

EXHIBIT A

Leon County, FL

REQUEST FOR PROPOSALS

NG9-1-1 System

RFP # BC-01-11-12-25

TECHNICAL REQUIREMENTS

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Leon County, FL
REQUEST FOR PROPOSALS
NG9-1-1 System Procurement – Technical Requirements

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1. INTRODUCTION

Leon County (County) is soliciting proposals from qualified firms capable of providing highly available, reliable, user-friendly, and powerful Next Generation 9-1-1 (NG9-1-1) NG9-1-1 Customer Premises Equipment (CPE) for its new Consolidated Public Safety Answering Point (PSAP). This new Consolidated PSAP will provide 9-1-1 call taking and radio dispatch services to all of Leon County (City of Tallahassee and the unincorporated areas of the County). This PSAP will continue to transfer 9-1-1 calls to three secondary PSAPs (Florida A&M University, Florida State University, and the State of Florida Capitol Police).

The NG9-1-1 system implemented in this project will initially provide Enhanced 9-1-1 (E9-1-1) functionality and will support future NG9-1-1 operations as they become available to the County. Since NG9-1-1 cannot be fully realized in a single County deployment, the acquisition of this telephone system is intended to allow Leon County to fully participate in any future regional or Statewide NG9-1-1 network without the need to replace its CPE.

The NG9-1-1 System will be installed at the County's new Public Safety Complex located at 911 Easterwood Dr (the intersection of Easterwood Dr. and Weems Rd Tallahassee, FL).

The County desires to purchase a NG9-1-1 System that will support its requirements as outlined in this Request for Proposal (RFP) from a single Prime Contractor who will furnish all equipment and services required to install and optimize a fully operational System. *However, the County reserves the right to purchase any required computer hardware, operating system software, or database management systems directly from its own sources.*

The County reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the Proposer of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted and confirmed in the Contract between the County and the chosen Proposer (Contractor).

1.1. Definitions to Terms in This RFP Section

For the purpose of clarity, terms are defined as follows for this document:

- A. Base Proposal – the basic components (hardware, software, services) of the NG9-1-1 System. NG9-1-1 components that are not “Optional”. The County intends to purchase all components included in the Base Proposal.
- B. Chosen Vendor, Successful Proposer – The vendor submitting the best proposal in response to this RFP. The County will enter contract negotiations with the Chosen Vendor.
- C. Contractor – The vendor contracted by the County to provide, implement, and maintain the NG9-1-1 System.
- D. County – Leon County, FL
- E. Optional Purchase – System items or functionality that is proposed outside the Base Proposal. Although these items/functionality are required in the proposal, actual purchase thereof is at the County's option.
- F. Proposal to describe – The proposal should describe how the proposed system provides the listed functionality/capability.

G. Proposer – Entity offering a NG9-1-1 System in response to this RFP

H. Request for Proposals (RFP) – Solicitation of NG9-1-1 System proposals

1.2. Complete Project

The Contractor for the project must act as the “Prime” Contractor for the project. The County will contract with only one vendor for the delivery and installation of the systems outlined in this document. The Contractor will also be responsible for all software, implementation services, and hardware that will be required to make the system operational; including System installation, training, and user testing. The Contractor will be responsible for migrating any existing system data to the new system database(s).

Vendors will be required to submit detailed subcontractor information in their response to this RFP. The Prime Contractor will assume full responsibility for the work performed by its subcontractors, their agents, employees, and all persons performing work under the project contract.

1.3. Terms of Engagement

The County anticipates entering into a Contract with the Successful Proposer that includes implementation, followed by a one-year warranty period, and follow-on system maintenance for the life of the system.

The one-year warranty for all items supplied under this RFP and subsequent contract shall begin at the time of final system acceptance of the complete system.

2. TECHNICAL REQUIREMENTS

2.1. Hardware Quantities

The NG9-1-1 system will be installed at the County's new Public Safety Complex located at 911 Easterwood Drive (the intersection of Easterwood Dr. and Weems Rd, Tallahassee, FL.)

2.1.1. 9-1-1 Workstation Quantity: 27

The proposed system shall include 27 9-1-1 workstations. The system shall accommodate up to 36 call taker workstations without significant system upgrade (i.e., wired for 36 call taker workstations).

2.1.2. CAMA Trunks Quantity: 9

The proposed system shall accommodate connection to 9 CAMA trunks. The system shall accommodate up to 12 CAMA trunks without significant system upgrade (i.e. wired for 12 CAMA trunks).

2.1.3. Central Office Connections: 5

The proposed system shall accommodate connection to 5 central offices. The system shall accommodate up to 7 central office connections without significant system upgrade (i.e., wired for 7 central office connections).

2.1.4. Cellular Telephone Provider Connections: 7

The proposed system shall accommodate connection to 7 cellular telephone provider systems. The system shall accommodate up to 10 cellular telephone provider connections without significant system upgrade (i.e., wired for 10 cellular telephone provider connections).

2.1.5. Administrative Line Appearances: 20

The proposed system shall interface the County's PBX and provide standard digital phoneset access via the 9-1-1 workstations. The 9-1-1 workstations shall provide a minimum of 20 administrative line appearances.

2.1.6. Secondary PSAP Locations: 4

The proposed system shall provide required hardware, software, and installation services to provide secondary PSAP functionality to Florida A&M University PD, Florida State University PD, and State Capitol PD dispatch centers, plus the Mobile Command Center. Proposals shall provide interconnection specifications (i.e., WAN/LAN, leased telephone circuits, etc.).

2.1.7. Secondary PSAP Workstations: 7

The proposed system shall include seven (7) 9-1-1 workstations for secondary PSAPs located as follows:

- A. 2 - FSU PD
- B. 1 - FAMU PD
- C. 1 - Capitol PD
- D. 3 - Mobile Command Center (trailer)

The system shall accommodate up to 10 secondary call taker workstations without significant system upgrade.

2.2. Next Generation Functionality

The system shall be capable of delivering NG9-1-1 functionality at any point along the migration path to true NG9-1-1 ("Network of Networks" as envisioned by USDOT, NENA and others). As the State and/or regions develop ESInet facilities, the provided system shall be capable of full interaction with these standards-based networks. The proposal shall describe how the proposed system will comply with standards as they emerge for such core NG9-1-1 functions as:

- A. IP Networking and Call/Data Delivery (CPE)
- B. Emergency Call Routing Function (ECRF)
- C. Emergency Services Routing Proxy (ESRP)
- D. Emergency Call Routing Proxy (ECRP)
- E. Border Control Function (BCF)

Immediate compliance with new NG9-1-1/ESInet standards are not expected but the Proposer shall describe how the proposed system will migrate to full NG9-1-1 operations.

2.2.1. Future-Proof Architecture

The system shall be designed to future-proof the County against the requirement for a 'forklift' upgrade of CPE equipment at any time during the transition to NG9-1-1.

The proposal shall describe how the proposed system will be configured to support this transition.

2.2.2. Multimedia Requests For Assistance

As part of the evolution to NG9-1-1, new call types will be received by the PSAP. These new call types are referred to as RFAs (requests for assistance), since they are no longer simply voice-oriented calls. The County intends to be able to handle RFAs in the future, potentially before national standards are fully adopted. It is mandatory that the system architecture support RFAs without changing out the core logic or hardware. The County assumes that some additional components such as servers and/or software modules/updates may be required to provide this transition to NG9-1-1.

The proposal shall describe how the proposed system will support multimedia Requests for Assistance now or how it will in the future. Describe any industry testing for such RFAs the responding Proposer has participated in and describe any prototypes that have been developed to support RFAs.

2.2.3. Virtual PSAP Operator

It is the County's desire to have the option to allow operator positions to securely access the system in a Virtual PSAP environment wherein login would place virtual positions into a group of operators specific to that of a specific PSAP. As an example, an operator in one PSAP could login to a second PSAP and based upon login ID and password, would appear as an operator within the second physical PSAP.

