

INVITATION TO BID
911 PSAP COMPUTER TELEPHONY
INTEGRATED (CTI) TELEPHONE SYSTEM

The City of Auburn will receive sealed bids until 4:00 p.m., Central Standard Time Friday, September 29, 2006, in the Office of the City Manager, 144 Tichenor Avenue, Auburn, Alabama, at which time they will be publicly opened and read for furnishing the following:

911 PSAP COMPUTER TELEPHONE INTEGRATED (CTI) TELEPHONE SYSTEM

The City of Auburn reserves the right to select the lowest responsible bidder as the best interest of the City may require, to award the purchase contract from any of the bids, to reject any and all bids, and to waive any informalities in the bids received. Bids will be good for sixty (60) days after being opened by the City of Auburn

No bids may be withdrawn for a period of sixty (60) days after the scheduled closing time for receipt of bids. A sealed envelope must be delivered to City Hall or mailed, addressed to:

City Manager, City of Auburn
144 Tichenor Avenue
Auburn, Alabama 36830

The envelope must be plainly marked on the outside as follows:

BID: 911 PSAP COMPUTER TELEPHONY BID
OPENING: 4:00 p.m.
DATE: Friday, September 29, 2006

The successful bidder will note that the City pays by invoice on each Friday of the month. Invoices must be received by Accounts Payable at least seven (7) days before the scheduled check date. If you have any questions concerning billing, please contact our accounts payable office at 334.501.7237 or 334.501.7238.

The successful bidder will be required to provide certificates of insurance showing that it carries, or has in force, automobile liability insurance, general liability insurance, professional liability insurance and workers' compensation insurance. Limits of liability for automobile liability insurance shall be, at a minimum, \$1,000,000.00 combined single limit. Limits of liability for general liability insurance shall be, at a minimum, \$1,000,000.00 per occurrence, \$1,000,000.00 personal and advertising injury, \$1,000,000.00 general aggregate and \$1,000,000.00 products/completed operations aggregate. General liability insurance will include coverage for contractually assumed liability. If general liability insurance

is written on a claims-made basis, the Contractor will maintain coverage in effect for two (2) years following the end of this agreement. Workers' compensation insurance shall provide statutory workers' compensation coverage and employers' liability coverage with limits of, at a minimum, \$500,000.00 each accident, \$500,000.00 disease- each employee and \$500,000.00 accident, \$500,000.00 disease – policy limit.

The certificate of insurance shall provide the City of Auburn, Alabama (City) with thirty (30) days written notice of cancellation of any of the coverage named in said certificate.

The City will be named as additional insured under the contractor's general liability insurance and automobile liability insurance policies.

The contractor shall require certificates of insurance from subcontractors. Subcontractors will carry limits of insurance equal to or greater than those carried by the contractor. These certificates shall evidence waivers of subrogation in favor of the contractor and the City, and shall be made available to the City upon request.

At the City's discretion, the contractor may be required to have in force builder's risk coverage and/or higher liability limits than that mentioned above and/or broader coverage than normally carried by the contractor.

The contractor agrees to indemnify, hold harmless, and defend the City, its officials, representatives, agents, servants, and employees from and against any and all claims, actions, lawsuits, damages, judgments, liability and expense, including attorneys fees and litigation expenses, in whole or in part arising out of, connected with, or in any way associated with the activities of the contractor, its employees, or its sub-contractors in connection with the work to be performed under this contract. The contractor agrees to purchase liability insurance to cover this indemnity obligation.

This contract will be interpreted according to the laws of the State of Alabama and may not be assigned by the contractor without the written permission of the City.

Legal action arising from the performance of this contract will be filed in the Circuit Court of Lee County, Alabama located in Opelika, Alabama or the Federal District Court for the Middle District of Alabama located in Montgomery, Alabama.

The successful bidder is responsible for acquiring the appropriate business licenses and permits to conduct work with the City of Auburn. Any non-Alabama bidders must submit a written opinion from an attorney stating the amount, if any, of preference granted by law to businesses in his state of residence.

CITY OF AUBURN, ALABAMA

Karen S. Broome
Purchasing Officer

FOR INFORMATION CONCERNING THIS PROJECT, PLEASE CONTACT BENJI WALKER AT
334.501.3101.

INTRODUCTION

1.1. Purpose of the Request for Bid (ITB)

The purpose of this Request for Bid (ITB) is to obtain a complete 911 PSAP COMPUTER TELEPHONY INTEGRATED (CTI) TELEPHONE SYSTEM in accordance with the requirements herein. This 911 PSAP COMPUTER TELEPHONY INTEGRATED (CTI) TELEPHONE SYSTEM should be equal to or better than Vesta Pallas.

The objective is to replace the entire telephone system with a new system that increases the effectiveness of 911 PSAP systems users and the public safety service level to the citizens. The City of Auburn desires to acquire a system with a proven technical and functional design and preference will be given to Bidders that have currently installed systems that closely approximate or satisfy the City of Auburn's requirements in the major functional areas.

1.2. Background on Current Environment

Population is approximately 49000.

The Police Department employs approximately 114 sworn and civilian personnel

The Fire Department employs approximately 80 personnel.

There are approximately 18 Communications personnel with four console positions.

Bidder will be responsible for determining any additional demographic or equipment information needed to facilitate bid process.

1.3. Definitions

- ACD - Automatic Call Distribution system.
- ADMINISTRATOR - The system's administrator except when used to reference the Purchasing Director.
- BIDDER - Any person, corporation, or partnership recognized under the State of Alabama Laws authorized to conduct business within the State of Alabama
- CAD - Computer Aided Dispatch system.
- COMMUNICATIONS DIVISION - The location of the Communications Division.
- CONTRACT - The agreement (including every document incorporated therein either physically or by reference) to be executed by City of Auburn and the successful Bidder, in which that Bidder is obligated to provide all products and services necessary for installation of the 911 PSAP CTI Telephone System and/or 911 PSAP WORKSTATION CONSOLES at the City of Auburn.
- CONTRACT TERM - The term of the contract is from contract signing date through completion of the contracted warranty period.
- CTI - Computer telephony integration employing intelligent workstations for telephony services.
- E911 - Enhanced 911 Emergency Telephone Network.

- NOS - Network operating system.
- OS - Operating system.
- BID - The Bidder's document describing the systems, products, or services being proposed to the State of Alabama/City of Auburn.
- PSAP - Public Safety Answering Point.
- ITB (Invitation to Bid) - This document in its entirety.
- SYSTEM - All telephone, computer, workstation, and ancillary hardware products, system software, application software, operating system software, and networking

software referred to herein, in the Bidder's response to this ITB, and in any additional documents which become part of the contract between the Bidder and the City of Auburn. Software products include source and machine-readable object code for such product and any other related materials which are furnished to the City of Auburn by the Bidder for use in connection with such product.

- TDD - Telephone Devices for the Deaf.
- TTY - Teletype devices.
- UCD – Uniform Call Distribution A method where all 911 calls are presented to all positions at the same time with the longest call being answered in order. Any call taker may answer the call and the system is typically squared and shared.
- WORK - The labor, methods, computer programs, material, documentation, transportation, and all other facilities necessary to complete the contract normally considered part of this type of system whether or not fully detailed. Unless the context clearly indicates otherwise, Bidders must furnish all work related to the awarded contract.

1.4. Sequence of Events Action

Action	Planned Date
Bidder Submission of Bid	<u>September 29, 2006 @ 4:00 p.m.</u>
Council Review/Approval	<u>approximately October 2006</u>
System Acceptance	<u>City of Auburn strongly desires implementation of the system prior to December 31, 2006.</u>

2. 911 PSAP CTI TELEPHONE SYSTEM TECHNICAL REQUIREMENTS

2.1. Existing Hardware/Software

Bidder will be responsible for viewing the City of Auburn's current hardware and software to determine compatibility. This does include Window Eyes software currently being used by a visually-impaired employee.

