Submit ten complete electronic copies in Microsoft Word or PDF format copied to USB flash drives.

### DIRECT INQUIRES TO ALL

**NAME** Francisco Silva

**TITLE** Purchasing Agent

**PHONE #** 608-267-3523

**FAX #** 608/266-4425

**EMAIL** [silva@co.dane.wi.us](mailto:silva@co.dane.wi.us)

**WEB SITE** [www.danepurchasing.com](http://www.danepurchasing.com)

DATE RFP ISSUED: February 14, 2011

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## 1.0 GENERAL INFORMATION

### 1.1 Introduction

The purpose of this document is to provide interested parties with information to enable them to prepare and submit a proposal for The provision and implementation of an Integrated Computer Assisted Dispatch and Mobile Data Computer System.

The County intends to use the results of this process to award a contract(s) or issuance of purchase order for the product(s) and or services(s) stated above.

The contract resulting from this RFP will be administered by Dane County, Department of Public Safety Communications.

The contract administrator will be The Director of Public Safety Communications.

This Request for Proposal (RFP) is issued on behalf of Dane County by the Purchasing Division, which is the sole point of contact for the County during the procurement process.

### 1.2 Scope of the Project

#### 1.2.1 Project Description

The purpose of the project is to replace the existing Computer Aided Dispatching System and Mobile Data System in use at the Dane County Public Safety Communications Center with a Commercial Off The Shelf (COTS)solution.

The replacement project shall include the delivery and installation of new hardware, software and system documentation along with training and other implementations services including data conversion.

The scope of the project shall include the following, as specified in this RFP:

- A. Computer Aided Dispatch (CAD) System
- B. Mobile Data Computer (MDCS) systems
- C. All associated interfaces and sub-modules
- D. Required Computer Hardware
- E. Required Implementation Services
- F. Required training

#### 1.2.2 Objective

The objective of the project is to improve the level of service provided by the PSC to the citizens of Dane County its many user agencies by replacing the existing CAD and MDCS hardware and software with a solution that will provide improved functionality.

#### 1.2.3 Needs

The existing CAD system was initially procured in the mid to late 1980's, and although it has been maintained and upgraded throughout its lifetime, it lacks many features, functions and capabilities that are currently available in other CAD and MDCS systems. The PSC has worked around the deficiencies of the existing system for a number of years but the system has reached a point of replacement.

#### 1.2.4 Current Operations

The Public Safety Communications Center of Dane County provides countywide 911 emergency call-taking services.

The County 911 Center provides dispatching and centralized communications services for the Dane County Sheriff's Department, Madison Police and Fire Departments as well as 21 local law enforcement agencies. The 911 Center also provides communications and dispatching services to 26 local fire departments and 21 local EMS agencies.

The PSCC utilizes a CAD System and other software provided by Application Data Systems, Inc. (ADSi). The ADSi software has been in place since the 1980's and provides limited

functionality when compared to other systems available on the market today.

The system processes over 200,000 9-1-1 calls per year and dispatches 416,000 calls for service per year (2010 number).

### 1.3 Definitions

The following definitions are used throughout the RFP:

**County** means Dane County

**County Agency** means Department /Division utilizing the service or product

**Proposer or Vendor** means a firm submitting a proposal in response to this RFP.

**Contractor** means proposer awarded the contract.

### 1.4 Clarification of the specifications

All inquiries concerning this RFP must be directed to the **person indicated on the cover page** of the RFP Document. (electronic mail is the preferred method).

Any questions concerning this RFP must be submitted in writing by mail, fax or e-mail on or before the stated date on the **Calendar of Events** (see Section 1.6)

Proposers are expected to raise any questions, exceptions, or additions they have concerning the RFP document as soon as possible in the RFP process. If a proposer discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFP, the proposer should immediately notify the contact person of such error and request modification or clarification of the RFP document.

**Mailing Address:**

**Dane County Purchasing Division  
Room 425 City-County Bldg  
210 Martin Luther King Jr. Blvd**

**Madison, WI 53703-3345**

Proposers are prohibited from communicating directly with any employee of Dane County, except as described herein. No County employee or representative other than those individuals listed as County contacts in this RFP is authorized to provide any information or respond to any question or inquiry concerning this RFP.

1.5 Addendums and/or Revisions

In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFP, revisions/amendments and/or supplements will be posted on the Purchasing Division web site at [www.danepurchasing.com](http://www.danepurchasing.com).

It shall be the responsibility of the proposers to regularly monitor the Purchasing Division web site for any such postings. Proposers must acknowledge the receipt / review of any addendum(s) at the bottom of the RFP Cover Page /Signature Affidavit.

Each proposal shall stipulate that it is predicated upon the terms and conditions of this RFP and any supplements or revisions thereof.

1.6 Calendar of Events

Listed below are specific and estimated dates and times of actions related to this RFP. The actions with specific dates must be completed as indicated unless otherwise changed by the County. In the event that the County finds it necessary to change any of the specific dates and times in the calendar of events listed below, it will do so by issuing a supplement to this RFP and posting such supplement on the Dane County web site at [www.danepurchasing.com](http://www.danepurchasing.com). There may or may not be a formal notification issued for changes in the estimated dates and times.

<b>DATE</b>	<b>EVENT</b>
Monday, February 14, 2011	Date of issue of the RFP (for Purchasing use)
Friday, February 25, 2011 at 1:00 P.M. CST	Mandatory vendor conference in City-County Building Meeting Room 354, 210 Martin Luther King Jr Blvd, Madison, WI 53703

Friday, March 4, 2011 at 2:00 P.M. CST	Last day for submitting written inquiries
Friday, March 11, 2011	Supplements or revisions to the RFP posted on the Purchasing Division web site at <a href="http://www.danepurchasing.com">www.danepurchasing.com</a>
Friday, March 25, 2011 at 2:00 P.M. CDT	Proposals due from vendors
Tuesday, April 26	Demonstrations by invited vendors in City-County Building Meeting Room 354, 210 Martin Luther King Jr Blvd, Madison, WI 53703
Monday, May 9, 2011	Notification of intent to award sent to vendors
Monday, June 6, 2011	Contract start date
Wednesday, February 1, 2012	System cutover

### 1.7 Vendor Conference

A mandatory vendor conference will be held to respond to written questions and to provide any needed additional instruction to vendors on the submission of proposals. All vendors who intend to respond to the RFP are required to attend the vendor conference.

For those vendors that choose not to attend the vendor conference in person, the conference will also be conducted via a web meeting over the internet and conference call. Vendors who desire to participate in the vendor conference via the web must contact the assigned purchasing agent (Francisco Silva) at least one week prior to the conference.

**Date:** Friday, February 25, 2011

**Time:** 1:00 P.M. CST

**Location:** City-County Building Meeting Room 354, 210 Martin Luther King Jr Blvd, Madison, WI 53703

### 1.8 Contract Term and Funding

The contract shall be effective on the date indicated on the purchase order or the contract execution date and shall run for eighteen months from that date, with an option by mutual agreement of the County and contractor, to renew for one additional one-year periods.

## 1.9 Reasonable Accommodations

The County will provide reasonable accommodations, including the provision of informational material in an alternative format, for qualified individuals with disabilities upon request. If you need accommodations at a proposal opening/vendor conference, contact the Purchasing Division at (608) 266-4131 (voice) or 608/266-4941 (TTY)

## 2.0 PREPARING AND SUBMITTING A PROPOSAL

### 2.1 General Instructions

The evaluation and selection of a contractor and the contract will be based on the information submitted in the proposal plus references and any required on-site visits or oral interview presentations. Failure to respond to each of the requirements in the RFP may be the basis for rejecting a response.

Elaborate proposals (e.g. expensive artwork) beyond that sufficient to present a complete and effective proposal, are not necessary or desired.

### 2.2 Proprietary Information

All restrictions on the use of data contained within a proposal and all confidential information must be clearly stated on the attached "Designation of Confidential and Proprietary Information" form. Proprietary information submitted in a proposal, or in response to the RFP, will be handled in accordance with the applicable Wisconsin State Statute(s).

To the extent permitted by law, it is the intention of Dane County to withhold the contents of the proposal from public view until such times as competitive or bargaining reasons no longer require non-disclosure, in the opinion of Dane County. At that time, all proposals will be available for review in accordance with the Wisconsin Open Records Law.

### 2.3 Incurring Costs

Dane County is not liable for any cost incurred by proposers in replying to this RFP.

Proposers cannot expect the Dane County Land Information Office to waive fees for GIS data necessary to reply to this RFP

## 2.4 Vendor Registration

**All proposers wishing to submit a proposal must be a paid registered vendor with Dane County.** Prior to the RFP opening, you can complete a registration form online by visiting our web site at [www.danepurchasing.com](http://www.danepurchasing.com), or you can obtain a Vendor Registration Form by calling 608.266.4131. Your completed Vendor Registration Form and Registration Fee must be received for your bid to be considered for an award.

## 2.5 Submittal Instructions

Proposals must be received in by the County Purchasing Division by the specified time stated on the cover page. All proposals must be time-stamped by the Purchasing Division by the stated time. Proposals not so stamped will not be accepted. Proposals received in response to this solicitation will not be returned to the proposers.

All proposals must be packaged, sealed and show the following information on the outside of the package:

- Proposer's name and address
- Request for proposal title
- Request for proposal number
- Proposal due date

## 2.6 Required Copies

Proposers must submit **an original and the required copies** of all materials required for acceptance as instructed on the cover page of the RFP (Special Instructions).

All hard copies of the proposal must be on 8.5"x11" individually securely bound.

**In addition, proposers are to provide the required numbers of complete electronic copies in Microsoft Word or PDF format on USB flash drives.**

## 2.7 Proposal Organization and Format

Proposals should be organized and presented in the order and by the number assigned in the RFP. Each response should be preceded by the section number and language of the RFP and any applicable addenda. Proposals must be organized with the following headings and subheadings. Each heading and subheading should be separated by tabs or otherwise clearly marked. The RFP sections which should be submitted or responded to are:

- Introduction (See Section 4 of this RFP)
- Response to general requirements (See Section 4 of this RFP)
  - Organizational qualifications
  - Staff qualifications and Facilities
  - References
- Response to technical requirements (See Section 5 of this RFP)
- Cost proposal (See Section 6 of this RFP)
- Required forms (See Section 8 of this RFP)
  - [Attachment A](#)      Signature Affidavit
  - [Attachment B](#)      Vendor Registration Certification
  - [Attachment C](#)      Reference Data Sheet
  - [Attachment D](#)      Designation of Confidential and Proprietary Information
  - [Attachment E](#)      Fair Labor Practices Certification
  - [Attachment F](#)      Cost Summary Page
- Appendices (Additional Information the proposer submits)
- Bond

## 2.8 Required Response Format

A paragraph-by-paragraph response shall be provided indicating compliance with every described requirement, specification and function included in this RFP. Proposers shall review all of the requirements in the RFP and respond to each paragraph therein using the following responses:

- A. Fully Compliant – The system currently provides the feature or function as described.
- B. Partially Compliant – The system provides some portion of the feature or function as described. The Vendor is required to specifically identify those portions of the requirement to which their system is non-compliant.
- C. Will Comply with Modification – The system does not currently meet the requirement, but the vendor will provide this capability via a system modification. The pricing for each modification must be included in the proposed price and clearly and specifically identified in the pricing forms. The modification must be installed and available prior to training and acceptance testing.
- D. Will Comply in a Future Release – The requested feature or function is not currently provided by the system, but has been specified for inclusion in a future release of the proposed system and will be provided at no additional charge to the County as a function of a valid system support agreement. The Vendor shall identify the date the feature will be released. The vendor will be contractually bound to deliver the feature by the release date.
- E. Substitution – The system provides the same capability as the requirement but does so in a different manner. The vendor shall explain in detail how the substitution meets the requirement. It shall be assumed if the substitution response is used that the requirement must and will be fully met.
- F. Exception – The system does not meet the requirement.

In paragraphs that primarily describe existing conditions or contain other topics for which the above described responses are not appropriate, Vendors will use the following responses:

- A. Understood – This response will be used to acknowledge that a descriptive paragraph has been read.
- B. Accept – This response will be used when terms or conditions are described. The response of accept indicates that the Vendor will accept the item as described.

- C. Alternative Offered – This response will be used when terms or conditions are described. The response of “Alternative Offered” indicates that the Vendor will not accept the item as described, but will offer an alternative approach to meeting the condition as described. The vendor will describe in detail the alternative approach that is being offered.
- D. Do Not Accept – This response will be used when terms or conditions are described. The response of “Do Not Accept” indicates that the vendor will not accept the term or condition described in the paragraph and does not offer any alternative.

## 2.8 Multiple Proposals

Multiple proposals from a vendor will be permissible, however each proposal must conform fully to the requirements for proposal submission. Each such proposal must be separately submitted and labeled as Proposal #1, Proposal #2, etc.

## 2.9 Oral Presentations and Site Visits

Oral presentations will be part of any requested demonstration.

The County may request the ability to visit a site operating the vendor’s system.

## 2.10 Demonstrations

Top-scoring vendor(s) will be required to install and demonstrate its product(s) at a County site, if requested by the County.

The County will furnish detailed specifications concerning the demonstration site and the particular test it will use to exercise the vendor’s product(s) and/or service(s).

Failure of a vendor to furnish the product(s) it has proposed for demonstration within the time constraints of the preceding paragraph may result in rejection of that proposal.

Failure of any product(s) and/or service(s) to meet the County’s specified requirements during the demonstration may result in rejection of the vendor’s proposal.

The successful demonstration of the vendor’s product(s) and/or service(s)

does not constitute acceptance by the County.

Any product(s) and/or service(s) furnished by the vendor for the purposes of this demonstration must be identical in every respect to those which will be furnished if a contract results.

### 3.0 PROPOSAL SELECTION AND AWARD PROCESS

#### 3.1 Preliminary Evaluation

The proposals will first be reviewed to determine if requirements in Section 2.0 are met.

#### 3.2 Proposal Scoring

Accepted proposals will be reviewed by an evaluation team and scored against the stated criteria.

This scoring will initially determine the ranking of vendors based upon their written proposals.

If the team determines that it is in the best interest of the County to require oral presentations, the highest-ranking vendors will be invited to make such presentations.

Those vendors that participate in the interview process will then be scored.

If the team determines that it is in the best interest of the County to require demonstrations, the highest-ranking vendors will be invited to make such demonstrations.

Following proposal and any presentation and demonstration scoring, six-year pricing will be scored, and the final ranking will be made based upon all scores.

#### 3.3 Right to Reject Proposals and Negotiate Contract Terms

The County reserves the right to reject any and all proposals and to negotiate the terms of the contract, including the award amount, with the selected proposer prior to entering into a contract.

If contract negotiations cannot be concluded successfully with the highest scoring proposer, the County may negotiate a contract with the next highest scoring proposer.

### 3.4 Evaluation Criteria

The proposals will be scored using the following criteria:

	<u>Description</u>	<u>Percent</u>
1.	General requirements	10
2.	Technical requirements	60
3.	Cost, including five years beyond warranty	<u>30</u>
	TOTAL	100

### 3.5 Award and Final Offers

The highest scoring proposer or proposers may be requested to submit final and best offers.

If final and best offers are requested, they will be evaluated against the stated criteria, scored and ranked.

The award will then be granted to the highest scoring proposer.

### 3.6 Notification of Intent to Award

As a courtesy, the County may send a notification of award memo to responding vendors at the time of the award.

## 4.0 GENERAL PROPOSAL REQUIREMENTS

### 4.1 Organization Capabilities

Describe the firm's experience and capabilities in providing similar services

to those required. Be specific and identify projects, dates, and results.

The vendor shall have at least one site of comparable size and structure (multi-agency type and multi-jurisdiction) as Dane County operational in a VMWare environment.

#### 4.2 Staff Qualifications

Provide resumes describing the educational and work experiences for each of the key staff who would be assigned to the project.

#### 4.3 Proposer References

Proposers must include in their RFPs a list of at least five organizations, including points of contact (name, address, and telephone number), which can be used as references for work performed.

The Proposer must be able to reference at least 5 sites of comparable size and structure as Dane County utilizing the software that is being proposed.

The references should be multi-agency dispatch centers of a size comparable to Dane County or larger.

All of the reference sites must be operational.

Additionally the vendor shall list **ALL** sites where they have or are in the process of installing CAD systems using virtual machine technology.

Selected organizations may be contacted to determine the quality of work performed and personnel assigned to the project.

<b>5.2</b>	<b>CAD HARDWARE AND SYSTEM SOFTWARE</b>
	Vendors shall address in written form each numbered section and sub-section of this RFP. If the Vendor takes exception to a specific paragraph, it shall fully describe the exception thereto.
	<b>GENERAL</b>
	The proposed system shall support the following systems or environments:
	<ul style="list-style-type: none"><li>• The live operational CAD system with local redundancy or fault tolerance.</li></ul>

	<ul style="list-style-type: none"> <li>• A CAD training environment,</li> </ul>
	<ul style="list-style-type: none"> <li>• A CAD test environment.</li> </ul>
	<ul style="list-style-type: none"> <li>• An off-site redundant server environment,</li> </ul>
	<ul style="list-style-type: none"> <li>• A data warehouse for CAD information,</li> </ul>
	<ul style="list-style-type: none"> <li>• The mobile data system host and all interfaces.</li> </ul>
	<p>The operational environment will support real-time CAD operations. The data warehouse environment will be used to support all standard and ad hoc query and reporting needs. The separation of the two environments is to facilitate the necessary response in the CAD operational environment.</p>
A.	Vendors shall include all of the hardware, software, services, and ancillary equipment required to make the system's interfaces functional.
B.	The computer system proposed shall be the manufacturer's most recent delivered model. Equipment at the middle or near the end of its life cycle will not be acceptable.
C.	The proposed system shall be directly expandable by adding hardware.
D.	The Vendor shall describe the scalability and expandability, indicating the related costs of the proposed system in terms of processors, main computer memory, disk drives, peripheral devices, and connectivity.
E.	Vendors are required to provide all necessary racks, tables, stands, or other required mounting facilities for the proposed systems, consoles, and communications
	<b>SYSTEM AVAILABILITY</b>
A.	The system shall be configured to provide system availability of

	99.99% for the operational CAD environment when measured on a 24-hour per day, seven days a week basis for 365 days including system maintenance and upgrades.
B.	The Vendor shall explain in detail how it proposes to achieve this requirement.
	<b>SYSTEM SIZING</b>
	The system shall be sized as per the following information:
A.	22 workstations on the operational CAD system,
B.	15 workstations in the training environment,
C.	416,000 incidents per year based on a separate incident for each agency type dispatched on a CFS. (i.e. an accident with injury that required police and fire and ems would be tallied as three incidents.)
D.	10% of daily activity during peak hour loading
E.	7% growth rate per year.
F.	Two years of historic information to be converted.
G.	20 administrative workstations.
H.	100 limited access workstations.
I.	Retention of all CAD incidents and unit data online for a minimum of 24 months in an operational environment
J.	Retention of CAD information for up to ten years in a CAD data warehouse environment

<b>SYSTEM RESPONSE TIME</b>	
A.	With the transaction volume at peak load, the proposed system shall support all CAD activities with a sub-second response time for of all transactions 95 percent of the time. This includes address verification and map display of an entered address on the Map Display.
B.	While at peak load, no transaction may ever exceed a two second response time.
C.	System back up shall not impact system response time.
D.	The running of reports or external queries shall not impact response time.
E.	Latency of networks and systems outside of the scope of this project will not be included when assessing response time.
F.	Response time is defined as the time between the depression of the last keystroke or pointing device activation (e.g., click) and the appearance on the workstation of the last character of the initial response (e.g., first page, pop-up window, etc.) and availability for user interaction.
G.	Vendors shall describe how their solution meets the above response time and how they intend to measure response time if different than described herein.
H.	
I.	The County reserves the right to review and approve the methods used to measure response time.
<b>RIGHT TO ACQUIRE ELSEWHERE</b>	
	Although the vendor is requested to propose all necessary hardware and software to ensure system operations in compliance with the RFP, the County reserves the right to purchase any hardware, equipment or system software from other sources if it is in the best interest of the County. If the County does purchase elsewhere, but acquires the same equipment as specified by the vendor, the vendor shall not be dispensed from satisfying system performance

	requirements.
	<b>VIRTUAL MACHINES</b>
	The County will only consider proposals that are fully functional with virtual machines. Additional consideration will be given to vendors that have installed comparably configured systems operating in a virtual environment. All servers must operate in a Virtual Machine environment with the exception of the database server which may be Windows 2008 or later.
	<b>COUNTY SYSTEM STANDARDS</b>
	The following are the existing County information technology standards. Vendors are to propose systems utilizing these standards. If the vendor chooses to deviate from these standards, an explanation as to how the deviation will benefit the County is required.
A.	Virtual Machine Software– VMware vSphere 4.1 or later,
B.	Servers operating System – Windows 2008 or later,
C.	Clients – Windows 7 or later,
D.	Citrix Server – XenApp 5 or later,
E.	Citrix Client --- XenDesktop 4 or later,
F.	Database – Microsoft SQL Server 2008 or later,
G.	Network Topology – TCP/IP version 4 but with the capability to upgrade to TCP/IP version 6 running over an Ethernet backbone,
H.	Servers Hardware – HP or IBM Servers,
I.	Client Workstations – HP,

J.	Citrix Terminals – HP,
	<b>WORKSTATIONS</b>
5.2.1.1	<b>CAD OPERATIONAL WORKSTATIONS</b>
A.	The client workstations that will be provided for use in the Communications Center shall be Rack or Blade type workstations that will be installed in the computer room at the Communications Center.
B.	The client workstations for the Communications Center and the Training Center shall include 4 monitors.
C.	The vendor shall propose 22 CAD operational workstations.
5.2.1.2	<b>OTHER WORKSTATIONS</b>
	The only other workstations that the vendor shall specify and propose are those needed to support console operations for the proposed servers.
	<b>PRINTER REQUIREMENTS</b>
A.	The Contractor shall configure the new system to print to existing TCP/IP printers in the Communications Centers, remote dispatch, administration and remote Fire and Police District Stations.
B.	The proposal shall include minimum printer specifications for the proposed system.
	<b>STORAGE SYSTEMS</b>
A.	The vendor shall propose a Storage Area Network sized to support the system as described in section 0.
B.	The SAN should also be configured to support the required levels of system availability described in the RFP.
C.	The Vendor shall provide any external array chassis required for the SAN.

D.	Any software required for the SAN to be specified and provided by the Vendor.
<b>SYSTEM BACKUP AND RESTORATION CAPABILITY</b>	
A.	The Vendor shall provide the necessary equipment (hardware and software) to allow for required backups and/or restoration of system applications and user information.
B.	The Vendor will fully explain how the backups and restoration are accomplished and what effects these operations have on the production CAD environment.
C.	Systems that require the CAD system to be removed from service or placed into a degraded mode of operation for routine backups will not be acceptable.
D.	Vendors will indicate the amount of automation available for the routine backups, the amount of time that routine or daily backups will require, and the amount of user intervention that will be required to accomplish this daily systems maintenance activity.
E.	The Vendor shall explain any additional routine software maintenance that is required to keep the system optimized.
<b>BACKUP FACILITY</b>	
A.	The Vendor shall configure the server located at a remote location to act as a backup CAD server. The remote location will be on the County's intranet.
B.	Proposals shall include recommended backup procedures and LAN/WAN connectivity requirements.
C.	The vendor shall explain in detail the failover scenario to the remote back-up facility.
<b>SOFTWARE AND UPGRADES</b>	
A.	All software applications supplied shall be of the latest production version in current release unless otherwise specifically requested and authorized by the County.

B.	The provision of “BETA” or other “work-in-progress” software applications is not acceptable unless specifically requested and authorized by the County.
C.	The Vendor shall provide the necessary methodology to allow operating system and/or application software upgrades to be easily loaded onto the system.
D.	Vendors shall describe how they propose to provide software upgrades.
	<b>DISASTER RECOVERY</b>
	The vendor is requested to provide a detailed explanation of their best practice disaster recovery recommendations for this system.
<b>5.3</b>	<b>CAD APPLICATION SOFTWARE FUNCTIONS</b>
A.	Vendors shall address in written form each numbered section and sub-section of this RFP. If the Vendor takes exception to a specific paragraph, they shall fully describe their exception in the appropriate section of the proposal.
B.	At a minimum, the proposed CAD system must include the functions and features specified within this section of the RFP.
C.	Vendors are encouraged to highlight and describe any functions and features provided by their proposed CAD systems that are not described below. These descriptions and highlights should only include those functions and capabilities that are included in the system proposed to the County.
D.	Elaborate descriptions of separately priced items and/or items not available in the proposed CAD system should not be included in the response to this RFP.
E.	With the exception of some supervisory functions, it is expected that all functions can be made available to all workstations, provided the operator has been assigned the proper security authorization. However, for convenience, the functions shown in

	the following subsections are listed under the primary user of the function.
	<b>COMMERCIAL OFF-THE-SHELF SYSTEM</b>
	It is the intention of the County to purchase primarily “off-the-shelf” or basic CAD software functionality, requiring the minimum amount of modifications in order to support necessary functions and interfaces. However, to ensure that the Vendor’s software meets a minimum set of requirements, this section specifies the minimum functions that must be supported by the CAD software.
	<b>TAILORED SYSTEM</b>
	The selected Vendor must tailor the CAD system to fit the requirements of the County. This will be accomplished through either minor customization of the CAD system software or, primarily, through adjustments in:
A.	File layout,
B.	Configuration tables,
C.	Screen presentation formats, and
D.	Field sizes.
	The costs associated with any required customizations shall be included in the proposal. The County will not reimburse the selected Vendor for any system tailoring/customization efforts beyond the amounts specified in the Vendor’s response to this RFP and resulting contract.
	<b>GENERAL FUNCTIONAL REQUIREMENTS</b>
	The proposed software shall be capable of supporting incident intake, resource recommendations, dispatching, unit status, and management reporting for Law Enforcement, Fire, and EMS, and provide the following functions and features, at a minimum.
5.3.1.1	<b>FUNCTIONAL WORKSTATION TYPES</b>
	The vendor’s proposed system shall accommodate the following types of CAD functional workstations. The vendor shall explain any

	exceptions or additional types that are provided.
<b>5.3.1.1.1</b>	<b>Full CAD Workstations</b>
	These workstations will be utilized for dispatching, call taking and dispatch supervision. These workstations may also be deployed in the test and training environments, backup sites, partner PSAPs and/or remote dispatch locations
<b>5.3.1.1.2</b>	<b>CAD Administrative Workstations</b>
	These workstations will be used to perform administrative functions in CAD such as performing file maintenance. They will also be using the ad hoc query tool in CAD to write reports and generate statistics. They will not be heavy users of the operational component of CAD but they will have access to the CAD system.
<b>5.3.1.1.3</b>	<b>Limited Access CAD Workstations</b>
A.	These terminals will be located at remote locations such as fire departments or police departments. They will be interactive with the CAD to perform specific functions such as system rostering, or querying the system for call times.
B.	It is highly desired that these workstations have some form of status display to show the status of calls and units throughout the jurisdiction.
C.	It is highly desired that these workstations will have access to the CAD map to view the location of incidents and units.
D.	It is anticipated that the user interface for these workstations is browser based and that they will be able to connect to the CAD system via internet over a Virtual Private Network
<b>5.3.1.1.4</b>	<b>System Administration Workstations</b>
	These workstations will have full access and administrative rights to the CAD system for all administration.

5.3.1.2	<b>BASIC FEATURES</b>
<b>5.3.1.2.1</b>	<b>Multiple Configurations</b>
A.	The software shall support dedicated call taker positions.
B.	The software shall support dedicated dispatcher positions.
C.	The software shall support combined call taker and dispatcher positions
D.	The software shall support the capability to easily convert any position from one format (call taker, dispatcher, combined) to another.
<b>5.3.1.2.2</b>	<b>Multiple Jurisdictions</b>
	The software must support multiple jurisdictions such that the CAD system provides each supported agency's management the greatest degree of control possible over the operational aspects of the CAD as it applies to their agency. This includes:
A.	Support for identical unit IDs for different jurisdictions,
B.	Closest unit response in jurisdictions with automatic aid agreements
C.	The ability to use a single incident numbering system for all incidents for all agencies.
D.	The ability to use sequential incident numbers for each jurisdiction,
E.	The ability to utilize separate incident numbers if units from different jurisdictions respond on the same incident if required.
F.	Support recommendations across multiple jurisdictions where appropriate.

G.	Permit agency specific call handling rules and support these via CAD processes (i.e. one agency will hold certain types of calls for the district unit while another agency will dispatch that type of call to any available unit)
H.	Support for different response complements for the same call type in different jurisdictions.
I.	Support for different SOP's by agency.
J.	Support for different shift times and durations for different agencies
K.	The proposer shall describe any additional multi-jurisdictional capabilities provided by their proposed system not specifically identified in this section
<b>5.3.1.2.3</b>	<b>Multiple Agency Types</b>
	The CAD system shall be capable of supporting multiple agency types including:
A.	Police Departments
B.	Sheriff's Department
C.	Fire Departments
a.	Career (in House)
b.	Combination (staffed in house units and response from home)
c.	Fully volunteer /Paid on Call
D.	Emergency Medical Services. Operating in any of the configurations listed for Fire Departments
a.	Career (in House)

b.	Combination (staffed in house units and response from home)
c.	Fully volunteer /Paid on Call
<b>5.3.1.2.4</b>	<b>Multiple Recommendation Capabilities</b>
	As detailed later in this document the CAD system shall have the capability to recommend units to respond to a call for service using multiple approaches including:
A.	Shortest travel time based upon AVL or in the case of fire units station location,
B.	Shortest travel time for fire units shall have the capability to assess time penalties to volunteer or other unstaffed resources and use these time penalties in calculating the unit to recommend
C.	Shortest travel distance based upon AVL or in the case of fire units, station location
D.	Geographic based response
E.	Multiple equipment / Unit capabilities
F.	Multiple operator or assigned personnel capabilities
G.	MABAS
<b>5.3.1.2.5</b>	<b>Multiple PSAP's</b>
	Although the CAD system shall be initially deployed in a single PSAP, the potential exists to over time permit other PSAP's to utilize this CAD system.
A.	The CAD system shall be able to support multiple PSAP's including separate interfaces to disparate E9-1-1 CPE.
B.	The vendor shall outline any potential technical issues associated with adding another PSAP.