The proposal shall describe how the proposed system supports the implementation of a Virtual PSAP.

2.2.4. Remote Positions (Option)

The system shall support the deployment of remote positions at a location to be determined at a later date. The County will supply the IP transport network between the PSAP and the remote positions. There shall be no signal conversion between the ANI/ALI Controller and the remote positions - the connection shall be IP end-to-end. The remote positions shall have the same functionality and access to resources as the local positions.

The proposer shall describe the network bandwidth and latency tolerance requirements per position. The proposer shall also describe any additional data or networking equipment required at the remote position location or at the primary location to support this function.

2.2.5. Interoperability

The proposer shall describe the programs it is participating in to test its system with products from other vendors.

2.2.6. Open Source Reliance

The proposer shall describe whether the proposed solution utilizes open source software/products and detail what, if any, are utilized. Describe how product enhancement control is maintained independent of open source community advances. Describe any risks associated with utilization of open source software.

2.3. North Florida Routing Network

The proposed system shall be fully compatible with the North Florida Routing Network (NFRN). This IP network presently interconnects PSAP facilities at 14 counties in North Florida. The Contractor will provide and install a connection between the NFRN router (Cisco 1841) and the provided NG9-1-1 system. The Contractor will configure the System to send/receive data packets on the NFRN.

2.4. ANI/ALI Controller

As used within this section, the term "ANI/ALI Controller" shall be interpreted as that interface as described within NENA-08-501 Issued June, 2004, "NENA Technical Information Document on the Interface between the E9-1-1 Service Provider Network and the Internet Protocol (IP) PSAP". In particular, the intent is to describe the necessary interfaces required of both legacy and NG9-1-1 networking as described within the VoIP Migration Strategies.

2.4.1. Telephony Switch

The NG9-1-1 ANI/ALI controller and the call control management module must have two physical servers that process the payloads for voice and data. Servers must operate together as a Virtual Server. Features of the virtual operation must provide the minimum functionality as follows:

In the event of a failure of the active server, switchover to the second server shall be automatic and shall result in no loss of service.

The system shall have a non-blocking, fault tolerant switching fabric which is expandable by adding interface cards.

Interface ports shall have dedicated resources to detect tones, generate tones and support audio conferencing.

2.4.2. ANI/ALI Controller – Voice Over Internet Protocol (VoIP)

The Switch must be capable of VoIP technology. The system must be capable of being accessed via Virtual Private Network (VPN), for virtual PSAP operations, online monitoring, system administration, and maintenance positions.

2.4.3. ANI/ALI Controller – Audio Signal Processing

Any CODEC audio signal protocol entering the central CPE equipment from direct VoIP Internet Service Providers (ISPs) must be supported utilizing common VoIP CODEC techniques.

2.4.4. ANI/ALI Controller - Interface, Control Functions, Standards

The new CPE system architecture must consist of a complete ANI/ALI Controller system with interface modules to administrative circuits. The ANI/ALI control functions shall combine into a fully redundant system. The architecture must conform to NENA standards as well as requirements outlined later in this document. The Proposer must configure the PSAP as a fully survivable solution offering a fault-tolerant and secure architecture.

- A. Equipment shall be capable of allowing direct trunking to/from Class 5 Tandem offices with ANI and Selective Routing
- B. Equipment shall be capable of reverse loop battery supervision on CAMA or TSPS type central office trunks and accept Enhanced 9-1-1 Tandem trunking.
- C. Equipment must support standard Enhanced 9-1-1 Fixed and Manual call transfer and Tandem Office speed dial and conference capabilities.
- D. Equipment shall be capable of interfacing proprietary telephone sets, which may be proposed as an option.
- E. Equipment must be capable of identifying to the ALI controller/server, the caller's telephone number as transmitted by the Tandem Control office, the Enhanced 9-1-1 trunk number over which the call arrived, and the Call Taker position that answered the call.
- F. Equipment must be capable of displaying the 9-1-1 caller's telephone number to the Call Taker immediately following answer by the Controller of the incoming call from the Tandem Office, even if the call is abandoned prior to the Call Taker answering the call.
- G. Equipment must be capable of storing, for retrieval by the Call Taker, the 9-1-1 caller's telephone number in the event caller hangs up before or after answer by the Call Taker.
- H. Equipment should have the ability for "one-button" activation by the Call Taker to dial a call back to the 9-1-1 caller's telephone number (Landline or Wireless) without the Call Taker dialing the entire telephone number sequence (including, if required by system design, dialing "9" for outside dial tone).
- I. The system must be equipped to provide Reverse ALI Lookup through transmission of telephone number through the ALI Controller/Server to the ALI Database in order to retrieve information related to the telephone number.

The system should include an indication that the operator is requesting a Reverse ALI Lookup. Each Reverse ALI Lookup shall be flagged in a daily report so that each use can be verified as proper.

- J. Equipment must have or be capable of interfacing the provided alarms, which will advise of failures in the equipment, both to the Contractor and the Call Taker Supervisor.
- K. Equipment must interface and accept calling number, trunk number, and answering position number information from the ANI Controller/Server.
- L. Equipment must be capable of storing, for retrieval by the Call Taker, the 9-1-1 caller's ALI Data (telephone number, name, and address) in the event caller hangs up before or after answer by the Call Taker.
- M. Equipment must interface with the Telephone Company Automatic Location Information (ALI) computers with at least two (2) digital output interfaces for the transmission and receipt of ALI data.
- N. Equipment must be capable of retrieving, storing, and displaying the entire ALI data stream from the Telephone Company ALI database. Display must be capable of conforming to NENA Database Standard Practice 03-001 and display NENA 02-010 Version 4 information provided by Service Providers and Database Management System Providers.
- O. The Controller must have a Computer Aided Dispatch (CAD) data output port, which transmits AT&T Enhanced 9-1-1 standard communications protocol. Programming modifications must be available and performed at no charge during installation, if changes to the data stream format are required to provide appropriate information to CAD.
- P. Equipment must be capable of "Repeat ALI" function via a single push-button (mouse click) operation, which will cause the system to retrieve and display ALI data on the current call and display the data on the ALI display screen of the Call Taker requesting "Repeat ALI". The "Repeat ALI" function shall not time out and shall allow the Call Taker to request "Repeat ALI" on Wireless 9-1-1 calls as frequently and over any period of time as required to handle the call.
- Q. Equipment must provide output to drive ANI/ALI printer(s). The interface must drive a paper printer(s) in a continuous format, real time mode with operator intervention. The printer device(s) shall be included in the system proposal. Printer(s) must be alarmed to sound an audible warning if it/they should fail in any manner (including paper jam and out-of-paper), which would result in an off-line condition. The County shall select the printer location within the communication center.
- R. ANI/ALI Printer(s) must provide a call detail report which, at a minimum, indicates:
 - 1. Incoming Trunk Number
 - 2. Position/Workstation that received the call
 - 3. Date
 - 4. Time the call was received by the system
 - 5. Time the call was answered
 - 6. Time the call was transferred, if applicable to call
 - 7. Time the call was terminated
 - 8. Caller's telephone number (ANI) – Wire line or Wireless

9. Caller's location information (ALI) – Wire line or Wireless

The printer shall be a quiet device and while in operation shall not emit excessive noise, which disrupts the work environment of the PSAP. If multiple printers are required, the proposal will include a customer acceptable rack mounting device to house printers. As an alternate to this requirement, the proposal shall include optional pricing for a PC device that will store this same data on a hard drive, with software to allow sorting for calls by date, time, and telephone/wireless number.

- S. Equipment must provide output to a CRT/LCD Flat Screen display located at each Call Taker Position. Screen display must contain a replication of the exact information retrieved from the Telephone Company ALI database.