2.2. 911 PSAP CTI Telephone System Hardware Requirements

References to hardware in this ITB include but are not limited to the intelligent workstations (PCs), network servers, the switch or PBX hardware, telephone consoles and/or sets, printers, associated ancillary equipment, and all other hardware required to support the proposed system.

If a Bidder includes any hardware and/or software provided by other manufacturers, the vendor shall be required to act as the prime vendor for all such items and must assume full responsibility for the procurement and maintenance of such items. The vendor will be considered the sole point of contact with regard to all stipulations, including payment of all charges and the meeting of all requirements of this bid.

Bidder will state in writing that Window Eyes software will function equivalent to current standards on proposed platform. The City of Auburn also requires that the proposed equipment will allow cohabitation of Motorola Gold Elite radio software.

2.2.1. Computer/Telephone System Hardware

Intelligent workstations and servers provided under this ITB must be IBM-

compatible with name brand recognition, and include Intel brand processors. Computer power supplies, hard drives, expansion slots, etc. must be sufficiently sized to permit 100% system expansion. The switch or PBX must use digital architecture and technology, and be modular in design if based on premise.

- 2.2.1.1. PC configuration
Computer workstation and server configurations must comply with industry accepted standards. The City of Auburn will not accept bids that include proprietary configurations, unless the Bidder can demonstrate an overwhelming advantage to such configurations, and can guarantee long term support and upgrades. Supplied PCs must be dual port video capable.
- 2.2.1.2. Telephone sets
Telephone sets are required for alternate call processing backup to the CTI system. Manual switching from computer to telephone sets via cable swap from the computer to the console or set will not be acceptable.
 - 2.2.1.2.1. Analog
Analog telephone sets are not acceptable for use the system.
 - 2.2.1.2.2. Digital
Digital telephone sets are required for use with the system.

In addition, IP Telephony sets must be available as an option in order to provide VoIP capability for remote positions. These sets must be capable of supporting up to four lines on them.
- 2.2.1.3. Printers
Paper printers will not be necessary in this bid; however, ability to retrieve information from the system must be available in order to generate a printable file. Printers on the system must be standard, plain paper printers available in the marketplace. The City of Auburn strongly encourages that these devices be on name brand quality. Printer drivers required for standard and selected printers must be provided as part of the system.
- 2.2.1.4. Input device operation
As an option, the system must accommodate the following operating devices. Selection of input devices must be a user function. Use of multiple applications during an operating session must be permitted via a single input device. Special attention must be given to each device regarding ergonomics and operational use. Independent arbitration of the keyboard and mouse between the telephone and other systems is required. Switching between applications must be performed through a single keystroke or mouse click, and take effect in less than one (1) seconds.

- 2.2.1.4.1. Keyboard
A standard, IBM PC 101 keyboard must be capable of processing all telephone calls, including voice, TTY, and TDD calls, and CAD functions. During CTI system failures, all call processing must be available via an alternate mode.
- 2.2.1.4.2. Mouse
The system must operate with standard two (2) and/or three (3) button and track ball mouse systems. The mouse must be capable of processing all telephone calls, including voice, TTY, and TDD calls. As an option, the mouse should be available to the CAD application in case of a CTI (Telephone Interface) system failure.
- 2.2.1.4.3. Screen/Monitor
A full size, color screen, 19 inch **TFT** monitor is required for each of the four positions. Monitors must use the most current standards for minimizing radiation to the user. The video system must employ selectable refresh rates that eliminate screen flicker. At a minimum, the user must be provided the capability to answer and release incoming calls with a single mouse click. It is a requirement to have the radio and 911 software reside on one 19" screen.
- 2.2.1.4.4. Telephone consoles or sets
Although telephone consoles or sets will not be used under normal operations, the capability to readily activate such devices during system failures and emergency/fallback operations is imperative. Bidder shall clearly state if the caller/call is lost during this transition.

2.2.2. System sizing

- 2.2.2.1. Base system
The system must be fully equipped with the following:
- PUBLIC SAFETY
- 4 9-1-1 Trunks
 - 4 Admin Lines
 - 6 Ringdown Lines
 - 4 Dispatch/Call Taker Positions
- 2.2.2.2. Modularity/expandability
Expansion to the system must be modular in that additional equipment cards or shelves can be added to increase capability.
- 2.2.2.3. Processing Capacity
The Bidder is required to ensure that the general hardware RAM and CPU specifications will successfully operate and have sufficient capacity to support 100,000 calls for service per year and four user positions and still comply with all stated performance requirements.

2.2.2.4. Storage

The system must provide sufficient hard drive storage capacity to store system setup and data information for a minimum of one (1) year without archiving as an option.

2.2.3. Installation

The City of Auburn requires a "turn key" installation for the entire CTI telephone system. The successful Bidder is responsible for installing all equipment and cable required to support the proposed system. The Bidder shall be responsible for coordinating the removal of existing telephone equipment and cable that is abandoned as a result of the new system installation.

2.2.3.1. Cabling

Bidder will provide all necessary cable and cabling distribution. No existing cable shall be reused.

2.2.3.2. Drawings

Three complete sets of as-built drawings are required. As-built drawings must also be submitted in an agreed upon graphic format (such as AUTOCAD, Visio, etc.) as delineated in the contract, on three individual sets of 3.5" diskettes or CD's.

2.2.3.3. Emergency power

The PSAP is equipped with sufficient emergency and UPS backup power to support the CTI telephone system. Customer premise equipment provided under this ITB, which is connected to the existing UPS must be done in a manner that telephone service is not interrupted during primary power fluctuations or outages.

2.2.3.4. Equipment racks

Standard 19" or 23", 7" (84") aluminum equipment racks must be provided by the Bidder. The City of Auburn will work with the successful Bidder on an acceptable floor plan and exact placement of racks. Rack type and installation practices must comply with existing standards of the City of Auburn. Rack must be mounted securely to the floor similar to existing racks.

2.2.3.5. Grounding

System grounding must comply with industry standards and good engineering practices with R56 standards preferred. The Bidder shall provide a "comprehensive" grounding review prior to system installation.

2.2.3.6. Power

The system must operate from standard 115V, 60 Hz, single-phase power. The Bidder shall state their power requirements for the backroom equipment and each answering position. The Bidder will be responsible for site inspection to ensure the electrical requirements are sufficient.

The successful Bidder is responsible for ensuring equipment in the system is connected to clean power, and that ample surge and

lightening protection is installed for each device connected to the system. Protection devices that use reset versus replacement circuitry are required.

2.2.3.7. Practices
System installation must be consistent with Industry standards, existing practices, applicable EIA standards, and good engineering practices.

2.2.3.8. Punch blocks
Punch blocks will be of industry standard and the responsibility of the bidder.

2.2.3.9. User workstation consoles
CTI equipment at the user and supervisor workstation consoles must be installed in a manner that facilitates the user's needs while readily conforming to ease of access to equipment for the technicians.

2.2.4. Interfaces
The Bidder must interface the CTI system with all other systems that are currently being interfaced within the City of Auburn's 911 PSAP. Integration methods employed by the Bidder must meet City of Auburn's approval, and not affect the warranties, agreements, or proprietary rights of the existing systems' manufacturers.

2.2.4.1. CAD
The City of Auburn currently operates a DOS-based CAD system. The Bidder must define in the Bid the CTI telephone system fields available for transfer to the CAD, and propose varying degrees of telephone/CAD integration for the new CAD systems. As a minimum, the name, address, and telephone number of the calling party, and the time of the call must transfer to the respective CAD fields from the telephone system.

The Bidder must describe in the response the process (how and when) by which information is sent from the CTI telephone system to the CAD.

The CTI must have the capability to transfer systems fields to the CAD.