C.	The vendor shall identify any additional costs associated with adding additional PSAP's.
<b>5.3.1.2.6 Windows</b>	
A.	All CAD workstations shall have multiple windows available.
B.	Standard Windows type functionality is desired for all CAD applications (e.g., dialog boxes, point-and-click, and drag-and-drop).
C.	Switching from one window to another shall not affect any information entered in any displayed window.
D.	Nothing should be able to cover critical information windows at particular workstations such as pending incidents at dispatch workstation.
<b>5.3.1.2.7 Function keys</b>	
A.	In addition to the windows standard functionality (dialog boxes, etc.), the CAD applications shall make use of programmable function keys for all frequent operations.
B.	These function keys shall be programmable by the system administrator.
C.	The Vendor shall explain the operation of all function keys provided and the degree to which they are system administrator programmable.
<b>5.3.1.2.8 Command Line</b>	
A.	The CAD application must provide a command line mode with multiple command lines.
B.	The commands utilized in the command line should be able to be aliased. (i.e. the command in the proposer's system that

	designates arrival on scene is AR, but can be aliased to also be OS).
C.	The system administrator shall have the ability to create or define alias commands
D.	The system should provide the capability to define a set of commands that are multiple commands executed by the entry of a single command.
E.	All functions that are capable of being performed via other functionality shall be accommodated via the command line. Standard windows menu processing alt letter is not sufficient.
F.	Proposals shall list the set of system functions accessible via the command line mode and explain the operation of the command line mode in the proposed CAD system.
<b>5.3.1.2.9 Windows Functionality</b>	
A.	Along with command line and function key capabilities the CAD the CAD system shall support interaction with the system via all other “normal” windows functionality such as drag-and-drop, pop-up menus, drop-down menus, cut and paste, undo, etc.,
B.	Menus or drop down dialog boxes may be provided to select the various functions that are available in the CAD applications program.
C.	Comprehensive security shall control what functions are available to each user.
D.	Only those functions that are allowed by security shall be displayed, except when using Windows drop-down dialog boxes, where the features not available shall be grayed out.
E.	The Vendor shall explain how the menus work in relation to provided security features.

<b>5.3.1.2.10</b>	<b>Special Accommodation</b>
A.	The CAD graphical user interface shall support varying screen resolutions and font/icon sizes.
B.	The system shall also support special keyboards for visually impaired users.
C.	The vendor shall describe how their system accommodates communicators with visual impairment and color blindness.
<b>5.3.1.2.11</b>	<b>Table Driven</b>
A.	The software design should make extensive use of table driven parameters, allowing easy modification by the system administrator without the requirement for programmer support.
B.	These modifications should be able to be made while the system is active without any impact upon CAD operations or without having to restart system for changes to take effect.
<b>5.3.1.2.12</b>	<b>Printing</b>
	Any information displayed on a CAD workstation shall be able to be printed on a designated shared printer, a locally attached printer, or “routed” (sent) to other workstations or printers at any time.
<b>5.3.1.2.13</b>	<b>System Back-up</b>
A.	Backup of the CAD files and user data/information shall be able to be accomplished without taking CAD out of service and with minimal impact upon CAD operations.
B.	Vendors shall explain the backup methodology used and the degree of automation as well as the anticipated duration of a routine backup. Acceptance testing will include maximum loading during the backup procedure.

<b>5.3.1.2.14</b>	<b>Training Component</b>
A.	In addition to the test environment, the CAD system must support a training component, which will allow new personnel to be trained on the system without impacting the production of the “live” environment or stored information.
B.	The training environment shall exactly resemble the live CAD operation.
C.	Vendors shall explain how this functionality is provided and if the proposed system incorporates the ability to create “training scripts” for CAD simulations.
D.	Self-guided tutorials are highly desired by the County.
<b>5.3.1.2.15</b>	<b>Test Environment</b>
A.	In addition to the training environment, the system shall support a test environment where new files or configurations can be loaded and tested prior to placing in a live environment.
B.	The simulated test environment shall exactly resemble the live CAD operation.
C.	Once files have been tested in the test environment these files shall be easily loaded from the test environment to the live environment without having to re-key them in.
<b>5.3.1.2.16</b>	<b>Remote Access</b>
A.	A remote access facility shall allow personnel with the proper security level to access the CAD system and obtain current and historical information relating to incidents and unit status,
B.	A remote access facility shall allow personnel with the proper security level to access the CAD system and perform system maintenance, diagnosis, or repair as required.

C.	An audit trail of remote access activity such as login, logout, account, transactions and if IP is available IP address should be captured to the system log file.
<b>5.3.1.2.17 Utility Programs</b>	
A.	A library of utility programs shall be supplied to maintain the CAD systems resource, configuration, and information files.
B.	These programs shall be accessed through menus or similar operation and shall be security controlled.
C.	Integrated “help” functionality for these configuration routines is highly desired.
D.	These utility programs will support manual, scheduled and batchable changes to the system resources, configuration and information files.
<b>5.3.1.2.18 Delayed Entry</b>	
A.	The system shall allow with proper security, the delayed entry of incidents, with a capability of entering actual time, not current computer time, into all time fields.
B.	Any entry of information subsequent to the entry of the original incident shall include the date, time, and ID of the person entering the information, and that the information was manually entered.
C.	Vendors shall identify how this is accomplished and any restrictions such as timeline sequence that has to be followed.
<b>5.3.1.2.19 Address Structure</b>	
A.	The system at a minimum shall support all address formats as described in USPS Publication 28.
B.	The vendor shall indicate that they have reviewed USPS Publication 28.

C.	The vendor shall specifically identify any address formats included in USPS Publication 28 that their system CANNOT support.
D.	In addition to the formats identified in USPS Publication 28 the CAD system shall at a minimum accommodate a three tiered address structure that includes:
a.	The street address (i.e. 200 S. Main St.),
b.	A building name or number (i.e. 200 S Main St, Building 3 or 200 S. Main St., Wilson Hall) within the address,
c.	A unit number within the building (i.e. 200 S. Main St, Building 3, Suite 205).
E.	The address structure will accommodate multiple buildings at a single street address such as a business park or apartment complex with a single street address
F.	It is desired that the above referenced address structure also include a fourth tier that would include the floor number of the suite. (i.e. 200 S Main St., Building 3, 2 <sup>nd</sup> Floor, room 205).
G.	The CAD system shall have the ability to validate an address to the “lowest” level of the address.
H.	The CAD system shall have the ability to recognize street types and directions as street name. (i.e. “Old HY 31”, “St Peters Rd” “West Rd”.
<b>5.3.1.2.20 Automatic Database Queries</b>	
A.	CAD shall have the ability to automatically run a database query upon entry of County-specified data (i.e., vehicle tag number, person name, etc.).
B.	The returns from all queries that are automatically generated shall be included in the incident record.

C.	The system shall be capable of automatically querying TIME and NCIC.
D.	The system shall have the capability to automatically cascade additional queries based upon a prior return. (i.e. if a plate is entered and vehicle registration is returned the system will automatically query the owner's information for warrants)
E.	The system shall provide capability to identify certain responses such as hits and visually and audibly alert the user upon query hit.
F.	Vendors shall explain to what extent their proposed systems differentiates between hits and near-hits. (A near hit is a hit response that is not the individual that was queried such as same name and DOB, but is obviously not the person queried.)
G.	The County's system administrator shall be able to define the alerting mechanism.
H.	The County desires that the CAD system be capable of automatically querying other RMS databases for information based upon the calls address or an entered name. However, there are multiple RMS databases in use and several agencies are in the process of switching products. This is an <b>extremely important</b> requirement and the vendor shall explain in detail how the County might be able to structure the automatic queries from CAD after the installation is complete and after the records vendors have been selected.
5.3.1.3	<b>SYSTEM HISTORY LOG</b>
	The CAD system shall maintain a reportable searchable history log file.
	<b>LOG ON/LOG OFF CONTROL</b>
5.3.1.4	<b>LOG ON REQUIRED</b>
A.	Each workstation operator shall log on before being recognized by

	the system.
B.	The logon identification of the operator shall be validated by the system(s) before that operator can perform system functions.
C.	An operator cannot be logged onto more than one terminal at a time.
D.	The logon identification (including the workstation ID) will become part of the CAD incident record for all incidents created or dispatched by that operator.
5.3.1.5	<b>SINGLE SIGN ON</b>
	The logon process should incorporate a “single sign on” to enable logons to multiple authorized systems.
5.3.1.6	<b>LOG OFF</b>
A.	CAD shall have the ability to quickly log off an operator and log on a new operator, without the need to exit from CAD or re-start the program. This will facilitate shift change and relief for breaks.
B.	CAD shall prohibit a dispatcher from logging off if the dispatcher is the only dispatcher controlling or viewing specific units or dispatch areas. (i.e. if the dispatcher is the only dispatcher viewing or controlling a set of units or area of the coverage area the system will prohibit log off)
C.	The time and date, along with the ID of the operator logging off and the ID of the operator logging on, shall be recorded in a system history log file.
D.	The system shall provide tools for searching the system history files to easily locate information such as users, date and time ranges, terminal, etc.

5.3.1.7	<b>CAD SCREEN LAYOUTS</b>
A.	CAD screen layouts will differ between Police, Fire, EMS, and admin users.
B.	Screen layouts shall be configured by user logon and the function they are to perform. (i.e. an individual's screen configuration will be different if they are logging on to perform fire dispatch functions than if they are logging in to perform law enforcement dispatch than if they are logging on to perform call taking functions)
C.	At logon, CAD will present the user with the previously configured screen layout for the function they are to be performing.
	<b>INCIDENT RECEIPT/CALL TAKING FUNCTIONS</b>
5.3.1.8	<b>INCIDENT CREATION</b>
	Upon receipt of a call for service, the application software shall allow for the capture, validation, display and maintenance of all of the following incident information:
<b>5.3.1.8.1</b>	<b>Incident Type</b>
A.	The incident type must be table defined.
B.	The system shall be site configurable so the system will utilize an incident type code with an accompanying translation table that translates the type code into a plain speech entry, or only an incident type field without a translation will be used.
C.	The software must provide an online help function for valid incident types.
D.	If the operator enters an incorrect or a partial incident type, the system shall display a list of valid incident types.
E.	The user shall be able to select the correct incident type from that list.
F.	The selected incident type must then be filled in by the system in

	the call for service screen.
G.	Once the incident type has been validated, the system shall also automatically display any related procedures or instructions related to this incident type.
H.	Changes to Incident type table values will maintain a reference to previous values for historical reporting. (i.e. 57D8 Explosion Large Fuel/Fire Load Vehicle changes to 57D9 and 57D9 Explosion Mobile Home, House Trailer, Portable Office changes to 57D10) the Incident history should show a 57D8 as a 57D9.
I.	The software must support up to 7 digit incident types using alpha and/or/combined numeric characters.
<b>5.3.1.8.2</b>	<b>Incident Location</b>
	The system must capture, display and process the incident location as follows:
A.	Incident location including street address, building number, apartment/suite/lot number, directional, development and street type.
B.	There must be sufficient room for free format locations (e.g., behind the red barn).
C.	All incident locations, whether obtained from the E9-1-1 controller or entered directly by the operator for administrative line (seven-digit) calls, must be validated against the system's geofile
D.	Following verification the system will display:
a.	Cross streets,
b.	Response areas,
c.	Map page and coordinates,

d.	Legal street names,
e.	Municipality
f.	Responsible agencies (Police, Fire and EMS)
g.	Zip code,
h.	X, Y coordinates (lat and long)
E.	The County requires that if the caller's location and the incident location are different they are displayed as separate icons on the associated Integrated Map Display.
F.	In the event a location cannot be properly validated against the geofile, the system must allow for the manual processing of the incident and notify the dispatcher or supervisor of the special address.
G.	The system shall produce a report of all incident entries that did not validate.
H.	All E9-1-1 ANI/ALI information including comment fields must be captured.
I.	All original E9-1-1 ANI/ALI information shall be saved and made part of the incident record even if the user changes the original E9-1-1 ANI/ALI information (e.g., the incident is not at the caller's location), or a rebid occurs on a wireless 9-1-1 call.
	The entry of locations shall be non-restrictive and allow entry of:
J.	Street addresses as described in section 5.3.1.2.19.
K.	Common place names.

L.	Alias names, including spelled or abbreviated directionals.
M.	Intersections.
N.	Landmarks.
O.	Mile posts/markers and direction (i.e., MP#90 northbound), including decimals.
P.	On and off ramp exit / entrance numbers, direction of travel and distance to/from (e.g., Northbound I-97, two miles from exit #221).
Q.	Under / Over pass names,
R.	Direction of travel and proximity (e.g., Northbound I-97, one mile south of Waterbury Rd overpass).
S.	Coordinate address (Latitude and Longitude)
T.	Military building numbers
<b>5.3.1.8.3</b>	<b>Incident location / Call Creation via the IMD</b>
	The system shall provide the capability to initiate the creation of a call via a map function. Ideally the process would allow the operator to initiate the call by right clicking on the location of the call on the map, and from the right click drop down selecting “create call here”. Following the right click the system would open the call creation window with the address filled in and verified with the cursor placed in the call type field. The vendor is requested to describe the capability of their system to meet this scenario.
<b>5.3.1.8.4</b>	<b>Other Information</b>
	The system shall also capture, display and maintain the following information. Ideally the information will be maintained in separate fields defined for that purpose. Storing the information in a comment field is not compliant.

A.	Incident priority (table-defined based on entered incident type).
B.	The software shall allow the call taker to override the table-defined priority value and enter a different priority level.
C.	All priority overrides shall be recorded in the incident history and available for reporting.
D.	Indication if the event is “in-progress”, has “just occurred”, or “previously occurred.” The default shall be set by the incident type, but modifiable by the dispatcher or call taker.
E.	Caller’s name.
F.	Caller’s address (not validated).
G.	Caller’s telephone number (ten digits plus extension or special instructions).
H.	Victim’s name.
I.	Victim’s address (not validated).
J.	Victim’s telephone number (ten digits).
K.	Call narrative/comments.
L.	Suspect(s) description(s).
M.	Vehicle(s) description(s).
N.	Type of area (residential, commercial, etc.).
O.	Identify source of call origination [i.e., (“T”) telephone, (9) 9-1-1

	system, (“R”) Radio, etc.).
P.	A flag to identify that the caller does not want to be contacted.
Q.	A flag to identify a child caller.
R.	A flag to identify a caller who has requested anonymity that will conceal the caller’s identity unless retrieved by an authorized person.
<b>5.3.1.8.5</b>	<b>Processing</b>
A.	The software shall allow the call taker to capture the caller's information in any order determined by the local administrator.
B.	The call taker shall be able to move around the input screen by tabbing, by point and click device, arrow keys, or by a next line key
C.	The vendor shall identify and describe any ability for the operator to rapidly navigate to a particular field. For example, (ctrl)-M might be locally –defined to take the operator to a comments field.
D.	The call entry screen shall be consistent for all user types (call taker, dispatcher, supervisor, etc.). This includes the operation of function key and menus.
E.	Once a call has a validated incident type and address, the call must be available to dispatch.
F.	After a call has been made available for dispatch, it must continue to be available for additional data entry and updates.
<b>5.3.1.9</b>	<b>USER DEFINABLE LAYOUT/FIELDS</b>
A.	The layout of the call entry screen shall be user definable.

B.	The system manager shall be able to locate, add, delete, and/or modify any entry fields on the screen.
C.	If this is not possible, the Vendor shall discuss any limitation to the customization of the entry screen.
D.	If the call entry screen is not customizable, Vendors shall include the proposed screen in the documentation for the system.
5.3.1.10	<b>MULTIPLE INCIDENT PROCESSING</b>
A.	The CAD system shall provide the capability for a workstation to process multiple incidents.
B.	If a call is in progress when another call is received, the call taker shall be able to retrieve a new call entry screen for the second call without losing the information already entered for the first call.
C.	Other authorized persons at other workstations shall be able to retrieve and complete a saved call.
D.	The system shall notify that call taker/dispatcher that the original call(s) still require processing. Vendors shall describe the method in which their system supports this capability.
E.	Call takers will not be allowed to log out before all call entry screens are cleared.
5.3.1.11	<b>E9-1-1 INTERFACE</b>
A.	The CAD system shall be capable of interfacing to the County's County's Positron Lifeline 100 / Intelligent Workstation E 9-1-1 system.
B.	The E9-1-1 controller will provide ANI/ALI information to the CAD system.

C.	Calling line identification (Caller ID) will also be made available.
<b>5.3.1.11.1 Automatic Fill</b>	
	The corresponding ANI/ALI information shall, upon issuing a command, or upon call answer as determined by local administration, fill in the CAD call screen with the following information, at a minimum:
A.	Location of calling telephone (address for landline, X-Y and tower site address for wireless.)
B.	Apartment, suite number, and other location information
C.	The telephone numbers; both main and pilot.
D.	The subscriber's name.
E.	Comments from the ALI screen.
F.	Emergency Service Number (ESN)
G.	English Language Translation (ELT) of ESN
<b>5.3.1.11.2 Processing</b>	
A.	If the location of the telephone is the desired emergency location, a single keystroke shall accept the location and validate it within the CAD geofile.
B.	If the ALI location is not the incident location, the workstation user shall be able to input the correct location.
C.	ANI/ALI data shall be displayed on the CAD workstation before the call taker speaks to the caller.
D.	Caller location shall be displayed as an icon on the Integrated

	Map Display.
<b>5.3.1.11.3</b>	<b>ReBids</b>
	The vendor shall explain how the proposed system handles rebids of 9-1-1 data.
<b>5.3.1.11.4</b>	<b>Placing 9-1-1 or Other Calls on Hold</b>
A.	The system shall provide the capability for the call taker to put a 9-1-1 or other call on hold to process another call as described in section 5.3.1.8.
B.	The fact that the call is on hold shall be displayed to all call taker workstations including a telephone line identifier.
C.	Any call taker will be able to pick up the call and have the partially completed call entry screen displayed on their workstation.
D.	Vendors shall explain how their systems accomplish this
	.
<b>5.3.1.11.5</b>	<b>Retention of 9-1-1 Information</b>
A.	The E9-1-1 information shall be retained in the call for service history.
B.	If there are multiple 9-1-1 calls for a single incident, the CAD system shall provide the capability to capture and retain information from all calls associated with an incident.
<b>5.3.1.12</b>	<b>TEN-DIGIT CALLS FOR SERVICE</b>
	The CAD system shall provide a mechanism for entering calls for service received on the Communication Center's administrative telephone system. The proposal shall include a procedure for entering a ten-digit call for service.

5.3.1.13	<b>LOCATION VALIDATION/GEOFIELD LOOK-UPS</b>
	Upon entry of the incident location, the CAD application software shall provide a look-up to the geographic database (geofile) to validate the location of the incident. This process shall facilitate validation of the incident's location.
A.	The system must assist the user in validating partial, incomplete, or inaccurate locations.
B.	The CAD shall utilize a "soundex", "metaphone", and/or other appropriate look-up aids for street names, intersections, commonplace names, landmarks, or street or highway route numbers. (Windows type ahead is not soundex nor a metaphone).
C.	The CAD system may also in addition to soundex utilize other appropriate look-up aids such as type ahead.
a.	If type ahead is utilized, the system shall only display as possible matches those streets on which the numeric address that has been entered is a valid address. (i.e. if the initial entry is 175 S. MA -- the type ahead drop down would not show S. Main St, unless 175 was a valid address on S. Main St.)
D.	A list of possibilities should be displayed when a partial spelling or misspelling of a street name is entered.
E.	The system must allow the user to cancel out of the soundex, metaphone function without making a selection.
F.	The location/geofile must support multiple "aliases" for"
a.	Street names,
b.	Intersections,
c.	Commonplace names,
d.	Landmarks, and

e.	Street or highway route numbers.
G.	If CAD is unable to provide an exact location match, a list of all potential matches based on available look-up aids shall be displayed to the user.
H.	The call taker shall be able to select the correct location from the displayed list, scroll forward or backward for other potential locations,
I.	The call taker must also have the ability to restart the location look-up with a new location.
J.	Proposals shall describe the tools available in the system for assisting users to validate addresses and other locations. Soundex, metaphone, use of the Integrated Map Display and other techniques are especially desirable from the County's perspective.
K.	Once a location is validated the system shall assign an X, Y coordinate value to the location.
L.	Once the address is validated, the system must identify using the X, Y coordinate:
a.	The appropriate Police Fire and EMS district, sector, reporting area,
b.	Agency of jurisdiction, and
c.	Any other geographic boundaries containing the address
M.	Cross-streets on both sides of an address shall be displayed. Vendors shall describe how dead-ends or other locations without two cross streets are displayed.
N.	The incident location shall be displayed in the center of the

	associated Integrated Map Display zoomed to a readable level automatically after the address is validated. Vendors shall describe how the map display will function with both densely and less-densely addressed areas.
O.	All information returned for validated locations shall become a part of the incident record and displayed/available to subsequent system users reviewing the incident record.
P.	If the validated address is for a multi-unit location the system must prompt the call taker to request additional information regarding the building, apartment, suite or lot number.
Q.	If the validated address is also a common place the call taker shall be so advised.
R.	All geographically sensitive hazards, dispatch policies, and other system functions shall stem from validated locations.
S.	The operator shall be able to complete the location look-up immediately upon entry, or at any time during the incident entry process.
T.	The system shall allow for a street name to be entered without a block range and/or city and return all possible ranges with City and location to be used to query the caller as to which is the correct choice.
U.	The CAD application should provide a feature to perform location validations / geofile lookups exclusive of the incident creation process.
5.3.1.14	<b>COMMON PLACE NAMES</b>
A.	The CAD application shall allow the user to enter a location as a common place, or business name, i.e., County Complex.
B.	The CAD shall automatically connect the common place name with an exact address.

C.	If more than one location has the same common place name (i.e., McDonalds), the CAD shall display a list of all locations with the same name with additional identifying information.
D.	The user shall be able to select the correct location from that list by using the keyboard or a point-and-click device.
E.	If the operator enters a street address that is associated with a common place the system shall notify the operator that the entered address is a common place.
F.	If the operator enters a common place that is a multi-unit address, the operator shall be instructed by the system to request additional information regarding the building, suite or apartment number. (i.e. entry of XYZ Office Park, the system should advise the operator to ask for additional information about building, floor or suite and then allow field level entry of this information.)
G.	If the common place is a multi-unit structure with common places names associated with the sub units the system shall display a list of additional common-places that the operator may choose from. (i.e. XYZ Shopping Mall, the system should display other common place names within the mall such as the names of the stores)
5.3.1.15	<b>ALIAS STREET NAMES</b>
A.	The CAD shall provide an alias-street name capability to accommodate multiple street names or abbreviations for the same street (i.e., Main St.).
B.	If the user enters an alias street name, the CAD shall automatically translate the alias name to the correct street name.
C.	If several variations of the same name exist, the CAD shall display a list of all possible street name variations.
D.	The user shall be able to select the correct location from that list

	by using the keyboard or a point-and-click device.
E.	The ability to alias common place names shall exist in the system.
F.	The system shall permit the use of alias names when entering intersections.
5.3.1.16	<b>INTERSECTIONS</b>
A.	The CAD shall provide the capability to enter and use intersections as a location.
B.	This feature must allow for multiple intersections of the same streets.
C.	If multiple intersections with the same streets occur, the system shall display them in a pick list with additional clarifying information such as block number or municipality.
D.	The call taker shall be able to enter partial street names on both intersecting streets.
E.	The operator shall be able to enter alias street names into the intersections and the system shall convert the alias names to the correct street names.
F.	The system shall permit a street to intersect itself.
G.	The system shall permit the intersecting streets to be entered in either order.
a.	For the sake of determining prior calls or potential duplicate calls the system shall treat the intersection as a single location regardless of the order in which the streets are entered.
H.	The CAD shall permit the operator to enter the name of one street

	and the system will display a pick list of all other streets that intersect.
a.	It is desired the operator be provided the ability to sort the list of intersecting streets in geographical order (N to S and S to N or E to W and W to E).
b.	It is desired the operator be provided the ability to sort the list of intersecting streets in alphabetical order.
c.	If in the list the street is intersected by the same street multiple times, each instance of the intersection shall be displayed in the geographically sorted pick list.
I.	The system shall accommodate intersections where more than two streets meet.
5.3.1.17	<b>MILE MARKERS &amp; OTHER LIMITED ACCESS HIGHWAY LOCATIONS</b>
A.	The proposed CAD system must provide an optimized method for locating incidents along Limited Access Highways.
B.	These locations shall include:
a.	Mile markers including decimals
b.	Exits,
c.	Distance and direction (2 miles north of ....)
d.	Common place names.
e.	Vendors shall describe the methods employed by their proposed systems for entering these types of locations.
5.3.1.18	<b>WIRELESS 9-1-1</b>
A.	For Phase 1 wireless calls, the system shall identify the tower ID and coordinate data.

B.	For Phase 1 wireless calls the system shall identify the directional tower face and orientation in degrees.
C.	For Phase 1 wireless calls, the system shall identify the street address and community of the tower site.
D.	For Phase 2 wireless calls, the system shall display and capture the coordinate data provided
E.	For Phase 2 wireless calls the system shall convert the coordinate data to a valid street address and record this information.
F.	The vendor shall explain in detail the method used to convert the phase 2 wireless coordinate data to a valid street address.
5.3.1.19	<b>BODIES OF WATER</b>
A.	The system shall have the capability to search for locations on rivers and lakes.
B.	The system shall be able to identify locations based on bearing and distance from a known location, (800 yards South of Pier 100)
C.	The County and some jurisdictions have established pier numbers on some lakes. While the pier numbers are on the lake side of a residence, the access to the lake may be via the address. The vendor will explain how they could provide the access address based on the pier numbering.
D.	GPS or other coordinate functionality allowed elsewhere in the system shall be available as much as possible on bodies of water.

5.3.1.20	<b>RAILROADS AND TRAILS</b>
A.	The system shall have the capability to search for locations on railroads and trails. These locations shall include mile or kilometer markers, crossings, and common place names.
B.	The system shall be able to identify and validate the intersection of railroads or trails and streets as a valid location for dispatch. (creating a common place to identify the location is not acceptable)
5.3.1.21	<b>DUAL DISPATCH RESPONSIBILITY</b>
	There are a number of jurisdictions within the County that share dispatch responsibility with the County based upon the agency type that is being dispatched. (i.e. in City XYZ the police maintain their own dispatch center but Fire and EMS are handled by the County) To assist the call takers in managing this process the system shall:
A.	Provide the capability to identify to the call taker that based upon the type of call and the location that the call should be transferred. (I.e. a police call in City XYZ) should be transferred)
B.	Provide the capability to identify to the call taker that based upon the type of call and the location that the call should be both entered and transferred. (i.e. a call type that would require a both a police and fire response where the County is responsible for dispatching fire and another agency is responsible for dispatching the police response)
C.	Provide the capability to identify to the call taker those calls that belong entirely within the County dispatch center.
D.	These jurisdictional areas will be defined in the GIS supporting the CAD. The vendor shall explain how their system will accommodate these requirements.
E.	The vendor shall also review section 5.5 interfaces for CAD to CAD sharing requirements and the possibility to transfer some data directly to other CAD systems.

5.3.1.22	<b>LOCATION / PREMISE INFORMATION</b>
<b>5.3.1.22.1</b>	<b>Location / Premise Information Processing</b>
	The term “location / premise information” is used to identify any information that might be associated with a location or premise. It includes all items but is not limited to section 5.3.1.22.2.
A.	The CAD system shall provide the capability to associate or attach location / premise information to each level of the address structure described in section 5.3.1.2.19.
B.	The CAD system shall also provide the capability to associate premise / location information to:
a.	Street Segments,
b.	Neighborhoods and Subdivisions,
c.	Jurisdictions
d.	Any other geographic feature or polygon (i.e. waterway, site defined boundary, governmental boundary, etc.)
C.	During incident processing, CAD shall alert operators of any existing premise / location information and display the information with minimal user effort (i.e., mouse click on site file alert icon).
D.	At any time during the life of an active incident, the users shall be able to quickly display the advisory information for that particular incident.
	The CAD system shall provide the capability to easily distinguish the type of premise information available without having to display the information.
E.	The CAD system shall have the ability to purge/delete any premise information that has not been updated for a site configured period of time.

F.	Before a purge / delete occurs, the system shall notify the system administrator 30 days in advance to check if the information should be updated or deleted. Vendors should also discuss the ability of alerting the agency owner of the information (since it is a multi agency system) instead of the system administrator before the information is purged.
G.	A utility for updating/purging site files shall also be provided. The County will develop policies for updating site files.
H.	The CAD shall provide access to site files and pre-fire surveys for addresses and businesses for jurisdictions not linking locally-maintained information to the CAD. Vendors should discuss any ability for local authorities to load and maintain their own information.
I.	If the incident being processed is located at a multiple unit location (shopping mall, apartment complex, mobile home park), the system will provide the operator the option to display premise / location information for:
a.	The individual unit
b.	All individual units
c.	The floor (if the CAD system can accommodate the floor)
d.	All floors
e.	The building
f.	All buildings at the address
g.	The address.
<b>5.3.1.22.2</b>	<b>Location / Premise Information Types</b>
	The software shall also perform necessary look-ups to determine, at a minimum, if any of the following conditions exist at the validated

	incident location or if any of the conditions identified in section 5.3.1.22.1 apply (does the street segment on which the location occurs have information attached to it, etc). The system shall provide the ability to have the following information displayed for Law Enforcement, Fire, or EMS incidents, or any combination thereof. The system shall track, in the system history log file, whether the user viewed the identified information and the date and time it was viewed.
A.	Location information. This information will be used for displaying special instructions relating to a location.
B.	When entering any location specific information, the system shall require the entry of an expiration date for the information.
a.	The system shall permit the entry of “never” as a valid expiration date.
b.	The system shall include a report that will identify and list all location specific information that will expire within a user specified time range.
C.	After Hours Contact Information – Provide after hours contact (e.g., key holder, owner / contact person’s name, key codes, etc.) information for any business, apartment complex, business malls, and residential communities.
D.	Emergency contacts for the location (business or residential). Information should be retrievable by both address and business name
E.	Medical information relating to individuals associated with the location.
F.	Fire protection systems
G.	Hazardous locations.
a.	The CAD application will provide for location validation against supplemental files containing locations that have been deemed hazardous to public safety personnel.

b.	At a minimum the system shall support the identification of the specific page in the Emergency Response Guidebook.
c.	Ideally, the system shall provide a hyperlink to the specific page the Emergency Response Guide book.
d.	This subsystem will allow the entry of dangerous persons, hazardous materials, or other conditions that may be prevalent at the locations.
e.	The system shall support scanned raster images of MSDS sheets and other forms containing hazardous materials information.
f.	The system will also allow for a proximity search around a location for hazards. The proximity will be associated with the type of call and the type of hazard.
g.	When entering hazards, the operator will have the capability to define the hazard proximity.
h.	The Vendor shall discuss the proposed system's ability to provide both hazardous locations support and proximity searches for locations
H.	Prior incidents history (at least the last ten incidents, within the 24 months of online storage, at the location regardless of incident or call type).
I.	Standard Operating Procedures (SOP's) for calls at a specific address, or on specific street segment, or within a geographic boundary.
J.	Standard Operating Procedures (SOP's) for calls at a specific address, or on specific street segment, or within a geographic boundary.