2.4.5. System Availability

The system shall provide an industry-standard up time of 99.999%. The proposer must describe any predictable maintenance or upgrade process affecting hardware, firmware, or software that would require the proposed solution be removed from service for any length of time.

2.4.6. Automatic Call Distribution

The system must be equipped with a call control management module which is capable of providing ACD-like capabilities. The following capabilities are required:

- A. Call Transfer
- B. Consultation Hold
- C. Minimum of Three Party Conference
- D. Systemwide and Local Instrument Speed Dial
- E. Station-to-station Intercom
- F. Supervisor Barge-In
- G. Caller ID for equipped administrative lines
- H. Direct-Outward Dialing (DOD)
- I. Direct-Inward-System-Access (DISA)
- J. Redundant (Dual) Computer Common Control
- K. Power Failure Transfer
- L. Toll Restriction, by area code, by station line
- M. Accept Two-Wire Analog Station Line Terminations from County PBX
- N. Support 4-Wire E&M Tie Lines
- O. Support 2-Wire Ring Down Circuits
- P. Provide Caller ID to Telephone Sets

2.4.7. Wireless Compatibility

The ANI/ALI equipment must be Wireless Phase I and II compatible per FCC requirements.

- A. The proposed system must be able to support multiple, simultaneous Wireless provider solutions, including, but not limited to: CAS, NCAS, and Hybrids.

- B. The proposed system must be able to support multiple, simultaneous Location Technology solutions, including: Handset Based, Network Based, and Hybrid.
- C. The proposed system must have the capability to interface with new network protocols, which may be required to support Phase II, including ISDN and VoIP/Telephony.
- D. The proposed system must be able to support multiple ALI re-bids to provide the capability to acquire new position updates provided by either Phase I or Phase II location technologies to track movement of a Wireless 9-1-1 caller.
- E. The proposed system must be able to support multiple ALI data presentations from different databases to provide both Phase I and Phase II data, including tower antenna face and estimate of location accuracy (confidence factor).

2.4.8. Fault Tolerance

The Proposer shall describe the proposed system architecture with respect to the major components or modules, and describe how the system will react to a failure of each major component or module. The proposal should explain how the proposed system has no single points of failure.

2.4.9. Power Distribution

Power must be delivered to the equipment such that the failure of a single power feed will not result in the loss of more than 50% system capacity.

2.4.10. Legacy and VoIP Interface Design

Given the mission-critical nature of the system and the various interfaces that need to be supported now or in the future, the following interfaces must be supported.

- A. CAMA analog
- B. CAMA T1
- C. SS7
- D. SIP (VoIP)

The proposal shall describe the design of the interfaces and identify any additional software, hardware, or external devices required to support them.

2.4.11. Protocols

The system shall use TCP/IP network connectivity and client/server network design. Calls shall be transported as VoIP between the (onsite) Central Equipment and the call taker workstations.

2.4.12. Bandwidth

The proposal shall state the bandwidth requirements for call-taker positions and remotely connected lines and trunks.

2.4.13. CAS and NCAS

The ANI/ALI controller must be compatible with eight, ten, and 20-digit ANI delivery, and non-call associated signaling (NCAS) solutions.

2.4.14. Administrative Trunks

The ANI/ALI Controller shall support a 2-wire telephone line interface which may be either loop start or ground start. Caller-ID functionality with name or name and number delivery shall be provided on all administrative telephone line interfaces.

The System shall interface with the County's Avaya administrative PBX. Administrative call transfers to remote sites (LCSO, TPD, etc.) will be done by the administrative PBX.

2.4.15.E9-1-1 CAMA Trunks

The ANI/ALI Controller shall have a CAMA type interface to the selective router and be compliant with all applicable local telephone company technical requirements.

2.4.16.ESInet

The proposed system must have the capability to terminate future NG9-1-1 network payloads as well as non-IP originated emergency and administrative calls. The proposal shall identify whether additional equipment is required to terminate future NG9-1-1 based trunks and provide optional pricing for same.

2.4.17.Switch Administration and Maintenance

The ANI/ALI Controller must be administered, monitored, and managed centrally. The Proposer will describe how this is accomplished and any requirements for space to accommodate the function.

2.4.18.Network Security

The proposal shall describe, in detail, included security protocols and interfaces. If additional hardware (firewall, etc) are required, this must be included in the base system, not priced as an option. Detailed pricing for security (hardware and software) is required.

2.4.19.9-1-1 Trunk and Administrative Line Gateway Placement

The system must include multiple media and emergency gateways and place these critical resources on multiple Ethernet switches to provide access diversity.

2.4.20.Ethernet Switch Configuration

The system shall provide at least two managed Ethernet switches of sufficient capacity to allow for distribution of all IP-based devices across such switches in such a fashion that the loss of one Ethernet switch will not disable more than 50% of the 9-1-1 workstation/phone positions, servers, and gateways.

2.4.21.Remote ALI Retrieval System Interface

The ANI/ALI Equipment must interface the ALI Database provided by the Telephone Company. The system must have at least two output interfaces for transmission and receipt of wireless and VoIP call data to the ALI Database.

The proposed system shall have ALI Rebid capability and shall be configured to allow manual ALI queries.

The ANI/ALI Equipment must be compatible with eight- and ten-digit remote database query methods.

The system should also support advanced NENA Extensible Markup Language (XML) tags for standardized data exchange.

The system shall support Additional Data as defined by NENA 71-001, Version 1, September 17, 2009, "NENA Standard for NG9-1-1 Additional Data"

2.4.22.ALI Caching

The system must be able to store ALI data received from third-party ALI databases (i.e., Telco ALI database). The system must send stored (cached) ALI information in response to subsequent queries for the same information providing faster ALI display on call taking workstations in the event the call is transferred to another system workstation or placed into conference.

2.4.23.CAD Interface

The System shall provide for NENA-compliant serial system interfaces for the delivery of ANI/ALI information to Motorola PremierI CAD and Mapping applications. The system shall be capable of delivering ANI/ALI information to CAD and Mapping applications via Ethernet connection without a hardware or software upgrade being required.

The System will be expected to work with any CAD and/or Map vendor to set up, test, and implement this CAD interface. Successful completion of this interface, and testing of same, will be a requirement at implementation and prior to cutover to the new system. The current ASCII ALI configuration should be considered baseline for the initial installation.

2.4.24.External Clock Interface

The ANI/ALI Controller shall be equipped to interface to an external clock source in order to ensure consistency of time stamps added to event records and reports from all PSAP equipment in compliance with NENA 04-002, Issue 4, April 9, 2007, "NENA PSAP Master Clock Standard".

2.4.25.E9-1-1 Network Compatibility

The solution, including software, hardware, and interconnections, proposed shall be compatible with the Local Telephone Company's network infrastructure as currently available.

2.4.26.Virus Protection

All PC-based machines (servers and workstations) in the network shall have virus protection software installed and functioning. The System shall provide a mechanism to keep the virus protection up to date that is not dependent on Remote Monitoring.

The virus protection shall be updated via a local virus definition server which is populated only with virus definitions that have been tested and approved by the proposing vendor.

2.4.27.Overflow Capability

The ANI/ALI Controller shall allow E9-1-1 calls to be routed to a designated alternate location if all Call Takers are busy.

2.4.28.Central Office/Tandem/PSAP Transfer; Hook Flash

The ANI/ALI Controller shall provide the capability for an established E9-1-1 call to be transferred by the Call Taker, via the E9-1-1 tandem office, to another PSAP or some other destination using hook flash signaling.

2.4.29.Outgoing Trunk/PSAP Transfer

The ANI/ALI Controller Switch shall provide the capability for an established E9-1-1 call to be transferred by the Call Taker, on an outgoing trunk, to another PSAP without requiring hook flash signaling. The transfer shall be initiated by the single click of a transfer button

and shall be transparent to the tandem. The ANI shall be transmitted with the transferred call.