2.2.4.2. Radio
The City of Auburn currently uses a UHF and VHF conventional radio system. City of Auburn will remain with its current Motorola CommandSTAR Lite Button LED and Motorola Centracom Gold Elite CRT Consoles. The Bidder is required to integrate the telephone system with Motorola's CommandSTAR Lite Button LED and Elite Console system. The Gold Elite and 911 software will reside on a single PC.

2.2.4.3. Headsets
The current system allows the use of both handsets and headsets.

The Bidder will be required to perform site inspection to ensure that current headsets, both wired and wireless, can be used with the CTI system. The City of Auburn requires continuing operation with only one headset per user. Should the CTI application fail, the Bidder will provide for automatic handset/headset connectivity, transmission, and reception of the telephone caller to the alternate telephone set.

- 2.2.4.3.1. Microphones/speakers/headsets
Users must be permitted to use the same microphone and speaker or headset to control the radio and telephone functions. Integration of the headset between the telephone and radio systems is performed through the radio system's interface function in the radio console. The Bidder must ensure the system proposed will fully integrate with the City of Auburn's radio system.

- 2.2.4.3.2. Adjustments
Independent headset audio/speaker adjustments are required. The user must be provided the capability of independently adjusting receive audio levels from the CTI application by using the mouse and/or keyboard. Telephone audio adjustments must be made independent from and not affect the individual workstation, but must follow the user by log-on to any workstation within the system.

- 2.2.4.3.3. Auxiliary Audio Inputs
The radio system's interface function must provide auxiliary audio inputs that will allow a call-taker to listen to audio sources when they are not on a call. There must be a minimum of three audio inputs.

- 2.2.4.3.4. Mute
A mute function is required for the CTI application. This feature shall be available to the agent via a single mouse click or keystroke.

- 2.2.4.3.5. Telephone off-hook
To integrate the headsets into the radio interface, Bidder's must provide a closed relay contact for a telephone "off-hook" condition. The relay contacts must be floating and not connected to ground or voltage/battery.

- 2.2.4.3.6. Transmit and receive audio
Audio switching shall be available to agent via a single mouse click or keystroke. External transmit and receive headset connections will not be accepted. It is required that these volume controls should follow the agent based on log-on. Impedance and levels must be equal to a standard telephone headset, balanced, and free of hum, noise and cross talk.

- 2.2.4.3.7. Types

City of Auburn currently uses a variety of standard-type telephone headsets to include wired and wireless. No change is anticipated. The system must permit use of standard telephone headsets available in the marketplace without modification to the headset jack or internal wiring. It should be noted that user console workspace is a premium.

User positions must be equipped with two front panel headset jacks for the telephone system only. The telephone headset jack must accept support for a standard, 4-wire or 6-wire headset plug including the push to talk variety. The transmit and receive audio levels must not change in the active headset when the other headset is inserted or removed.

2.2.4.4. Logging recorder

City of Auburn is currently considering the purchase of an Eventide or Nice 24 hour logging recorder. The CTI must be capable of interfacing with either of these systems.

2.2.4.5. Radio

City of Auburn currently uses a Motorola Gold Elite and CommandSTAR Lite radio console systems. The CTI must be compatible with both these systems. It will also be required for the Gold Elite radio software and 911 software to reside on the same PC.

2.2.4.6. System time

Time synchronization will be required between currently used radio systems, Phase 1, and Phase 2 E911. The Bidder must provide a means to synchronize every workstation and the PBX or switch in the proposed system to the existing WWVB or GPS time source using Network Time Protocol (NTP).

2.2.4.7. TTY / TDD

The Bidder must fully integrate the proposed CTI telephone system with a TTY/TDD system. The TTY and TDD interface proposed must comply with all existing and known future FCC and/or legal requirements, including ADA, for handling TTY and/or TDD calls.

2.2.5. Operating temperature

All equipment rooms are air-conditioned; however, the Bidder must provide the guaranteed operating temperature range and the BTU's of heat generated for each primary piece of equipment in the proposed system. The expected operating temperature range is between 0°-40° C.

2.2.6. Standards

The Bidder is responsible for proposing and listing in detail the hardware City of Auburn is required to purchase and/or lease to support the proposed solution. All equipment proposed must comply where applicable with industry standards such as UL approval, ISO, OSI, IEEE, ANSI, EIA, TIA, (including ANSI/EIA/TIA-568 Commercial Building

Telecommunications Wiring Standards), etc. Equipment proposed must be compatible with AT&T telephony protocol(s), when applicable.

2.2.7. Technology

2.2.7.1. Analog

The use of analog switch technology is not acceptable and will be considered grounds for automatic non-compliance to this ITB.

2.2.8. Templates

Keyboard templates or other helpful tools required for ease of operation must be provided upon delivery of the system.

2.2.9. WAN / LAN connectivity

The Bidder must state in the Bid if WAN/LAN connectivity is required. Equipment required for connectivity to City of Auburn's WAN/LAN must comply with the standards used by City of Auburn's Information Services Division at the time of the Bid. Information regarding network connectivity standards is available from Information Services Division. If WAN/LAN connectivity is proposed, a complete list of equipment, including manufacture, model, revision, etc., a network diagram, and a fully detailed functional description for the connection must be included. For example, CAT5 Ethernet cable using TCP/IP protocol.

2.3. 911 PSAP CTI System Software

References to software in this ITB include but are not limited to the CTI application, the NOS/OS, the switch or PBX operating system and application, and all other software required to support the proposed system.

2.3.1. Computer/Telephone System Software

The Bidder should employ the use of standard software products available in the marketplace for workstation and network operating systems. Proprietary CTI application software will be written in a state-of-the-art language using 32-bit architecture. Proprietary switch or PBX software must be designed and written using current programming languages and techniques, and perform efficiently. Long-term software support and maintenance for proprietary software is required. Vendor software must be written in a modular approach so a failure in any one window does not affect other windows in the application.

2.3.2. Compatibility

To ensure compatibility with the City of Auburn's existing network and future enhancements, proposed CTI application software must operate at OSI Level 6 (Presentation Layer) or above. The Bidder shall state their OSI application level.

2.3.3. Operating systems

City of Auburn's strategic direction for desktop and network operating systems is Windows XP Workstation and Windows 2003 Server. The use of standard network and workstation 32 bit operating systems is strongly encouraged. Use of proprietary operating systems is not acceptable.

2.3.4. Production version

The latest production version of software releases for the product line

selected will be provided. If between the time of Bid and the time of final acceptance new releases of software are marketed and available, they must be provided to City of Auburn without additional charge. One condition of final acceptance is that City of Auburn must have the latest releases of supported production version software for the entire installed product line.

2.3.5. Security

The Bidder must propose a solution with security features to satisfy the City of Auburn's network security requirements (using, for example, routers or firewalls), including those security requirements by Public Safety and State Police to protect the criminal justice systems from unauthorized access.

2.3.6. Source code

The Bidder shall state the availability of the Source code for the CTI telephone system. Bidders must specifically identify all source code not provided. If application source code is not provided with the CTI system, then the Bidder is required to place the application source code in escrow for City of Auburn and demonstrate to the City of Auburn's satisfaction that the said source code will be faithfully maintained. Source code is not expected for commercially manufactured software products such as but not limited to Windows™, Oracle™, or other such products.

2.3.7. Upgrades

Software upgrades must be provided to City of Auburn as available. If a cost is associated with software upgrades, the Bidder must include an expected cost for software upgrades.

2.4. System Compatibility

2.4.1. General 911 PSAP CTI Telephone System Compatibility

The hardware, operating system, and network selected for the 911 PSAP CTI TELEPHONE SYSTEM must be compatible with the City of Auburn's computing environment to the extent that all functional interface requirements are satisfied.