K.	The detailed information in the SOP shall be displayed in a separate area or window on the CAD screen, allowing the incident to be displayed at the same time as the SOP.
<b>5.3.1.22.3</b>	<b>Citizen Submission</b>
	The County is interested in any aspects of the proposed system that would via the internet, allow citizens to report special conditions about a specific location. This might include special needs during an evacuation, specific medical conditions, or any other location specific information that would impact the safety of the resident or might require special consideration when a response to that location is made. Specific comments as to security, verification and validation of submitted information is requested of the vendor.
5.3.1.23	<b>TELEPHONE NUMBER AS A REFERENCE</b>
A.	Given the increasing number of calls that are received from cellular telephones, the proposed system shall have the capability to utilize the telephone number as a reference in the same way and address or location is used to identify and alert dispatch personnel.
B.	The system shall permit the creation of alerts attached to telephone numbers similar to those associated with addresses in section 5.3.1.22 and subordinate subsections.
C.	The system shall also provide the capability to utilize the telephone number of the caller when identifying prior calls for service. If prior calls were received from the calling telephone number the call taker and dispatcher shall be notified in a fashion similar to that if a prior call had been received at an address
D.	The vendor shall describe in detail how they will satisfy the requirements of this section, and specifically identify any deficiencies in the capabilities of the proposed system to meet these requirements.
5.3.1.24	<b>URGENT INCIDENTS</b>
A.	The CAD applications software shall allow the call taker to pass an urgent but incomplete call for service (containing only basic incident type and validated incident location information) on for immediate dispatch, while the remainder of the incident intake information is being solicited.

B.	As the call taker is obtaining further information through caller interrogation, the updated information will be sent to the dispatcher(s) who is/are handling the incident.
C.	All information added to the incident should contain the time, date, and operator ID.
5.3.1.25	<b>INCIDENT ROUTING</b>
A.	CAD shall automatically route a new incident to the appropriate dispatcher(s) based on:
a.	The incident type
b.	The jurisdiction(s) responsible for the incident location.
c.	The location of the incident
B.	The call taker shall be able to override the normal call routing by entering the desired dispatcher position ID.
C.	The call taker's screen shall provide a display of dispatchers who are logged onto the CAD system, their areas of responsibility, and the number and type incidents assigned to facilitate the expedient manual routing of incidents.
D.	The system shall support "default supervisory position routing" of particular user-defined incident types to a designated supervisory position.
E.	If the call will require handling by multiple dispatchers, the call will be routed to each. Examples of this are calls requiring a multi-agency type response (i.e. Police and Fire) or calls for which the response compliment is controlled by different dispatchers.
F.	The system shall assign a (Radio) talk group to each incident. The CAD administrator shall be able to enter and change the available talk groups for assignment by CAD for incidents, The

	assignment of talk groups shall be determined by single or multiple unit responses, incident type, and/or geographic location.
5.3.1.26	<b>DUPLICATE EVENT DETECTION</b>
A.	After the location is verified, the CAD system shall check all active, pending and recently closed incidents in the response area for potential duplicates.
B.	The detection shall take into consideration:
a.	Proximity,
b.	Time, and
c.	Type of call
d.	Phone Number
C.	It is desired that the proximity for identifying a duplicate call be based on the type of call (i.e. a domestic violence call would have a much smaller proximity search than a smoke in the area call) and density of the area (i.e. a traffic crash call in a rural portion of the County would have a larger proximity search than a traffic crash in an urban area of the County.)
D.	The proximity search should be based upon a radius from the reported location of the incident. (a block face search is not acceptable)
E.	The type of call should not require an exact match since different callers might report an occurrence as a different type of incident.
F.	If any potential duplicates are found, the system shall display sufficient information about each for the call taker to make the proper determination.
G.	The call taker shall then be able to easily cancel the event if it is a duplicate, proceed with the incident processing, or append the

	additional information to the “duplicated” incident record.
H.	The CAD application will maintain canceled “duplicate” incidents within historical system files.
I.	A procedure will be available in the CAD system to merge incident information from duplicate incidents to the master incident record.
J.	A record of the canceled duplicate incident shall be maintained in the master incident record.
5.3.1.27	<b>ADDING INFORMATION</b>
A.	The CAD shall allow a call taker or dispatcher to add information to an active incident at any time.
B.	All information entered will be transferred “almost instantaneously” to all call takers/dispatchers working the call and will contain the ID number of the person entering the information, along with the date and time of entry.
C.	The system shall alert users of new information added to the open incident (i.e., colored text, reverse video, etc.).
D.	All information shall be retained in the incident history record.
E.	Additional information may be added to completed incidents at any time through other CAD application functions.
F.	Information contained in completed incidents shall only be modifiable by the addition of comment information and then only by persons with a specific security level.
G.	Vendors will explain in detail the method in which their respective systems handle this requirement.

5.3.1.28	<b>NON-DISPATCHED “ADVISED” INCIDENTS</b>
A.	The CAD shall provide the ability to record information from citizens about particular situations or incidents that do not require the dispatching of any public safety resources.
B.	These incidents will be recorded and shall be retrievable from the system/incident history files for later access and information analysis.
5.3.1.29	<b>ASSIGNMENT OF INCIDENT NUMBERS</b>
	CAD shall assign a unique event/incident number to every call entered into the system. Format of the incident number is YY-99999999.
5.3.1.30	<b>PRIORITY DISPATCH CORPORATION STATUS</b>
	The County uses Emergency Medical Dispatch, Emergency Fire Dispatch and Emergency Police Dispatch from Priority Dispatch Corporation. The County will <b>not</b> consider any vendor that is not described by PDC to be at the certified status level for each of the products. The vendor shall describe in detail how their system interacts with the PDC products. Additionally, vendors shall describe the use of the PDC multi-discipline launcher and why their firm is or is not certified by PDC in this tool.
	<b>Proposals need not include any pricing for Priority Dispatch software licenses.</b>
	<b>DISPATCH FUNCTIONS</b>
5.3.1.31	<b>UNIT/RESOURCE SETUP</b>
<b>5.3.1.31.1</b>	<b>Unit Number and Type</b>
A.	Each unit shall be assigned a unit number and unit type.
B.	The unit number must be up to ten (10) characters.
C.	The unit type shall indicate the type of vehicle and its capabilities.

D.	The system administrator should be able to add, delete, and modify unit numbers and types as required.
E.	Unit numbers need not be unique when in different agencies/jurisdictions.
5.3.1.32	<b>FIRE UNIT/CREW CAPABILITIES</b>
A.	In addition to unit identification and type, the system must support several levels of unit/crew capabilities. The dispatcher shall be able to recommend units based on the unit or crew's special capabilities.
B.	These special capabilities shall be in addition to the unit type. Examples of these capabilities include vehicle extrication capability on a ladder truck, a paramedic on an engine, hazardous materials specialists on EMS units, etc.
C.	The system shall be capable of recommending tenders based upon their capacity.
D.	The system must also take into consideration the number of personnel currently staffed on the unit.
E.	System supervisors and other authorized users must be able to modify these capabilities as required, without adversely impacting the system (e.g., without having to shut down or restart the system.).
F.	The unit crew capabilities must be easily modified.
G.	Multiple Fire unit types.
a.	Units may have more than one type.
b.	The system will recommend them based on the appropriate type. As an example, a "quint" may be recommended as either a pumper or a ladder truck.

c.	The system shall be able to specify which type is utilized first if a recommendation requires several of the unit's type. (i.e. the call requires both a pumper and a ladder, the system should be able to specify that the quint should be used as a ladder first)
H.	Fire unit staffing.
a.	The system shall allow the dynamic entry of personnel staffing specific units/apparatus.
b.	The system should allow the staffing module to be accessed from the field by authorized users to dynamically reflect changing assignments.
5.3.1.33	<b>SELECTING PENDING INCIDENTS</b>
A.	The CAD application shall sort the displayed pending incidents in order of priority and by elapsed time (time since entry.)
B.	The colors for each priority shall be definable by the system administrator.
C.	The dispatcher shall be given an audible and visible alert that an incident has been added to the pending queue.
D.	The volume, pitch, and duration of the audible alert shall be definable by the system administrator and based on the priority of the incident.
E.	Vendors shall fully describe the method for alerting the dispatcher that a new call has been placed on the pending incident queue.
F.	The dispatcher shall be able to:
a.	Select the highest priority incident from the pending incident display with a single keystroke and/or by selecting the incident using a point-and-click device.
b.	Select incidents from the pending queue in any order.

c.	Place an incident back in the pending queue after reviewing it.
d.	Select another pending incident from the screen.
e.	If more than one pending incident is open at the same time, each incident will be located in a separate window and the dispatcher will be able to toggle back and forth from each of the open incidents.
f.	Vendors shall describe the maximum number of pending/active incidents that can be opened at any one time and how the system accomplishes this process.
5.3.1.34	<b>DISPATCH SCREEN</b>
	The CAD software shall provide the following basic functions/information when a call for service is retrieved for dispatch:
A.	All calls for service information obtained during incident intake.
B.	Geofile information, to include:
a.	The high and low closest cross streets,
b.	Jurisdiction, and district,
c.	Fire response area,
d.	EMS response area,
e.	Grid (reporting area),
f.	Development name,
g.	Map page and coordinate,

h.	Latitude and Longitude and
i.	Other information as specified above.
C.	The above response zones/areas shall be automatically computed by the CAD system for verified locations and displayed as part of the incident record.
D.	Coordinate based location of the call, preferably latitude and longitude.
E.	This information should be easily available for review by dispatchers, call takers, and supervisors working the call.
F.	Premise / Location information. This information will be used for displaying hazards, hazardous materials, or special instructions relating to a location as described in section 5.3.1.22.
G.	Telephone Number information. This information will be used for displaying hazards, hazardous materials, or special instructions relating to a location as described in section 5.3.1.23.
H.	Notes shall be able to be associated with various geographic locations: grids, street segments, intersections, or specific addresses as described in section 5.3.1.22.1.
I.	Notes shall be able to be associated with the telephone numbers as described in on 5.3.1.23.
J.	Information regarding hazardous locations in proximity to the incident location shall be flagged.
K.	Prior call for service history (at least the last ten incidents, within the 24 months of online storage, at the location regardless of incident or call type). For example, if officers are responding to an incident, the proposed CAD system should inform them that a "false alarm" recently occurred there or that loud music was reported on the previous shift so that they are aware of the

	situation before and during their response to the incident.
L.	Prior call for service history (at least the last ten incidents, within the 24 months of online storage, from the telephone number regardless of incident or call type). For example, if officers are responding to an incident, the proposed CAD system should inform them that a “false alarm” recently was reported by that phone number or that loud music was reported on the previous shift so that they are aware of the situation before and during their response to the incident.
M.	Duplicate event detection. The application software must detect and notify the dispatcher of the potential of a duplicate incident as previously described.
N.	Emergency location contacts.
O.	Incident type advisory or procedural information. Each CAD incident type may have multiple advisory or procedures displayed. These instructions may be used to advise dispatch and/or field personnel on how that specific incident type is to be handled.
P.	The detail information shall be displayed in a separate area or window on the screen, allowing the incident to be displayed at the same time as the advisory.
Q.	Whenever an incident location has emergency contacts, an indicator will be displayed to the user advising of the existence of the emergency contact information.
5.3.1.35	<b>UNIT RECOMMENDATION</b>
	CAD shall automatically provide the dispatcher with a recommended set of units suggested for dispatch. The recommendation will be composed of a specific unit identifier(s). Creating the list of recommended units for dispatch consists of two processes. The first identifies the number and type of units to recommend and the second identifies the specific units matching the type and number that will be recommended.

A.	The recommendation of specific units shall be based upon:
a.	Shortest travel time,
b.	Shortest Travel Distance,
c.	MABAS (Mutual Aide Box Alarm System),
d.	Other fixed geographical based plans (response plans)
B.	The response plans as constructed shall be system activated based on the time of day and day of week. (it should be noted that the activation times will be jurisdictionally dependent)
<b>5.3.1.35.1 Number and Types of Units to Be Recommended</b>	
A.	The number and type of units to be recommended shall be based upon:
a.	The incident type,
b.	Geographic sub area,
c.	Jurisdiction,
d.	Specific addresses or location types,
e.	Time of day,
f.	Day of week, and
g.	Resource plan in place.
B.	The recommendation shall include specifically the number and type of units that should be recommended based upon the incident type.

C.	The CAD system will allow the recommendation of different numbers and types of resources for the same incident type when the incidents are located in different geographic sub-areas (i.e., geographically sensitive dispatch policies).
D.	The CAD system will allow the recommendation of different numbers and types of resources for the same incident type when the incidents are located in different jurisdictions (multi-jurisdictional control).
E.	Each agency shall be able to determine the number and type of units that will respond to call types within their jurisdiction.
F.	The CAD system shall allow for each agency to vary the recommendation of the numbers and types of units based upon the time of day and day of week.
G.	The CAD system shall allow for a systematic change in the numbers and types of units that are recommended based on a degraded or upgraded response plan.
H.	The CAD system must facilitate the inclusion of resources required to respond to specific call types as discussed in sections 5.3.1.8.1 and 5.3.1.35.2.
I.	The CAD system shall allow the recommendation of different numbers and types of resources for the same incident type when the incident is located at a specific address (i.e. school, chemical plant, hospital, etc.)
J.	The CAD system shall support the use of unit type substitutions in identifying the number and types of units to recommend. (i.e. (1 engine) or (1 ladder and 1 rescue)
<b>5.3.1.35.2</b>	<b>Specific Units to Be Recommended</b>
A.	Law Enforcement unit recommendations shall be based on:
a.	The type of call

b.	Jurisdiction of call
c.	Unit staffing,
d.	Unit types,
e.	Unit status.
B.	Law Enforcement recommendations, dependent on call type may include units assigned to other calls.
C.	Fire/EMS unit recommendations shall take into account
a.	Unit types,
b.	Assigned personnel quantity and
c.	Assigned personnel capabilities, and
d.	Unit equipment capability.
D.	The vendor shall describe any tools available to assist in developing the recommendations.
a.	It is highly desirable that some form of graphic or flow chart is available to assist the users in developing the response recommendations.
<b>5.3.1.35.3</b>	<b>Unit Recommendation Based on Estimated Shortest Travel Time</b>
	In this approach the system will identify the specific units based upon the estimated shortest travel time over the street network.
A.	For mobile units such as police and fire/EMS units away from their station the system shall utilize an AVL system to identify the units' positions.

B.	For quartered fire/EMS units the system shall utilize the known location of their station to identify the units' positions.
C.	The vendor shall explain in detail the GIS requirements for their system to make recommendations based on estimated shortest travel time.
D.	The vendor shall explain the source of their recommendation algorithm (proprietary, ESRI Network Analyst, etc.).
E.	The vendor shall explain their system's ability to assess time penalties to non-staffed (volunteer or paid on-call) fire houses for the process of calculating shortest travel time recommendations
a.	The vendor shall explain the ability to change these time penalties by time of day and day of week.
b.	The vendor shall explain the ability of their system to override the time penalty if the station or unit is put into service.
F.	The vendor shall explain their system's ability to assess time for routes that will travel through congested areas during times of congestion (Rush hour)
<b>5.3.1.35.4</b>	<b>Unit Recommendation Based on Calculated Shortest Travel Distance</b>
	In this approach the system will identify the specific units based upon the calculated shortest travel distance over the street network.
A.	For mobile units such as police and fire/EMS units away from their stations the system shall utilize an AVL system to identify the units' positions.
B.	For quartered fire/EMS units the system shall utilize the known location of their station to identify the units' positions.
C.	The vendor shall explain in detail the GIS requirements for their

	system to make recommendations based on calculated shortest travel distance.
D.	The vendor shall explain the source of their recommendation algorithm.
E.	The vendor shall explain their system's ability to assess time penalties to non-staffed (volunteer) fire houses for the process of calculating unit recommendations
a.	The vendor shall explain the ability to change these time penalties by time of day and day of week.
b.	The vendor shall explain the ability of their system to override the time penalty if the station or unit is put into service.
<b>5.3.1.35.5 Unit Recommendation Based on Fixed Response Plan</b>	
A.	The system shall utilize the incident geographic location to determine the reporting district and sector and/or MABAS Box run order to determine the order in which to recommend specific units to respond.
B.	The system will utilize real-time unit status to determine unit availability. All unit recommendations shall correspond to the current, real-time status of all resources.
C.	With limited exceptions, the software shall never recommend a unit that is on another assignment or otherwise unavailable for dispatch. The application shall facilitate the definition and recommendation of second, third, etc., level units in the event a primary recommended response unit(s) is in an unavailable status.
a.	The software will allow the recommendation of out of service Law Enforcement units for specific call types.
D.	Law Enforcement unit recommendation shall be based on district/sector plans. The application shall support multiple district/sector plans.

a.	The Vendor shall indicate how many different district/sector plans may be entered by the user agency.
b.	It is highly desirable that the response plans are variable by time of day, day of week and jurisdiction.
E.	Fire unit recommendations will accommodate multiple alarm levels. Vendors shall indicate how many alarm levels are supported.
F.	Fire unit recommendations shall be based on a planning algorithm used by the CAD system. The Vendor shall indicate how many different response plans the CAD system will accommodate.
G.	The CAD system will provide for temporary change of quarters of Fire/ EMS units. The dispatch recommendation will be based on the “move to” coverage or incident scene locations.
H.	The unit recommendation of Fire / EMS units will show the station number and/or pager tone codes associated with each unit.
I.	The CAD applications will support “tactical locations” that will modify the normal response based upon the location of the incident. These “tactical locations” and the resulting response recommendations will be user defined.
J.	The CAD system will allow for “cross-staffed support for recommendations of Fire units. If a “cross-staffed” unit is recommended, the “other” unit is automatically removed from service. Once the unit returns to quarters from its assignment, all cross-staffed units are automatically marked available. The system shall support multiple “cross staffed” units.
K.	The CAD system shall provide the capability to “load balance” between units. This would be required to two similar units that are located in the same facility for Fire or EMS, or two patrol units may be assigned to the same beat for police. The vendor shall explain in detail how their system would provide workload equalization

	between these units.
L.	Target Hazard Dispatch.
a.	The CAD system administrator shall be able to identify certain occupancies such as hospitals, nursing homes, high rises, chemical storage plants, etc. as target hazards.
b.	The system must support an unlimited number of different target hazards.
c.	Each hazard shall allow for an upgraded response depending on the type of hazard. Each hazard occupancy shall be identified by both address and business/building name.
M.	The system will provide for a “degraded modes” of dispatch activity.
a.	In situations of large thunderstorms, heavy snowfall, peak brush fire season, and other major events, the number and type of recommended units will be reduced based on the system being placed in degraded mode.
b.	The reduction in resource recommendations will be table-driven.
c.	One or more degraded modes are desired. Vendors shall describe their system’s method for handling this requirement.
N.	The CAD system must be able to send a snap shot of the current location of incidents and units (as displayed on the system’s Integrated Map Display) to supervisors equipped with Mobile Data Computers capable of accepting and displaying the information.
O.	Substituting Units.
a.	When the system is searching for a unit of a particular type (example: an ambulance) and locates a unit of another type (example: a medic unit), the system shall be able to add the medic unit to the recommendation, but continue searching for the ambulance.

b.	The search shall progress from the incident going out until a full complement of resources, as defined by the dispatch policy for that incident type, priority, and location (see other modifiers in this section), is found.
c.	If the most desirable unit is not found, then the next desirable unit shall be recommended.
d.	This capability shall be user definable for any unit types based on the call type.
P.	The CAD system must be able to recommend units based on the skill level of the individuals assigned to the unit. For example, if a SWAT, Spanish-speaking individual is required, the system should be able to find and recommend the closest available unit matching the requirement. A fire-relevant example is the requirement to identify available personnel that are certified for confined space entry.
a.	The proposed CAD system must provide an entry screen for requesting specific skills as well as properly process requirements that are automatically generated based on the incident type.
Q.	The system shall have the capability to recommend the “balance of an alarm” which would recommend only those units needed to complete the next alarm level’s recommended compliment.
<b>5.3.1.35.6 Dynamic Recommendations</b>	
	Until each dispatched unit has arrived on scene the CAD system shall monitor all units that become available and if a unit that has become available is a better “fit” than one of the dispatched units the system shall alert the dispatcher. Better fit could mean that it could be closer, from the same jurisdiction or a better equipment match.
	The vendor shall describe their capabilities in this area.

5.3.1.36	<b>DISPATCHING UNITS</b>
	The dispatcher shall have the capability to accept the system-provided unit recommendations with a single keystroke or action of a point and click device, or override the recommended units and replace them with one or more other units.
A.	The dispatcher shall have the capability to select a unit that is on a lower priority incident.
a.	A single keystroke shall remove the unit from the previous incident (preempt) and assign it to the new incident.
b.	If the preempted unit is the last unit assigned to an incident, the incident shall be automatically placed in the pending incident queue and held (stacked) for that unit.
c.	When the unit clears the incident to which it was assigned, the unit will be recommended to the incident from which it was preempted.
d.	If a different unit is assigned to the incident in the pending queue, the incident will no longer be stacked (held) for that unit and the system will not automatically recommend it when the unit becomes available again for dispatch.
e.	All times associated with assignment and re-assignment shall be kept in the incident history file.
B.	CAD will assign a primary unit based on incident response policy.
C.	The dispatcher shall have the ability to change the primary unit at the time of dispatch or at any time during the handling of the incident. The primary unit is the unit who is responsible for completing any required departmental reports.
D.	The CAD system shall provide the ability to stack, or assign low priority incidents to a busy unit.

a.	These incidents shall be time stamped, and displayed in the pending incident display, with an indication that the incident has been stacked to a unit.
b.	When the unit clears from one incident, the applications software will provide an indication that the unit is now available for a “stacked” or preempted incident.
c.	The CAD shall time stamp when the unit is en route to the new incident.
E.	Upon acceptance of a unit dispatch recommendation or input of a dispatcher's own unit recommendation, the applications software shall automatically and dynamically update the status of all affected units throughout the CAD system.
F.	All CAD workstations must be updated with the new status information automatically and instantaneously.
a.	At this point, units equipped with Mobile Data Computers through the MDCS functionality will automatically be notified of their assignment, status update, call information, other units assigned to the call, and location and hazard information.
G.	The system shall provide the ability to automatically transmit incident information such as address of incident, development name, high and low cross streets, map page and coordinate, and call type alphanumeric paging or text messaging based on the type of incident, geographic location of incident, unit availability.
a.	The data sent to the alphanumeric pagers shall be formatted so that it can either be sent to the mail drop area as a notification or to the page area as a dispatch message to respond.
b.	Additionally, the CAD will have the ability to transmit specific information from the incident to specified alphanumeric pagers.

H.	The CAD system must support and be able to recommend roaming units (i.e., units that are assigned to more than one patrol district).
5.3.1.37	<b>NOTIFICATIONS</b>
A.	Upon selection of recommended units and the execution of the dispatch function the dispatched units shall be notified.
B.	The CAD system shall provide the capability to notify different units in different manners. The specifics of the different approaches to notification are addressed elsewhere in the RFP, however, the following types of notification shall be provided automatically by the CAD system:
a.	Mobile Data Digital Dispatch,
b.	Toning,
c.	Alpha-numeric paging,
d.	Fire Station Alerting Systems (US Digital Designs Phoenix G2)
e.	Text Messaging to smart phones
f.	Email notification
g.	CAD's messaging system
h.	The vendor shall explain any other methods of notification that their system provides
i.	Notifications for "interested parties", being non dispatched units, or location contacts must be supported. This can be used to alert the a transport destination like a Jail or a Hospital of incoming transports, or health agencies of an incident type occurring.

5.3.1.38	<b>BE-ON-THE LOOKOUT (BOLO)</b>
A.	The CAD system shall provide an efficient method for tracking BOLO notifications.
B.	The system shall make BOLO information accessible for a system-wide and
C.	BOLO's shall be active a specific number of days or until cleared.
D.	Any time a license plate is entered into the system the CAD shall automatically check the BOLO information.
5.3.1.39	<b>FIRE UNIT MOVE-UPS</b>
	The proposal shall include Fire apparatus Move-Up software that will interface CAD and the Integrated Map Display.
5.3.1.40	<b>RIP AND RUN REPORTS</b>
A.	The CAD system shall provide the ability to send Fire rip and run reports containing incident location and summaries to remote Fire stations with apparatus assigned/dispatched to a specific incident.
B.	Rip and run printouts shall include hydrant information.
C.	Vendors shall discuss connectivity options, such as remote printers, fax, email, etc.
5.3.1.41	<b>ADDING UNITS TO INCIDENTS</b>
<b>5.3.1.41.1</b>	<b>Adding Units by Recommendation</b>
A.	The dispatcher shall be able to add additional units to an incident by having the system recommend these additional units.

B.	The dispatcher will specify the type of unit(s) needed, and the system should recommend the additional units in the same way as an initial dispatch. (Example: Command requests an additional Brush Truck. The dispatcher enters a command for recommendation of a Brush Truck. The system searches the available units for the next Brush Truck and returns a recommendation to the dispatcher in the same screen format as the original recommendation.)
<b>5.3.1.41.2 Adding Units by Call Type or Alarm Level</b>	
A.	The dispatcher shall be able to request the system to recommend additional units for an active incident by providing the system with a different call type or by changing the alarm level on the call.
B.	The system should recommend the additional units in the same way as an initial dispatch. The unit recommendation shall take into account the units already assigned to the call and only recommend the additional required units. For example, if a second alarm is called only the additional units required to satisfy the second alarm would be recommended by the system.
C.	The system shall allow another set of run orders by alarm level.
<b>5.3.1.41.3 Add Units by Personnel Capabilities</b>	
A.	The dispatcher shall be able to add additional units with specific capabilities to an incident by having the system recommend these additional units.
B.	The dispatcher will specify the personnel capabilities needed, and the system should recommend the additional units in the same way as an initial dispatch. (Example: Command requests an additional ALS provider. The dispatcher enters a command for recommendation of an ALS provider. The system searches the available units for the next ALS provider and returns a recommendation to the dispatcher in the same screen format as the original recommendation.)

5.3.1.42	<b>INCIDENT AND UNIT STATUS MAINTENANCE</b>
A.	The applications software shall dynamically and interactively track the status of all resources that are defined within the CAD system.
B.	A unit icon shall appear on the Integrated Map Display showing the last known location of each unit.
C.	The unit icon shall be repositioned to the new location each time the unit's location is changed.
D.	When AVL information is available, the unit's location will be automatically updated via the AVL system.
E.	The color of the icon shall correspond with the unit's status.
F.	For MDC equipped vehicles, the system will allow them to digitally update their status by using their onboard mobile data computers.
G.	The system will track those status updates as if they were entered by system operators and indicates the MDC as the initiator.
H.	The software shall provide an indication as to whether a Police unit is a single or two-person unit. Two-person units with one fully-qualified responder (such as training units) shall be configurable.
I.	The unit icon displayed on the map shall indicate this also.
J.	The application shall track the following minimum incident and unit status conditions for Law Enforcement units assigned to an incident:
a.	Incident Received

b.	Assigned / Dispatched
c.	Acknowledged
d.	En route
e.	In Area
f.	Staged
g.	On scene
h.	Transporting
i.	Arrive transporting location
j.	Available (Clear)
k.	Out of Service
l.	Delayed
K.	The Out of Service status shall be supported by secondary locally defined table identifying the reason for the out-of service condition.
L.	The Delayed status shall be supported by secondary locally defined table identifying the reason for the delay
M.	The application shall track the following minimum incident and unit status conditions for Fire/EMS units assigned to an incident:
a.	Incident Received

b.	Assigned / Dispatched
c.	Acknowledged
d.	En route
e.	On scene
f.	In area
g.	Staged
h.	Available on radio
i.	Available In-District
j.	Available In-Quarters
k.	Out of Service
l.	Transporting
m.	Arrival
n.	At Hospital
o.	At Patient
p.	Delayed in Quarters
q.	Delayed in service

N.	The Out of Service status shall be supported by secondary locally defined table identifying the reason for the out-of service condition.
O.	The Delayed statuses shall be supported by secondary locally defined table identifying the reason for the delay.
P.	In the event the FD activates an Incident Command System, the proposed CAD system should facilitate the capture of certain stages and associated times of a Fire incident, such as:
a.	Initiate Command.
b.	Transfer Command.
Q.	Recorded times (e.g., dispatched, arrived, etc.) shall be maintained in military (24-hour clock) format.
R.	The applications software shall capture hour, minutes, and seconds (HH:MM:SS). All unit status changes shall be automatically time stamped and become part of the incident for service history.
S.	The clock time and date used by CAD must be able to be reset while CAD is operational, and without the need to have users log off, or to re-boot the system.
T.	The Vendor shall discuss how its proposed system handles semi-annual time changes and the effects that these time changes have upon open incident times and later statistical analysis.
<b>5.3.1.42.1</b>	<b>Incident Milestones Maintenance</b>
	Certain incident milestones shall be tracked by the system. A command executed by the dispatcher shall mark the occurrence and the time of the milestone on the incident record. Unit based milestones, such as first unit arrival, shall be automatically captured when the unit status command is executed. FD / EMS milestones include:
A.	Receipt of call.

B.	Incident entered for dispatch.
C.	First dispatch of incident.
D.	First unit arrived at the scene.
E.	First engine arrived at the scene.
F.	First transport unit arrived on the scene.
G.	First medical arrived on the scene.
H.	Patient contact made.
I.	Trauma alert
J.	Water on the fire.
K.	Fire declared under control.
L.	Patients extricated from a vehicle.
M.	First shock delivered
N.	Mayday initiated
O.	Coroner called
P.	MedFlight requested
Q.	Primary search initiated

R.	Primary search completed
S.	Secondary search initiated
T.	Secondary search completed
U.	Notifications conducted (entered for each notification).
V.	Evacuation declared.
W.	All clear announced after search is completed.
X.	Last unit cleared incident.
<b>5.3.1.42.2 Unit Status Timers</b>	
A.	The CAD applications software shall provide unit status timers in minutes and seconds that will advise the dispatcher if a unit has exceeded the preset amount of time in a status condition.
B.	The applications software shall provide an initial check-back after a preset time interval passes between when a unit first arrives "on-scene" to when the software shall first prompt the dispatcher to check on the unit's condition.
C.	Vendors shall explain any ability to include mobile computer transactions and/or two-way radio channel affiliation as part of the checking.
D.	This time interval shall be defined based upon incident type and jurisdiction and established by the system administrator.
E.	The application shall provide secondary check-back times which shall be the defined time periods, after the initial check-back, that the software will continue to prompt the dispatcher to check on a

	unit's condition.
F.	When a defined check-back period has expired, the system shall visually and audibly alert the dispatcher assigned to the unit to make contact with it.
G.	If the dispatcher cannot make contact with the unit, the dispatcher should be prompted to notify field supervisory personnel.
H.	Once contact is made with a unit whose check-back timer has expired, and the unit advises that its status is fine, the dispatcher must be provided with an appropriate means to cancel the check-back alert and reset the unit's check-back timer.
I.	This process shall continue, utilizing the table-defined check-back time interval, until a unit clears from the incident.
J.	The system shall monitor units dispatched to a call. If the units have not been marked en route to the call in a Department pre-defined time, the system shall make a visible and audible notification to the dispatcher and appropriate supervisor that the unit is overdue.
K.	The system shall provide welfare check timers that can be assigned to units that are not on calls for service. It could also be considered a timer set based upon the status of available.
L.	The system shall provide the capability to set welfare times on fire and EMS units that are "on the air" meaning away from their stations but not assigned to call.
M.	The welfare check timer will behave as described above.
<b>5.3.1.42.3 Updating Unit Status</b>	
A.	Dispatchers shall be capable of updating unit status through:
a.	Keyboard input of appropriate unit identifiers and a single function key,

b.	A pointing device, or
c.	Via command line entry.
B.	The applications software shall allow dispatchers to update a unit's status while performing any call taking or dispatching function within the CAD system, by providing easy accessibility to an interactive command line at all times.
C.	This command line shall allow multiple units to have the same status updated simultaneously.
D.	Updating unit status must be accomplished without losing the incident information displayed on the screen.
E.	If the cursor is repositioned to perform the command, it must be automatically returned to the correct screen and cursor position where the user left off, without losing any information.
F.	The software shall provide dispatchers with the capability to clear any number of, or all units, with a single command.
5.3.1.43	<b>ESTIMATED TIME OF ARRIVAL</b>
A.	If AVL is in use, the system shall calculate an estimated time of arrival for each unit based on the non-emergency travel time from the time dispatched.
B.	If the unit exceeds this time by a Department-determined percentage of the travel time, the dispatcher shall be provided an audible and visual alert.
C.	This estimate should also be available for display to the call takers to assist them while talking to the calling party.