2.4.30.Call Taking Mode

The system shall have the ability to present inbound 9-1-1 and administrative calls to each call taker. Each position shall display all 9-1-1 and administrative lines and shall cause all call taking positions to signal an incoming call with an audible and visual indication. The call shall be delivered to the first Call Taker who “answers” the ringing call.

2.4.31.Selective Transfer

The ANI/ALI Controller must be able to provide the capacity for access to a minimum of six (6) emergency service providers for each ESN. This capability will allow any Call Taker to transfer a call to an agency and establish a conference call.

2.4.32.Abandoned Call Information

The ANI/ALI Controller shall be capable of collecting, storing and make available for recall the ANI digits and processing the ALI lookup regardless of the condition of the call: active or on-hook.

The ANI of the abandoned caller must be available for viewing by the call taker and the abandoned call must remain in queue with still-active 911 calls.

2.4.33.Automatic Call Detail Record (CDR)

The ANI/ALI Controller shall capture, and store, all available information pertaining to each 9-1-1 call on the application/telephony virtual server and be accessible to the MIS package for electronic and paper reports.

2.4.34.Redundancy

The system architecture shall be such that the failure of any one component or module will not result in total system failure, but only the loss of the equipment associated with that module. All vital system modules must be protected through the use of redundant modules to ensure single point failure tolerance.

The 9-1-1 ANI/ALI Telephony Switch must have a pair of Application Servers operating as a high availability virtual server for ensured redundancy. Both application servers must provide for constant availability; each of which must have the ability to support all call taker positions. Failures on the active server must result in migration of the applications to the second server without service interruption. The switch over between telephony servers shall maintain all calls in progress and shall not require any human intervention.

2.4.35.Flexibility

The proposed system shall have the demonstrated ability to effectively manage and process a variety different call formats including:

- A. Traditional analog or digital telephone calls
- B. Wireless calls in compliance with the FCC Phase 1 and Phase II mandate for full call integration.
- C. Voice Over IP in native format in compliance with the emerging NENA I3 standard
- D. Instant Messaging (IM)
- E. Voice Over IM (VoIM)

F. Short Message Service (SMS, "Cellular Text")

G. Video

2.4.36. Central Equipment

All central equipment shall be rack mounted. The rack must be securely mounted to the floor and properly grounded to the facilities grounding system. The rack must have dual power supplies

2.4.37. Maintenance Printing - Equipment Room

Proposal to describe

2.4.38. Maintenance Access - System Reconfiguration

Proposal to describe

2.4.39. Future Expansion

The system specified herein shall be capable of meeting today's needs as well as NG9-1-1/ESInet connectivity in order to meet anticipated future growth. It shall be capable of supplying the equipped wired and maximum quantities specified in this document without replacing any in-place common equipment. The system should be installed with adequate processor and hardware to meet this growth.

Proposers shall state the expansion capability of their equipment, describing the overall system capacities including the number of incoming 9-1-1 trunks, answering positions, telephone lines, central office connections, remote workstations, etc.

2.4.40. Call Detail Records

The system shall provide Call Detail Records for all payloads. The system shall provide QoS information for each call to ensure that 9-1-1 State Plan Technical and Operational Standards are being met. QoS information should be accessible through the maintenance function.

2.4.41. Environmental

Proposal to describe.

2.4.42. Specifications

All equipment shall comply with, but not be limited by, the following specifications and standards:

- A. Comply with FCC rules part 15, class A for EMI
- B. Comply with FCC rules part 68
- C. UL/CSA 6950 3rd edition
- D. CE compliant – (International requirement)
- E. NENA 04-001 Generic Standards for E9-1-1 PSAP Equipment.
- F. The proposer shall supply proof of FCC Part 15 and FCC Part 68 certification.

2.4.43. System Diagrams

The proposal shall include system diagrams in Microsoft Visio (or comparable) showing:

- A. System Connectivity

B. System NG9-1-1 Functionality including connectivity to ESInet

2.5. Master Clock (Optional Purchase)

The proposal shall include (as an option) a Time Synchronization Device "Master Clock" that utilizes GPS technology. The proposed Master Clock shall be configured and equipped to provide a timing signal to at least six communications center systems: 9-1-1 Telephone, CAD, RMS, dispatch radio system, premise data network, and spare. The proposed master clock shall also be compliant with NENA 04-002, Issue 4, April 9, 2007, "NENA PSAP Master Clock Standard".

2.6. Workstation Equipment

2.6.1. PC Hardware Requirements

The workstation should be state-of-the-art, digital technology including industry-standard keyboard and mouse. The workstation must be equipped with all necessary audio and video interface equipment to include keyboard, mouse, speakers and a 22" flat panel monitor.

2.6.2. PC Specifications

The proposal shall provide minimum and optimum specifications for workstations and provide optional pricing for each.

Proposal to describe

2.6.3. Programmable Keypad

It is desirable for the workstation to be equipped with a 12 to 24 key programmable keypad that will allow the Call Taker to perform basic system function without using the computer keyboard.

2.6.4. Headset/Handset

The workstation shall provide an audio interface to a headset/handset and to the radio system arbitration unit to accommodate both radio and 9-1-1 audio in the same headset/handset. Proposers are encouraged to utilize wireless technologies.

2.6.5. CTI Software Requirements

The screen layout must be highly customizable. The 9-1-1 client application must be a true soft phone and operate independent of any associated telephone instrument. If a fault occurs in the application or PC while a call is active the call must be presented to another operator without failure.

2.6.6. Call Taker Log-on

The system shall require Users to log-on with a Username/Password combination. Upon successful completion of the log-on, each Call Taker will be presented with a selection of pre-configured roles.

The screen layout presented to the Call Taker shall be based on a user/role combination. If a user/role combination has not been defined for the Call Taker then the screen layout presented to the Call Taker shall be based solely on the selected role. If a role has not been assigned to the Call Taker, the Default User/Default Role layout shall be presented. Call takers shall be able to log-on at any position and be presented with the identical screen layout associated with the selected role.

2.6.7. Position Software Update

Proposal to describe.

2.6.8. Call / Line Indicators

The workstation shall indicate incoming emergency and non-emergency calls by both audible and visual means. 9-1-1 Trunks shall have a different audible and visual signal from other lines. The workstation shall also have the ability to visually display the status (connected, ringing, or on hold) of each emergency and non-emergency call.

2.6.9. Routing Status

It is desirable that the workstation be capable of providing a visual display of the routing status of the call:

- A. Normal – the first attempt to route the call was successful
- B. Overflow – the first route was busy or congested
- C. Alternate – the first route attempt failed and another route was attempted
- D. Transfer – the call was transferred
- E. Not Available – no routing status was received.

2.6.10. System Sounds and Icons

The workstation shall allow a supervisor to modify the system sounds and button icons.

2.6.11. Graphical User Interface

The GUI must consist of a number of windows, each of which can be located and docked in a position on the screen deemed most optimal by PSAP management.

2.6.12. Screen Layout Lock

The screen layout shall be automatically locked when the Call Taker logs in to the answering position.

2.6.13. Screen Layout Restore

The supervisor shall have the capability to restore the original screen layout while making modifications.

2.6.14. Print Capabilities

The workstation shall provide an interface port for manual printing of ALI and TDD conversation upon call release. The workstation shall send these print jobs to a network printer.

2.6.15. Status Windows

The workstation shall present the call-taker with the status of the following categories:

- A. Number of Active 9-1-1 Calls
- B. Number of 9-1-1 Calls on Hold
- C. Number of 9-1-1 Calls Ringing
- D. Number of Active Call-takers

The numbers shall be summarized and presented on icons.