2.4.2. Compatibility Limitations

The Bidder of the proposed 911 PSAP CTI TELEPHONE SYSTEM application software is required to either warrant that the proposed system is hardware/operating system software independent and will function on any hardware platform chosen (within the configuration stated above), or specify any limitations that restrict the proposed software system to certain hardware/software platforms.

2.4.3. E911 Network Compatibility

The Bidder must guarantee in writing in the Bid that the proposed system is fully compatible with the State of Alabama.

2.5. System Performance Specifications

2.5.1. General

The system provided must be capable of performing hardware/software routine maintenance and upgrades while the system is fully operational.

The Bid must specify the required or suggested activities, such as hardware/software maintenance, data reorganization, off-line processing, etc. that will cause the system to be unavailable to users. The average period of time that the system can be expected to be unavailable due to each of these activities over a one-month time-frame must also be specified.

2.5.2. System availability

The 911 PSAP telephone system must be available to users twenty-four (24) hours per day, seven (7) days per week. The successful Bidder supplied hardware and software must provide City of Auburn with 911 PSAP telephone system availability of no less than 99.7% (approximately twenty-six (26) hours of downtime over any consecutive twelve (12) month period) or state the percentage of system availability if less than 99.7%. If the proposed system availability is less than 99.7%, the Bidder must detail the reasons for the decreased availability. The 911 PSAP telephone system will be considered down whenever normal telephone operations cannot be conducted without experiencing major system alarms or conditions that inhibit or prevent the call taker from communicating with the calling party or performing vital call processing functions.

The 911 PSAP telephone system downtime resulting from external causes, including but not limited to acts of God, fire, or City of Auburn's negligence will be excluded from downtime calculations.

2.6. Systems & Acceptance Testing

The Bidder will be responsible for all materials, hardware and software provided until subject items have been delivered, implemented, tested, and accepted by City of Auburn. The Bidder will certify in writing to City of Auburn when the system is installed and ready for testing. Degrees of system failure and operability for acceptance testing purposes are determined solely by City of Auburn. System warranty and/or software support programs will not begin until after system acceptance.

2.6.1. Failure Prioritization

The following failure priority levels are defined for use during the Systems & Acceptance Testing process.

2.6.1.1. Priority One (1)

Priority one (1) failures are major system failures that render the system completely unusable and/or inoperable, and are considered to be operationally unacceptable by the PSAP Manager.

2.6.1.2. Priority Two (2)

Priority two (2) failures are major and minor system failures that significantly reduce system operability and usability, and are considered to be operationally unacceptable by the PSAP Manager.

2.6.1.3. Priority Three (3)

Priority three (3) failures are minor system failures that minimally reduce system operability and usability, and are considered to be

operationally acceptable only during the acceptance testing phase by the PSAP Manager.

- 2.6.1.4. Priority Four (4)
Priority four (4) failures are minor system failures and punch list items that have little to no effect on system operability and usability, and are considered to be operationally acceptable only during the acceptance testing period by the PSAP Manager.

- 2.6.2. Acceptance Testing
Acceptance test plans are required as described in the following subsections. If, in City of Auburn's judgment, it determines that the CTI telephone system has not passed a test performed, City of Auburn will provide the successful Bidder a written description of the way(s) in which the CTI telephone system's performance was deemed unsatisfactory. The document will also include a limited but reasonable period of time in which the problem is to be resolved by the successful Bidder.

In measuring acceptance, system failure resulting from external causes, including but not limited to acts of God, fire, City of Auburn's hardware failure or City of Auburn's negligence, will be excluded from the acceptance testing.

If it is discovered that the system or any part thereof requires correction, City of Auburn must, nevertheless, have the absolute right to continue the use of the system until such time as it is convenient to City of Auburn for change implementation.

If the CTI telephone system does not function because of a problem in Bidder's hardware or operating system, it is the Bidder's responsibility to define/document the problem and furnish the corrective action to repair the problem.

City of Auburn will notify the Bidder in writing when the 911 PSAP CTI TELEPHONE SYSTEM has passed/completed the final acceptance test.

- 2.6.2.1. Build out
The successful Bidder will procure, receive, and build out the entire telephone system as outlined in the final, negotiated contract process prior to installation in City of Auburn's Communications Center. The location of the build out will be agreed upon by City of Auburn and the successful Bidder as part of contract negotiations. Specifics about the Bidder's intended process for the build out must be included as part of the response to this ITB. A build out testing plan is required in this ITB response. Testing must include a measurable testing process for each functional and technical aspect of the specifications listed in this ITB.

- 2.6.2.2. Preliminary
A preliminary acceptance testing plan is required in this ITB response. Testing must include a measurable testing process for each functional and technical aspect of the specifications listed in

the Bidder's Bid response. Once accepted by City of Auburn, the testing plan will be used for testing the initial installation in City of Auburn's Communications Center.

2.6.2.3. Final

A final acceptance testing plan is required in this ITB response. Final acceptance testing is expected to commence immediately upon system cut over and proceed for thirty (30) consecutive failure priority one (1) free days. If a priority one failure occurs during the final acceptance testing period, the final acceptance testing period will be stopped, and the failure or failures expediently repaired to City of Auburn's satisfaction. During this period of interruption, the system must continue to operate with the greatest degree of reliability possible given the respective failure(s). The final acceptance testing period of thirty (30) consecutive failure free days will restart the day after repairs are affected, at City of Auburn's sole discretion.

Testing must include a measurable testing process for each functional and technical aspect of the specifications listed in the Bidder's Bid, and system performance measurements based on the telephone activity to date in City of Auburn's Communications Center. This testing serves as a sign off process for payment to the successful Bidder.

2.7. Secondary call taking site

City of Auburn's 911 calls are currently rerouted to another PSAP during times that require alternate 911 call routing. The Bidder must describe the way in which service could be provided to the secondary site.

3. 911 PSAP CTI TELEPHONE SYSTEM FEATURES

3.1. System Features

3.1.1. Redundancy Option

There must be an option for a minimum of two processors, each having its own power supply. System must provide information to the duty supervisor that a failure has occurred, as well as inform the service provider through a remote maintenance connection. This response must contain an accurate description of how the steps required to effectuate a switch over from one processor to the other will occur. There must also be an accurate assessment of how much time will be consumed from the time of system failure until system reactivation on the second processor.

3.1.2. Trunking

The trunk interface shall transform one (1) E9-1-1 tandem trunk, TSPS/CAMA trunk, or other reverse battery supervision trunk using MF

signaling into a class "C" service line for presentation to the agent. The trunk interface shall decode MF tones presented with various protocols, and then send corresponding ANI to the answering position handling the emergency call.

- 3.1.3. Pre-Recorded Greetings
The system must allow the call taker to program "Pre-Recorded Greetings" by line type. These greetings must follow the call taker by log on to any position. There must be a different greeting allowed for each line type in the system.
- 3.1.4. System Expansion Capability
The switch shall be based upon a modular design that offers the City of Auburn superior price/performance and the flexibility to grow in size and functionality as expected and un-expected growth occurs. The switch should offer the City of Auburn upgradeability and graceful evolution.
- 3.1.5. Call Flow
Currently all calls are presented to all call takers at the same time. The new system needs to provide this type of call flow along with the indication of the longest ringing call as well as single button answer of that call.
- 3.1.6. ANI/ALI
The system must accommodate twenty (20) digit, XY (latitude/longitude) coordinates, and latitude and longitude ANI in compliance with FCC Docket 94-102. Bidder will be required to determine the circuits City of Auburn uses to communicate with the ALI database provider for ALI services. Communications with the ALI database must be made in a full duplex mode immediately after the ANI is decoded.
- 3.1.7. Archiving/retrieving data option
The system must provide data archiving and retrieving for the MIS package as an option. The process must provide discrete selection for archiving and/or retrieving data by date(s). The Bidder must provide a description and training of the data archiving and retrieving process.
- 3.1.8. Backup/redundancy option
 - 3.1.8.1. Central Processor(s)
As an option the system design must eliminate single points of failure by using fault-tolerant components (e.g. dual power supplies, RAID, mirroring, hot swappable components, etc.) The Bidder must fully describe in the Bid any reduced levels of service caused by component failure, including the operational requirements for backup and recovery.
 - 3.1.8.2. E911 Controller and/or Control Function
Whether or not the proposed system uses a standard E911 controller, the solution must use a distributed processor architecture and meet the following functional requirements.