5.3.1.44	<b>SITUATION FOUND</b>
	The CAD system shall provide a separate field in the incident record that will record the situation found upon arrival. Which will be used to differentiate the incident type of the call as dispatched and the incident type of the call for service as found upon arrival.
5.3.1.45	<b>UPDATING INCIDENTS</b>
A.	The applications software shall allow both call takers and dispatchers to review an active incident and update the incident with corrections or additions.
B.	All corrections or additions must contain the time, date, operator ID and workstation ID.
C.	When call taker forwards updated information to the appropriate dispatcher, the dispatcher shall be visually/aurally alerted by the system to the presence of the update.
D.	In addition, there will be a clear indication of which information is new.
E.	Law Enforcement calls should be available to the Fire Department and EMS to investigate the details of the call, especially if they are also responding.
F.	Law Enforcement should be able to view Fire and EMS call details if necessary.
G.	However, the default situation is for Law Enforcement to only view Law Enforcement calls and for Fire Department dispatchers to only view Fire calls and EMS dispatchers to view only EMS calls if configured by the local system administrator.
H.	It should not be necessary to transfer the entire incident to accomplish the transfer of the updated information.
I.	The software must allow units to be added as assisting units to an

	incident after it has been dispatched.
J.	If another agency response, such as adding Fire units to a Law Enforcement incident, is required, the CAD shall automatically copy the active incident and route the new incident to the appropriate dispatcher.
K.	The Vendor shall discuss their system's ability to add additional public safety agency resources to an active incident.
L.	Fire dispatchers must be able to escalate Fire alarm levels.
M.	The CAD will make additional unit recommendations based on the new alarm level.
N.	Dispatchers must be able to "preview" the next alarm level assignments for an active incident.
O.	Units equipped with Mobile Data Computers (MDC) shall be able to update the incident record by adding comments, changing its location, etc.
5.3.1.46	<b>RELEASING AND REASSIGNING UNITS</b>
A.	The software shall allow units to be reassigned from one incident to another or to be easily "exchanged" on two active incidents.
B.	The previous incident shall be returned to the pending queue if the reassigned unit is the last or only unit on the incident.
C.	Vendors shall discuss how these functions are accomplished by their systems.
5.3.1.47	<b>INCIDENT COMPLETION</b>
A.	CAD shall allow users to clear either single units or all units on an incident with a single command, function key, or point and click device action.

B.	The dispatcher shall be able to add comments upon clearing the incident or to a closed incident.
C.	If the last unit on an incident is cleared, CAD shall require one or more disposition code if the user agency requires a disposition code for the incident type.
D.	The software shall provide for the capture of a user-maintainable incident disposition code, an indicator that a report is or is not required, and incident completion comments.
E.	Disposition codes shall be selectable from a validated list of potential disposition codes.
F.	The CAD system administrator shall be able to modify, add, and delete valid disposition codes.
G.	If the last unit clearing an incident is Mobile Data Computer (MDC) equipped, it shall be able to indicate the final incident disposition and transmit it digitally to the CAD system.
H.	The CAD system shall track and use this disposition as if it was entered by a system operator, including tracking the time, device ID, and person ID of the person entering the disposition and clearing the call.
I.	Immediately upon the closure of an incident all data including the incident history, unit history and all comments shall also be written to the CAD system's Data Warehouse.
5.3.1.48	<b>REOPENING AN INCIDENT</b>
	The system shall provide the capability to reopen a closed incident. The vendor shall discuss the capabilities of the proposed system in this area specifically identifying:
A.	Under what circumstances an incident may be reopened and

B.	How information related to the reopened incident is captured and
C.	The impact on data already transferred to other systems.
5.3.1.49	<b>STATUS MONITORING</b>
	If limiting the data displayed on the status monitors is accomplished via some form of filtering unwanted information, the vendor shall explain in detail the safeguards the system has in place to ensure that all units and all incidents are displayed on at least one dispatch position's status monitor.
<b>5.3.1.49.1</b>	<b>Pending Incidents</b>
A.	In a separate window, the software shall display the incidents waiting to be dispatched (pending) queue. The dispatcher shall be able to quickly select the desired incident to dispatch.
B.	The pending incident queue display shall present all waiting calls for that dispatch position for service in priority order, and within each priority, elapsed time since incident receipt.
C.	Displayed information shall include, at a minimum:
D.	Incident priority.
E.	Incident type.
F.	Location.
G.	Appropriate response areas (i.e., Police district, Fire response zone).
H.	An indicator of whether the incident is near the boundary of the County's dispatch area (user option).
I.	Time of incident receipt or elapsed time since incident receipt

	(user option).
J.	Brief incident summary comment.
<b>5.3.1.49.2 Unit Status</b>	
A.	The software shall facilitate the operation of a unit status display monitor.
B.	This monitor displays the interactive status of all units controlled by an individual dispatcher.
C.	The status display shall be a separate monitor/window controlled by the dispatcher's interactive workstation.
D.	The status monitor will have the ability to display one or more dispatch groups and one or more agencies at the dispatcher's discretion.
E.	The unit status display shall present the current status of all active units. Status information shall include, at a minimum:
a.	Unit identifier.
b.	Current status.
c.	Assigned incident ID (if assigned to an incident).
d.	Assigned incident type.
e.	Talk group incident assigned.
f.	Location of assigned incident or location of the unit if not assigned to an incident (e.g., at Fire Station #1).
g.	Time in status or elapsed time (user option).

h.	Brief comment.
F.	The grouping of displayed units shall be user maintainable. This will allow the dispatcher to organize the status display by station, type of unit, geographic coverage area, etc.
G.	A single workstation must be capable of displaying any Police/Fire/EMS units.
H.	The dispatcher shall be able to sort the unit status display by unit number, unit type, incident number, battalion, and/or availability.
I.	It is highly desired that the system provide the capability for the unit status monitors to have the ability to display multiple columns of units and their associated information.
<b>5.3.1.49.3 Active Incident Status</b>	
	A separate portion of the display or a window shall display a summary of all active incidents.
A.	The active incident status display shall include, at a minimum:
a.	Time incident received or elapsed time (user option).
b.	Incident number.
c.	Priority.
d.	Incident type.
e.	Incident type description.
f.	Talk group incident assigned.
g.	Location.

h.	Units assigned.
i.	Status times associated with each unit.
B.	The dispatcher shall be able to quickly select any incident from the display for updating.
C.	The dispatcher shall be able to scroll the active incident display, if there are more incidents than can be displayed at one time.
<b>5.3.1.49.4 Recently Closed Incident Monitor</b>	
	A separate portion of the display or a window shall display a summary of the last (user configurable number or time limit) incidents that have been closed.
A.	The closed incident status display shall include, at a minimum:
a.	Time incident received
b.	Time the incident was closed
c.	Incident number.
d.	Priority.
e.	Incident type.
f.	Incident type description.
g.	Talk group incident assigned.
h.	Location.
i.	Units assigned.

j.	Cleared times associated with each unit.
5.3.1.50	<b>CHANGING DUTY ROSTER AND SHIFT CHANGES</b>
A.	The CAD shall provide an ability to quickly change the duty of a single unit, including on or off duty, area of coverage, personnel assigned, and whether recommended for dispatch.
B.	The CAD shall also provide the ability to build a shift roster.
C.	The rostering must occur by individual agency.
D.	The capability to build the roster at least one week prior to the shift must exist for all Law Enforcement/Fire/EMS personnel.
E.	The system must support a method to delete the previous shift personnel from the roster at a scheduled time each day to be set by the CAD administrator.
F.	The scheduled time must vary by agency.
G.	The shift roster should be maintained in the system for later access and analysis. Rosters should be available online for 24 months and available for archive to other media.
H.	CAD shall alert supervisor personnel if units don't "roster on."
5.3.1.51	<b>INCIDENT HISTORY</b>
A.	Once an incident is closed (all units cleared) and incident data is transmitted to CAD Data Warehouse, the software shall maintain the incident's details within the incident history files of the system.
B.	The incident history shall include all information generated as part of the call intake, dispatch, and unit status tracking process specific to each incident.

C.	The incident history file shall allow for the online inquiry and display of closed incidents.
D.	Incident history recall shall be by:
a.	Incident number,
b.	Date and time or range of date and time
c.	Address,
d.	Telephone number of caller
e.	Grid,
f.	Map page,
g.	Unit,
h.	Station, battalion, etc.
E.	Security shall control which users have the ability to access closed incidents and which users have the ability to update or modify closed incidents.
F.	Incident history must be stored in a commercial, industrial strength relational database management system.
G.	A set of standard reports must be provided that can routinely generate tables, statistics, maps, and charts that are typically required to manage a communications center.
H.	Tools should be available for easily creating ad hoc reports.

I.	Vendors shall list the standard reports contained in the proposed system, and the ad hoc report generation capabilities of the proposed system.
5.3.1.52	<b>UNIT HISTORY</b>
A.	The CAD system shall capture non-incident and incident related unit history in a unit history file.
B.	The unit history shall include all statuses identified in section 5.3.1.42.
C.	The unit history file shall allow for the online inquiry and display of unit activity. Information contained in this file may also be printed on any printer within the Communications Centers or other workstations that have access to the CAD system environment.
D.	The unit history information should also be stored in a commercial, industrial-strength relational database management system.
E.	Standard and ad hoc reporting capabilities that access unit history information must be provided.
F.	The Vendor shall list the standard reports contained in the proposed system, and the ad hoc report generation capabilities of the proposed system.
G.	The Vendor shall list the standard reports contained in the proposed system, and the ad hoc report generation capabilities of the proposed system.
5.3.1.53	<b>TRANSFERRING INCIDENTS</b>
	There are times when control of an entire incident and all units assigned to the incident needs to be transferred to another dispatch group or position. The CAD system shall provide this functionality, using a single, abbreviated command.

5.3.1.54	<b>TRANSFERRING DISPATCH POSITION RESPONSIBILITIES</b>
	CAD shall provide the ability to transfer an entire dispatch group or position responsibilities and all associated units and incidents to another dispatch group or position.
5.3.1.55	<b>5.3.1.56 TOW/WRECKER ROTATION LIST</b>
	The proposed CAD system shall contain a rotation function that will distribute the tows/wrecking jobs to wrecker companies on an equitable basis within jurisdictions and within areas within jurisdictions.
A.	The dispatcher shall be able to query the system as to the next tow company to be called for each tow area.
B.	Upon use of a tow company, the system shall move to the next company for the next tow in that area.
C.	The system shall also allow a tow company to be placed on suspension from the tow rotation and be automatically reinstated at a particular date and time.
D.	If the tow company is unavailable, the dispatcher shall be able to by-pass that company and retrieve the next company from the list.
E.	The system shall keep a record of reasons why a tow company was chosen or skipped.
F.	The system should be able to put a tow company back at the top of the list if the company is canceled before getting to the scene.
G.	The system shall allow the dispatcher to select any tow company and not rotate them if the selection is due to the owner's request of that tow company.
H.	When a tow company is used, the towed vehicle log entry screen shall be automatically displayed.

I.	The dispatcher shall be able to enter multiple towed vehicles for the selected tow company.
J.	If the tow is associated to an incident, the tow entry shall be associated to the incident in CAD.
	<b>COMMUNICATIONS SUPERVISION</b>
	Functionality required for the Communications Supervisors includes all of those shown above as required under Incident Receipt and Dispatching plus:
A.	Capability to monitor any workstation on the CAD system.
B.	Capability to disable any remote access workstation,
a.	By workstation identifier
b.	By IP address
c.	By operator logged on.
C.	Capability to disable any mobile data computer,
a.	By workstation identifier
b.	By IP address
c.	By operator logged on.
D.	Ability to interactively determine the workload and response times for dispatchers and call takers.
E.	Capability of making changes to CAD system support files based upon applicable security.
F.	Ability to display at least the ten most recent incidents occurring throughout the County.

G.	Capability of studying current system loading and system resource utilization.
H.	Ability to accept automatic notifications of “user-defined serious” nature incidents.
I.	The shift supervisor shall automatically be alerted to any of the following calls:
a.	Calls taking longer than a user-defined amount of time to enter.
b.	Unit needs assistance calls.
c.	Incidents pending longer than a user-defined amount before dispatch.
d.	Other incidents of interest defined by call type.
<b>INTEGRATED MAP DISPLAY (IMD)</b>	
A.	The CAD system must have a seamlessly integrated computerized map, based upon the County provided GIS.
B.	The IMD must support the automatic display of units as derived from the AVL system.
C.	The IMD will be displayed at each operator position.
D.	A map-centric IMD, in which the GIS/Map is fully integrated with the CAD system, is preferred by the County. However, mapping component systems, in which a separate IMD application is linked to the CAD system, may be proposed.
E.	The geofile supporting the CAD system must utilize the County’s existing GIS
F.	The geofile may undergo processing to be “formatted” for use by

	either CAD or the IMD.
G.	The map data must be easily imported/loaded from an ESRI Spatial data format (ArcGIS 10) or directly from the Spatial Data Engine.
H.	The County shall be provided tools that allow for easy importing updates to the map data.
I.	The IMD system shall have the ability to display all:
a.	Street/roadway data (such as freeways, major streets, minor streets, curb to curb, parcel data and address, etc.),
b.	Hydrology data (such as rivers, streams, drainage canals, lakes, etc.), and
c.	All railroads, trails, bridges, etc.
d.	Street/roadway data shall include all entrance/exit ramps for controlled access highways, dead ends and cul de sacs, etc.
e.	The system shall support the display of aerial photographs and raster images.
J.	The IMD shall refresh the screen within two seconds when new or updated data is received.
K.	Pan and zoom – the system must provide a mechanism for panning and zooming around the area covered by the IMD.
L.	Default zoom scales – the IMD should provide a default set of zoom scales.
M.	As users zoom in and out of these zoom scales, different (appropriate) information is displayed on the map. For example, when viewing the entire dispatch area, only major roads and freeways are displayed. However, when zooming into a

	neighborhood, building footprints, individual address numbers, street curbs, and other detailed information is displayed.
N.	The system administrator must be able to modify the default geographic layers that are displayed at each zoom scale.
O.	The system must utilize advanced spatial analysis techniques to:
a.	Assign the closest appropriate unit with jurisdictional/area responsibility.
b.	Calculate the shortest and quickest path (via streets and roadways, not straight-line calculations) for dispatched vehicles.
c.	The path information or route shall be sent in text and/or graphic display to station printers, MDCs, and be available to dispatchers.
P.	Display floor plans and site detail information for incidents.
Q.	Zoom and pan around the jurisdiction by use of mouse drag on slide bar or mouse click on appropriate directional icons.
R.	Center on an address or location when the dispatcher selects the associated event.
S.	Center on a specific unit if that unit or personnel assigned to that unit's portable emergency call button is activated.
T.	Center on a specific event location when the dispatcher recalls the associated event from the CAD status monitor.
U.	Display different layers of graphic information such as Law Enforcement, Fire and EMS jurisdictional boundaries and response zones, hydrant locations, unit locations, driveways, building locations, building footprints, etc.

V.	Spatially aggregate incident information.
W.	The digital map must be able to display all or selected sets of validated locations entered into the CAD system.
X.	The map shall be able to display all boundary layers:
Y.	The system must support a practically unlimited number of boundary types. Each boundary type shall be treated as a unique geographic layer.
Z.	Typical boundary file layers shall include:
a.	Response areas.
b.	Jurisdictional (County, city, etc.).
c.	Statistical (census tracts, census blocks, etc.).
d.	Administrative (public areas, parks, etc.).
e.	Commercial (mall, zoo, etc.).
f.	Gated communities.
g.	Zip Code
AA.	Point Locations - The system must support a practically unlimited number of point layers. Each point location type shall be treated as a unique geographic layer. Examples are:

a.	Landmarks: - Common names, building numbers, and landmarks, etc.
BB.	Fire hydrants - The hydrants shall be assigned specific X-Y coordinates that are linked to the closest street address. The file must also support detailed hydrant data, including hydrant/main size, flow, status, etc.
CC.	The map must be able to display Iconic symbols:
a.	Units and stations – The system must support multiple icons representing marked and unmarked law Enforcement cars, ambulances, fire apparatus, fire hydrants, fire stations, schools, etc.
b.	These icons shall be proportionately sized to match the map size. When the map is displaying the entire dispatch area, all vehicles shall be clearly displayed.
c.	Each icon shall display the unit identification number, either within, immediately above, or immediately below the icon.
d.	All structural icons must display the facility name (i.e., Fire Station 2, Avery Elementary, etc.) within, immediately above, or immediately below the icon.
e.	Incidents – The system must support multiple icons representing Law Enforcement, Fire, and EMS incidents.
f.	Ideally, different icons will be used to display more specific information about the nature of the incident (i.e., gun for armed robbery, burning car for vehicle fire, a building with flames representing a structure fire, etc. if desired by the system administrator).

g.	The system shall display the associated call's incident number along with the icon.
h.	Vehicle clustering – The system must provide a "cluster" icon for multiple Law Enforcement and/or Fire and/or EMS vehicles at one site. Each icon must uniquely represent the presence at the site of multiple vehicles, and, by mouse click, cause a window to pop up which will display data about all vehicles represented by the icon.
i.	Incident clustering - The system must provide a "cluster" icon for multiple incidents at one site. Ideally, different icons will represent multiple events and, by mouse click, cause a window to pop up which will display data about each incident represented by the icon.
<b>TIME/NCIC ACCESS</b>	
A.	All authorized CAD Workstations shall have the capability of accessing the Transaction Information for the Management of Enforcement System (TIME)/NCIC via the CAD computer and performing all authorized TIME/NCIC functions.
B.	The CAD system shall automatically send a query to TIME/NCIC for registration and wants and warrants checks when a license plate and/or person's name is entered.
C.	Access to TIME/NCIC functionality must be controlled by sufficient security.
<b>HOSPITAL RECOMMENDATIONS</b>	
CAD shall recommend appropriate receiving hospitals for EMS transports. CAD shall recommend hospitals based on facility specializations, unit position, and transport route time. CAD shall facilitate the input of diverting hospitals to eliminate such hospitals from being recommended.	

	<b>TRANSPORT MILEAGE</b>
	The proposal shall include a utility that provides actual mileage traveled by mobile units during specific operations (i.e., patient/inmate transports). The proposal shall explain how this function is accomplished and how Dispatch and field users will use it. The transport mileage should be in tenth of a mile increments.
	<b>CONTACT MANAGEMENT DATABASE</b>
	The system shall provide a contact management database that includes a telephone directory for personnel and agencies the County must contact. Information stored in this directory shall include the name, agency, multiple telephone numbers, and types of telephone number (home, work, pager, cellular, email, websites, etc.). The system operator shall be able to retrieve the telephone information by complete or partial name or agency. Contact database access shall be available to MDC-equipped field units via the MDCS.
	<b>GEOFILE REQUIREMENTS</b>
5.3.1.57	<b>EXISTING GIS ENVIRONMENT</b>
	The existing GIS environment is SQL based, ArcGIS 10 SDE and image server. It is required that CAD vendors utilize this environment for the GIS component of their geo-file.
<b>5.3.1.57.1</b>	<b>Direct Access</b>
	Given the size and complexity of the spatial database, it is highly desired that the proposed system be capable of accessing and utilizing the existing Spatial Data Engine directly.
5.3.1.58	<b>COORDINATE BASED GEOFILE</b>
	The CAD system must support coordinate-based operations, as the County requires that the proposed CAD system use advanced Geographic Information System (GIS) and spatial analysis techniques. County GIS data is referenced to the Wisconsin Coordinate Reference System (WISCRS) – Dane County. The agencies in the County will implement an Automatic Vehicle Location (AVL) system that is based on a Global Positioning Satellite (GPS) system that would be fully integrated with the proposed CAD system. This system would require a very accurate Geofile to display near

	real time vehicle location information.
5.3.1.59	<b>AVAILABILITY OF GIS TOOLS</b>
	The proposer shall include with its proposal all GIS tools necessary to create and maintain the spatial data infrastructure necessary to support the CAD system as described, and maintain additional data not maintained by the County's GIS staff. The proposed CAD system's Geofile processing module shall provide the capability to establish and maintain at a minimum:
A.	Response Zones
B.	Police Areas
C.	Street Networks (including center lines as well as all impedance data) including:
a.	Directionals (one-way)
b.	Speed limit
c.	Likely travel speed
d.	Road closings
e.	Overpass / underpass
D.	Railroads and Trails

E.	Law Enforcement Jurisdictions
F.	Fire Jurisdictions
G.	EMS Jurisdictions
H.	Waterways and other hydrographic data
I.	Point or Polygons identifying special locations
J.	Other geographical layers using typical mapping/GIS tools.
	The Vendor shall initially set up and create the required geographic information using data provided by the County, data available to the Vendor, and the Geofile processing tools of the proposed CAD system. However, once installed, the Geofile shall be capable of being updated by accessing source GIS data without requiring assistance from the selected Vendor and without overwriting additional data unique to this application. The intent is for the system to access the SQL Spatial database source already maintained by the County's GIS department.
5.3.1.60	<b>GEOFILE MANAGEMENT SYSTEM REQUIREMENTS</b>
	The Geofile management system shall support the following (at a minimum):
<b>5.3.1.60.1</b>	<b>Point within Polygon</b>
	The proposed CAD system must support the capability to identify the location of a point (call for service or other police activity) and all relevant polygons within which it is contained. These will include at a minimum:
A.	Local Police, Fire and EMS jurisdictions and contact information

B.	Police Patrol Zone
C.	Fire Box Alarm Zone
D.	Municipality jurisdiction
<b>5.3.1.60.2 Cross Street Identification</b>	
	The proposed CAD system's Geofile structure shall support the return of both cross streets when an address is given which fits into a valid address range.
<b>5.3.1.60.3 Unit with Shortest Travel Time</b>	
	The proposed CAD system must be able to satisfy dispatch recommendations based upon the unit with the least travel time based upon the position of the units when the call for service is selected for recommendation and dispatch. This recommendation shall use the street network and all impedance data available.
<b>5.3.1.60.4 Unit Routing</b>	
	The proposed CAD system and MDC system shall support the ability to identify the correct / fastest routing from a unit's location at the time of inquiry to another fixed point (call for service or other activity) at any given point in time. The system shall be capable of transmitting this data to the mobile data device of the units recommended.
<b>5.3.1.60.5 Spatial Searches</b>	
	The proposed CAD system must support the utilization of spatial searches for identifying hazards, duplicate calls, etc.

<b>5.3.1.60.6</b>	<b>Hyperlinking or Cross-referencing</b>
	The system shall support the hyperlinking or cross referencing of any unique geo-spatial item (point, street segment, polygon, etc.) to a specific file or files (drawings, text data file, etc.)
<b>5.3.1.60.7</b>	<b>Layer variation based on time of day / day of week</b>
	The CAD system shall support the automatic (or with minimum keystrokes) the changing of certain polygon layers based upon the time of day or the day of week.
<b>5.3.1.61</b>	<b>PARCEL LEVEL ADDRESSES</b>
A.	The Geofile of the proposed CAD system should support parcel level GIS information, in which the approximate location of the front door of all the parcels is stored in the Geofile.
B.	The CAD system must be able to use this information for address validation and to determine an incident's location.
C.	This information is only available for selected locations. The proposer should delineate any issues lacking a complete data set would cause.
<b>5.3.1.62</b>	<b>BUILDING FOOTPRINTS</b>
A.	The Geofile should support the storage of building footprints and other images (pictures of specific buildings) that are associated with specific addresses.
B.	This information is only available for selected addresses. The proposer should delineate any issues lacking a complete data set would cause.

C.	The vendor shall specify the types of files its software can link to.
5.3.1.63	<b>ASSIGNING X, Y COORDINATES TO VALIDATED ADDRESSES/LOCATIONS</b>
	Once an incident location is entered into the proposed CAD system, the location verification step shall add the coordinates of the incident's location to the incident record and display an incident icon on the tactical map display.
5.3.1.64	<b>DUPLICATE INCIDENT DETECTION</b>
A.	During incident entry process, the proposed CAD system shall make a duplicate incident check based upon the location and/or coordinates of the incident.
B.	If, during incident initiation, a potential duplicate incident in the area is found, the user shall be notified via a prompt and shown a list of the potential duplicate(s).
C.	The CAD system must have a parameter (modifiable by the system administrator) specifying the distance in number of feet or similar function, from the location of the incident for duplicate incident detection.
5.3.1.65	<b>STREET CLOSURES</b>
A.	The system shall provide the ability to easily close streets from a dispatcher or supervisor workstation.
B.	The street closure should immediately propagate to all other system users.
C.	All geographic activity such as routing or recommendations should immediately use the street closure as a factor in the system's algorithms.

5.3.1.66	<b>GEOFILE VALIDATION</b>
	Given the extreme importance of the geographic data supporting the CAD system the following requirements are in place:
A.	The vendor will be required to supply the County with a CAD map analysis tool that will accurately identify any errors in the GIS basemap that will interfere with proper identification of the required units and with proper identification of the correct response districts.
B.	The vendor will be required to work with the client to conduct an analysis of the GIS database and agree upon a course of remedial action.
C.	The vendor will be required to work with the client to analyze the results of any remedial action taken to correct database errors and agree that such errors appear to have been corrected.
D.	A formal "Go-Live" authorization will not be provided by the client until these steps have been taken and the results agreed upon by both the client and the vendor.
E.	The vendor shall discuss any ability to report updates or other changes from the CAD environment to the County's planning department.
5.3.1.67	<b>GIS LICENSING</b>
	The vendor shall identify any ESRI or client or server licensing requirements with the deployment of their solution.
5.3.1.68	<b>NECESSARY GIS DATA</b>
	The vendor shall supply a list of the GIS data necessary for the systems' operation, broken down by critical and enhanced data.
	<b>AUTOMATIC VEHICLE LOCATION</b>
	The CAD system shall include and Automatic Vehicle Location (AVL) Component. The AVL shall include:
A.	The ability to receive coordinate information from the mobile units

	and display this information on the IMD in near real time mode.
B.	The capability to filter unit display on the IMD to only those units that dispatcher is controlling.
C.	The ability to record historical data and provide “playback” capability.
D.	The capability to filter the playback to a single or specified group of units.
E.	The ability to configure and administer the AVL component.
F.	The ability to interface with other AVL systems, such as those used by private ambulance fleets or aeromedical providers.
	<b>CITIZEN CALL ENTRY</b>
	There are a small number of institutions that account for a large number of the low priority calls that are handled by the PSC. These are primarily parking violations occurring at several locations. The County is interested in any solutions that would permit pre-approved individuals to directly enter very low priority calls into the system and to see the status of these calls at their remote locations.
	<b>MANAGEMENT INFORMATION SYSTEM REPORTING</b>
	This section includes the general records management and management information system requirements of the CAD system for support of Law Enforcement, Fire and EMS operations. The following functional requirements for the compilation of necessary information to produce specified reports, tables, charts, graphs, and maps shall apply to all CAD subsystems and modules. That is, the same mechanisms described in this section shall be accessible to each module and subsystem in the CAD. Unless otherwise noted, these requirements shall apply equally to Law Enforcement, Fire and EMS activities.
	The intent of the CAD Management Information System shall be the compilation of data and statistical information regarding agency activities for decision support and administrative decision-making process.

	Vendor shall indicate the method utilized by, and where appropriate, provide sample outputs of how their proposed CAD meets the requirements specified in the following subsections
5.3.1.69	<b>DATA STORAGE LOCATION</b>
	Generally, all reports that will be discussed in this section will be created using data that is stored in the data warehouse portion of the CAD System as described throughout the RFP. This is done to ensure that reporting operations will not interfere with the operational characteristics of the CAD System.
	The vendor shall describe their system's capabilities to utilize a warehouse type environment for the reporting components of the CAD system.
5.3.1.70	<b>REPORT GENERATION</b>
	The CAD system shall include a set of report generation tools that provide the following minimum capabilities:
<b>5.3.1.70.1</b>	<b>Report Printing and Display</b>
A.	The proposed CAD shall be capable of generating reports for both screen display and printing.
B.	All reports shall be capable of screen display and printing.
C.	The system shall be capable of efficiently exporting report data to a variety of file formats, including, but not limited to Microsoft Office Suite, Open Office and PDF.
D.	Any limitations shall be fully explained in the response to this RFP.
<b>5.3.1.70.2</b>	<b>Menu Selectable</b>
	Reports in the proposed CAD shall be menu selectable for content and generation parameters.

<b>5.3.1.70.3</b>	<b>Command Mode</b>
	The report generator of the proposed CAD shall also include a command mode providing for the generation of a report using selectable parameters from any system files or information not shown as menu selections including narrative, thus providing the capability of performing a data mining function.
<b>5.3.1.70.4</b>	<b>Graphical Constraint Selection</b>
	The system shall include reporting based on graphical constraint entry. For example, the user shall be able to graphically choose an area within the County (by choosing the area on a map display) and display CAD statistics for that area (Community Reports).
<b>5.3.1.70.5</b>	<b>Inclusion of PSC Information</b>
	The report generator of the proposed CAD shall allow for including PSC-specific information on reports, charts, graphs, and maps produced by the system. Such information includes, but is not limited to, report header data and text, County Seal, Department Logos, etc.
<b>5.3.1.70.6</b>	<b>Data Availability to Other Systems</b>
A.	The report generator of the proposed CAD shall have the capability of making CAD data available for other systems and PC applications, using the Microsoft DDE, OLE, ODBC, ASCII, or comparable standards for dynamic data exchange. Examples of the types of software that would access the system's databases through DDE, ODBC, or other available techniques include Microsoft Access, Excel, FoxPro, Seagate Crystal Reports, etc.
B.	Vendor shall fully explain any limitations and available functionality for meeting this requirement in its proposed system.
<b>5.3.1.70.7</b>	<b>Plain Text Search Capabilities</b>
A.	The proposed CAD shall include a mechanism for completing plain-text searches. The proposed system shall include the ability to search narrative information and all other fields for the occurrences of user specified words or partial words.