Call-takers shall be able to open up windows for each status category to obtain more information about calls in each category:

- E. ANI
- F. Trunk
- G. Position
- H. Call Taker
- I. Start Time

2.6.16. Automatic Number Identification

The workstation must be capable of providing visual display of the emergency caller's telephone number.

2.6.17. Call History Database

The System/Workstations shall identify multiple calls from a common ANI record for a pre-determined period of time. When a Call History flag is displayed, the call taker may view the call history records or ignore the flag and process the call as usual.

2.6.18. Automatic Location Identification

The workstation shall be capable of providing visual display of the calling party's street address information based on the ANI. The workstation must also be capable of extracting geographical coordinate information from the ALI file received and transmitting this information to geographical mapping software.

The proposed system GIS must be compatible with the TLC/GIS Motorola PremierI CAD GIS.

2.6.19. Wireless Call Handling

The workstation shall present Wireless calls and shall include all standard call-handling features.

Single step wireless callback is mandatory as the Call Taker shall not be required to perform a manual ANI callback for wireless calls.

2.6.20. TDD Detection

The workstation shall be capable of detecting emergency calls originating from Baudot-type Telecommunication Devices for the Deaf (TDD) equipment, and indicating to the Call Taker the presence of the TDD call.

2.6.21. TDD Communication

The workstation must allow operators to communicate with TDD/TTY callers directly from their 9-1-1 workstation keyboard, without requiring the use of any external device. Operators must also be capable of manually connecting to emergency calls originating from ASCII- type TDD/TTY equipment, as well as originating both Baudot and ASCII calls from their answering position.

The workstation shall allow users to store and access (send) a minimum of 20 pre-programmed TDD/TTY messages, as well as to print the previous TDD/TTY conversations.

The operator shall also have the ability to create a conference between the TDD/TTY caller and up to four non-TDD/TTY parties either in 9-1-1 call-taking mode or administrative call-taking mode.

The TDD/TTY function must allow an operator to transfer a TDD/TTY call to another operator position.

The TDD/TTY function must allow the operator to alter its operation to comply with ADA requirements for HCO (Hearing Carry Over) and VCO (Voice Carry Over) calls.

The two-way TDD/TTY conversation and text information should also be stored on the Application/Telephony Virtual Server.

2.6.22.Call Review

The workstation shall allow the Call Taker to view the ANI information of at least the last 10 calls released at the answering position.

2.6.23.Instant Messaging

Instant messaging must be available from each PSAP workstation and be configurable or disabled according to individual PSAP requirements. Each workstation shall have the ability to send an instant message to any other workstation on the system.

2.6.24.ALI Parsing

The workstation shall guarantee that ALI data is appropriately and consistently displayed when interfacing with different ALI providers that send their information in various formats (i.e. wireline vs. wireless).

ALI should comply with NENA's recommended XML schemas at the time of delivery.

2.6.25.Conference

The workstation must provide the Call Taker the ability to remain on a call and add a new party to the conversation without putting the caller on hold - the caller must remain on-line at all times.

The system shall allow for up to 10 simultaneous conferences of up to 3 parties each. Any party shall be able to drop out of the conference; leaving the others talking as long as at least one of the other parties possesses supervision on their connection.

Call Takers shall be able to mute any participant in the conference and shall be able to exclude any participant from hearing other parties in the conference to allow for private consultation.

The status of the call shall be presented visually in a window that also shows the status of all other calls at the workstation (active, abandoned, on hold).

2.6.26.Speed Dial - Contacts

The Call Taker speed dial shall allow the Call Taker to quickly access frequently called telephone numbers from a pre-programmed list of contacts.

The Call Taker shall simply double click on the on the contact in order to initiate the speed dial.

2.6.27.Speed Dial – Icons

The Call Taker shall be allowed to initiate a speed dial simply by clicking on an icon which has been preconfigured with the telephone number. It shall be possible to group speed dial icons in a logical manner.

It shall be possible to initiate a speed dial conference with the single click of a speed dial icon.

2.6.28.Callback

The workstation shall have the ability to callback a 9-1-1 caller by dialing the ANI received during the E9-1-1 call setup.

The workstation should provide a single feature key to perform this operation. Manual dialing of the number by the Call Taker shall not be necessary.

The callback of emergency TDD and wireless calls should be performed in the same manner.

2.6.29.Hold

The answering position must allow the call taker to place up to five administrative calls on hold with a single keystroke or mouse click. The ANI/ALI controller system must store the ANI/ALI information while the call is on hold, avoiding repetition of the ALI request.

2.6.30.Forced Disconnect

Call Takers shall be capable of releasing an existing E9-1-1 call at any time, regardless of whether the calling party has hung up.

2.6.31.Monitor

Any authorized call taker or supervisor must have the ability to silently listen to another call taker's telephone conversation from his/her workstation. Such action must not cause any audio or visual disturbance at the monitored answering position.

2.6.32.Barge-In

The workstation shall give the Call Taker the ability to barge into an existing call by clicking on the appropriate circuit indicator on their screen or pressing the appropriate line appearance on the telephone.

Upon entering any 9-1-1 or administrative call for which ANI/ALI or Caller-ID information is available, such information shall be immediately displayed on the Call Taker's display.

A minimum of six participants must be able to use the barge-in feature on a single 9-1-1 call.

2.6.33.Make-Busy

Call Takers, with appropriate system permissions, shall be capable of temporarily removing themselves from a ring group (call queue) in order to wrap up a previous call or perform another task (such as radio dispatch) while remaining logged on. Call Takers shall click a single "Make Busy" icon to remain logged on but not in a queue to receive calls.

2.6.34.Static Map (Optional Purchase)

The County plans to use their Motorola PremierI CAD Map.

As an Optional Purchase, the proposal shall include a mapping product that plots incidents. The proposed map product's capabilities should be fully described.

2.6.35.Recommended Spares

The proposal shall provide a list of recommended spares.

2.7. Recorder

2.7.1. Central Recording

Audio recording shall be provided at each workstation (call taker, dispatcher, supervisor). Audio at each workstation shall be recorded regardless of whether a user is logged onto the 9-1-1 Telephone System.

The audio records shall be fully integrated with the MIS application.

2.7.2. Instant Recall Recording

The workstation must provide Instant Recall Recording (call-check) functionality for all audio. Recordings should be accessible by an easy-to-use interface and provide for a rolling log of records available for review. The proposer will state how IRR calls will be handled and for what interval they will be available for review.

The IRR must be IP-based and fully integrated with the MIS application.

2.7.3. Recorder Specifications

The recording system shall have the following minimum specifications:

- A. Record all audio at each workstation (Quantity 27). Provide optional pricing for nine (9) additional workstation recording devices (growth).
- B. Record 9-1-1 system audio of calls transferred to remote call takers (Quantity 7 – (2) FSU, (1) FAMU, (1) Capitol PD, (3) Mobile Command Center)
- C. Rack mount chassis for an industry-standard 19” rack
- D. Minimum expandable capacity within a single chassis to grow to at least 48 channels
- E. Unlimited playback licenses
- F. Unlimited “Real-Time Monitoring” licenses
- G. Dual power supplies for redundancy
- H. Front Panel Access Hot-Swap Drives
- I. Sound Card
- J. CD/DVD-RW Drive
- K. Ethernet (100/1000 BaseT)
- L. Fault Polling Software/Dial-out paging capability
- M. Call editing and reporting capabilities on separate (remote) workstation

Proposal to fully describe.

2.7.4. Call Volume Analysis

The system shall include a search engine with a user friendly interface that allows, at a minimum: event playback, live monitoring and filtering of recording information with analysis of volumes and patterns.

The system must be capable of providing recording statistics (minutes by hour, number of recordings by hour, etc.) for each channel recorded.

2.7.5. Backup

The system shall include redundant workstation recording on separate systems.

Proposal to fully describe.