No single point of failure is permitted. Control functions must not

use a central controlling module or other single device.

Each line interface and call processing module shall serve a minimum number of trunks, call takers, and/or transfer positions. The activity state of a line interface or call processing module must not affect the performance of another. Heavy trunk traffic, false trunk seizures, line failures, and/or defective line interface and/or call processing cards must not affect service to trunks handled by other cards in the E911 controller or other equipment performing control functions.

Administrative ports and modules and ANI/ALI display modules that provide communications to external devices such as ALI databases and ANI/ALI displays must be redundantly configured. One module must be active and the other in standby mode. The system must switch to the standby module automatically if the active module fails.

Power supplies must be distributed and redundant.

Replacement of faulty modules must not require system or controller shut down.

3.1.8.3. Fault tolerance and fallback modes

The system must provide varying degrees or levels of fallback operations, depending on the magnitude of the fault or problem. An "all or nothing" approach is unacceptable. The Bidder must describe in the Bid each level of fallback in detail.

3.1.8.4. Files

3.1.8.4.1. Data

Administrators must be permitted to backup system data files separately from operating system and system setup files. In the event of a system failure that causes system data corruption, administrators must be able to reload the system data files without affecting any other files.

3.1.8.4.2. Operating System

Administrators must be permitted to backup operating system files separately from data and system setup files. In the event of a system failure that causes operating system corruption, administrators must be able to reload the operating system files without affecting any other files.

3.1.8.4.3. System setup

Administrators must be permitted to backup system setup files separately from system data and operating system files. In the event of a system failure that causes system setup corruption, administrators must be able to reload the system setup files without affecting any other files.

3.1.8.5. Hard drive

The system must provide an easy-to-operate backup system for

backing up the hard drive. The system may use a tape or other permanent memory storage device as backup media. The process required for backup must not interrupt normal use and/or operation of the system. The Bidder must describe in the Bid the backup process for the proposed system and the estimated time required for backup.

3.1.8.6. Information retrieval

Retrieving information from backup media must be available to administrators from any position on the system. The process required for information retrieval must not interrupt normal use and/or operation of the system. Information retrieved must be in a "read-only" format, and must not be changeable from the retrieval process.

3.1.9. Call time stamp

The time stamp must be referenced to an acceptable time standard, and not deviate from the CAD time. The system must time stamp all incoming voice, TTY, and TDD calls using the system's internal time source. The time the call entered the system, the time it is answered, the call duration, the time completed or transferred, and the user ID must be included in the time stamp function.

3.1.10. E911 Controller and/or Control Functions

City of Auburn is considering customer premise based solutions. Whether or not the proposed system uses a standard E911 controller, the solution must use a distributed processor architecture and meet the following functional requirements.

Modules must function independently. Processing bottlenecks must not occur. Each call processing module must be equipped with a dedicated multi-frequency receiver to avoid delays in decoding ANI. The system must not force incoming calls to wait for an available multi-frequency receiver before presenting the call.

3.1.11. System time

Time for the telephone system must be consistent with the time used for the radio and CAD systems. One standard for all three systems is most desirable.

3.1.12. Trunk and lines

3.1.12.1. Classification

The system must permit the capability to classify a minimum of five classifications of trunks and lines. (e.g. emergency, administrative, non-emergency, jurisdiction "X", etc.)

3.1.12.2. Connectivity

Trunk and line connectivity must be provided as per City of Auburn's acceptance of approved engineering by the Bidder. The connectivity or cross connect system must be sized in a manner that accommodates moderate growth and modular system expansion for trunks, lines, and ring down circuits.

3.1.12.3. Prioritization

The system must provide the capability to systemically prioritize and differentiate by color between types of trunks and lines. Prioritization must provide the capability to affect queuing and differentiate between categories for the longest unanswered call feature. Selectable colors must be available for each priority. A minimum of three (3) priorities is required.

3.1.13. User type/qualifications

The system must provide the capability to denote a user's functional duties or specific qualifications. Visual presentation of this information must be selectable between permanent viewing and viewing upon command. Establishing individual personalities within software must not increase user log on time. Total user log on time must not exceed fifteen (15) seconds.

3.1.14. Help functions

The system must provide on-line hyper-text help for all user functions. Help information must be retrievable while using the system without having to abandon a call or log off. The Help screens must contain standard, Windows™-type help functions such as but not limited to topics, contents, search, find, etc. The level of "Help Information" must be based on authorization / skill level. At no time should a lesser level gain access to help information on supervisory or administrative levels.

If written help and user information is currently published for the system proposed, two copies of the user information must be provided at no additional cost to City of Auburn.

4. 911 PSAP CTI TELEPHONE SYSTEM USER SPECIFICATIONS

The proposed system must provide users the ability to perform required and routine telephony functions with minimum impact and/or conflict with CAD and/or radio operations.

- 4.1 The CTI telephone interface shall provide the user with on-screen access to all telephone features.

The interface shall be a Graphical User Interface and shall provide the user with the ability to access the operating system and applications via easy to use icons and pictures. Users shall be released from having to remember long, complicated command structures in favor of icons.

- 4.2 The City of Auburn's strategic direction for desktop operating systems is the operating system.

To ensure the greatest degree of reliability, flexibility and security, it is highly desirable that the system shall operate under the latest available Windows operating system. Bidders will validate their technical proficiency and their ability to support, design and implement Microsoft BackOffice™ solutions. Bidders shall state any Microsoft certification programs

of which they are participants of, such as, Microsoft Solution Partner or Microsoft Certified Professional.

4.3 System Log-On

The system shall provide log-on capability. Each call taker will be prompted to log-on based on a user name and password. Upon successful completion, all personalized features, functions, and capabilities shall be made available to the call taker.

4.4 Abandon Call Capture

The system must provide users and supervisors the capability to capture abandon call information, and redial the abandoned number automatically upon command. A list of abandoned calls must be provided in table format, and selectable for redial with a single keystroke, or mouse click. Redial must occur within two (2) seconds from when initiated.

4.5 Automatic Redial

The system must provide each user the capability to redial the last five (5) numbers (minimum) answered on their console. Redial must occur within two (2) seconds from when initiated with a minimal number of screen keystrokes, or mouse clicks.

4.6 Call Conferencing

The system must provide conferencing features, which permit every user and supervisor on the system to conference, multiple lines and trunks without regard to the type of line or trunk. Conferencing must not degrade the quality of the audio. The Bidder must describe the call conferencing process, and the number of lines that can be conferenced during a single call without degradation. Adding a call to the conference must occur immediately with a minimal number of keystrokes, or mouse clicks.

4.7 Call History

As each call is answered, the system must automatically save the last one hundred (100) callers (ANI/ALI) in a Call History window. System must also be capable of tracking the call history in a database format for retrieval by the call takers at a later date.

4.8 Supplemental Information

They system shall provide the ability to add information (such as location information, hazardous materials information, medical alerts, etc.) to a location based upon ALI. In addition, the system must allow for the user to create their own categories for entering information. This information must then be shared by all call takers and appear in the call display when a call is received with the same ALI.

4.9 Call Notes

The system shall provide the ability for a telecommunicator to attach a Call Note to the Call record associated with any particular call. The note shall be recorded to the Master Call Records database and be available for viewing through the MIS reporting package.