B.	It shall be possible to retrieve or find all narrative information that contains combination of two or more words/phrases (e.g., find all occurrences of “red” and “Honda”).
<b>5.3.1.70.8 Report Narrative and Title</b>	
	The proposed CAD shall include a suitable mechanism for the entry of a unique report narrative and report title for each report. Although a default narrative and title should be available, the County desires the capability of overwriting these defaults prior to the printing of any report.
<b>5.3.1.71 PREDEFINED REPORTS AND MINIMUM REPORTING CAPABILITIES</b>	
	The proposed CAD shall provide a number of pre-defined reports, custom tailored to meet the needs of the PSC.
<b>5.3.1.71.1 CAD Statistics</b>	
	The proposed system shall include the ability to produce counts and statistical information to be tracked and maintained on-line. The system shall maintain counts of CAD activity.
<b>5.3.1.72 COMPREHENSIVE REPORTING TOOLS</b>	
	The proposed CAD shall include comprehensive reporting tools in each module whereby County personnel can create “pre-defined” reports. The available reports shall be robust, flexible, and easily initiated.
<b>5.3.1.72.1 Automatic / Scheduled Initiation</b>	
	The system shall provide the capability for all reports to be scheduled for automatic initiation by time of day, day of week, etc., and directed to any printer(s) accessible through the County’s network.
<b>5.3.1.72.2 Selection Criteria</b>	
	It shall be easy to change selection criteria and parameters such as starting date and time, ending date and time, subset of data to be

	extracted and aggregated, etc.
<b>5.3.1.72.3</b>	<b>Statistics and List Generation</b>
	The reports shall include summarizing and sub-total statistics, as well as list generation.
<b>5.3.1.72.4</b>	<b>Advanced Reporting Functions</b>
A.	The County is particularly interested in trend analysis, data aggregation, and other more advanced reporting functions.
B.	Vendor shall describe any of these advanced features that are available within its proposed system.
<b>5.3.1.72.5</b>	<b>Graphical Output Requirements</b>
	In addition to tabular reports, the system shall include the ability to either directly generate maps, charts and graphs or to generate maps, charts and graphs through easily invoked PC applications such as Microsoft Excel.
<b>5.3.1.72.6</b>	<b>Sample Administrative Reports</b>
	Vendor shall identify the type of standard (pre-defined) reports available in the proposed system and include sample administrative reports for review/evaluation by the County.
<b>5.3.1.73</b>	<b>AUTOMATIC REPORT EXECUTION</b>
	The proposed system shall have the ability to start reports automatically (at a predetermined time and day, or by a transaction) and to print the resulting output at more than one location.
<b>5.3.1.74</b>	<b>EXCEPTION REPORTS</b>
A.	The CAD reporting system shall allow the setting of user thresholds for given activity identifiers.
B.	A daily, weekly, and monthly report governing exceptions that

	exceed the thresholds will be produced for each predefined (by the system administrator) department/division in the County. The purpose of these reports is to notify administrative personnel of occurrences within their departments/divisions and the earmarking of trends that would otherwise go unnoticed.
C.	Thresholds may be based on calculated results such as response time or time from call pick up to dispatch.
5.3.1.75	<b>WEB-BASED REPORTS</b>
	The proposed system shall also include Web-based reports. The Web-based reports shall be menu driven, available to all authorized users and once requested on-line, they shall be available for printing.
5.3.1.76	<b>TREND ANALYSIS/FORECASTING</b>
	The proposed CAD shall include the ability to extract recent historical incident occurrences and to trend and pattern statistics and, when possible, to forecast future activity.
5.3.1.77	<b>MAPS</b>
A.	The CAD system shall include an easy-to-use map-generation function that is accessible from all relevant system modules.
B.	System users shall be able to extract desired data, reformat it as necessary, and produce a map customized (tailored) to the County without having to depend on programming or technical personnel or Successful Vendor assistance.
C.	Ideally, certain maps will be menu selectable with “step-by-step” instructions available to “walk the user” through the production of the map.
	At a minimum, the system shall support either the direct production or, through an easily invoked (e.g., seamless) third-party mapping tool, the creation of the following general types of maps and geographic analysis

<b>5.3.1.77.1</b>	<b>Thematic Maps</b>
	Thematic maps are maps of geographic boundaries (e.g., response zones, Police districts, neighborhood watch areas, fire box alarm zones, company areas, etc.) that cover the entire County or geographic subset and that are color-coded or differentially shaded to reflect the data contained within each boundary. For example, a map showing the average response time in each Police district in the County.
<b>5.3.1.77.2</b>	<b>Automatic Pin Maps</b>
	Pin maps are maps displaying, through icons or other symbols, the location of specific occurrences in the County or geographic sub-area. For example, a map showing the location of all fire dispatches that occurred in the County during the last two months.
5.3.1.78	<b>SPATIAL DATA AGGREGATION</b>
	The system shall provide the ability to aggregate extracted information into more meaningful statistics. For example, generate crime rates by district statistics by aggregating individual crimes occurring in each district of the County.
5.3.1.79	<b>TREND ANALYSIS/FORECASTING</b>
	The system shall provide the ability to extract recent historical incident occurrences and to trend and pattern statistics and, when possible, to forecast future activity.
	<b>DATA CONVERSION (SEPARATELY PRICED OPTION)</b>
	The existing ADSi CAD system has produced historical data back to about 1993. The Vendor shall explain how this data may be converted and made available via the proposed system.
	<b>PERSONNEL AND TRAINING RECORDS MANAGEMENT</b>
	The Communications center has a requirement for a subsystem to manage the training history and training requirements of center personnel. Ideally the system would provide the basic capabilities such as identifying training and certification requirements and then monitoring the status of center personnel against these requirements. The vendor shall outline the capabilities of their system in this area.

	<b>ON-LINE DOCUMENTS</b>
5.3.1.80	<b>SYSTEM DOCUMENTATION</b>
A.	The system shall provide all system documentation online so that any operator can retrieve information on the system operation, such as command syntax or field definitions.
B.	This online documentation must be searchable based on topic or keyword search.
C.	Information that references other sections of the documentation shall be linked so the operator can jump to the related area without having to perform another search
5.3.1.81	<b>USER DOCUMENTATION</b>
A.	The system shall allow additional documentation to be added by the County.
B.	This documentation may include procedure manuals, notification lists, or user manuals for other systems.
C.	The system shall provide the County with the flexibility to allow searching of the user documentation and linked references similar to the system documentation.
D.	If this requirement is met with the provision of a third party “help” system-authoring tool, the specific tool shall be named in the proposal.
	<b>SYSTEM MESSAGING</b>
5.3.1.82	<b>OPERATIONAL MESSAGING</b>
A.	The system shall be capable of messaging between:
a.	Operator positions within this PSAP
b.	Operator positions in another PSAP supported by this CAD system,

c.	Mobile units on the MDCS included with this proposal
d.	Administrative workstations attached to this CAD System
e.	Remotely or Web Connected CAD workstations.
B.	These messages may be single line or multiple lines.
C.	The sender of the message shall be able to send the message to:
a.	A particular person,
b.	A single position or workstation,
c.	A role (i.e. dispatcher controlling sector 1 or dispatcher controlling this unit, etc.)
d.	A user classification (i.e., all dispatchers),
e.	User defined groups,
f.	Groups of classifications, or all system users.
D.	The system shall provide a directory of persons, positions and groups available to be messaged.
E.	The sender shall have the capability to request a read receipt if the message is to only one user.
F.	The system shall not permit the user to request a read receipt if the message is to be routed to multiple positions or units.
G.	The recipient of the message shall be provided with an audible and visible alert when the message is received.

H.	The audible and visible alerts shall be user definable.
I.	The system shall provide the capability to allow a recipient to:
a.	Save the message,
b.	Reply to the message with minimal key strokes
c.	Forward the message to recipients as described above,
d.	Direct the message to a printer, or
e.	Add the message to an incident
J.	The content of the message will include:
a.	The sender's identification
b.	The sender's computer ID
c.	The date and time sent, and
d.	The message itself.
K.	Transmission and receipt of a message shall be logged to the system history log file.
L.	The content of the message shall be logged to the system history log file.
M.	If a message is routed to a specific individual or position and the individual or position is not logged on the system the sender shall be notified and given the option to queue the message for future delivery.

5.3.1.83	<b>ADMINISTRATIVE MESSAGING</b>
A.	The system shall be capable of processing administrative messages. Administrative messages are not as time sensitive as the operational messages, but may also be several lines long.
B.	Senders shall be able to send messages to:
a.	A particular person,
b.	A single position or workstation,
c.	A role (i.e. dispatcher controlling sector 1 or dispatcher controlling this unit, etc.)
d.	A user classification (i.e., all dispatchers),
e.	User defined groups,
f.	Groups of classifications, or
g.	All system users.
C.	Messages shall be accepted regardless of whether the recipient is logged onto the system at the time they are sent. An interface to the County's E-mail server may be utilized to fulfill this requirement, but operators must be able to access their electronic mail from any system computer.
D.	It is desirable for the administrative messaging capability to interface with the County's E-mail server using SMTP compliant mail / message exchange, so that system operators may send messages to other County staff.
E.	The system shall allow for administrative messages to be sent to station rip and run printers and administrative printers by individual printer and groups such as battalion / dispatch group / etc.

5.3.1.84	<b>MESSAGING GATEWAY</b>
	The County would like to provide operational messaging from users of the proposed CAD system and users of other CAD system in use in the County. The vendors shall provide a description of how this might be accomplished using their system.
	<b>REMOTE ACCESS</b>
5.3.1.85	<b>FIRE / EMS STATIONS</b>
	Each of the Fire and EMS Stations serving the County shall be provided access to the system, with expandability for up to ten more stations in the next five to seven years. The CAD system shall be able to support access for up to 100 remote CAD workstations. This access will be achieved through leased-line LAN/WAN or via the internet with a VPN. The computers in the stations shall function primarily as administrative workstations or limited access workstations as described in sections 5.3.1.1.2 and 5.3.1.1.3 of this RFP. CAD security shall limit access to the system and provide access only to those functions that have been authorized. The authorized functions shall be user definable by the system administrator and include functions such as displaying incident information, displaying maps, staffing Fire/ EMS units, or sending operational messages.
5.3.1.86	<b>ADMINISTRATIVE OFFICES</b>
	Access to the system shall be provided for County Law Enforcement, Fire and EMS administrative offices. This access will be achieved though the County's existing LAN/WAN, leased services or the internet with a VPN connection. If possible, the application to access the system should run on the existing personal computers located in these offices. CAD security shall limit access to the system and provide access only to those functions that have been authorized. The authorized functions shall be user definable by the system administrator and include functions such as displaying current incident information, current staffing information, or a snapshot of the status monitors.
5.3.1.87	<b>DYNAMIC LOCATIONS</b>
	There are situations that arise that will require members of management from the agencies supported by CAD system to access

	<p>the system via their laptops from non-defined locations. The system should provide the capability for personnel to access the CAD system via the internet with the use of a Virtual Private Network. Once connected, these laptops or workstations shall have capabilities similar to those identified in sections 5.3.1.1.2 and 5.3.1.1.3. The vendor shall explain how the proposed systems can provide this capability.</p>
<b>5.4</b>	<b>MOBILE DATA COMPUTER SYSTEM (MDCS) REQUIREMENTS</b>
	<b>OVERVIEW</b>
	<p>There are currently approximately 300 mobile data computers deployed in the field. Wireless connectivity is provided by a combination of leased services (aircards), RD-LAP and wi-fi connectivity. Police, EMS and Fire agencies have identified the potential benefits that a mobile data solution can provide. This section provides the identified needs and requirements for mobile computing, along with the associated interfaces and system functionality. The requirements include providing public safety personnel deployed in the field with access to national, state, and local crime databases and other relevant Law Enforcement, Fire, and Emergency Medical databases, real-time messaging, office automation, and other support for routine daily functions.</p>
	<p>The County will be responsible for providing any mobile data computer hardware (including mobile devices, modems, networks, etc.) that is required for the system. Any mobile data computer hardware, operating system software, databases and associated services included in the response to this RFP shall be separately priced.</p>
	<b>LAW ENFORCEMENT AGENCIES</b>
	<p>The goal of the MDCS for the Law Enforcement Agencies is to provide officers with additional information in the field, to improve officer efficiency, and to increase the safety of the environment that officers work in. Access to state (TIME) and federal (NCIC) databases, as well as the ability to query other local databases for wants, warrants and stolen vehicles, along with the ability to interface with CAD and provide coordinate location data for AVL are all critical functions. This will enable police officers to complete functions in the field that are currently only available to them in the office. Access to this additional information will allow Police officers to become more independent, more efficient, and improve the safety and effectiveness of officers in the field.</p>

	<p>In addition to the benefits described above, direct access to information by officers in the field will also result in a significant reduction in voice radio traffic, reducing workload on dispatchers and teletype operators. Electronic messaging between officers, deputies, supervisors and dispatchers will increase the level of communications that takes place. The reduced voice traffic improves the efficiency of the operation, as well as allows more critical communications to take place in a timely manner.</p>
	<p>The MDCS shall also include software tools that allow field personnel to track their time and self-initiated activities. Tools should be provided to field supervisors to help them monitor, enhance, and summarize their staff's activities and to measure productivity.</p>
	<p>Although the primary device utilized to access the mobile data system will be mobile data computers, the vendor is requested to provide information regarding the use of other smart phone devices.</p>
	<p><b>FIRE AND EMS DEPARTMENTS</b></p>
	<p>The goal of implementing the MDCS in the Fire and EMS Agencies is to make personnel more efficient by extending specific computer capabilities into the field. Mobile Data Computers will provide the ability to enhance communications between dispatch personnel and units enroute or on the scene of an incident. MDCs will also enable the units to maintain electronic copies of standard operating procedures, hazardous materials databases, building layouts, and maps of the area all stored locally on the computer. The system shall provide the capability to automatically track the location of apparatus via the Automated Vehicle Location System, and enable personnel responding to calls for service to update their status using digital rather than voice communications.</p>
	<p>As with the Police Department, the same management reports and tools as described above shall be available.</p>
	<p><b>MOBILE DEVICE QUANTITY PRICING</b></p>
	<p>The vendor shall provide quantity pricing and pricing break points for the mobile data clients. (For example the vendor will provide the per unit price for 100 – 150, 151- 250, etc.)</p>

	<b>FUNCTIONAL REQUIREMENTS</b>
	The proposed MDCS shall meet the following functional requirements:
5.4.1.1	<b>SCALABLE FUNCTIONALITY</b>
	As described above, the mobile data environment at the County is very mixed, and the level of bandwidth provided varies widely. The vendors shall explain in detail how their MDCS provides the ability to scale the functionality of the MDCS based upon the bandwidth available.
5.4.1.2	<b>WINDOWS FUNCTIONALITY</b>
	The system shall support the use of:
A.	Cut / copy / paste,
B.	Keyboard functions,
C.	Custom toolbars / macro support,
D.	Windows-style GUI.
E.	Drop down menu pick lists for all fields that support a predefined set of user entries.
F.	Data shall be capable of being imported or exported from other applications such as Microsoft Word or Excel.
a.	The Vendor shall describe how the proposed system meets this requirement and any exceptions or clarifications that may be required as a result of host system limitations.
G.	Function keys can be added, deleted, reassigned, and configured by a County system administrator.
H.	The application shall support use of a touchscreen for quick and direct access to functions.

I.	Buttons and icons will be sized for effective use with a touchscreen display
J.	A common user interface methodology shall be supported across different user interface screens. Each functional screen shall have, to the greatest extent possible, the same look and feel as the other functional screens provided.
5.4.1.3	<b>DATA VALIDATION</b>
A.	The MDCS should validate entered data.
B.	The system should not allow the input of incorrect data (i.e., date of February 30, marking en route twice, etc.).
C.	The MDCS shall include edit rules to assist in the capture of accurate data.
5.4.1.4	<b>FIELD REFERENCE MATERIALS</b>
	The MDCS should provide reference document with hypertext access to field personnel. Typical field reference materials include:
A.	Departmental policy manuals and Standard Operating Procedures (SOPs).
B.	State and local statutes.
C.	Phone numbers (reverse look-up).
D.	Contact Information.
E.	Hazardous Materials.
F.	Preplans.
G.	County Maps, building layouts, malls, apartment complexes, etc.

5.4.1.5	<b>APPLICATION REQUIREMENTS</b>
A.	The client application shall run continuously even when operating other applications in order to facilitate real-time wireless data network monitoring.
B.	The client application shall be able to be selected by a function key / pointing device when operating in any other mode.
C.	The system shall be designed to support the transfer and display of images (i.e. attachment of a digital picture, receipt of a mugshot or photograph, transmit fingerprints or accident scene diagrams) with appropriate data collection device and application.
D.	The system should facilitate field units to prepare / access incident reports, premise inspections, etc., on hand-held portable devices.
E.	The applications shall support text-based searches of the data local to the MDC.
F.	Mobile and portable mobile data system functionality shall be provided.
G.	Provide the ability to print from the vehicle to a remote printer at Headquarters or at a district station.
H.	The system shall support a portable PDA type of device for undercover, bike, or other non-vehicle based users.
I.	The system shall provide an emergency button function that will automatically send the unit identification and location along with a high priority message indicating that assistance is needed. This message shall be configurable to be sent to the dispatcher and all units or units in a given area.
J.	All applications shall require the use of a user ID and password to

	gain access to the application. A single login is desired using existing County user name and password accounts (cached locally). The login shall provide access to all authorized systems based on the user's security and appropriate permissions.
K.	User privileges and system access shall be controlled from the host server, and can be enabled or disabled based on the user's needs.
L.	The database for all mobile data information shall be ODBC compliant.
5.4.1.6	<b>ALERTS</b>
A.	All audible alerts shall allow for unique configurable sounds for each functional module and type of alert.
B.	All audible alerts shall be able to be muted and subsequently restored as needed.
5.4.1.7	<b>ENCRYPTION</b>
	The data exchanged over the air and stored on the MDC shall satisfy Department of Justice security requirements, including a minimum of 128-bit end-to-end encryption.
5.4.1.8	<b>SCREEN ILLUMINATION</b>
A.	The client application shall be designed to operate in a reduced light condition that allows information to be readable but does not illuminate the user or the vehicle.
B.	The display shall also be able to be readable in sunlight conditions.
C.	Users shall be able to easily adjust screen brightness for specific conditions.
D.	The Vendor shall provide a remote management solution to

	permit 802.11 access points to provide critical operating system updates, virus definitions, and software upgrades without the need of physically touching each device.
E.	This solution shall be able to provide the MDCS administrator the ability to manage these updates remotely and record successful transactions.
5.4.1.9	<b>AUTOMATIC VEHICLE LOCATION</b>
A.	Integrated GPS AVL shall provide accurate positional data for all field units. Transmitted data shall include vehicle-tracking information for maintenance purposes.
B.	Personnel with appropriate security or role shall be able to see (through AVL system) where their units are located and to be able to ascertain their statuses.
C.	The MDCs shall have in-vehicle mapping, showing unit location and call location.
5.4.1.10	<b>QUERIES</b>
A.	The application shall support all current TIME transactions available to mobile devices.
B.	The system shall support all NCIC 2000 requirements
C.	The system shall provide the capability to easily move information in query returns to the TraCS.
D.	The vendor shall discuss how the proposed system would support moving or importing query return data into fields in different field based reporting systems.
E.	To the greatest degree possible, all displayable response data received by the client application from an interfaced MDCS shall be parsed into fields and presented to the user in a formatted display such that it is in an organized and easy to read format.

F.	As discussed in the CAD section of the RFP there are multiple Records Management Systems in use across the County for both police, Fire and EMS agencies. The City of Madison Police Department is in the procurement process now. The vendors are asked to discuss any “query building” tools that they provide that would permit systems administration personnel at the County to construct queries to these RMS systems once the vendors have been selected.
G.	The vendor shall discuss how CAD system information provided to the MDCS can be moved or imported into different field based reporting systems.
5.4.1.11	<b>OPERATOR LICENSE SCANNING</b>
A.	The system should support the of reading both magnetic stripe and bar coded driver's licenses.
B.	Data captured from the scanning of a drivers license should be automatically inserted into forms in the mobile application such as Time Queries
C.	Data captured from the scanning of a drivers license should be automatically inserted into forms in the TraCS application that will be operating on the MDC.
	<b>SPECIFIC OPERATIONAL REQUIREMENTS</b>
	This section contains the detailed specifications for the MDCS.
5.4.1.12	<b>MESSAGE SWITCH</b>
	The MDCS shall support the interconnection of existing computer systems with the MDCS for the purpose of enabling mobile user transactions. This functionality is based upon standard network architecture, and it is envisioned that it will be provided using a component that will be referred to in this document as a Message Switch. Regardless of the name of the device, the requirements in this section cover the anticipated functionality. The requirements contained herein are specific to the Message Switch. However, the Vendor shall be aware that if any requirements as stated in the other

	sections expand upon the required capacity, functionality, or general operation of the Message Switch, they shall be incorporated.
	Vendor shall be aware that any costs associated with computer hardware, operating system software, databases, and associated services included in its Proposal shall be separately priced.
	<b>5.4.1.12.1 Message Switch Interfaces</b>
A.	The Vendor shall provide an interface or interfaces to the CAD system that shall support communications with field users for dispatch, unit status reporting, unit GPS location reporting, and CAD inquiry transactions.
B.	The Vendor shall provide an interface or interfaces to the RMS that shall support communications with field users for RMS inquiry transactions and field report upload.
C.	The CAD system shall interface to TIME, the National Crime Information Center (NCIC), and the National Law Enforcement Telecommunications System (NLETS).
D.	This interface shall be a computer application to computer application interface using the State's latest approved data communications technology, equipment, and interface protocols.
E.	The Vendor shall provide an interface to the e-mail system (configurable by a system administrator to allow/disallow users) that shall support mobile user e-mail transactions.
F.	This interface shall support e-mail exchange over the agency LAN with the County e-mail system as well as between mobile users.
G.	E-mail shall be capable of being allowed at all times and limited on e-mail size rather than network speed. If larger than 10k (for example), e-mail would only be downloaded if high-speed network is available. CAD shall always have bandwidth priority.

H.	The Vendor shall provide an interface to the Intranet (configurable by a system administrator to allow/disallow users) that shall support mobile user browser access to Intranet server resources using a provided mobile client web browser. Intranet traffic should be capable of being allowed at all times, with CAD being given bandwidth priority. Accessing the Intranet shall not suspend any other mobile application communications but shall allow concurrent communications.
<b>5.4.1.12.2 Message Switch Redundancy (Separately Priced Option)</b>	
	The Message Switch shall be offered in a redundant configuration providing automatic fault / failure detection and switchover. The redundant configuration shall be offered as an option.
<b>5.4.1.12.3 Message Switch General Transaction Logging</b>	
A.	The Message Switch shall log all message transactions in a database with an ODBC compliant interface.
B.	A minimum of ninety (90) days of transactions shall be maintained online.
C.	The Message Switch message log entries shall include the date, time, message type, and mobile unit source or destination ID in addition to the message body or content.
D.	To save storage space, file attachments need not be logged, but a record of the transaction shall be logged including the date, time, message type, mobile unit source or destination ID, and an indication of the file transferred.
<b>5.4.1.13 SECURITY</b>	
	The system must meet CIJIS Security Policy 4.5, 7.3.2.3 requirements for Advanced Authentication. Advanced Authentication is the term describing added security functionality, in addition to the typical user identification and authentication of login ID and password, such as: biometric systems, public key infrastructure (PKI), smart cards, software tokens, hardware tokens, or "Risk-based Authentication" that includes a software token element comprised of a number of factors, such as network information, user information,

	positive device identification (i.e. device forensics, user challenge/response questions).
<b>5.4.1.13.1</b>	<b>Screen Blanking</b>
	A user-controlled screen blank-out mechanism shall be included in the MDCS. This feature shall be easily invoked and turned off.
<b>5.4.1.13.2</b>	<b>Login</b>
	The MDCS shall meet the security requirements of the County and a public safety system. The National Crime Information Center (NCIC 2000) requires that each user accessing their system and databases be certified and have a unique user ID and encrypted password. All data exchanged over the wireless system shall be encrypted "end-to-end" with at least 128-bit encryption excluding any of the encryption schemes found to be vulnerable by industry standard groups. Must meet FIPS Publication 140-2 for "Security Requirements for Cryptographic Modules." Standard data processing security measures shall be implemented in the MDCS including. Password complexity shall be configurable by the system administrator and a tool shall be provided for verification of password:
A.	Password blanking on input.
B.	System lockout after a specified number of failed login attempts, with automatic notification to the System Administrator which will include date, time, and MDC number. The system administrator will control the number of failed log in attempts prior to lockout.
C.	Ability for users to change their passwords.
D.	The MDCS shall be able to force users to change their passwords at a prescribed time interval (within a maximum of 90 calendar days). The system administrator will control this feature, including the time interval.
E.	Provide a time-out and/or lock-out capability to minimize the problem of sensitive information being captured by a criminal who commandeers a Police or Fire vehicle and MDC.

F.	Be a minimum length of eight (8) characters.
G.	Not be a dictionary word or proper name
H.	Not be the same as the User ID.
I.	Not to be identical to the previous ten (10) passwords.
J.	Due to specific requirements for EMS, Fire and Police, different login screens may be required for the different departments.
K.	A single login will log users into all other systems requiring login functions.
5.4.1.14	<b>SCANNING AND BAR CODING</b>
	In order to increase officer efficiency, the MDCS shall support the following scanning and optional bar coding capabilities. It should be noted that different hardware scanning devices are required for the different types of scanning capabilities described below.
5.4.1.14.1	<b>Magnetic Strip Reader (Separately Priced option)</b>
	The Magnetic Strip Reader shall provide the ability to load driver's license information into appropriate data entry screens by scanning the magnetic strip included on the driver's license. The information shall be parsed and automatically populate citation and field reports as appropriate.
5.4.1.14.2	<b>Fingerprint Scanning (Separately Priced option)</b>
	The Fingerprint Scanning shall provide the appropriate fingerprint scanning hardware and applications in the vehicle to provide the following capabilities:
A.	Scan (capture) fingerprints in the field.
B.	Load the captured fingerprints into the currently open form(s).

C.	Transmit the form(s) along with the scanned fingerprints to a central application / database.
<b>5.4.1.14.3</b>	<b>Bar Code Scanning (Separately Priced option)</b>
	The bar code scanning shall provide the ability to read information into appropriate data entry screens by scanning the bar code label. The information shall be capable of being parsed to automatically populate reports as appropriate.
<b>5.4.1.15</b>	<b>DIGITAL IMAGES</b>
	The application shall facilitate the capture of digital images from vehicles equipped with digital cameras. The captured images shall be able to be associated with the currently open forms. The MDCS shall provide the capability of sending digital images to a distribution list.
<b>5.4.1.16</b>	<b>SWITCHING BETWEEN MDCS APPLICATIONS</b>
	The MDCS shall allow users to easily and quickly switch back and forth between system applications. MDCS users shall be able to switch between entering data into reports and forms, to handling emergency events, to retrieving query responses, to initiating messages, to updating their status, to reviewing messages, etc., without losing any information that has been entered into the system.
	Partially completed reports should not be lost.
<b>5.4.1.17</b>	<b>NETWORK TIME SERVER SYNCHRONIZATION</b>
	Date and time on the MDCS units is critical to a number of processes. For example, vehicle status updates, report status changes, message sent and message received time stamps, etc., shall all be synchronized between the various MDCS units in the system for the date and time stamping to be useful. It is necessary for the MDCS to synchronize the date and time on all system MDCS units. The MDCS server and/or message switch will obtain the current date and time from the County's Netclock. The County must have more than one internal time source available to CAD host servers. The current date and time shall then be used to synchronize all of the MDCS units logged onto the system.

	Each MDCS unit's system clock shall be updated based on the Netclock date and time. The synchronization shall occur upon successful login and, thereafter, once per County-specified time interval (e.g., every hour).
5.4.1.18	<b>TIME TRACKING FUNCTIONS</b>
	The MDCS system shall provide a time tracking form including the following data entry fields and pass the entered information to the CAD / RMS systems:
A.	Validated activity code.
B.	Narrative description of the activity and remarks.
C.	Location / address of the activity.
D.	Case / citation numbers associated with the activity.
E.	Beginning odometer reading.
F.	Ending odometer reading.
G.	Total time worked (hours: minutes).
H.	Total leave / lost time (hours: minutes).
I.	Total overtime worked (hours: minutes) and reason for overtime.
J.	The beginning and ending date and time for each activity shall be time stamped automatically by the system. In case the computer-generated time stamps are wrong (i.e., the officer forgot to enter his / her activity into the computer and is documenting it after the fact), an additional set of beginning and ending date and time fields will be available for users to correct the system-generated time stamps.

5.4.1.19	<b>CONTEXT SENSITIVE HELP</b>
A.	The MDCS system shall include a context sensitive help system. The help screens shall be context sensitive and available by mouse or keyboard command.
B.	The help program shall contain a search engine, hypertext links, hierarchical contents, and the ability to move back and forth through previously viewed help windows.
C.	A help system shall be local to the device to reduce bandwidth utilization.
D.	Updates to the help system shall be accomplished via the network at a low priority or while in the vicinity of a high-speed access point.
5.4.1.20	<b>QUERIES</b>
A.	The Client Application shall provide formatted data entry screens for each type of CAD, RMS, and TIME inquiry type required by this RFP.
B.	The message switch shall provide the capability to perform cascading queries, where the results of a response may be used to initiate another query.
C.	Query responses shall be subject to the security of the user, and shall only provide information available to the user.
D.	The MDCS will support the following law enforcement query capabilities compatible with NCIC 2000 and data mining functions.
<b>5.4.1.20.1</b>	<b>Vehicles</b>
	Vehicle query based on:
A.	Tag, state, year. (Would also like the capability to query local

	databases for partial tag data.)
B.	Vehicle Identification Number (VIN).
C.	Decal number, state and year.
D.	Multiple tag query. Retrieves owner information for a series of vehicles. Based on Tag, Year, State, and/or VIN
E.	Boat registration number.
F.	Ownership. Retrieve all cars owned by an individual based on name, social security number, age / date of birth, gender, race, driver's license number, and State.
G.	The MDCS shall automatically check the returned owner in TIME, NCIC, DMV. A mechanism, however, shall be provided to only check if the vehicle is wanted or to obtain the registration information without checking the vehicle's owner against the indicated databases.
<b>5.4.1.20.2 Persons Query</b>	
	Persons query based on:
A.	Name, social security number, age / date of birth, gender, and race.
B.	Driver's license number and State.
	Query to go to TIME, NCIC, PRMS, retrieve data on all vehicles owned by an individual based on:
C.	Name, social security number, age / date of birth, gender, and race.
D.	Driver's license number and state.