2.7.6. Playback

The system shall provide for the simultaneous playback of previously recorded audio while recording the maximum number of channels, and shall not degrade recording performance.

The system must be capable of selecting multiple audio files and playing them back in order of occurrence. The system must be able to reconstruct the digital time with the files to play back an entire activity in real time.

Selected audio files for playback must have the capability to skip dead time gaps while playing back continuously.

The playback function must have the ability to view and select audio files for playback according to date, start time, channel number and name, ANI/ALI information, duration notations (capable of being edited) recorded with the files.

The system must be capable of playing back silent periods and displaying the associated time and date during playback for proof of non-events.

The workstation must be capable of variable speed playback of voice calls while preserving pitch.

2.7.7. Quality

The system shall be able to conduct multiple simultaneous playback sessions (multiple remote PCs) with no degradation of speed or quality of recording.

2.7.8. Licenses

The system must have unlimited playback seat licenses and must use a thin client application with no software loaded or residing on the client PC.

2.7.9. Recording Attachments

The operator must have the capability of posting annotations as an attachment to a recording

2.7.10. Search

Expanded searches shall be conducted by clicking a "Date" button, thereupon viewing a calendar display. By clicking on the desired day, all the payloads for that day may be viewed in a scrollable format, listed in chronological order. It shall also be searchable using ANI/ALI information.

2.7.11. Archive

When burning a CD for playback, the recorder must have the ability to "Pack" the playback executable with all the playback functionality, tagging, and queuing with the recordings for security validation.

2.7.12. Security

The recording system must provide a System Log and User Log that reports all activity within the recording system. All accesses into the recording system must record the log-in number and what recordings were retrieved by the log-in number by time and date. The identification of which recording was retrieved must only be identified by a Hex code within the Log record.

The system must be able to provide and create administrative user accounts that control any access to the recorder functions and be able to terminate that access automatically by date and time.

Playback access must be able to secure privileges by individual channel, time of day, single station access, department access, division access, data source, Log group, and length of time.

The playback retrieval software shall have the ability to verify authentication of a recording by its digital signature with the original recording secured within the recording folder.

2.7.13. Diagnostics

The system shall include built-in diagnostic software that will automatically monitor alarm conditions of the equipment and initiate audible and visual alarms in the event of any failure or disruption of the operation/recording processes.

The system shall display a System Offline alarm at the Supervisor Workstations when the system is off line.

The system must be capable of automatically dialing out by modem or e-page and making notification to the Contractor's diagnostic/repair center in the event of any failure or alert.

The system must conduct a fault tolerance check and place a call to the Contractor's support system to log a system status report nightly. This report will be reviewed on a daily basis by the Contractor's technical support staff as a preventive maintenance and proactive service log.

Proposal to fully describe.

2.7.14. IP Packet Recording (Option)

The proposal shall include an optional recorder system that captures all IP payloads received at each workstation (text files, photographs, videos, telematic files, etc.). This system shall (at a minimum) include all the functionality specified above for the audio recorder system.

Proposal to fully describe.

2.8. Reports

2.8.1. Data Integration

The reporting interface shall be capable of integrating multiple databases into one report with the recordings as an attachment to the payload record.

2.8.2. Data Analysis

The system's reporting capabilities must be designed to enable authorized users the ability to drill up/drill down and navigate the information to enable various agents, managers, supervisors, and executives to answer virtually any telecom question in exactly the level of detail necessary to support a given administration decision.

The system shall provide comprehensive management and statistical reports for individual PSAPs/Jurisdictions.

2.8.3. Report Manager

The report manger must be able to save a customized report as a browser-type favorite for quick report generation.

2.8.4. Report Parameters

ANI/ALI data must be captured and stored with each 9-1-1 call.

The following items from the ANI/ALI data stream must be captured and stored in their own individual database fields of appropriate size that is sortable and searchable:

- A. Originating Phone Number (ANI)
- B. Address or Coordinate (ALI)
- C. Caller Name
- D. ANI/ALI Time of Initiation
- E. ANI/ALI Time of Pickup
- F. ANI/ALI Time of Disconnect
- G. ANI/ALI Date
- H. ESN
- I. Class of Service
- J. LEC
- K. Additional Data
- L. Multi-Media Payloads

2.9. Administration, Alarms, and Reporting

2.9.1. Administration

System administration shall be a web browser or windows application that provides the maintenance functions required for the 9-1-1 specific functions implemented by the ANI/ALI Controller. These functions include:

- A. Tandem transfer code configuration
- B. Outgoing Trunk configuration
- C. User configuration
- D. ALI configuration
- E. Resources configuration
- F. Services configuration
- G. Speed dial numbers
- H. Agency information

Proposal to fully describe.

2.9.2. Self-Monitoring

The local ANI/ALI system must be capable of self-monitoring vital processes and sending alarms in the event of an alarm condition. The system shall notify the communications supervisor, local system administrator, and/or local maintenance personnel upon detection of an alarm via e-mail and give a brief description of the alarm condition.

2.9.3. Remote Access

The system must provide maintenance personnel the capability to query the system locally and remotely through an internet connection via a Virtual Private Network (VPN) as to the fault(s) and its affect on the system. Alarm history queries, reporting, and printing must be provided.

2.9.4. Alarm Categories

There shall be a minimum of two categories of alarms (major and minor) depending on the criticality of the event. It is desirable for the system to allow the administrator to configure notification thresholds.

The types of alarms are defined as follows:

- A. **Major Failures** - A major case of trouble, for purposes of this document, shall be defined as any problem causing a reduction of 10 percent (10%) or more of incoming, outgoing or intercom traffic in the system or the non-functioning of 9-1-1 call handling software features, recorders, interfaces required to outside technologies or other functions essentially rendering the system less than 90% functional as determined by the County's Project Manager.
- B. **Minor Failures** are minor system failures that minimally reduce system operability or have little or no effect on system operability and usability, and are considered to be operationally acceptable by the County.

The system shall be capable of sending email notifications of alarm conditions to communication supervisors and maintenance personnel. The email notification must summarize the SNMP trap which triggered the alarm condition.

2.9.5. Reporting

The proposal shall include a comprehensive management and statistical reporting functionality to provide the PSAP management personnel with real-time and historical information. It shall be user friendly, customizable, and capable of generating reports for varying time periods. The system also shall be able to auto-schedule the generation of predefined reports. The provided system shall include one black and white networked laser printer to be used as a system printer.

As a minimum, the following information shall be readily available for reporting purposes:

- A. ANI
- B. Seizure time
- C. Position answered
- D. Answer time
- E. Disconnect time
- F. Incoming trunk number.
- G. Total count of Payloads by Type
- H. Average Event Waiting Report
- I. Average Event duration
- J. Total Abandoned Events
- K. Events by incoming trunk
- L. Events by hour of day

- M. Events answered by position
- N. Events answered by all positions
- O. Events answered by user ID

2.10. Installation

The successful vendor (Contractor) will be responsible for all aspects of provisioning and installing the system contained in this RFP. Installation of any equipment or adjunct located within any of the identified sites will require identification of any modification required by Leon County to accommodate such installations.

Installation must be accomplished without disruption of existing enhanced 9-1-1 services.

The Contractor will be responsible for cleanup of any waste, extraneous or used material, packing material, shipping support structures, spillage, or by-product resulting from the equipment delivery or any other item generated from the unloading and/or installation of the equipment. Each day during equipment delivery and installation, the Contractor shall clean up and remove all waste material and rubbish, leaving the area as used by the Contractor clear of all obstructions. Upon system cutover, the Contractor shall remove from the site all tools and machinery owned or rented by the Contractor and all rubbish and material.

Contractor will provide personnel for a minimum period of 24 hours after initial cutover to be available for technical assistance regarding functions and use and operation of the system.

Proposer should be aware that certain security requirements will require background checks and coordination with agencies to ensure access to sites where work will be performed.