4.10 Call Holding

Users answering calls must be permitted to immediately place a call on hold with a single keystroke, or mouse click. Information regarding the time the call was placed on hold, the duration the call has been on hold, and the user that placed it on hold must be available on the screen for each call on hold.

4.11 Call Playback

In addition to data captured on logging recorders, the system must provide separate functionality for recording and playing back all calls, voice, radio, TTY, and TDD, for the most previous thirty (30) minutes of operation. Playback functions must occur within one (1) second of a minimal number of keystrokes, or mouse clicks. The system shall provide the following functions:

- (a) The voice recording shall be physically stored on the local hard drive in an individual file for each call.
- (b) The Instant Recall Recorder shall provide VCR-like controls. The user shall have the ability to mark and move to any portion of the call.
- (c) The Intelligent Workstation shall provide two jack boxes and an output port for an interface to an external speaker at the position. This shall allow the call-taker to playback the Instant Recall Recorder to the speaker port, headset/handset 1, headset/handset 2, or a called or calling party or a combination thereof.
- (d) At a minimum, the Instant Recall Recorder shall provide the following features:
 1. Play
 2. Pause
 3. Stop
 4. Play forward/Fast forward
 5. Rewind
 6. Repeat
 7. Forward file to another position
 8. Display ANI
 9. Display Calling Line ID (if available)
- (e) The system shall provide an option for the user to record a “pre-Recorded Greeting” in their own voice to be played upon call answer. This feature will allow the call taker to be in a “listen” mode, rather than a “talk” mode. Multiple greeting shall be available to the user based on the line type, such 9-1-1, seven-digit emergency or administrative.
- (f) The headset/handset volume shall be adjustable via software. Adjustment shall be possible by a simple “point and click” procedure. Volume adjustments shall follow the user to the position once they log-on, and shall not require readjustment due to the previous user.

4.12 Call transfer

Call transfer must occur immediately with a single keystroke, or mouse click. User and supervisor functions associated with normal call taking and monitoring must apply to transferred calls. Users must be capable of transferring calls manually and/or through speed dial functions from the keyboard and/or mouse. If internal to the system, notification of the incoming transferred call must be provided on the console screen of the respective user to whom the call was transferred. The user originating the transfer and all supervisors must be able to reenter the call up to the point the call is answered at the transfer point. If internal to the system, the transferred line must be denoted on the originating user's and all subsequent user's consoles until the call is complete. Call data must be maintained for calls transferred within the system throughout the duration of the call without regard to number of transfers.

4.13 Intercom

The system must provide an internal intercom. Users and supervisors must have the capability to select whether the intercom audio is routed to their headset or handset. Use of the intercom feature must occur with a minimal number of keystrokes, or mouse clicks.

4.14 Enhanced Wireless

The system must provide a method for formatting the ALI for calls with 20 digit ANI (CAS) and 10 digit (NCAS) so the Calling Party Number (CPN) appears in the same location as it does for landline calls. This formatting, or "normalizing", must provide the CPN to the ANI Callback list for CAS and NCAS calls received.

The system must also provide the CPN to a third-party CAD application, which uses the CPN as the CAD incident number. This is to ensure that the CAD incident number for wireless calls is based on the actual CPN, not a non-dialable number (pseudo-ANI or ESRx).

4.15 Enhanced Alarming

The system must be capable of sending alarms to an external monitoring service that will notify the user when a system or user module is no longer functioning properly. The monitoring service must be capable of the following:

- 24x7 monitoring of all servers and workstations with the ability to be run locally, remotely via dial up, or through an internet connection via Virtual Private Networks (VPN)
- Alarm notifications via pager or e-mail
- Remote troubleshooting
- Performance monitoring

4.16 Call Detail Records

The system must be capable of creating call detail records and system event records with the information gathered from workstations and the switch in the event that a call center's quality of service comes into question. These records can then be used to audit the events of the call in order to determine if processing occurred in a reasonable fashion. The records must be capable of being sent to a number of different destinations, such as to a printer to create a hard copy or to an MIS package to create a database record. Call event information that cannot be sent successfully to the CDR system must be stored at the workstation. The CDR system must also be capable of recovering unsent event information and creating a special recovered call detail record.

4.17 DDE Channels

The system must provide two DDE channels to share ALI information with other applications, such as a mapping or CAD application.

4.18 Enhanced ALI Display

The system must provide for at least 100 viewable saved ALI requests per user session. In addition, all non-manual ALI requests must be automatically saved for the duration of the user session.

4.19 IP ALI

As an option, the system must be able to connect to the ALI service provider with a TCP/IP connection. Please state your ability to provide this feature.

4.20 Longest Ring

4.20.1 Answer

The system must provide the capability to immediately answer with a minimal number of keystrokes, or mouse clicks from any screen the longest ringing trunk or line in queue. The system must denote the trunk or line classification and priority, as outlined in Section 3.1.12.

4.20.2 Identify

The system must readily identify the trunk and/or line and classification of the highest priority unanswered call in each trunk and/or line classification group.

4.20.3 Queuing

The system must automatically queue calls by priority for the longest ring. e.g. every priority one (1) call will be answered in order of ring duration before any in subsequent priorities are answered regardless of ring duration between priorities.

4.21 Private Ringing

The system must support private ringing.

4.22 Records management

Use of record management and report functions must not negatively impact system performance.

4.22.1 Functionality

The records management functions in the system must be standards-based. Information such as but not limited to the following events must be provided. Accurate daily call count by trunk and line, calls per hour, average mean answering time, average call duration, call distribution, and other call related information. Information must be reportable by user, position, trunk/line, etc. A finite set of pre-programmed reports must be available to users and supervisors. Ad hoc reporting must also be provided. Report writing must follow standard, SQL-based report writing syntax, and be user friendly in nature. Use of object-oriented technology is encouraged.

4.22.2 Record review and reports

Record review and report writing functions must be available to users, supervisors, and maintenance personnel if granted access to these functions by the system's administrator. The additional use of password protection is desirable for records review and report writing. Initially there shall be one CTI positions capable of this function, and one non-CTI equipped positions capable of this function.

At a minimum the system shall provide the ability to generate reports:

1. based on position(s)
2. based on agent(s)
3. based on trunk(s) or line(s)
4. based on groups of positions
5. based on groups of trunks or lines
6. based on time of day
7. based on shift duration
8. based on day of week
9. based on week
10. based on month
11. based on quarter

12. based on abandoned calls
13. based on outbound calls
14. based on inbound calls
15. based on duplicate callers
16. based on call duration, time of answer, time of hold, time of talk

4.22.3 Ad hoc reports--**OPTIONAL**

As an option, users, supervisors, and maintenance personnel must be provided the capability to query the database, and create and print reports in an ad hoc fashion. Capabilities and limitations for ad hoc reporting must be described in the response; including data fields available for reporting. If a specific data field is excluded from ad hoc reporting, it must be noted.

The MIS system must incorporate the E-911 call data records for the ability to research and identify:

- (a) ANI – Caller's Telephone Number
- (b) ALI – Caller's Address Information
- (c) TDD Text
- (d) Any supplemental information received in the ALI record such as but not limited to, Emergency Service Number, Business, Residence.

4.22.4 Changes to data

Data integrity is of significant importance owing to the nature of the data. Bidders shall state the safeguards that are in place to protect the integrity of the data.

4.22.5 Printing

Records and reports must print on the printer of choice.

4.22.6 Query Language

The use of SQL-based reporting is required. Use of proprietary query languages is not acceptable.

4.22.7 Type

The Bidder must describe the type of records management and reporting system proposed. Specific information regarding the system's capabilities and limitations must be provided. If "canned" type reports are available, a brief description and sample of each report must be included.