	Retrieve data on articles owned by an individual based on:
E.	Article type and serial number.
F.	Owner applied number.
	Query to go to TIME, NCIC, and PRMS. Article query returns current owner of the article and its status (stolen, recovered, etc.). Return involvement history for a person based on:
G.	Name, social security number, age / date of birth, gender, and race.
H.	Driver's license number and State.
I.	Query returns a list of involvements in PRMS related to the specified person. Query goes to PRMS database. The query returns, for example, a list of cases in which the specified individual was involved and the nature of that involvement (victim, suspect, etc.).
<b>5.4.1.20.3 Articles Query</b>	
A.	Gun query based on serial number. Query to go to TIME and NCIC.
B.	Article query based on article type and serial number. Query to go to TIME, NCIC, and PRMS.
C.	Gun or article query that returns a list of involvements in PRMS related to the gun or article. Query based on article type and serial number. Query is routed to PRMS database. The query returns, for example, a list of cases in which the article or gun was involved.
D.	Gun or article query that returns a list of article owners in PRMS related to the gun or article. Query based on article type and serial number. Query is routed to PRMS database.

<b>5.4.1.20.4</b>	<b>Address Information</b>
	Items in this section shall also be available to Fire and EMS personnel.
A.	Premise History. A query generated against the CAD database detailing recent dispatch activity occurring in a specific address / location.
B.	At least ten of the most recent, high priority CAD events occurring at the premise will be displayed on the MDCS unit. For example, if an armed domestic violence call is followed by ten, more recent, minor calls (e.g., false alarms); the armed domestic violence call will be one of the ten CAD events displayed on the MDC.
C.	The County will specify the exact format and content of the report.
D.	Hazard / Alert Query. A query generated against the CAD database that returns all the hazards / alerts at or near a location / address.
E.	The County will specify the radius to be searched in fractional miles. The system will return all of the hazards / alerts within the specified search radius.
F.	The hazard / alert information will be sorted by priority and return up to ten hazards / alerts at a time.
G.	The following information will be displayed: hazard / alert type, location, date, and contact information.
<b>5.4.1.20.5</b>	<b>BOLO Queries</b>
	Any query that is run will specifically query the BOLO file for matches. The system shall also permit direct queries to the BOLO files.
<b>5.4.1.20.6</b>	<b>CAD System Queries</b>
	MDCS units shall have access to the CAD database. Responding units need information to perform their duties. The County will

	specify the exact format, field contents, and default field values for the queries.
	The queries described below are provided "on demand." That is, the MDCS display shall only update the information when the query is re-initiated. Selected queries (i.e. Units on duty) will be required to refresh automatically for a configurable period of time.
	The Successful Vendor shall provide the following CAD queries consistent with the specified design:
A.	Units on duty - a list of all units currently on duty and their status, location, and nature code (if assigned to call), sorted by District.
B.	Pending calls for service - available only to a subset of designated users, this query will list all calls for service that have not yet been assigned, with their priority, nature code, and location.
C.	Calls currently being worked - available only to a subset of designated users, list all active calls for service that have been assigned, with their priority, nature code, current status, and location. Query shall default to listing all active calls within the user's agency or sector. However, the system will allow users to retrieve all active calls in the County. These events need to be automatic, event driven updates for Fire and EMS, and not polled. Availability shall be configurable individually by user department. Fire and EMS does not generally restrict view by sector, etc.
D.	Unit history - available only to a subset of designated users, a report detailing the specified unit's activity from designated start time until designated end time.
E.	Call for service summary - a report containing summary information for a call for service. The County will specify the exact content and format of the report. The report can be obtained by entering a specific incident number, an address / location, or an involved person's name.
F.	Calls for service detailed report - a report available only to a subset of designated users that displays all of the information

	including comments and units associated with a specific CAD event.
G.	Responses containing officer safety information shall have both visual and aural alerts that are clearly distinct from normal system responses and alerts
<b>5.4.1.20.7</b>	<b>Hazardous Material Query</b>
	The MDCS shall provide a query to return hazardous material information and hazard mitigation procedures based on the latest edition of the North American Emergency Response Guidebook. The query shall go to a national Hazardous Material database set up to provide this information.
	The ability to receive CHEMTREC information directly on the mobile computer is desired, either via routing of faxed information or by a link to CHEMTREC, which will be accessible from authorized MDCS units.
<b>5.4.1.20.8</b>	<b>Query Prioritization</b>
	The random nature of public safety events can result in a number of query responses being returned to an MDCS unit simultaneously or nearly at the same time. The County will assign a priority code to each type of query. The MDCS shall use this priority to queue the most "important" query responses to the user first, with other, less important responses being routed to the user after the more important responses are reviewed.
	The prioritization process shall take all pending actions (messages, e-mail, dispatch assignments, query responses, etc.) into account. All of these events shall have a priority code assigned to them and the code shall be used to route the events to the user in a logical fashion.
<b>5.4.1.21</b>	<b>MESSAGING</b>
	The MDCS shall include a real-time message system that provides the following functions:
A.	Message data shall be encrypted (minimum 128 bit encryption)

	and compacted.
B.	Messaging shall not be limited to a specific agency (ability to message to personnel in other agencies)
C.	Group assignments described below shall be dynamic. The MDCS system shall coordinate with CAD to find all units currently belonging to a group. For example, a list of Police vehicles in a specific zone or sector should be an actual representation of the currently assigned units in the zone or sector, rather than a predefined assignment of vehicles to zones and sectors.
D.	Free format message entry / edit screen.
E.	Ability to send / reply / forward a message from an MDCS unit to one or more MDCS units. The MDCS shall provide each recipient with the message owner's login ID name and vehicle / unit number. The unit selection shall be from a drop down list of zones and currently logged in units for each zone. Reply messages shall automatically be sent to the unit(s) initiating the message.
F.	Ability to send / reply / forward a message to predefined groups of MDCS units. The MDCS shall provide each recipient with the message owner's login ID name and vehicle / unit number.
G.	Ability to send / reply / forward a message from an MDCS unit to one or more CAD operators either by name or workstation ID. CAD message recipients shall be provided with the message owner's login ID name and vehicle / unit number.
H.	Ability for CAD users to send / reply / forward messages to one or more MDCS units. The MDCS shall provide each message recipient with the message owner's CAD position number and login name.
I.	Alerts MDCS users that they have a message pending.

J.	Messages shall be sent to currently logged-in units / users. The MDCS will gather information on which units and users are currently logged in to the system. This information shall be presented to the MDCS user in a drop-down list or similar method for selection of message recipients.
K.	All messages shall be logged, including who sent the message, the date and time the message was sent, the message content, and if the message was successfully delivered. Such logs shall be maintained online for no less than 90 days, and allow for off-loading to CD, tape, or other storage media for permanent retention. The log shall be searchable by date-time range, specific user(s), partial / complete message contents, or a combination of these factors.
L.	Shall provide the capability to send and receive messages to mobile units and CAD from any Intranet-enabled personal computer. Requires a valid user ID and password.
M.	When a unit receives a positive hit confirmation from a vehicle, person, or other specified query, a configurable message shall be sent to the dispatcher and all units or units in a given area.
N.	The system shall have a message prioritization and organization to arrange messages according to importance, time / date, or local grouping.
O.	The system shall have an inbox where messages are stored; messages are not deleted when new messages come in.
P.	Users shall have access to the County Intranet and mobile messaging, but access to the World Wide Web or Internet mail will be configurable by user to limit access to selected sites for authorized resources only.
5.4.1.22	<b>DISPATCHING FUNCTIONS</b>
	The MDCS shall be fully integrated with the CAD system. By integrating the MDCS with the CAD system, public safety personnel shall be able to more efficiently perform many dispatch-related functions directly in the field without relying on voice

	communications. Dispatched calls should automatically be logged in the activity report.
	MDCS dispatch functions fall into the following broad categories:
A.	Silent dispatch - A vehicle's MDC shall be a full participant in the dispatch process. When a dispatcher assigns a unit equipped with an MDC and logged into CAD, all relevant information regarding the event and the assignment shall appear on the MDC. Software shall automatically update calls if selected fields have been updated. New messages shall provide a configurable audible and visible notification to the user.
B.	Call acknowledgement
C.	Enroute
D.	Self-initiated dispatch - an MDC-equipped unit happens upon an event and dispatches / assigns itself to the event. The unit shall inform CAD that it is responding to the event by sending CAD a digital message specifying the event location, nature code, and other relevant information.
E.	Self Assignment even if not dispatched to the call. The ability for a unit to assign itself to a pending call or active call.
F.	Tracking status - MDC-equipped vehicles shall use digital messages to inform CAD of changes in their status (e.g., en route, on scene, available, etc.).
G.	Updating emergency event records - the CAD system shall maintain an activity log on all events related to emergency incidents (e.g., comments from the scene and witnesses, unit activity, etc.). MDC-equipped vehicles shall use digital messages to update CAD's Call for Service (CFS) activity log records.
H.	Accessing information from CAD - queries shall be available to MDC-equipped vehicles to access emergency incident and apparatus related information from CAD. It is desirable to be able to double click the incident to pull up additional details, and to use

	function keys such as Forward and Backward to quickly progress through the information.
<b>5.4.1.22.1</b>	<b>Silent Dispatch</b>
	The CAD system shall automatically send event information to dispatched MDCS units. This type of dispatch is referred to as silent since the information is not necessarily broadcast over the radio. The silent dispatch may be supplemented by voice communications as determined by the department's SOP.
A.	Silent dispatch messages shall receive a very high priority on MDC-equipped units. MDCS users receiving a silent dispatch shall be notified via a unique visible and audible alarm that they have a pending dispatch message.
B.	Users should be able to easily switch from any application they are running on the MDC to view and respond to the dispatch message without losing any data.
C.	Silent dispatch messages shall contain all of the relevant information about the event, including:
a.	Call taker's name and CAD position ID.
b.	CAD position ID and login name of dispatcher assigning unit to the call.
c.	Other units assigned to the call.
d.	Location.
e.	Nature code.
f.	Priority.
g.	Involved individuals and vehicles.
h.	Phone number.

i.	Comments
j.	Pre-plan information (slide and/or tactical information) and any operating procedures associated with the specific event or location.
k.	Premise information that includes business name, owner information, alarm company name, after-hours contact information, and other relevant premise information.
l.	Hazards associated with the event and its location.
<b>5.4.1.22.2 Self Initiated Dispatch</b>	
A.	A form shall be available in MDC-equipped units that allow them to initiate an event (e.g., an officer spots a drunk and disorderly individual and dispatches him or herself to handle the situation).
B.	All self-initiated dispatch events shall be routed to the pending call area of controlling dispatchers.
C.	The controlling dispatchers shall be prompted to assign backup units and follow other SOP's as contained in the CAD system.
D.	If the officer did not announce the self-initiated dispatch over the radio, the controlling dispatcher shall have the ability to send the information to a group of units, in addition to the ability to announce it.
The following minimum data entry fields shall be included in the form:	
E.	The event nature code (e.g., accident, disorderly individual, traffic stop, etc.) with a default priority that may be overridden by the controlling dispatcher.
F.	Location of the event (should be automatically filled in for AVL-equipped vehicles). The user should be able to override the AVL-provided location in the event that the self-initiated dispatch is not

	located at the current location of the vehicle.
G.	Narrative description.
<b>5.4.1.22.3 Self Assignment</b>	
	The MDCS shall provide the capability for units to review pending calls for service and under specific rules assign themselves to a selected call. The vendor shall explain how their system would permit this and what rules can be put into place regulate this function.
<b>5.4.1.22.4 Status Tracking</b>	
A.	The MDCS shall provide an easy-to-use mechanism for field units to update their status digitally. Soft or hardware buttons shall be easily used by a person in a moving vehicle with gloves on.
B.	The CAD statuses for the EMS, Fire and Police Departments shall be supported by the MDCS. In all cases, the statuses available on the MDCS shall be consistent with the statuses available in the CAD system as specified in Section 5.3.1.42.
C.	Vendor shall be responsible for ensuring that all MDCS statuses are also available in the CAD system.
D.	The MDCS shall clearly inform users whether their status update was completed successfully, accept all status updates from CAD, and display system times for each status change.
E.	The MDCS shall notify all units assigned to a call of the changed status of any other units assigned to the call.
<b>5.4.1.22.5 Police Statuses</b>	
	The following statuses shall be available to Police users in the field using a mobile computer. Additional status messages shall be configurable by a system administrator for system-wide use.
A.	Out of service with indication of type, including data fields for entering the reason to be validated against a locally-maintained

	table and location. The location shall be validated against the geographic reference file.
B.	Off-duty.
C.	On-duty (unit / officer becomes available for their shift) with an indication of type and a data entry field for indicating the officer's current location. The location shall be validated against the geographic reference file or obtained from AVL.
D.	Send a backup unit - unit is requesting that a backup unit be assigned to the activity currently being handled by the unit.
E.	Busy, but available for dispatch.
F.	Busy and not available for dispatch.
G.	In service and available for calls.
H.	En route / dispatch message received.
I.	Arrived / on scene - arrived on scene of dispatched event.
J.	Officer needs help - initiates an emergency message. A system administrator definable emergency message alert with tone will be broadcast to the CAD dispatcher. AVL provides the location of the unit.
K.	Available / call completed.
L.	Transport begun, including a drop down list of type (e.g., prisoner, juvenile, etc.), a validated entry field for the destination, and an entry field for the transporting vehicle's starting odometer reading (starting mileage).
M.	Transport (e.g., prisoner, juvenile, etc.) completed, pre-filled with

	the destination entered above and an entry field for the transporting vehicle's ending odometer reading (ending mileage).
<b>5.4.1.22.6</b>	<b>Fire / EMS Statuses</b>
	The following statuses shall be available to Fire / EMS users in the field using a mobile computer. Additional status messages shall be configurable by a system administrator for system-wide use.
A.	Responding.
B.	Arrival.
C.	Staged.
D.	Primary search completed.
E.	Secondary search completed
F.	Water on fire.
G.	Fire under control.
H.	Patient transferred over
I.	Available on the air
J.	Loss stopped.
K.	At Patient Side (APS).
L.	Transporting to hospital, including a field for entering the destination hospital and priority of the transport.
M.	Arrival at hospital. The hospital name pre-filled from the above

	entry.
N.	In service.
O.	In quarters.
P.	Out of service, not available for dispatch.
<b>5.4.1.22.7 Updating Emergency Event Records</b>	
	The MDCS system shall provide a data entry form to enable field personnel to update CAD's Incident record. The following data entry fields shall be included on the form:
A.	Narrative description / comment - a descriptive field containing up to 250 characters.
B.	Incident number - defaults to the incident to which the unit is currently assigned (silent dispatch or self-initiated event).
C.	If the unit is not currently assigned to a call, the MDCS shall provide the last Incident number to which the unit was assigned as the default value.
D.	The user may override the default Incident number in case the update is for a different call for service.
5.4.1.23	<b>MESSAGES</b>
5.4.1.23.1	<b>Message Receipt</b>
	It is important that the user always receive messages sent to the mobile data computer in a timely manner. As a result, if the mobile computer shall be configured to go into a "sleep" mode after a period of non-use (assuming that the user or unit remains logged on), the computer (and/or modem) shall be configured to "wake up" upon receipt of an incoming message and display the message to the operator. This shall occur automatically without any operator intervention.

<b>5.4.1.23.2</b>	<b>Reception Alerts and Indicators</b>
	The client application shall provide a visible and audible indication upon message receipt. All visual indications shall include a counter showing the number of messages that have not been viewed (in queue counter.) Message receipt shall be associated with an audible alert, which is sounded upon receipt of each message.
<b>5.4.1.23.3</b>	<b>Date and Time Stamping</b>
	All messages received shall have a method whereby the operator can determine the time and date associated with message reception.
<b>5.4.1.23.4</b>	<b>Individual Message Processing</b>
	All messages sent and received shall be individually viewable and able to be saved or deleted on an individual basis. All messages regardless of type shall be able to be deleted as a group.
<b>5.4.1.23.5</b>	<b>Message Progress Indicators</b>
	Any messages sent over an interface or link shall clearly indicate success or failure to the operator. If an interface or link goes down, a notice shall be provided to the operator showing that the link is down.
5.4.1.24	<b>AUTOMATIC VEHICLE LOCATION AND GLOBAL POSITIONING SYSTEM</b>
	The Global Positioning System (GPS) shall provide vehicle location information.
<b>5.4.1.24.1</b>	<b>Automatic Vehicle Location (AVL)</b>
	Proposals shall include an AVL system capable of tracking approximately 500 mobile units.
<b>5.4.1.24.2</b>	<b>Required AVL Functions</b>
A.	AVL coordinates shall be provided to CAD by the MDCS at the County-specified time interval for each logged-in MDC.
B.	The system administrator for the MDCS shall be able to modify

	the time interval and other AVL coordinate transmittal criteria.
C.	Each AVL transmission shall include a time stamp for each transmission.
D.	The frequency of AVL updates shall be tied to vehicle speed so that more frequent updates occur as the vehicle travels at a faster rate of speed.
<b>5.4.1.24.3 MDCS Tactical Map Display</b>	
A.	The MDCS shall include a Tactical Map Display that is consistent with the CAD map display.
B.	The MDCS tactical map shall display the location of pending and active incidents.
C.	Users can limit the MDCS map to only display a subset of pending and active incidents (e.g., only Fire calls).
D.	The MDCS tactical map shall also display the location of all "logged-in" units based on their AVL coordinates.
E.	Users can limit the MDCS map to only display a subset of "logged-in" units (e.g., only Police units).
F.	The tactical map shall use a rule-based approach for displaying information. It shall also have a feature where a user may "de-clutter" the display with the press of a button, changing the amount of information displayed.
G.	There shall be several levels of "de-clutter" that a user can cycle through and get back to default level display.
H.	For example, at a particular zoom level only the major roads and highways should be displayed, while at a different, more detailed zoom level, all local and collector streets will be added to the display.

	The AVL map display in MDC-equipped vehicles shall show:
I.	The vehicle location at all times. The display shall normally be centered on the vehicle's location.
J.	All units assigned to the call to which the vehicle is currently assigned.
K.	The call location to which the vehicle is assigned.
L.	Standard pan and zoom functions shall be provided with a preset default zoom level determined by the County, and shall be modifiable by the County system administrator.
<b>5.4.1.24.4 Travel Route Analysis</b>	
A.	The MDCS shall provide the capability to locate an address / location and describe the travel route from the unit's present location to that address / location.
B.	The travel route analysis shall include analysis of impedance of route (speed of route). This shall be used to provide most efficient route in relative real time.
C.	It shall also provide for temporary road closure, barriers, etc. These shall be highest impedance value (unable to travel).
D.	In addition shall be able to take into account temporary reduced speeds on a route due to construction or other temporary conditions.
<b>5.4.1.24.5 Capture and Replay of AVL Information</b>	
A.	The AVL server shall capture AVL information, organized by vehicle.
B.	Tools shall be provided in the MDCS system to extract this information by one or more units or by groups of units.

C.	Authorized individuals will be able to view this information on the AVL server by "playing back" (with a feature for varying the speed of playback) the track taken by the selected vehicles overlaid on top of a geographic map.
D.	The AVL server shall provide an icon, unit ID label, and the date and time when the vehicle was at its displayed location.
E.	The system shall also provide standard mapping functions such as pan, zoom, annotate, and print for the AVL track display.
5.4.1.25	<b>E-MAIL (CONFIGURABLE OPTION)</b>
A.	MDC users shall be able to organize their mail and address books in a manner consistent with standard Internet e-mail packages.
B.	MDC users shall be alerted when new e-mail is received.
C.	E-mail and attachments shall be filtered to limit size of package before transmission.
D.	The mail client used on the MDCS shall contain a spell checker.
E.	MDC users shall be notified of the availability of new e-mail at times designated by the system administrator (e.g., pending e-mail will be displayed at login, or high priority e-mail will be displayed immediately).
F.	The system shall force users to read / view their e-mail and any attachments prior to their being deleted, saved, forwarded, or replied to.
G.	A "return receipt" option with date and time stamping shall be available to the sender (e.g., court subpoenas, SOP updates, BOLO's, supervisory directions, etc).

5.4.1.26	<b>INTRANET (CONFIGURABLE)</b>
	MDC users shall be able to access the County Intranet applications.
5.4.1.27	<b>TEXT TO VOICE (SEPARATELY PRICED OPTION)</b>
	The MDC application shall provide the capability, controllable by the user, to read message responses, such as a license plate query, aloud to the user. This feature shall be easily enabled or disabled by the operator via function key or icon.
5.4.1.28	<b>VOICE RECOGNITION (SEPARATELY PRICED OPTION)</b>
	It is desired to have the user be able to initiate a limited number of commands through verbal communications. These commands shall initiate transactions, such as running a license plate query, without any physical operator intervention. The Vendor shall describe the capabilities provided by the system, including requirements for wired or wireless microphones to be either worn by the user or mounted in the vehicle.
<b>5.5</b>	<b>CAD INTERFACES</b>
	Vendors shall address in written form each numbered section and sub-section of this RFP. If the Vendor takes exception to a specific paragraph, they shall fully describe their exception in the appropriate section of the proposal.
	<b>E9-1-1</b>
A.	The CAD system shall integrate with the existing Positron Lifeline 100 with Intelligent Workstations.
B.	The CAD system must be able to determine through the 9-1-1 interface which communicator has a particular 9-1-1 call.
C.	The CAD system must automatically populate the CAD incident screen of the communicator handling the call with the associated

	ANI/ALI information of that call.
D.	The address shall be located in the caller location field of the CAD call entry form.
E.	If the caller location is the location of the call, the system will provide the communicator the ability to copy the caller's location to the location of the call field on the CAD call entry form with a single keystroke or click.
F.	If the caller location is not the location of the call, the system will provide the communicator the ability to move the cursor to the location of the call field on the CAD call entry form with a single keystroke or click.
G.	Once the ANI/ALI information has been associated with the call's incident record, any other communicator (call taker, dispatcher, supervisor, etc.) monitoring the call will also be able to view the call's ANI/ALI information.
H.	The system shall also center and zoom the IMD to the caller's location and place an icon on the map to indicate the caller's location.
I.	It shall be a site option if the system shall continue to display the caller's location if different from the location of the call.
J.	The system shall be capable of capturing and retaining the off hook (answer) time of calls.
5.5.1.1	<b>WIRELESS CALLS</b>
A.	For Phase 1 calls, the system shall place an icon on the map indicating the tower location.
B.	For Phase 1 calls the system shall include in the above mentioned icon the general heading of the tower face receiving the call.

C.	The vendor shall explain in detail where their system places the tower location and heading in the call record.
D.	For phase 2 calls the system shall place an icon on the map indicating the location of the 9-1-1 caller based upon the coordinate data received.
E.	The system shall provide the capability to translate the 9-1-1 coordinate data into a street address and record this address in the location of caller field in the CAD call entry form.
F.	The vendor shall explain in detail the methodology utilized by the proposed system to translate the coordinate data into a street address.
G.	The vendor shall explain in detail how their system and interface will process the rebidding of the system.
5.5.1.2	<b>MULTIPLE PSAPs</b>
	Although the initial installation of the system will occur at a single PSAP, it is possible the system may be deployed or extended to other primary PSAP's utilizing other Customer Premise Equipment.
A.	The vendor shall explain in detail the capabilities of the proposed system and interface to support multiple PSAP's.
5.5.1.3	<b>NEXT GENERATION</b>
A.	The vendor shall explain in detail the capabilities of their system to support the emerging standard for Next Generation 9-1-1.
	<b>CALLER IDENTIFICATION</b>
	The vendor shall explain in detail the capabilities of the proposed system to support the acceptance of Caller ID information from the telephone system and if the vendor provides any lookup capabilities based upon the information received. The ability to locally flag calling numbers – whether delivered via ALI or caller ID – is desired.

**MOBILE DATA COMPUTER SYSTEM**

The CAD system shall be integrated with the proposed Mobile Data Computer System (MDCS) and the integration should provide the following capabilities.

- A. Silent/digital dispatch – the ability to transmit incident information to assigned units through the mobile data system without having to utilize voice communications.
- B. Status updates – units in the field will be able to directly update their status by activating icons/function keys without having to utilize voice communications.
- C. The time source for the MDCS shall be synchronized with the rest of the system so all times are consistent throughout.
- D. Messaging – the CAD system will provide a mechanism for sending and receiving messages from mobile units as described elsewhere in this RFP.
- E. All messages will be tracked (time stamped) in a reportable format.
- F. All messages will have the receiving and transmitting parties identified and recorded.
- G. Support for remote CAD functions – authorized users will be able to perform a subset of CAD functions on their mobile units for example: Supervisors will be able to query the CAD system to obtain information such as the status of one or more units, list of active calls, list of pending calls, etc. Units assigned to a call will be able to query and update CAD by performing functions such as obtaining detailed call information, adding a comment/record to a call for service, retrieving location and status of all units assigned to the call, etc.

	<b>RADIO SYSTEM</b>
5.5.1.4	<b>PUSH TO TALK IDENTIFICATION</b> CAD shall capture and display unit/portable PTT ID and translate that ID to a unit number. The CAD shall display the unit ID of the vehicle speaking on the radio on the selected talk group.
5.5.1.5	<b>EMERGENCY ALERT</b> The CAD shall also display and record in the unit/incident record at any time when an emergency button has been activated and display which radio activated the button and center the Intergrated Map Display to the location of the unit or the portables assigned to that unit.
5.5.1.6	<b>MODIFY ID'S</b> The dispatch supervisor must have the ability (via the CAD) to easily modify unit IDs for mobile and portable radios.
5.5.1.7	<b>AFFILIATION</b> The system shall provide the capability to display the talk group that a unit is affiliated and when that unit manually changes to a different talk group.
	<b>TRANSACTION INFORMATION FOR THE MANAGEMENT OF ENFORCEMENT (TIME)</b> The proposed systems shall include an interface that will facilitate the exchange of data between the Dane County CAD system and the TIME System.
A.	The proposed CAD and mobile data computer systems must both interface to the TIME System.
B.	The TIME interface shall be compliant with NCIC 2000
5.5.1.8	<b>SEAMLESS ACCESS TO TIME</b> The proposed TIME interface shall support a seamless access mode. In this mode data entered into either the proposed CAD and MDCS will automatically (seamlessly) be formatted to fit standard TIME queries, routed to TIME through this interface, and a notification of a

	response returned to a specified location on the originating workstations.
<b>5.5.1.8.1</b>	<b>Seamless Query Generation</b>
	Seamless queries to TIME should automatically be generated during certain system related actions. The County expects that the proposed CAD system and MDCS will support seamless queries in at least the following system related actions:
A.	Traffic stop entry
B.	Officer initiated event data entry
<b>5.5.1.9</b>	<b>SEAMLESS QUERY DATA FIELDS</b>
	Only a specific set of data entry fields will be associated with this capability. The County will work with the selected Vendor to identify all of the fields that will be sent to TIME during a seamless query.
	At least the following data fields shall be included in, and generate seamless queries to TIME:
A.	Name(s) and Date of Births
B.	Driver's License Number.
C.	Vehicle tags.
<b>5.5.1.10</b>	<b>TIME DATA ENTRY SCREENS</b>
	The proposed TIME interface shall support a data entry screen mode. In this mode users activate a set of preformatted, fill-in-the-blank type data entry screens for frequently used TIME queries and functions. This type of access is required to support routine person, vehicle and property checks that may not be associated with CAD/MCDS actions.
<b>5.5.1.10.1</b>	<b>Minimum Supported Functions</b>
	At a minimum the following queries and functions will be supported in fill-in-the-blank type data entry screens:

A.	Drivers License Query.
B.	Vehicle Tag Query.
C.	Person Query.
D.	Gun Query.
E.	Property Query.
F.	Vendors shall indicate the functions and queries supported by their proposed interface through fill-in-the-blank type data entry screens.
<b>5.5.1.10.2 Entry Screen Maintenance</b>	
	The proposed TIME interface should provide a means for creating new screens as needed. The County prefers to be able to accomplish the screen maintenance/update without having to rely on the selected Vendor's programming or consulting assistance. Vendors shall indicate how their TIME screens are maintained.
<b>5.5.1.11 COMMAND LINE DATA ENTRY</b>	
	The proposed TIME interface shall support a command line mode for generating TIME queries. Users access this function by entering a valid command followed by the appropriate values. This functionality must be provided for a select number of frequently used TIME queries. Vendors shall indicate the TIME functions and queries supported by their proposed interface through a command line format.
<b>5.5.1.12 TIME EMULATION</b>	
	The proposed TIME interface shall support a TIME emulation mode. In this mode, users shall be able to perform all authorized TIME functions by directly entering TIME commands into a separate emulation window on the workstations.

5.5.1.13	<b>SECURE ACCESS</b>
A.	The proposed System will ensure through user security (login ID and password) and associated privileges that only authorized users and/or workstations are able to complete TIME transactions.
B.	Vendors will indicate what controls exist within the proposed TIME interface to prevent criminal history and other confidential information from being accessed by workstations other than those that are authorized and under the operation of authorized users.
5.5.1.14	<b>TRANSACTION LOGGING</b>
A.	The proposed TIME interface will adhere to all State and Federal mandates and auditing requirements.
B.	The TIME interface must provide for automated logging and retrieval of all criminal justice inquiries consistent with State and NCIC regulations and policies.
C.	All TIME interface transaction will be logged in the system's transaction log regardless of whether they were initiated seamlessly, via fill-in-the-blank type forms, or through a command line.
D.	The transaction log for TIME queries and responses shall contain at least a 180 days of historical transactions.
5.5.1.15	<b>CASCADING QUERIES</b>
A.	The TIME interface shall provide the capability to provide cascading queries. Cascading queries are seamlessly generated queries that are based on data returned from a previous query. An example would be the ability to perform a warrant query utilizing the registered owner's name that was provided by a vehicle registration query.