2.10.1. System Grounding

System grounding must comply with industry standards and good engineering practices.

Proposer to supply requirements.

2.10.2. System Power

The system must operate from standard 120V, 60 Hz, single-phase power. The proposal shall identify power requirements for the backroom equipment and each answering position.

2.10.3. System Build Out

The system purchased in this RFP shall be delivered to its proper location and installed by the Contractor without additional cost or expense and at the convenience and direction of the County. The system shall not be deemed to have accepted any component or piece of equipment until such time, as said equipment has been installed and operating in accordance with the specifications contained herein.

All work shall comply with the applicable national, state, and local codes and regulations.

2.10.4. Liquidated Damages for Non-Performance in Delivery/Installation

If the Contractor fails to deliver and install the equipment in accordance with the contracted deadline for go-live operations, it is understood that the amount of \$500 per day for a period of up to 90 days shall be deducted from the monies due the Contractor for each intervening calendar day any work remains incomplete, not as a penalty, but as

liquidated damages. However, the Contractor shall not be liable if failure to perform arises out of causes beyond the reasonable control of the Contractor and without the fault or negligence of the Contractor (acts of God, the public enemy, fires, floods, strikes, freight embargoes, etc.). After 90 days, the County reserves the right to enforce the provisions of the performance bond or continue the liquidated damages, at a daily rate of \$1,000, with a maximum not to exceed the value of the contract.

The County anticipates activation of their new Communications Center in August 2012. The Proposer should assume that target date for the 9-1-1 System go-live.

2.11. Documentation

2.11.1.As-Builts

Two complete sets of as-built drawings are required. As-built drawings must be submitted in Microsoft Visio format, or other agreed upon graphic format as delineated in the contract, on two individual sets of CDs. The installation and acceptance of the system shall not be complete until as-built drawings are delivered. The Contractor shall provide and maintain:

- A. System Network Diagrams
- B. Data Flow Diagrams
- C. System Grounding Diagrams
- D. Equipment Layouts
- E. Equipment Rack Layouts

2.11.2.Manuals

Provide documentation for installation, operating, and maintenance for each component of the system. This documentation will include user manuals, maintenance manuals, and parts list of the equipment necessary for the continued and proper preventative maintenance and repair of the entire system.

All documentation provided by the Proposer/Contractor shall be provided in Microsoft Office format. Any specialized software required to view, edit, or maintain system documentation shall be provided by the Proposer/Contractor.

2.12. System Acceptance Testing

2.12.1.Functional Acceptance Testing

Acceptance testing will be performed/documented by the Contractor and witnessed by the County and/or its designee. The functional acceptance test will verify that the system installed will provide all the specified functionality. The County will not accept or certify the system until all items on the acceptance test plan are met to its satisfaction. A successful functional acceptance test is a condition for system cutover.

The Contractor will certify in writing when the system is installed and ready for testing.

If successful completion of the functional acceptance test is not obtained within thirty calendar days of the Contractor's stated date of completion, the County shall have the option, at their sole discretion, of canceling the contract with no further cost to the County or to continue the acceptance test.

Proposals shall include an initial Acceptance Test Plan (ATP) for demonstrating the system functions. This ATP will be finalized during contract negotiations.

2.12.2.Failure Levels

The following failure priority levels are defined for use during the Functional Acceptance Test:

- A. A major case of trouble, for purposes of this document, shall be defined as any problem causing a reduction of 10 percent (10%) or more of incoming, outgoing or intercom traffic in the system or the non-functioning of 9-1-1 call handling software features.
- B. Any major system failure encountered during the ATP will require a stop in acceptance testing. The major failure must be corrected and the functional test restarted (from its beginning).
- C. Minor system failures are minor system failures or open punchlist items that minimally reduce system operability or have little or no effect on system operability and usability, and are considered to be operationally acceptable only during the acceptance testing phase.
- D. Up to five minor system failures may be encountered and added to the Contractor's punchlist during acceptance testing. These failures may be corrected prior to final system acceptance. If more than five minor system failures are encountered during acceptance testing, the test must be stopped, the failures must be corrected and the test restarted (from its beginning).

2.12.3.System Reliability Testing

Upon completion of a successful functional acceptance test and cutover to live system operation, the system may begin a 30-day reliability test period in which the system performs normal 9-1-1 call taking service without a major system failure. If a Major failure occurs during the reliability test period, the final acceptance testing period will be stopped, and the failure or failures expediently fixed to County's satisfaction. Upon completion of a successful reliability test and correction of any system punchlist issues, the Contractor may request final system acceptance from the County.

2.12.4.Failure Response Time During ATP

Contractor response times to failures during acceptance testing shall meet the requirements defined for the warranty period.

2.13. Training

2.13.1.Training Requirements

Training on all system functions must be provided by the Contractor prior to cutover to live operations. Training must include sufficient information and experience to familiarize personnel (user-trainers, supervisors, and system administrators) with all system functions, features, and operations for their particular assignments.

The Contractor must implement a train-the-trainer plan for call-takers and PSAP administrators. Proposals shall include training plan that will be finalized at least 45 days prior to beginning training activities. The training plan shall include the training curriculum and recommended schedule.

2.13.2.Training Curriculum

Training curriculum for call-takers, supervisors, system administrators, and training instructors shall include instruction on all aspects of the PSAP/workstations, including but not limited to the following:

- A. Call Taking
- B. System Administration & Customization
- C. Troubleshooting
- D. Reporting
- E. Call Recording

2.13.3. Training Material

Training materials for call-takers, system administrators, and training instructors shall be approved by the County prior to the delivery of any training. Training materials shall become the property of the County.

Participants must receive individual copies of applicable training materials at the time the course is conducted. Authorization shall be granted to reproduce these and any subsequent training materials that are provided. It is a requirement that sufficient copies of ANI/ALI Controller end user training documentation and copies of administrative training documentation be included in this project in CD or DVD format in addition to paper copies for each participant.

2.14. Project Management

2.14.1. Project Manager

The Contractor shall assign a project manager who is familiar with 9-1-1 networks and IP networks, as well as the proposed system. The proposal shall include the Contractor's minimum qualifications and experience for assignment as project manager for this project. The County reserves the right to approve the Contractor's assignment of project manager for this project.

2.14.2. Project Plan

The proposal shall include a task-oriented Gantt chart detailing the system installation utilizing MS Project 2000 or a later version. The proposed start date for the project must utilize a "contract date" for competitive and demonstrative purposes. The project plan must identify critical dependencies and anticipated timelines.

3. WARRANTY/MAINTENANCE REQUIREMENTS

This section is written so that it can be pasted directly into a procurement specifications document.

All equipment, software, and services furnished by the Contractor shall be warranted free from defects in material and workmanship, and shall conform to this RFP and the resulting contract. In the event any such defects in equipment, software, or services become evident within the warranty period, the Contractor shall correct the defect at its option by (1) repairing any defective components; (2) furnishing necessary replacement components; (3) otherwise correcting any reproducible and/or recurring software defects; or (4) redoing the faulty services. The Contractor is responsible for all charges incurred in returning defective components to the Contractor's, subcontractor's, or suppliers' plants, and in shipping repaired or replacement components to the County. Labor to perform warranty services will be provided at no charge during the warranty period. Thereafter, the maintenance and service of the System will be contracted out to the Contractor, a third party, or provided by the County.

The Contractor further warrants that during the warranty period the equipment and software furnished under the contract shall operate under normal use and service as a complete system, which shall perform in accordance with this RFP and the resulting contract.

The warranty period shall be a period of 12 months from the date of final system acceptance as defined herein.