At a minimum the system shall provide a variety of "canned" reports providing information on:

1. Hourly and daily system overview reports, including inbound calls, outboard calls, abandoned calls, cellular calls, 9-1-1 calls, admin calls, etc.
2. Agent overview report, indicating total number of calls handled, percentage of total number of calls, and average ring, talk, and hold duration per agent.
3. Duplicate Caller report
4. Abandoned Caller report
5. Ring Time Statistics
6. Trunk & Line Utilization

4.22.8 Viewing

Records and reports must be viewable from the screen. Printing records and

reports as the only means of viewing is unacceptable.

4.23 Speed Calling

The system must include the capability to preprogram a nearly unlimited quantity of numbers into a speed calling function for the purpose of reducing the time necessary to connect to another party over the telephone network. Selecting a number from the speed calling group must be accomplished from an object button or with a minimal number of keystrokes, or mouse clicks. Speed dialing shall be capable of performing primary and secondary dialing for: dialing, transfers, conferences, and other functions, such as, long distance access, card numbers, pin access. Speed Dial Libraries shall be stored in a database that resides either on a local drive, network drive, or a combination of both and shall include the following at a minimum:

- (a) Speed dial locations shall be displayed as a button. Each button shall provide access to either a single entry, a group of entries, or a group of groups.
- (b) Management shall have the ability to assign the descriptive label that appears on the buttons and have the ability to assign icons for each button.
- (c) Users shall have the ability to search the speed dial library for a given entry by typing the first few letters of the entry.
- (d) Speed dialing shall support the ability to dial alphanumerically, in example, 1 800 CALL ATT.
- (e) Speed dial access shall be available by either a simple mouse click, keyboard entry, or a combination of both.

4.24 Status

User and Trunk/line status functions must be available to users, supervisors, and maintenance personnel if granted access to these functions by the system's administrator.

4.24.1 Trunk/line

The system must provide trunk and line status from any console in the system. Information such as active, on hold, available, working user, working position, call duration, and other call specific information must be provided.

Bidders are requested to indicate what provisions are included in the proposed CTI interface which would assist individuals which may have difficulty distinguishing between standard color shades in identifying line status, such as incoming call, held call, steady call, and/or active call.

4.24.2 User

The system must provide user specific information upon command. Information such as number of calls taken, trunk or line status by user, special qualifications, working assignment, and other related, operator specific information for users logged onto the system at the time of inquiry must be provided.

4.25 System Alarm Notification

4.25.1 Supervisors and maintenance personnel

The system must provide supervisors and/or maintenance personnel the capability to query the system as to the fault(s) and its affect on the system.

Alarm history queries, reporting, and printing must be available.

4.25.2 Users

Users logged onto the system must receive visual notification at each position of telephone system alarms resulting from minor and/or major faults in the system. Single system-wide Audible notification through a central alarm bell is not acceptable. A minimal number of keystrokes, or mouse clicks must exist to extinguish audible alerts regardless of the user's position in the application at the time of the alarm.

4.26 TTY and TDD identification

The system must internally, without user intervention, immediately recognize incoming TTY and TDD calls and immediately activate functions germane to TTY and TDD calls. A separate TTY/TDD device is not acceptable. TTY and TDD calls must have the same recording and reporting capabilities as voice calls. The TTY / TDD function shall provide the following features:

- (a) To save the telecommunicator valuable time, the system shall provide for an unlimited amount of "canned" predefined messages based on incident type, i.e., POLICE, FIRE, EMS.
- (b) The system shall provide management with the capability to configure and script the predefined messages based on the incident type, such as, but not limited to, POLICE, FIRE, EMS.
- (c) The system shall provide the ability to search for predefined messages.
- (d) The system shall provide the ability to assign predefined messages to "hot keys", i.e., F1-F12, or a CTRL key combination.
- (e) The system shall provide a single window for viewing transmitted and received TDD characters and a separate window for viewing pre-canned messages.
- (f) TDD/TTY text must be saved to the master call record database and be available to the MIS system for reporting and printing.

4.27 User setup

4.27.1 Colors

The system must permit the administrator to select and change screen colors for those features not systemically predetermined by color.

4.27.2 Features and functionality

The system must permit the administrator to select and change system features such as but not limited to: screen layout; button size, location, color, and type; mouse speed and arrow size; pre-recorded voice greetings, etc. System features selectable by the administrator must be listed in the response.

4.27.3 System Access Levels

The system must provide a multiple levels of system access for – administrators, supervisors, and users. Unique system access level setting for each authorized user is most desirable. Administrators must be provided the capability to access, add, change, delete, etc. every feature, function, and parameter in the system. The system must provide a selectable subset of administrator functions for

supervisors and users. Bidders shall state the number of access levels available.

4.27.4 System Security

The system must provide the capability for system users to securely log onto the system by using a user ID and user-selected password. Log on must not take more than fifteen (15) seconds from the time the log on screen is properly completed and entered.

5. 911 PSAP CTI TELEPHONE SYSTEM USER SPECIFICATIONS

5.1 System Support

5.1.1 Declaration of support

The Bidder must provide a written statement in the Bid declaring the length of time they will remain committed to supporting the proposed hardware solution with parts, modules, boards, equipment, upgrades, and software solution with patches, maintenance, upgrades, and modifications required for maintaining and/or expanding the system.

5.1.2 Level of Support

City of Auburn requires seven (7) days per week, twenty-four (24) hour per day, four (4) hour (maximum) response time for hardware and software support services throughout the entire year. Bidders must propose hardware and software support services for remedial maintenance under the original warranty and the proposed extended maintenance services. The services proposed by the Bidder must include but are not limited to the following issues.

5.1.2.1 Contacts and Location of Certified Service Provider

The Bidder must provide in the Bid the company name, address, telephone number, and other relative information of the proposed certified maintenance service provider(s). Names, titles, and contact telephone numbers (during normal and after hours) must be provided for supervisors responsible for City of Auburn's maintenance functions.

5.1.2.2 Help Desk Services

The Bidder must describe in the Bid the Help Desk services available by telephone to hardware and software support technicians and system users. Help Desk services are essential for supporting desktops and servers, PBX/switches, controllers, NOS/OS, CTI application, and other related hardware and software included in the solution. City of Auburn desires 7 x 24 availability of Help Desk services, but may consider other alternatives. The availability of Help Desk service is especially critical during the first year of operation, but required throughout the life of the system.

5.1.2.3 Method of Notification

The Bidder must describe in the Bid the proposed method for problem notification (such as 24 hour available hot line support, remote diagnostics, etc.). City of Auburn will view favorably solutions that include failure diagnosis and reporting via SNMP.

The Bidder must fully describe in the Bid their ability to remotely monitor and diagnosis computing hardware and devices in their proposed system.

5.1.3 Remote Monitoring

5.1.3.1 Minimum Features

The System shall provide, at a minimum, the following features:

- (a) The system shall provide remote monitoring (7x24) of all servers, workstations, and any other SNMP/IP device on the network.
- (b) The system shall provide Alarm notification via Pager or E-mail to first level support should an alarm threshold be exceeded.
- (c) The system shall provide remote troubleshooting tools to diagnose hardware and software problems.
- (d) The system shall provide performance monitoring of network and computer components.

5.1.4 Support Response Time

The Bidder must describe in the Bid the proposed support response time. e.g. How long after notification before remedial action is taken. The description must include clarifications for weekends, holidays, 24-hour service, etc.

5.1.5 Problem Escalation

The Bidder must describe in the Bid the method(s) proposed for problem escalation. e.g. How long after notification before the problem escalates to larger support resource commitments, and then for function limiting problems, to the incurring of liquidated damages.

5.1.6 Cost of Support

The Bidder must provide the full cost of the support proposed.

5.2 Hardware Maintenance Support

The Bidder is required to describe in the Bid any resources expected of the City of Auburn to maintain all 911 PSAP CTI TELEPHONE SYSTEM hardware.