B.	The vendor shall describe the capabilities of the proposed system to provide cascading queries as describe above and shall identify what queries will be provided.
	<p><b>FEDERATED QUERY CAPABILITY</b></p> <p>It is desired that the system have the capability to perform federated queries. Federated Queries are defined as a single query that will be processed against multiple systems and return multiple returns. An example of this would be a single name search that would query the DMV, TIME and local RMS systems. Federated queries should be generated on both seamless queries and manual queries as described above.</p>
	<p><b>FIRE STATION ALERTING</b></p>
A.	The system shall provide an interface to the Motorola Gold Elite radio consoles to facilitate the toning of dispatched fire and EMS units. Sometime prior to 2013, a new console interface will be selected and installed. Vendors shall describe connectivity with Motorola MCC7500, Harris Maestro and Avtec Scout.
B.	The vendor shall describe the features and capabilities of the interface to the radio consoles.
C.	The system shall provide and interface to the US Digital Designs Phoenix G2 fire station alerting system.
D.	The vendor shall outline their experience with interfacing to the Phoenix G2 system.
	<p><b>FIRE STATION FAXING</b></p>
	The County is interested in the potential of utilizing a fax system to support the delivery of “rip and run reports” to certain volunteer staffed fire stations. The vendor shall describe the capability of the proposed system to support this function.
	<p><b>MULTIMODAL NOTIFICATION</b></p> <p>The system must have the capability to deliver notifications utilizing a number of different modes. The system shall provide:</p>

A.	The ability to interface with multiple paging venues,
B.	The automatically page resources based on incident type and/or location,
C.	The ability to manually browse/search staff lists and page personnel by selecting one or more individuals/groups off the list.
a.	The ability to group pages by defined department (certain level call automatically pages a group)
b.	The ability to page all units on duty
c.	The ability to page groups
d.	The ability to page individuals
e.	The ability to page crew members
D.	The ability to send email and SMS text messages to one or more selected individuals/groups in a fashion similar to that described for paging.
E.	The ability to send SMS text messages to one or more selected individuals/groups in a fashion similar to that described for paging.
	<b>AVL</b> The proposed CAD system should be able to accept and display automatic vehicle location (AVL) information provided by the AVL system.
5.5.1.16	<b>REAL-TIME DISPLAY OF VEHICLE LOCATIONS</b> Through the AVL interface, the proposed CAD system must be able to provide real-time display of vehicle locations on the associated Integrated Map Display.

5.5.1.17	<p><b>MODIFIABLE PARAMETERS</b></p> <p>The proposed CAD system must be able to interact with the AVL system through this interface to establish system parameters such as frequency of location transmittal by AVL equipped vehicles.</p>
5.5.1.18	<p><b>DISPLAY OF UNIT IDENTIFIERS</b></p> <p>The proposed CAD system must be able to accept and utilize unit ID information provided through the AVL interface for spatial display and for dispatch purposes. That is, the unit IDs provided by the optional AVL system must be displayable on the CAD system's IMD and used for unit recommendations.</p>
5.5.1.19	<p><b>RECORDING AND PLAYBACK OF AVL INFORMATION</b></p>
A.	<p>The AVL system and interface shall provide the capability to capture and record the AVL data received.</p>
B.	<p>The system shall provide the capability to replay the AVL data that has been captured and recorded.</p>
C.	<p>The system shall have the ability to specify both a single unit and multiple units to be displayed during the replay of recorded AVL data.</p>
D.	<p>The system shall provide the capability to "turn on" and "turn off" AVL data recording.</p>
E.	<p>The system shall be able to select both a single unit and multiple units to "turn on" and "turn off" AVL data capture and recording.</p>
	<p><b>PRIORITY DISPATCH CORPORATION PRODUCTS</b></p>
	<p>The County uses the EPD, EFD and EMD ProQA products by Priority Dispatch Corporation. The County <b>will not</b> consider any vendor that is not at the certified level for all of the previously mentioned products. The vendor shall explain <b>IN DETAIL</b> how their system integrates to the PDC products particularly in a multi-discipline call (a call requiring at least two different agency types such as both police and EMD). A detailed functional description is desired.</p>

**STATE TRAFFIC OPERATIONS CENTER**

The system will be required to provide data to the Wisconsin State Traffic Operations and Safety Laboratory while complying with the WisDOT InterCAD Data Exchange Guidelines. The guidelines are in line with the 2-way data transformation of incident summary information between the public safety (GJXDM) and transportation (IEEE 1512) domains. A copy of the guidelines are posted at danepurchasing.com.

**OTHER CAD SYSTEMS**

As described in other sections of this RFP there are a number of jurisdictions that share dispatch responsibility with the PSC. These are primarily situations in which the PSC is responsible for dispatch of Fire and Emergency Medical Services and the municipality dispatches for the law enforcement. There are also a number of different PSAP scenarios as to the receipt of landline calls, cellular telephone calls and VOIP calls. Currently these situations are handled in a number of different ways that vary from transferring the calls, passing along information, to the installation of a workstation from the PSC CAD in a remote dispatch center to allow the center to see the CAD calls.

To better handle these situations, the County would like to capitalize on the many sets of Information Exchange Package Documentation (IEPD) that have already been developed to permit the standardized exchange of information between CAD systems. This section identifies the scenarios that would be expedited by the development of standards based CAD to CAD interfaces.

For pricing purposes, the vendor shall assume that the other CAD is capable of exchanging information using the same IEPDs as models. The exchanges will be two way, such that the PSC CAD must be capable of receiving information as well as pushing it

For each of the following sections (5.5.1.20 through 5.5.1.25) the vendor shall address not only the capabilities of the proposed system and their company in providing the information exchange, but also their experience in providing the exchange.

The vendor is asked to provide a list of agencies at which they have implemented information exchanges based on the NIEM model. If the vendor cannot identify exchanges based on the NIEM model, they can identify other locations they have implemented CAD to CAD information exchanges.

5.5.1.20	<b>CALL DATA TRANSFER</b>
	In this scenario, a call is received at one PSAP where the data is collected and entered into the local CAD system, but the dispatch should occur from another dispatch center. Ideally the following should occur when the initiating PSAP is the PSC:
A.	The information is entered into the CAD system,
B.	The information is passed to the correct agency's CAD system,
C.	Some form acknowledgement received or the person making the original entry notified,
D.	The call information and the transfer recorded in the CAD system and
E.	The call closed.
F.	Ideally the following will occur when the initiating PSAP is not the PSC, but the dispatching center is the PSC:
G.	The call information is received from the initiating PSAP,
H.	The PSC CAD sends an acknowledgment to the initiating CAD,
I.	The call information is placed in the initiate incident form and validated,
J.	The call is processed as any other CAD call for service.
5.5.1.21	<b>JOINT CALLS</b>
	In this scenario, a call is received at one PSAP where the data is collected and entered into the local CAD system. The call for service requires a dual agency type response (police and EMS for example). In this case the call must be entered into the local CAD system and processed, the information transferred to the CAD system of the

	second agency where it will be processed. Additionally, there is benefit in both dispatch centers being able receive status updates of all units regardless of agency that are responding to the call for service. Ideally the following should occur when the initiating PSAP is the PSC:
A.	The information is entered into the CAD system
B.	The information is passed to the correct agency's CAD system.
C.	Some form acknowledgement received, or the person making the original entry notified,
D.	The call is processed as another call for service.
E.	As units responding to the call change status the information associated with the status change is passed to the other CAD system.
F.	Ideally the following will occur when the initiating PSAP is not the PSC, but one of the required agencies is dispatched by the PSC:
G.	The call information is received from the initiating PSAP,
H.	The PSC CAD sends an acknowledgment to the initiating CAD,
I.	The call information is placed in the initiate incident form and validated,
J.	The call is processed as any other CAD call for service,.
K.	As units responding to the call change status the information associated with the status change is passed to the other CAD system.

5.5.1.22	<b>ASSISTANCE REQUEST</b>
	In this case assistance from an agency in one dispatch center is requested by an agency serviced by a different center is requested. If the request is denied no other action takes place, however, if the request is granted, then the processing will be similar to a joint call.
	Ideally the following will occur:
A.	The requesting agency will generate a request for assistance identifying the type or nature of the request.
B.	The interface will push the request to the CAD of the requested assistance.
C.	The receiving agency will either grant or decline the request.
D.	If the request is granted, the requesting agency will forward the call information as if the call being processed were a joint call as described above.
5.5.1.23	<b>BOUNDARY CALL</b>
	In this scenario, the CAD system determines that a call for service is within a pre-defined distance to a boundary of an agency serviced by another CAD system. When a call occurs within this boundary area, the CAD system via the CADS to CAD interface will send a message to the other agency's CAD system so advising them. In that this is an information only transaction, no other action is required.
5.5.1.24	<b>NOTIFICATION OF CALL IN JURISDICTION</b>
	Similar to the boundary call scenario, the notification of a call in jurisdiction will occur a dispatch center dispatches an agency to a location that is shared. An example of this would be an EMS call dispatched to a location where the police department is not dispatched by the PSC. In this scenario, the CAD system via the interface will send a message to the second dispatch center notifying them that EMS has been dispatched to a location within their jurisdiction. In that this is an information only transaction, no other action is required. These situations may be set up locally to act as Joint Calls.

5.5.1.25	<p><b>BE ON THE LOOK OUTS (BOLO)</b></p>
	<p>When any agency issues a BOLO, the CAD system via the interface shall send the BOLO information to any CAD system on the interface.</p>
	<p><b>RMS SYSTEMS</b></p> <p>As stated earlier in the RFP there are a number of RMS systems that the CAD system will share data with. The vendor shall explain the capabilities of their system to satisfy the requirements identified below. If the vendor has an alternative approach they should include it in the explanation.</p>
5.5.1.26	<p><b>QUERY CAPABILITY</b></p>
	<p>Given the many different agencies supported by the PSC and the variety of Records Management Systems supporting the agencies, the PSC is interested in any tools included with the proposed CAD system to facilitate the building of queries to a variety of ODBC base RMS systems. The vendors shall explain in detail their capabilities in this area.</p>
5.5.1.27	<p><b>DATA TRANSFER</b></p> <p>To provide an efficient method to provide CAD information to multiple RMS systems the following approach shall be taken. The CAD system shall provide the following capabilities:</p>
A.	<p>The system shall provide the capability to write CAD call for service information to a database or file outside of the CAD System.</p>
B.	<p>The system shall provide the capability to write the call for service information multiple times over the life of the call.</p>
C.	<p>The system shall provide the capability that the system administrator can define the triggers for the CAD system to write the call for service information.</p>
A.	<p><b>SMART PHONES</b></p> <p>The vendor shall describe in detail any capabilities of the proposed system to support the transmission of CAD call for</p>

	service information to Smart Phone devices as a basic function of the dispatch process.
B.	The vendor shall describe any capabilities of the proposed system to engage in two-way communications with Smart Phone devices as a part of the CAD dispatch process.
C.	Software or other means to facilitate such communication should be specific to the smart phone application, as opposed to simply allowing a smart phone's browser to access secure web pages designed for use by regular computers.
<b>5.6</b>	<b>MDCS INTERFACES</b>
	<b>CAD</b>
	The MDCS shall interface to the CAD system to provide:
A.	Silent/digital dispatch – the ability to transmit incident information to assigned units through the mobile data system without having to utilize voice (RF) communications.
B.	Status updates – units in the field will be able to directly update their status by activating icons/function keys without having to utilize voice communications.
C.	Messaging – the CAD system will provide a mechanism for sending and receiving messages from mobile units as described elsewhere in this RFP.
D.	All messages will be tracked (time stamped) in reportable format.
E.	All messages will have the receiving and transmitting parties identified and recorded.
F.	Support for remote CAD functions – authorized users will be able to perform a subset of CAD functions on their mobile units for example:
a.	Supervisors will be able to query the CAD system to obtain information such as the status of one or more units, list of

	active calls, list of pending calls, etc.
b.	Units assigned to a call will be able to query and update CAD by performing functions such as obtaining detailed call information, adding a comment/record to a call for service, retrieving location and status of all units assigned to the call, etc.
	<b>TIME</b>
	The MDCS shall be interfaced to the TIME system to provide the capabilities identified in section 0.
	<b>BADGER TRACS</b>
	Agencies throughout the County utilize the TraCS system for traffic related reporting.
A.	The vendor shall list their experience interfacing to Badger TraCS at the mobile client level.
B.	The vendor shall list their experience interfacing to the implementation of TraCS in other states.
C.	The system shall be capable of transferring CAD data to the TraCS system at the mobile client.
a.	The vendor shall explain how the transfer occurs.
b.	The use of Windows copy and paste may be acceptable, but it is not the desired method.
D.	The system shall be capable of moving information captured via a Drivers License scan into TraCS forms on the mobile client.
E.	
F.	The system shall be capable of moving information from TIME and other query returns into the TraCS forms.
	<b>FIELD BASED REPORTING SYSTEMS</b>
	Agencies throughout the County utilize Field Based Reporting Systems provided by a number of different vendors, and the County desires to enhance the capability of these system by expediting the entry of CAD information, drivers license scanned information and

	query returns into the Filed Reporting Systems.
A.	The vendor shall list their experience interfacing to Field Reporting Systems provided by other vendors.
B.	The vendor shall discuss how they could provide the movement of CAD information to Field Reporting Systems provided by other vendors.
C.	The vendor shall discuss how they could provide the movement of scanned Drivers License information to Field Reporting Systems provided by other vendors.
D.	The vendor shall discuss how they could provide the movement of query return information to Field Reporting Systems provided by other vendors.
<b>5.7</b>	<b>ACCEPTANCE TESTING</b>
	This section of the RFP describes the acceptance testing procedure that will occur before the system is accepted. The vendor shall indicate their understanding and agreement or disagreement to the requirements in this section.
	<b>FUNCTIONAL ACCEPTANCE TEST</b>
	The functional acceptance test will be conducted to verify that the installed system provides the functional capabilities described in the Vendor's proposal, the contract, any change orders and any other defined requirements document.
A.	The Vendor will be expected to demonstrate to the PSC that each function and option operates as described in the previously listed documents.
B.	Should any failures be identified during the test, the Vendor will have a reasonable opportunity to correct the deficiencies, after which a retest may be scheduled.
C.	The PSC, at its sole discretion, may require a retest of the failed functions, or may elect to require the Vendor to conduct a complete retest.

D.	This process will continue until all functions have passed or it becomes obvious that the system under test will not support one or more functions that it was designed to accomplish.
E.	At this point, the PSC may negotiate a settlement with the Vendor, or may take other steps as deemed appropriate.
F.	
G.	System training will not begin until the Functional Test has been passed.
H.	Throughput testing will not begin until the Functional Test has been passed.
	<b>THROUGHPUT ACCEPTANCE TEST</b>
	The Vendor must conduct and pass system throughput performance tests for the system. The throughput test must exercise every component of the system. These tests will verify that the installed system will meet the expected throughput capability and provide the expected operational speed.
A.	The throughput level to be tested will be based on the peak number of transactions experienced by the PSC, combined with the selected Vendor's claim for system throughput capability.
B.	The Vendor will be required to execute and provide a standard benchmark test based on peak load characteristics with a transaction rate corresponding to the system loading information.
C.	Administrative workstations shall not adversely affect transaction response time in the Dispatch Center.
D.	System Back-up shall not adversely affect transaction response time in the Dispatch Center.
E.	System failover shall not adversely affect transaction response time in the Dispatch Center.
F.	For the purpose of the Throughput test response time is defined as

	the time between the depression of the last keystroke or pointing device activation (e.g., click) and the appearance on the workstation/terminal of the last character of the initial response (e.g., first page, pop-up window, etc.).
G.	Vendors shall describe how they intend to measure response time if different than described herein.
H.	
I.	The PSC reserves the right to review and approve the methods used to measure response time.
J.	
K.	Should any failures be identified during the performance test, the Vendor will have a reasonable opportunity to correct the deficiencies, after which a retest may be scheduled.
L.	The PSC, at its discretion, may require a retest of the failed functions or may elect to require a complete retest.
M.	This process will continue until all functions have passed or the system fails to provide the throughput required by the PSC. At this point, the PSC may negotiate a settlement with the Vendor or take other steps as deemed appropriate.
N.	Vendors shall provide details in the proposal(s) on how acceptance tests will be conducted.
O.	System throughput testing will last for a minimum of three hours and involve sufficient transactions to validate the capabilities of the CAD/MDCS systems.
P.	All subsystems, including TIME/NCIC, messaging, etc., will be exercised during this test; however, delays as a result of external systems will not be a cause for failure.
Q.	System cutover will not occur until Throughput testing has been passed.

	<b>RELIABILITY ACCEPTANCE TEST</b>
	The PSC will test the installed systems to ensure that they meet the system reliability requirements agreed to by the Vendor.
A.	The reliability test will last a minimum of 90 days.
B.	During the reliability testing period the system will be utilized as designed. The vendor will agree that use of the system during the reliability testing period will not constitute productive use of the system.
C.	During this period all system downtime will be recorded and tracked. If the total recorded system down time reaches a level that precludes completion of the test period within the reliability parameters the test will be terminated and the vendor will be notified. (Although the test has been terminated it will be the PSC's choice as to continuing to use the system).
D.	The vendor will be provided an opportunity to make system modifications so long as those modifications do not interfere with the use of the system by the PSC, and the test will be restarted.
E.	The vendor shall have two opportunities to restart the test.
F.	If the system fails to pass the reliability test as described above, the PSC may negotiate a settlement with the Vendor, or may take other steps as deemed appropriate.
	<b>INTEGRATED MAPPING ACCEPTANCE TEST</b>
	The Vendor shall perform acceptance tests to verify the accuracy of the Mapping Systems.
	<b>Each Vendor shall provide details in his proposal(s) on how testing will be conducted. Final system testing procedures will be mutually agreed upon prior to system testing.</b>
<b>5.8</b>	<b>TRAINING</b>
	Vendors shall address in written form each numbered section and sub-section of this RFP. If the Vendor takes exception to a specific

	paragraph, it shall fully describe the exception in the appropriate section of the proposal.
	<b>GENERAL</b>
	Training on all system functions will be provided by the Vendor prior to commencement of the reliability test period. Training will include sufficient information and experience to familiarize communications, public safety, technical support, and maintenance personnel with system features and operations for their particular assignments. Training will include, at a minimum, hardware operation, operating system maintenance utilities, and application software features. All training (unless otherwise negotiated) will take place within Dane County. In no case will ad-hoc or demonstration-only training be considered adequate to fulfill the training requirement for any operational level position.
5.8.1.1	<b>TRAINING MATERIALS</b>
	All training will be performed using document-based training materials provided by the Vendor. Such documentation, at a minimum, will include hardware user manuals, software operational texts, and tutorial examples. Any and all instructional materials, media presentation devices, presentation media, and course instructors will be provided by the Vendor.
5.8.1.2	<b>PERMISSION TO REPRODUCE</b>
A.	Since the PSC intends to conduct all subsequent line-level training internally, it shall be necessary for the Vendor to grant the PSC permission to reproduce any and all training materials for purposes of training agency and County personnel.
B.	To the extent possible, all such training materials should be made available to the PSC in electronic format.
5.8.1.3	<b>PERMISSION TO VIDEO RECORD</b>
	Since the PSC intends to conduct all subsequent line-level training internally, it shall be necessary for the Vendor to grant the PSC permission to video record any and all training sessions for the for purposes of training agency and County personnel.

5.8.1.4	<b>EXPERIENCE OF VENDOR TRAINERS</b>
	The Vendor shall submit a resume, a list of training classes presented, and prior client references that have been trained by each of the Vendor's proposed training personnel. The PSC shall interview the Vendor's training team, and shall mutually agree on the training package and the qualifications of the training personnel prior to the development and execution of the training program.
5.8.1.5	<b>TRAINING PLAN</b>
	The Vendor shall submit a training plan that specifically identifies:
A.	The specific classes to be conducted,
B.	The prerequisites for each class
C.	The duration of each class,
D.	The number of times each class will be offered,
E.	The maximum number of students permitted in each class.
	<b>TRAINING REQUIREMENTS</b>
	Training tasks shall include, but not be limited to:
A.	Applications software features and integration with other applications.
B.	Ad-hoc report generation and data query.
C.	Database maintenance and tuning/optimization.
D.	Entering and maintaining users in the system.
E.	System parameter definition and table configuration.

F.	User definition and maintenance.
G.	Security definition and management.
H.	System Operation Recovery.
I.	Backup creation and maintenance.
J.	Installation and re-location of workstations.
K.	Operation and maintenance of printing devices.
L.	First level troubleshooting and diagnostics.
5.8.1.6	<b>SCHEDULING</b>
	All training courses shall be scheduled and approved by the PSC at least 30 days in advance.
5.8.1.7	<b>TRAINING UTILITIES</b>
	In addition to formalized training programs, the Vendor shall list any electronic utilities that provide an on-line or off-line training environment. The nature of these utilities shall be presented, along with the content of such courses. These utilities should simulate operational scenarios using live parametric data wherever possible.
5.8.1.8	<b>ADMINISTRATIVE ON-SITE TRAINING</b>
	The Vendor shall conduct separate comprehensive classroom administrative operator training for the CAD / MDCS systems. Sessions for the administrative personnel will occur before the new system is placed in service.
	The following topics shall be addressed:
A.	Security concepts.

B.	System features.
C.	User definition and maintenance.
D.	Creating, storing and running ad-hoc reports.
E.	Interface troubleshooting and maintenance.
F.	Configuring and maintaining system files, tables and parameters.
G.	Database administration and tuning.
H.	Set up and maintain a test or training database.
I.	Monitor functions and reports.
J.	Backup procedures.
K.	Failure mode procedures.
L.	New user/workstation setup.
M.	Geo-file maintenance.
N.	Backup and restoration of system/files.
O.	Routine hardware and system maintenance procedures.
P.	Map modifications.
Q.	System/network diagnosis and troubleshooting.

5.8.1.9	<b>ON-SITE CAD SYSTEM USER TRAINING</b>
	The Vendor shall provide separate operational training for end users of the CAD systems as well as other designated staff personnel. Training shall include system orientation and familiarization that includes discussion and equipment demonstration. The Proposal shall include the number of classes and the schedule, both of which shall be subject to the PSC approval.
	At a minimum, the following training will be provided:
A.	Call takers:
a.	Enhanced 9-1-1 ANI/ALI information display and input.
b.	Incident creation codes/procedures.
c.	Incident status display.
d.	Routing recommendation and override.
e.	Informational query.
f.	Position routing.
g.	Integrated map display.
B.	Dispatchers:
a.	Incident status display and select.
b.	Unit status display, recommendation, and override.

c.	Status update.
d.	Informational query.
e.	Position routing.
f.	Integrated map display.
C.	Communications Center Supervisors:
a.	All of the above call taker and dispatcher functions.
b.	Operational parameter maintenance.
c.	Supervisory monitor and override functions.
d.	Failure mode recognition and corrections.
5.8.1.10	<b>TRAIN THE TRAINER</b>
<b>5.8.1.10.</b>	<b>CAD Train the Trainer</b>
	The PSC intends to conduct all future training for new CAD system users. The Vendor shall provide at least one class specifically geared to training trainers to train others in the use of the CAD system. The vendor shall provide specifics of this class including what will be covered in this class and how it is differentiated from the CAD end-user classes.
<b>5.8.1.10.</b>	<b>MDCS Train the Trainer Classes</b>
	The PSC and supported agencies intend to conduct all end user training for end users of the mobile data system. The Vendor shall provide at least one class specifically geared to training trainers to train others in the use of the MDC system. The vendor shall provide

	specifics of this class including what will be covered in this class and how it will be presented. It is expected that at least the following topics will be covered:														
A.	Silent dispatch.														
B.	Activity reporting functions.														
C.	Data analysis reporting functions.														
D.	Records retrieval.														
E.	SOP access.														
F.	Status update.														
G.	Messaging.														
H.	Premise data retrieval.														
I.	MDC operation.														
<b>MINIMUM PERSONNEL TRAINING REQUIREMENTS</b>															
The Vendor shall provide for the following minimum numbers of personnel/position training requirements upon system implementation:															
<b><u>CAD/ MDCS Training</u></b>															
	<table border="1"> <thead> <tr> <th><b><u># of Personnel</u></b></th> <th><b><u>Position Description</u></b></th> </tr> </thead> <tbody> <tr> <td>80</td> <td>CAD dispatcher/call takers</td> </tr> <tr> <td>10</td> <td>CAD dispatcher supervisors</td> </tr> <tr> <td>5</td> <td>CAD System administrators</td> </tr> <tr> <td>5</td> <td>CAD report analysts</td> </tr> <tr> <td>5</td> <td>Geofile maintenance</td> </tr> <tr> <td>10</td> <td>Police, Fire and EMS clerical staff</td> </tr> </tbody> </table>	<b><u># of Personnel</u></b>	<b><u>Position Description</u></b>	80	CAD dispatcher/call takers	10	CAD dispatcher supervisors	5	CAD System administrators	5	CAD report analysts	5	Geofile maintenance	10	Police, Fire and EMS clerical staff
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	10	MDCS Trainers
<b>5.9</b>	<b>WARRANTY AND SYSTEM MAINTENANCE</b>	
	<b>GENERAL</b>	
	The following requirements apply to equipment, software, and services that are provided by the Vendor, or fall within any contracted scope of work. Vendors shall provide a copy of provisions and terms of the proposed warranty in compliance with applicable state and local codes. A description of available warranty options shall be included in the proposal. The Vendor shall be the single point of contact for all warranty claims.	
	<b>HARDWARE AND EQUIPMENT WARRANTY</b>	
	The application of this section is contingent upon the provision of hardware by the vendor as opposed to being procured directly by the County	
A.	The Vendor shall warrant that all equipment/services within its scope of work shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship, and title.	
B.	The Vendor shall warrant that all equipment and installation conforms to the specifications provided within this RFP, or the manufacturer's published specifications, whichever is most stringent, and that it shall be free from defects in materials, functionality, and workmanship for a period of at least one year <b>from the date of final system acceptance.</b>	
C.	Interim periods between the manufacturer's standard warranty and the date of acceptance will be the Vendor's responsibility.	
D.	Vendors shall warrant and guarantee further that the equipment furnished hereunder is of good workmanship and materials and that the same is properly designed, operable, and equipped for the proposed use by the PSC, and is in strict conformity with the detailed RFP except as agreed upon within the contract documents.	
	<b>SOFTWARE WARRANTY</b>	
A.	The Vendor shall warrant that all Vendor-furnished software is fully	

	operational, efficient, and free from defect for a period of one year <b>from the date of final system acceptance.</b>
B.	The Vendor will be responsible for correcting all malfunctioning software in a timely manner, at no additional cost to the PSC, for the life of the system, as long as a maintenance agreement is in force.
	<b>ADDITIONAL EQUIPMENT WARRANTY</b> Warranty on any additional system hardware or software purchased after acceptance of the initial system will be for not less than 12 months after the date the hardware or software is accepted and placed in service.
	<b>WARRANTY REPAIRS</b>
A.	Warranty repairs on all furnished equipment and systems shall be made at no cost for parts or labor for a period of one year from the date of final system acceptance.
B.	The Vendor shall be responsible for any shipping costs incurred to send components to manufacturers for repair or replacement.
C.	The PSC reserves the right to closely monitor and observe warranty repair service.
D.	During the warranty period, the Vendor shall maintain adequate staff and spare parts inventory, both located within the PSC area, to ensure prompt warranty service.
E.	Response during the warranty period shall be the same as that listed for "Maintenance."
F.	The Vendor shall describe in the proposal how system and equipment maintenance and repair will be handled during the warranty period.
a.	During the warranty period, the Vendor will respond to all repair calls or notices of system malfunction at no additional cost to the PSC.

b.	Warranty service shall be on a 24-hour per day, 365-day per year basis.
c.	The Vendor will have qualified technicians available to respond to major system malfunctions within two (2) hours and to minor system malfunctions within eight (8) hours (one business day) during the warranty period.
d.	A major system malfunction is defined as one in which the entire system is out of service or in which system functionality is degraded to the point that the system is not substantially providing the level usage required.
e.	A minor system malfunction is defined as one in which some system features are inoperative, not rendering the entire system unusable or significantly degraded.
f.	The PSC reserves the right to decide whether a system malfunction is classified as major or minor.
G.	Acceptance of the work of the Vendor upon completion of the project shall not preclude the PSC from requiring strict compliance with the contract, in that the Vendor shall complete or correct upon discovery any faulty, incomplete, or incorrect work not discovered at the time of acceptance.
a.	The one-year limit specified above shall not void or limit this requirement for little used features or functions.
H.	Any subVendor costs for first-year warranty of any system hardware or software component covered under the above warranty requirements shall be included within the basic system proposal price.
a.	The PSC shall pay no maintenance costs to any vendor or subVendor prior to the end of the warranty period.

	<b>MAINTENANCE</b>
5.9.1.1	<b>SYSTEM MAINTENANCE, REPAIR, AND SERVICE FACILITIES</b>
A.	The Vendor shall be responsible for preventative and remedial maintenance of the system for a period of one year following final acceptance of the system by the PSC.
B.	Maintenance shall include parts and labor.
C.	Each Vendor shall state in its system proposal the name, location, and capabilities of the service facility(ies), which will provide any of the installation, service and maintenance.
D.	Vendors shall also include:
a.	a description of the service facilities,
b.	the size and qualifications of its staff, and
c.	the number of years the service provider has been in business.
E.	Vendors shall also include a list of customers (with names and telephone numbers) who operate systems of similar size and complexity for whom installation and maintenance services are performed.
F.	This information is required to demonstrate to the PSC that local service facilities are capable of installing, optimizing, and maintaining the proposed system.
5.9.1.2	<b>PREVENTATIVE MAINTENANCE AND SPARE PARTS</b>
A.	The proposal shall define a preventative maintenance program that ensures, to the extent possible, failure free operation. The system availability shall be in accordance with other sections of this document.
B.	A sufficient supply of spare parts shall be maintained to allow

	immediate restoration of operation of the system infrastructure.
C.	In the event that these parts are consumed, replacement stock shall be available via emergency request and airfreight within 24 hours of the equipment failure.
D.	Vendors shall recommend a list of essential spare parts to be maintained by the PSC to ensure rapid restoration of systems operations in the event of component failure.
E.	In addition to parts, proposals shall include a list of recommended test equipment required to maintain the proposed system. An itemized price list shall be provided for both the recommended parts inventory and the recommended test equipment.
F.	Stocking of spare parts shall remain the responsibility of the local maintenance provider.
G.	Maintenance shall include keeping all software up to date. At the end of the first year of warranty/maintenance service, all software shall be of the latest version, release, and service release.
H.	Any penalties incurred during the warranty period will be based on the rates for the first year of maintenance following the warranty period, and will be deducted from the first year of maintenance, or billed to the Vendor if no maintenance agreement is purchased.
	<b>FOLLOW-ON MAINTENANCE FOLLOWING WARRANTY PERIOD</b>
	The Vendor shall include in his proposal a price for the follow-on maintenance described herein. The proposal price shall be for a five-year maintenance period starting 12 months after final system acceptance.
5.9.1.3	<b>HARDWARE</b>
	The Vendor will be required to provide system and equipment maintenance support to the PSC during and after expiration of the warranty period.