Claims under any of the warranties herein are valid if made within 30 days after termination of the warranty period. In addition, the following specific requirements apply to the Contractor's warranty:

- A. The Contractor warrants that all equipment furnished hereunder is new and of current manufacture.
- B. Should the Contractor fail to remedy any major failure within 8 hours, or any minor failure or defect within 10 consecutive days after receipt of notice thereof, the parties shall meet and discuss an extension of time which may be fair and equitable under the circumstances, failing which the County shall have the right to replace, repair, or otherwise remedy such failure or defect at the Contractor's expense.
- C. The Contractor will obtain any warranties which subcontractors or suppliers to the Contractor give in the regular course of commercial practice, and shall apply the same to the benefit of the County. Copies of any of these warranties shall be provided to the County.
- D. The Contractor shall remedy, at its own expense, damage caused by the Contractor to the County-owned or controlled real or personal property.
- E. The Contractor shall be liable to the County for supply of information, materials, and labor necessary for mandatory revisions determined by the manufacturer for the duration of the warranty period at no cost to the County.
- F. Under this warranty, the Contractor shall remedy, at its own expense, any failure to conform to the general contract terms, System requirements, or any other document included by reference in this RFP and resulting contract. The Contractor also agrees to remedy, at its own expense, any defect in materials or workmanship

including failure of the System to continue to operate at the appropriate availability rates.

- G. The Contractor must maintain an adequate inventory of spare parts to ensure expedient repair of the system and guarantee that any replacement or upgrade of spare parts will be available for the term of the contract. Should a manufacturer discontinue any product or cease to do business, the Contractor agrees to stock an adequate supply of replacement components.
- H. The Contractor must store spare parts at a location within Leon County to ensure the availability of critical system components in the event of a hardware failure.
- I. The Contractor shall identify the location of, or establish by the date of equipment delivery, a factory-trained and certified service facility equipped with the instrumentation necessary to provide service on the proposed system.
- J. The Proposal will specify a comprehensive list of the critical spares, as recommended by the equipment manufacturer, which will be maintained locally.
- K. The acceptance of systems/equipment by the County shall not limit its warranty rights set forth above with respect to defects in materials or workmanship.
- L. The warranty, and the annual maintenance and support contract following the warranty period, shall include in its coverage any system customizations completed by the Contractor in order to meet the RFP specifications.

3.1. Warranty on Additional Equipment

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.

3.2. Maintenance During the Warranty Period

Proposals shall describe how system and equipment maintenance and repair will be handled during the warranty period. During the warranty period, the Contractor will respond to all repair calls or notices of system malfunction at no additional cost to the County. System problems should be responded to 24 hours a day, seven days a week (not just during normal business hours). The amount of time required for the Contractor to respond shall be within one hour (remote access is acceptable for initial response). The initial Contractor response may be in the form of a call-back from a qualified system or software engineer, or remote support. The Contractor will have qualified technicians available to respond to major system malfunctions within one hour and to minor system malfunctions within one business day during the warranty period. Major and Minor system malfunction are defined in the Acceptance Testing Section of this RFP. The County reserves the right to decide whether a system malfunction is classified as major or minor.

Responding to a notice of malfunction is defined as actual start of diagnostics and repair procedures to correct the identified problem (not when Contractor staff answers the phone and notes the problem). Procedures and processes to correct the problem must be initiated during the time frame specified above.

Acceptance of the work of the Contractor, upon completion of the project, shall not preclude the County from requiring strict compliance with the contract, in that the Contractor shall complete or correct upon discovery any faulty, incomplete, or incorrect work not discovered at the time of acceptance. The one-year limit specified above shall not void or limit this requirement for little-used features or functions.

3.3. Service Under Warranty

If it becomes necessary for the County to contract with another vendor for warranty repairs, due to inability or failure of the Contractor to perform such repairs, the Contractor shall reimburse the County for all invoices for labor, materials required, and the shipping/handling costs thereof to perform such repairs, within 30 days from presentation of such invoices. This shall only occur after the Contractor has been given reasonable time and fair opportunity to respond and correct the problem(s). The cost for such repairs will not exceed the actual parts and labor replacement price of the repair.

3.4. Liquidated Damages for System Down Time During the Warranty/Maintenance Periods

Immediately upon system acceptance, if any component of the system malfunctions, resulting in total loss of system operation or significantly degraded functionality, as defined as either a major or minor outage the Contractor will provide a credit to the County as specified below:

DOWN TIME HOURS	DOWN TIME CREDIT	
	MAJOR OUTAGE	MINOR OUTAGE
1 ST HOUR	\$0.00	\$0.00
2 ND HOUR	\$0.00	\$0.00
3 RD HOUR	\$50.00	\$0.00
4 TH HOUR	\$75.00	\$0.00
5 TH HOUR	\$100.00	\$20.00
6 TH HOUR	\$125.00	\$40.00
7 TH HOUR	\$150.00	\$60.00
8 TH HOUR	\$175.00	\$80.00
9 TH HOUR	\$200.00	\$100.00
EACH ADDITIONAL HOUR	\$200.00	\$100.00

Down time credits will be computed in increments of one-tenth hour, and will be deducted from the next regularly scheduled payment. Down time and response time credits will not be duplicated for the same hour.

3.5. Follow-On Maintenance Following Warranty Period

Proposals shall include a price for the follow-on maintenance described herein. The Proposal price shall be for a five-year maintenance period starting immediately after the one-year warranty expires. Price increases are allowed annually for on-going maintenance following the warranty period. (Note: price increases must be defined in the proposal.)

3.5.1. Hardware Maintenance

The Contractor will be required to provide system and equipment maintenance support to the County during and after expiration of the warranty period for any hardware provided in conjunction with this RFP and resulting contract. The County will require a response time of no more than one hour for a Major failure of the System and no more than one business day for a Minor failure of the System.

The proposal shall provide maintenance service information about various proposed maintenance plans for each of the following system components:

- A. CPU, memory, and controller devices
- B. Storage and backup subsystems
- C. Communications devices and control devices
- D. Workstations, including display monitors, and keyboards
- E. Printers
- F. All ancillary equipment required for system operation

3.5.2. Software Maintenance

The Contractor shall maintain all Contractor-furnished software in a reliable operating condition and incorporate the latest software changes applicable to the installed system. All system customizations performed by the Contractor specifically to meet the requirements of this RFP and any resulting contract must be included in the follow-on maintenance following expiration of the warranty period.

- A. The proposal shall describe the nature of offered 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. The proposal shall describe the proposed methodology for each type of software provided.
- C. The maintenance contract pricing shall include providing a documented number of hours of support for non-defective application support. This type of support will assist in system configuration, performance tuning, and other support that would normally fall outside the scope of a typical support call. Proposers shall describe their willingness and associated cost to assist the client with system issues of this nature.

3.5.3. Continuation of Maintenance

In the event that the manufacture and sale of any component of the proposed system is discontinued by the original equipment manufacturer, the Contractor will agree to provide continuous maintenance coverage, if desired by the County, for up to five years from the date the County is notified of the cessation of manufacture of the equipment.

3.5.4. Personnel Security

The Proposer shall describe background checks provided for employees, including if checks are performed to all employees, or only if their role and responsibility within the Proposer's organization mandates it. The Proposer shall also describe policy on hiring former computer hackers, personnel non-disclosure agreement requirements, and procedures followed when personnel terminates employment to ensure the security and confidentiality of its clients' systems.

3.5.5. Onsite System Maintenance Personnel

The proposal shall include two onsite Contractor staff capable of performing system maintenance during the Warranty/Maintenance periods of the contract. These personnel shall be technically qualified to provide the following services:

- A. System Maintenance, including recorders and routers.
- B. System Software Upgrades/Repairs
- C. System Hardware Upgrades/Repairs
- D. Database Upgrades/Repairs
- E. 24-Hour On-Call Contractor Contact

Both Onsite Contractor personnel will be onsite eight hours per day during normal business hours. The County reserves the right to interview proposed onsite personnel and approve/reject their assignment.