A.	The PSC will require a response time of no more than two hours for a "Major" failure of the system and no more than 8 hours (1 business day) for a "Minor" failure of the system.
B.	The Vendor shall provide the following minimum information about its various maintenance plans for each of the following system components:
a.	Servers, workstations and associated peripherals.
b.	Storage and backup subsystems.
c.	Printers.
d.	All ancillary equipment required for efficient system operation.
C.	The Vendor shall describe the scope of maintenance coverage and types of programs available to the PSC, and include all cost information in the proposal.
D.	The Vendor shall specify the Preventive Maintenance (PM) schedule and estimate the amount of non-scheduled maintenance (system down-time) for each component of the proposed system.
E.	Maintenance will be performed according to the plan selected by the PSC.
F.	The Vendor shall specify the minimum and maximum time required to respond to calls for non-scheduled maintenance 24 hours per day, seven days per week, and the location(s) from which such maintenance will be provided.
G.	The Vendor shall describe the policy for expediting repair of equipment that has been inoperative for eight hours, 24 hours, and longer than 24 hours.

5.9.1.4	<b>MAINTENANCE OF VENDOR FURNISHED SOFTWARE</b>
	The PSC requires that the Vendor maintain all Vendor-furnished software in a reliable operating condition, and incorporate the latest software changes applicable to the installed system.
A.	The Vendor will describe the nature of his software maintenance coverage and program for maintaining reliable, efficient, and current software.
B.	The maintenance contract pricing shall include providing and installing any system software patches, upgrades, enhancements, etc., developed by the software manufacturer during the maintenance contract period.
	<b>DOWN TIME CREDITS</b>
A.	If any component of the system malfunctions, resulting in total loss of system operation or significantly degraded functionality, the Vendor will provide a credit to the PSC proportional to the amount of down time experienced:
B.	Down time credits will be computed in increments of one hour, based on maintenance charges in effect at the time, and will be deducted from the next regularly scheduled maintenance payment.
C.	Down time and response time credits will not be duplicated for the same hour, and will not apply during the warranty period.
	<b>CONTINUATION OF MAINTENANCE</b>
A.	In the event that the manufacture and sale of any component of the system is discontinued by the original equipment manufacturer, the Vendor will agree to provide continuous maintenance coverage, if desired by the PSC, for up to five years from the date the PSC is notified of the cessation of manufacture of the equipment.
B.	Maintenance contract payments for additional years will be made by the PSC on a monthly basis.
	<b>SERVICE UNDER WARRANTY</b>
A.	If it becomes necessary for the PSC to contract with another vendor

	for warranty repairs, due to inability or failure of the Vendor to perform such repairs, the Vendor shall reimburse the PSC for all invoices for labor, materials required, and the shipping/handling costs thereof, to perform such repairs, within 30 days from presentation of such County invoices.
B.	This shall only occur after the Vendor has been given written notice, reasonable time, and fair opportunity to respond and correct the problem.
C.	The cost limitation for such repairs will not exceed the parts and labor replacement price of the repair.

## 6.0 COST PROPOSAL

### 6.1 General Instructions on Submitting Cost Proposals

Proposers must submit an original and the required number of copies of the cost proposal as instructed on the **cover page of the RFP** (Special Instructions).

Cost proposal should be submitted in a separate envelope labeled **Cost Proposal** with the written proposal. (Refer to Cost Proposal Form)

### 6.2 Format for Submitting Cost Proposals

Cost proposals will be submitted using the Microsoft Excel Workbook associated with this RFP. Outside the cost proposal, proposers shall not allude to any information regarding the cost of a proposed solution other than to designate if an item of discussion is a mandatory or optional item.

NOTE: The price that will be used for the cost calculations will be the initial price, and the maintenance costs for years 2 – 6. The costs will cover the time period from implementation, the warranty period (1 year from final acceptance) and the first five years of maintenance.

For maintenance costs, proposers are to calculate and provide an equatable capital cost that discounts the maintenance costs by 2.5% per

year.

### 6.3 Scoring of Cost Proposals

A value-based assessment will be made to arrive at the number of points awarded each proposal based upon the cost of the proposed system. The core measurement for this allocation will be the Price per Point, which is a calculation based upon RFP compliance and price. Proposals will be awarded points based upon a ratio of the price per point in the proposal and the average price per point of all qualified proposals.

The process for determining the number of points allocated based on cost will be as follows:

1. All general and technical requirements will be scored and adjusted based upon the percentage of points allocated to the general and technical sections.
2. The price per point for each vendor's proposal will be calculated.

$$\text{Price} / \text{Points} = \text{Price per Point (PPP)}$$

3. The average price per point for all qualified proposals will be calculated.

$$\Sigma \text{Price} / \Sigma \text{Points} = \text{Average Price per Point (APP)}$$

4. A ratio of each vendor's price per point and the average price per point will be calculated.

$$\text{PPP} / \text{APP} = \text{PPP ratio (PPR)}$$

5. The vendor with the lowest ratio will be awarded the highest number of points available.
6. A ratio will be calculated between the vendor with the lowest ratio and each other vendor and points awarded based upon that ratio.

$$\text{Lowest PPR} / \text{Vendors PPR}$$

7. Points will then be allocated using this ratio

## 6.4 Fixed Price Period

All prices, costs, and conditions outlined in the proposal shall remain fixed and valid for acceptance for 180 days starting on the due date for proposals.

## 7.0 SPECIAL CONTRACT TERMS AND CONDITIONS

### 7.1 Payment Requirements

The following is the milestone payment plan that will be incorporated into the contract with the successful vendor.

- 10% at contract signing
- 10% at acceptance of a binding project plan and schedule
- 10% at successful installation of ALL application software, including modifications and interfaces
- 20% at successful completion of the functional and throughput acceptance tests
- 25% at successful system cutover
- 25% at system acceptance

### 7.2 Performance Bonds

The successful proposer is required to submit a performance bond in 100% of the contract amount.

### 7.3 Domestic Partner Equal Benefits Requirement

The proposer agrees to provide the same economic benefits to all of its employees with domestic partners as it does to employees with spouses, or the cash equivalent if such a benefit cannot reasonably be provided. The contractor [or grant beneficiary] agrees to make available for County inspection the contractor's payroll records relating to employees providing services on or under this contract or subcontract [or grant]. If any payroll

records of a contractor [or grant beneficiary] contain any false, misleading or fraudulent information, or if a contractor [or grant beneficiary] fails to comply with the provisions of s. 25.016, D. C. Ords., the contract compliance officer may withhold payments on the contract; terminate, cancel or suspend the contract in whole or in part; or, after a due process hearing, deny the contractor the right to participate in bidding on future County contracts for a period of one year after the first violation is found and for a period of three years after a second or subsequent violation is found

## 8.0 REQUIRED FORMS

The following forms must be completed and submitted with the proposal in accordance with the instructions given in Section 2.0. Blank forms are attached.

Attachment A	Signature Affidavit
Attachment B	Vendor Registration Certification
Attachment C	Reference Data Sheet
Attachment D	Designation of Confidential and Proprietary Information
Attachment E	Fair Labor Practices Certification
Attachment F	Cost Summary Page

<b>RFP COVER PAGE SIGNATURE AFFIDAVIT</b>	
<b>NAME OF FIRM:</b>	
<b>STREET ADDRESS:</b>	
<b>CITY, STATE, ZIP</b>	
<b>CONTACT PERSON:</b>	
<b>PHONE #:</b>	
<b>FAX #:</b>	
<b>EMAIL:</b>	

In signing this proposal, we also certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a proposal; that this proposal has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this proposal has not been knowingly disclosed prior to the opening of proposals to any other proposer or competitor; that the above statement is accurate under penalty of perjury.

The undersigned, submitting this proposal hereby agrees with all the terms, conditions, and specifications required by the County in this Request for Proposal, and declares that the attached proposal and pricing are in conformity therewith.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
**NAME (TYPE OR PRINT**

\_\_\_\_\_  
**DATE**

**Addendums** -This firm hereby acknowledges receipt / review of the following addendum(s) (If any)

Addendum # \_\_\_\_\_ Addendum # \_\_\_\_\_ Addendum # \_\_\_\_\_ Addendum # \_\_\_\_\_

**6.0 VENDOR REGISTRATION CERTIFICATION**

Per Dane County Ordinance, Section 62.15, "Any person desiring to bid on any county contract must register with the purchasing manager and pay an annual registration fee of \$20."

Your completed Vendor Registration Form and Registration Fee must be received for your bid to be considered for an award. Your bid/proposal may not be evaluated for failure to comply with this provision.

Complete a registration form online by visiting our web site at [www.danepurchasing.com](http://www.danepurchasing.com). You will be prompted to create a username and a password and you will receive a confirmation message, then log back in and complete the registration. Once your registration is complete you will receive a second confirmation. Retain your user name and password for ease of re-registration in future years.

Payment may be made via credit card on-line or by check in the mail or in person at the Purchasing Division office. If paying by check make check payable to Dane County Treasurer and indicate your federal identification number (FIN) on the subject line.

**CERTIFICATION**

The undersigned, for and on behalf of the **PROPOSER, BIDDER OR APPLICANT** named herein, certifies as follows:

- This firm is a paid, registered vendor with Dane County in accordance with the bid terms and conditions.

Vendor Number # \_\_\_\_\_

Paid until \_\_\_\_\_

Date Signed: \_\_\_\_\_

\_\_\_\_\_

Officer or Authorized Agent

---

Business Name

<b>REFERENCE DATA SHEET</b>	
Provide company name, address, contact person, telephone number, and appropriate information on the product(s) and/or service(s) used for three (3) or more installations/services with requirements similar to those included in this solicitation document	
<b>NAME OF FIRM:</b>	
<b>STREET ADDRESS:</b>	
<b>CITY, STATE, ZIP</b>	
<b>CONTACT PERSON:</b>	<b>EMAIL:</b>
<b>PHONE #:</b>	<b>FAX #:</b>
<b>Product(s) and/or Service(s) Used:</b>	
<b>NAME OF FIRM:</b>	
<b>STREET ADDRESS:</b>	
<b>CITY, STATE, ZIP</b>	
<b>CONTACT PERSON:</b>	<b>EMAIL:</b>
<b>PHONE #:</b>	<b>FAX #:</b>
<b>Product(s) and/or Service(s) Used:</b>	

<b>NAME OF FIRM:</b>		
<b>STREET ADDRESS:</b>		
<b>CITY, STATE, ZIP</b>		
<b>CONTACT PERSON:</b>		<b>EMAIL:</b>
<b>PHONE #:</b>		<b>FAX #:</b>
<b>Product(s) and/or Service(s) Used:</b>		

<b>Designation of Confidential and Proprietary Information</b>		
The attached material submitted in response to this Proposal includes proprietary and confidential information which qualifies as a trade secret, as provided in Sect 19.36(5), Wisconsin State Statutes, or is otherwise material that can be kept confidential under the Wisconsin Open Records law. As such, we ask that certain pages, as indicated below, of this proposal response be treated as confidential material and not be released without our written approval. Attach additional sheets if needed.		
Section	Page Number	Topic

Check mark :  This firm is not designating any information as proprietary and confidential which qualifies as trade secret.

**Prices always become public information when proposals are opened, and therefore cannot be designated as confidential.**

Other information cannot be kept confidential unless it is a trade secret. Trade secret is defined in Sect. 134(80)(1)(c) Wis. State Statutes, as follows: "Trade secret" means information, including a formula, pattern, compilation, program, device, method technique or process to which all of the following apply:

1. The information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use.
  
2. The information is the subject of efforts to maintain its secrecy that are reasonable under the circumstances.

**In the event the Designation of Confidentiality of this information is challenged, the undersigned hereby agrees to provide legal counsel or other necessary assistance to defend the Designation of Confidentiality.**

Failure to include this form in the proposal response may mean that all information provided as part of the proposal response will be open to examination or copying. The County considers other markings of confidential in the proposal document to be insufficient. The undersigned agree to hold the County harmless for any damages arising out of the release of any material unless they are specifically identified above.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
**Name (type or print)**

\_\_\_\_\_  
**Date**

**FAIR LABOR PRACTICES CERTIFICATION**  
**Dane County Ordinance 25.11(28)**

The undersigned, for and on behalf of the PROPOSER, BIDDER OR APPLICANT named herein, certifies as follows:

1. That he or she is an officer or duly authorized agent of the above-referenced PROPOSER, BIDDER OR APPLICANT, which has a submitted a proposal, bid or application for a contract with the county of Dane.

That PROPOSER, BIDDER OR APPLICANT has: (Check One)

\_\_\_\_\_ not been found by the National Labor Relations Board (“NLRB”) or the Wisconsin Employment Relations Commission (“WERC”) to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this Certification is signed.

\_\_\_\_\_ been found by the National Labor Relations Board (“NLRB”) or the Wisconsin Employment Relations Commission (“WERC”) to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this Certification is signed

Date Signed: \_\_\_\_\_

\_\_\_\_\_  
Officer or Authorized Agent

\_\_\_\_\_  
Business Name

**NOTE:** You can find information regarding the violations described above at: [www.nlr.gov](http://www.nlr.gov) and <http://werc.wi.gov>.

**For Reference Dane County Ord. 28.11 (28) is as follows:**

**(28) BIDDER RESPONSIBILITY. (a)** Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder’s responsibility to perform the contract.

If you indicated that you have been found by the NLRB or WERC to have such a violation, you must include a copy of any relevant information regarding such violation with your proposal, bid or application.

<b>COST / FINANCIAL PROPOSAL</b>	
<b>NAME OF FIRM:</b>	

Cost proposal shall be submitted in excel format, refer to Attachment F – Cost Sheets at [www.danepurchasing.com](http://www.danepurchasing.com)

## STANDARD TERMS AND CONDITIONS

(Request For Bids/Proposals/Contracts)

DCO CHS 19.25 Rev. 07/07

1.0 APPLICABILITY: The terms and conditions set forth in this document apply to Requests for Proposals (RFP), Bids and all other transactions whereby the County of Dane acquires goods or services, or both.

1.1 ENTIRE AGREEMENT: These Standard Terms and Conditions shall apply to any contract, including any purchase order, awarded as a result of this request. Special requirements of a resulting contract may also apply. Said written contract with referenced parts and attachments shall constitute the entire agreement, and no other terms and conditions in any document, acceptance, or acknowledgment shall be effective or binding unless expressly agreed to in writing by the County.

1.2 DEFINITIONS: As used herein, "vendor" includes a provider of goods or services, or both, who is responding to an RFP or a bid, and "bid" includes a response to either an RFP or a bid.

2.0 SPECIFICATIONS: The specifications in this request are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a design, type of construction, quality, functional capability or performance level, or any combination thereof, desired. When alternates are proposed, they must be identified by manufacturer, stock number, and such other information necessary to establish equivalency. Dane County shall be the sole judge of equivalency. Vendors are cautioned to avoid proposing alternates to the specifications which may result in rejection of their bid.

3.0 DEVIATIONS AND EXCEPTIONS: Deviations and exceptions from terms, conditions, or specifications shall be described fully, on the vendor's letterhead, signed, and attached to the bid. In the absence of such statement, the bid shall be accepted as in strict compliance with all terms, conditions, and specifications and vendor shall be held liable for injury resulting from any deviation.

4.0 QUALITY: Unless otherwise indicated in the request, all material shall be first quality. No pre-owned, obsolete, discontinued or defective materials may be used.

5.0 QUANTITIES: The quantities shown on this request are based on estimated needs. The County reserves the right to increase or decrease quantities to meet actual needs.

6.0 DELIVERY: Deliveries shall be FOB destination freight prepaid and included unless otherwise specified. County will reject shipments sent C.O.D. or freight collect.

7.0 PRICING: Unit prices shown on the bid shall be the price per unit of sale, e.g., gal., cs., doz., ea., etc., as stated on the request or contract. For any given item, the quantity multiplied by the unit price shall establish the extended price, the unit price shall govern in the bid evaluation and contract administration.

7.1 Prices established in continuing agreements and term contracts may be lowered due to market conditions, but prices shall not be subject to increase for the term specified in the award. Vendor shall submit proposed increases to the contracting department thirty (30) calendar days before the proposed effective date of the price increase. Proposed increases shall be limited to fully documented cost increases to the vendor that are demonstrated to be industry wide. Price increases may not be granted unless they are expressed in bid documents and contracts or agreements.

7.2 Submission of a bid constitutes bidder's certification that no financial or personal relationship exists between the bidder and any county official or employee except as specially set forth in writing attached to and made a part of the bid. The successful bidder shall disclose any such relationship which develops during the term of the contract.

8.0 ACCEPTANCE-REJECTION: Dane County reserves the right to accept or reject any or all bids, to waive any technicality in any bid submitted and to accept any part of a bid as deemed to be in the best interests of the County. Submission of a proposal or a bid constitutes the making of an offer to contract and gives the County an option valid for 60 days after the date of submission to the County.

8.1 Bids **MUST** be dated and time stamped by the Dane County Purchasing Division Office on or before the date and time that the bid is due. Bids deposited or time stamped in another office will be rejected. Actual receipt in the office of the purchasing division is necessary; timely deposit in the mail system is not sufficient. **THERE WILL BE NO EXCEPTIONS TO THIS POLICY.**

9.0 METHOD OF AWARD: Award shall be made to the lowest responsible, responsive vendor conforming to specifications, terms, and conditions, or to the most advantageous bid submitted to the County on a quality versus price basis. Among other things, quantities, time of delivery, purpose for which required, competency of vendor, the ability to render satisfactory service and past performance will be considered in determining responsibility.

10.0 ORDERING/ACCEPTANCE: Written notice of award to a vendor in the form of a purchase order or other document, mailed or delivered to the address shown on the bid will be considered sufficient notice of acceptance of bid. A formal contract containing all provisions of the contract signed by both parties shall be used when required by the Dane County Purchasing Division.

11.0 PAYMENT TERMS AND INVOICING: Unless otherwise agreed, Dane County will pay properly submitted vendor invoices within thirty (30) days of receipt of goods or services, or combination of both. Payment will not be made until goods or services are delivered, installed (if required), and accepted as specified. Invoices presented for payment must be submitted in accordance with instructions contained on the purchase order.

11.1 NO WAIVER OF DEFAULT: In no event shall the making of any payment or acceptance of any service or product required by this Agreement constitute or be construed as a waiver by County of any breach of the covenants of the Agreement or a waiver of any default of the successful vendor, and the making of any such payment or acceptance of any such service or product by County while any such default or breach shall exist shall in no way impair or prejudice the right of County with respect to recovery of damages or other remedy as a result of such breach or default.

12.0 TAXES: The County and its departments are exempt from payment of all federal tax and Wisconsin state and local taxes on its purchases except Wisconsin excise taxes as described below. The State of Wisconsin Department of Revenue has issued tax exempt number ES41279 to Dane County.

12.1 The County is required to pay the Wisconsin excise or occupation tax on its purchase of beer, liquor, wine, cigarettes, tobacco products, motor vehicle fuel and general aviation fuel. The County is exempt from Wisconsin sales or use tax on these purchases. The County may be subject to other states' taxes on its purchases in that state depending on the laws of that state. Vendors performing construction activities are required to pay state use tax on the cost of materials.

13.0 GUARANTEED DELIVERY: Failure of the vendor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the vendor liable for all costs in excess of the contract price when alternate procurement is necessary. Excess costs shall include administrative costs.

14.0 APPLICABLE LAW AND VENUE: This contract shall be governed under the laws of the State of Wisconsin, and venue for any legal action between the parties shall be in Dane County Circuit Court. The vendor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of this contract and which in any manner affect the work or its conduct.

15.0 ASSIGNMENT: No right or duty in whole or in part of the vendor under this contract may be assigned or delegated without the prior written consent of Dane County.

16.0 NONDISCRIMINATION/AFFIRMATIVE ACTION: During the term of this Agreement the vendor agrees, in accordance with sec. 111.321, Wis. Stats., and Chapter 19 of the Dane County Code of Ordinances, not to discriminate against any person, whether an applicant or recipient of services, an employee or applicant for employment, on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs. The vendor shall provide a harassment-free work environment. These provisions shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, including apprenticeships, rates of pay or other forms of compensation.

16.1 Vendors who have twenty (20) or more employees and a contract of twenty thousand dollars (\$20,000) or more must submit a written affirmative action plan to the County's Contract Compliance Officer within fifteen (15) working days of the effective date of the contract. The County may elect to accept a copy of the current affirmative action plan filed with and approved by a federal, state or local government unit.

16.2 The vendor agrees to post in conspicuous places, available for employees and applicants for employment, notices setting forth the provisions of this Agreement as they relate to affirmative action and nondiscrimination.

16.3 Failure to comply with these Terms and Conditions may result in the vendor being debarred, termination of the contract and/or withholding of payment.

16.4 The vendor agrees to furnish all information and reports required by Dane County's Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, D.C. Ords., and the provisions of this Agreement.

16.5 *Americans with Disabilities Act*: The vendor agrees to the requirements of the ADA, providing for physical and programmatic access to service delivery and treatment in all programs and activities.

17.0 PATENT, COPYRIGHT AND TRADEMARK INFRINGEMENT: The vendor guarantees goods sold to the County were manufactured or produced in accordance with applicable federal labor laws, and that the sale or use of the articles described herein do not infringe any patent, copyright

or trademark. The vendor covenants that it will, at its own expense, defend every suit which shall be brought against the County (provided that such vendor is promptly notified of such suit, and all papers therein are delivered to it) for any alleged infringement of any patent, copyright or trademark by reason of the sale or use of such articles, and agrees that it will pay all costs, damages, and profits recoverable in any such suit.

**18.0 SAFETY REQUIREMENTS:** All materials, equipment, and supplies provided to the County must fully comply with all safety requirements as set forth by the Wisconsin Department of Commerce and all applicable OSHA Standards.

**18.1 MATERIAL SAFETY DATA SHEET:** If any item(s) on an order(s) resulting from this award(s) is a hazardous chemical, as defined under 29 CFR 1910.1200, provide one (1) copy of the Material Safety Data Sheet for each item with the shipped container(s) and one (1) copy with the invoice(s).

**19.0 WARRANTY:** Unless specifically expressed otherwise in writing, goods and equipment purchased as a result of this request shall be warranted against defects by the vendor for one (1) year from date of receipt. An equipment manufacturer's standard warranty shall apply as a minimum and must be honored by the vendor. The time limitation in this paragraph does not apply to the warranty provided in paragraph 27.0.

**20.0 INSURANCE RESPONSIBILITY:** The successful vendor shall:

**20.1** Maintain worker's compensation coverage as required by Wisconsin Statutes, for all employees engaged in the work. The successful vendor shall furnish evidence of adequate worker's compensation insurance.

**20.2** Indemnify, hold harmless and defend County, its boards, commissions, agencies, officers, employees and representatives against any and all liability, loss (including, but not limited to, property damage, bodily injury and loss of life), damages, costs or expenses which County, its officers, employees, agencies, boards, commissions and representatives may sustain, incur or be required to pay by reason of the successful vendor furnishing the services or goods required to be provided under the contract with the County, provided, however, that the provisions of this paragraph shall not apply to liabilities, losses, charges, costs, or expenses caused by or resulting from the acts or omissions of County, its agencies, boards, commissions, officers, employees or representatives. The obligations of the successful vendor under this paragraph shall survive the expiration or termination of any contract resulting from the successful vendor's bid.

**20.3** At all times during the term of this Agreement, keep in full force and effect comprehensive general liability and auto liability insurance policies (as well as professional malpractice or errors and omissions coverage, if the services being RFP NO. 110098

provided are professional services) issued by a company or companies authorized to do business in the State of Wisconsin and licensed by the Wisconsin Insurance Department, with liability coverage provided for therein in the amount of at least \$1,000,000 CSL (Combined Single Limits). Coverage afforded shall apply as primary. County shall be given ten (10) days advance notice of cancellation or non-renewal. Upon execution of this Agreement, the successful vendor shall furnish County with a certificate of insurance listing County as an additional insured and, upon request, certified copies of the required insurance policies. If the successful vendor's insurance is underwritten on a Claims-Made basis, the Retroactive Date shall be prior to or coincide with the date of this Agreement, the Certificate of Insurance shall state that coverage is Claims-Made and indicate the Retroactive Date, the successful vendor shall maintain coverage for the duration of this Agreement and for two years following the completion of this Agreement. The successful vendor shall furnish County, annually on the policy renewal date, a Certificate of Insurance as evidence of coverage. It is further agreed that the successful vendor shall furnish the County with a 30-day notice of aggregate erosion, in advance of the Retroactive Date, cancellation, or renewal. It is also agreed that on Claims-Made policies, either the successful vendor or County may invoke the tail option on behalf of the other party and that the Extended Reporting Period premium shall be paid by the successful vendor. In the event any action, suit or other proceeding is brought against County upon any matter herein indemnified against, County shall give reasonable notice thereof to the successful vendor and shall cooperate with the successful vendor's attorneys in the defense of the action, suit or other proceeding.

**20.4** The County reserves the right to require higher or lower insurance limits where County deems necessary.

**20.5** In case of any sublet of work under this Agreement, the successful vendor shall furnish evidence that each and every subvendor has in force and effect insurance policies providing coverage identical to that required of the successful vendor.

**21.0 CANCELLATION:** County reserves the right to terminate any Agreement due to non-appropriation of funds or failure of performance by the vendor. This paragraph shall not relieve County of its responsibility to pay for services or goods provided or furnished to County prior to the effective date of termination.

**22.0 PUBLIC RECORDS ACCESS:** It is the intention of the County to maintain an open and public process in the solicitation, submission, review, and approval of procurement activities. Bid openings are public unless otherwise specified. Records are not available for public inspection prior to issuance of the notice of intent to award or the award of the contract. Bid results may be obtained by visiting the Dane County Purchasing Office Monday – Friday, between 8:00 a.m. and 4:00 p.m. Prior appointment is advisable.

**22.1 PROPRIETARY INFORMATION:** If the vendor asserts any of its books and records of its business practices

and other matters collectively constitute a trade secret as that term is defined in s. 134.90(1)(c), Wis. Stats., County will not release such records to the public without first notifying the vendor of the request for the records and affording the vendor an opportunity to challenge in a court of competent jurisdiction the requester's right to access such records. The entire burden of maintaining and defending the trade secret designation shall be upon the vendor. The vendor acknowledges and agrees that if the vendor shall fail, in a timely manner, to initiate legal action to defend the trade secret designation or be unsuccessful in its defense of that designation, County shall be obligated to and will release the records.

22.2 Data contained in a bid, all documentation provided therein, and innovations developed as a result of the contracted commodities or services cannot be copyrighted or patented. All data, documentation, and innovations shall be the property of the County.

22.3 Any material submitted by the vendor in response to this request that the vendor considers confidential and proprietary information and which vendor believes qualifies as a trade secret, as provided in section 19.36(5), Wis. Stats., must be identified on a designation of Confidential and Proprietary Information form. In any event, bid prices will not be held confidential after award of contract.

23.0 RECYCLED MATERIALS: Dane County is required to purchase products incorporating recycled materials whenever technically and economically feasible. Vendors are encouraged to bid products with recycled content which meet specifications.

24.0 PROMOTIONAL ADVERTISING: Reference to or use of Dane County, any of its departments or sub-units, or any county official or employee for commercial promotion is prohibited.

25.0 ANTITRUST ASSIGNMENT: The vendor and the County of Dane recognize that in actual economic practice, overcharges resulting from antitrust violation are in fact usually borne by the County of Dane (purchaser). Therefore, the successful vendor hereby assigns to the County of Dane any and all claims for such overcharges as to goods, materials or services purchased in connection with this contract.

26.0 RECORDKEEPING AND RECORD RETENTION-PUBLIC WORKS CONTRACTS: The successful bidder on a public works contract shall comply with the State of Wisconsin prevailing wage scale and shall establish and maintain adequate payroll records for all labor utilized as well as records for expenditures relating to all subcontracts, materialmen and suppliers. All records must be kept in accordance with generally accepted accounting procedures. The County shall have the right to audit, review, examine, copy, and transcribe any such records or documents. The vendor will retain all documents applicable to the contract for a period of not less than three (3) years after final payment is made.

26.1 RECORDKEEPING AND RECORD RETENTION-COST REIMBURSEMENT CONTRACTS: Where payment to the vendor is based on the vendor's costs, vendor shall establish and maintain adequate records of all expenditures incurred under the contract. All records must be kept in accordance with generally accepted accounting procedures. The County contracting agency shall have the right to audit, review, examine, copy, and transcribe any pertinent records or documents relating to any contract resulting from this bid/proposal held by the vendor. The vendor will retain all documents applicable to the contract for a period of not less than three (3) years after final payment is made.

27.0 YEAR 2000 COMPLIANT: Vendor warrants that: a) all goods, services and licenses sold otherwise provided pursuant to this procurement have been tested for and are fully year 2000 compliant, which means they are capable of correctly and consistently handling all date-based functions before, during and after the year 2000; b) the date change from 1999 to 2000, or any other date changes, will not prevent such goods, services or licenses from operating in a merchantable manner, for the purposes intended and in accordance with all applicable plans and specifications and without interruption before, during and after the year 2000; and c) vendor's internal systems, and those of vendor's vendors, are year 2000 compliant, such that vendor will be able to deliver such goods, services and licenses as required by this procurement.

28.0 LIVING WAGE REQUIREMENT: The vendor shall, where appropriate, comply with the County's Living Wage requirements as set forth in section 25.015, Dane County Ordinances.

28.01 In the event its payroll records contain any false, misleading or fraudulent information, or if the vendor fails to comply with the provisions of s. 25.015, D.C. Ords., the County may withhold payments on the contract, terminate, cancel or suspend the contract in whole or in part, or, after a due process hearing, deny the vendor the right to participate in bidding on future County contracts for a period of one (1) year after the first violation is found and for a period of three (3) years after a second violation is found.

28.02 Bidders are exempt from the above requirements if:

- The maximum value of services to be provided is less than \$5,000;
- The bid involves only the sale of goods to the County;
- The bid is for professional services;
- The bid is for a public works contract where wages are regulated under s. 62.293, Wis. Stats.;
- The bidder is a school district, a municipality, or other unit of government;
- The service to be provided is residential services at an established per bed rate;
- The bidder's employees are persons with disabilities working in employment programs and the successful

bidder holds a current sub-minimum wage certificate issued by the U.S. Department of Labor or where such a certificate could be issued but for the fact that the employer is paying a wage higher than the minimum wage;

- The bidder is an individual providing services to a family member; or
- The bidder's employees are student interns.

#### 28.03 COMPLIANCE WITH FAIR LABOR STANDARDS.

During the term of this Agreement, PROVIDER shall report to the County Contract Compliance Officer, within ten (10) days, any allegations to, or findings by the National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that PROVIDER has violated a statute or

regulation regarding labor standards or relations within the seven years prior to entering this Agreement. If an investigation by the Contract Compliance Officer results in a final determination that the matter adversely affects PROVIDER'S responsibilities under this Agreement, and which recommends termination, suspension or cancellation of this agreement, the County may take such action.

28.04 PROVIDER may appeal any adverse finding by the Contract Compliance Officer as set forth in sec. 25.015(11)(c) through (e).

28.05 PROVIDER shall post the following statement in a prominent place visible to employees: "As a condition of receiving and maintaining a contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation or union organizing."