The Bidder is required to provide in the Bid a list of any test or diagnostic equipment required to maintain the hardware, including the cost of the equipment which the City of Auburn needs to procure. City of Auburn may purchase the equipment as part of the system or exercise its option to obtain the equipment through other sources.

5.2.1 Routine

The Bidder must describe in the Bid the impact anticipated on operational and technical support employees during routine preventive and corrective maintenance procedures. It is recognized that the Bidder cannot anticipate every situation; however, a reasonable discussion on routine repair procedures is required.

5.2.2 Warranty

The Bidder must describe in the Bid the impact anticipated on operational and technical support employees during warranty hardware maintenance procedures. It is recognized that the Bidder cannot anticipate every situation; however, a reasonable discussion on warranty repair procedures is required.

5.2.3 Emergency

The Bidder must describe in the Bid the impact anticipated on operational and technical support employees during emergency maintenance procedures. It is recognized that the Bidder cannot anticipate every situation; however, a reasonable discussion on emergency repair procedures is required.

5.2.4 Remote

The system must provide maintenance technicians the capability of entering the system remotely using a laptop or desktop PC. Remote entry into the system must be limited to those authorized through the system administrator function and be password protected.

5.2.5 Console

If the proposed system includes a maintenance monitor console function, the Bidder must include the equipment required for the function in their response. An overview of the functionality and capability from the console must be included.

5.2.6 Extended Hardware Maintenance

The Bidder must propose extended hardware maintenance for a minimum of four (4) years, in one (1) year increments, beyond the one (1) year warranty period. The maintenance Bid will also include, but not necessarily be limited to, the stipulations and conditions identified in this document.

5.2.7 Spares kit

It is the intention of the City of Auburn to maintain a critical spare parts inventory on site to ensure quick and response correction of trouble reports. The Bidder must provide in the Bid a recommended list of spares (parts, modules, boards, and/or equipment) required to maintain the system.

5.3 Software Maintenance Support

References to software in this ITB include but are not limited to the CTI application, the NOS/OS, the switch or PBX operating system and application, and all other software required to support the proposed system. The Bidder is required to describe in the Bid the resources necessary for the City of Auburn to maintain all 911 PSAP CTI TELEPHONE SYSTEM software.

The Bidder is required to provide in the Bid a list of any test or diagnostic equipment required to maintain the software, including the cost of the equipment.

5.3.1 Routine

The Bidder must describe in the Bid the impact anticipated on operational and technical support employees during routine software maintenance procedures. It is recognized that the Bidder cannot anticipate every situation; however, a reasonable discussion on routine procedures is required.

5.3.2 Warranty

The Bidder must describe in the Bid the impact anticipated on operational and technical support employees during warranty software maintenance procedures. It is recognized that the Bidder cannot anticipate every situation; however, a reasonable discussion on warranty repair procedures is required.

5.3.3 Emergency

The Bidder must describe in the Bid the impact anticipated on operational and

technical support employees during emergency maintenance procedures. It is recognized that the Bidder cannot anticipate every situation; however, a reasonable discussion on emergency repair procedures is required.

5.3.4 Remote

The system must provide the ability to remotely send alarm messages automatically to a maintenance center. The system shall provide the ability for maintenance center technicians to enter the system remotely using a laptop or desktop PC. Remote entry into the system must be limited to those authorized through the system administrator function and be password protected.

5.3.5 Console

If the proposed system includes a maintenance monitor console function, the Bidder must include the equipment required for the function in their response. An overview of the functionality and capability from the console must be included.

5.3.6 Extended Software Maintenance

The Bidder must propose extended NOS/OS and application software maintenance for a minimum of four (4) years, in one (1) year increments, beyond the one (1) year warranty period. The maintenance Bid will also include, but not necessarily be limited to, the stipulations and conditions identified in this document.

5.4 Bidder Support Staffing

The Bidder is required to document in the Bid the number of the firm's technical staff members dedicated to new development versus those assigned to support of existing applications. If the offer is not the manufacturer of the software, the Bid shall state the resources available or capabilities of the manufacturer.

5.4.1 Installation and Testing Support

The Bidder is required to provide on-site support during the installation and the testing phases of implementation. The City of Auburn will view favorably direct support from the manufacturer(s) if different from the Bidder during installation and testing.

5.4.2 Licenses

The Bidder must comply with hardware, software, and intellectual property rights licensing requirements for their and City of Auburn's use during installation and City of Auburn's ongoing use after installation.

5.4.3 Upgrade Support

The Bidder must offer, for the full term of the maintenance agreement, support of the proposed 911 PSAP CTI TELEPHONE SYSTEM to ensure continued operation during and after hardware upgrades and implementation of new releases of all software that were covered under the maintenance agreement.

The Bidder must provide enhancement updates to the software as they become available. The updates should be able to be applied by function rather than by a blanket update release. Explain the method of distributing information on the available updates and software modifications with an explanation of the responsibilities of the maintenance vendor, the manufacturer (if different from the maintenance vendor), and the City of Auburn.

The Bidder should specify the methods to be used to update the software of the

system at the City of Auburn's site for both remedial updates and functional enhancement updates.

5.4.4 User Group Support

The Bidder is requested to include in the Bid, information related to a formal User Group for the product being proposed, if one exists.

If a User Group exists, the Bidder is also requested to describe the Bidder's level of support for the User Group and the method provided to accept customer input into future product enhancement.

5.4.5 Warranty

All warranties must be submitted as part of the Bid. The Bidder must warrant that all work done and all materials furnished by it or by its subcontractor(s) or representative(s) as a part of or in conjunction with the 911 PSAP CTI TELEPHONE SYSTEM and the work, specifically including but not limited to hardware, software, implementation, and documentation, must be of good workmanship and quality, free from all defects in design, content, workmanship, or materials for a period of at least one year from the date of final system acceptance.

Additionally, the Bidder must guarantee support for the hardware, operating system and application software for a minimum of five years from the date of final system acceptance.

The Bidder must specifically address its warranty correction process. The Bidder must specify problem tracking and escalation procedures including the method for the City of Auburn to follow-up on previously reported problems and the method used in closing a problem.

5.4.5.1 Single point of contact

The successful Bidder must serve as City of Auburn's single point of contact for all warranties, whether warranted by the successful Bidder or another manufacturer, throughout the entire warranty period unless otherwise negotiated in the contract.

5.4.5.2 Equipment condition

The Bidder must expressly warrant that all items supplied under the contract are new, free from defects in design, materials, and workmanship.

5.4.5.3 Warranty repairs

Maintenance services provided under warranty must be available on a seven (7) days per week, twenty-four (24) hours per day, four (4) hour (maximum) response time basis throughout the entire warranty period.

5.4.5.4 Minimum warranty period

A minimum of a one (1) year warranty period is expected for all hardware, software, and ancillary equipment provided by the successful Bidder. The one (1) year period will commence upon City of Auburn's final acceptance of the system. The period may begin prior to final acceptance if, at City of Auburn's sole, written discretion, only minor punch list items remain open. All warranties must survive acceptance

and payment by the City of Auburn.

5.4.5.5 Warranty extension

Standard warranties for hardware and/or software provided by the successful Bidder to City of Auburn that exceed the one (1) year mandatory warranty period must be provided without additional charge to City of Auburn. The Bidder may provide a price for extending the standard hardware and/or software warranty period, as desired. If such a price is provided, a written explanation of the services and/or materials covered under the extension, major items or components not covered, the duration of the extended period, and the cost of the extended warranty must be included.

Bidder must provide pricing for 3- and 5-year maintenance agreements as an option.

5.4.5.6 Other manufacturer(s)' warranties

If another manufacturer's hardware and/or software is provided under contract for the CTI telephone system, the successful Bidder may utilize that manufacturer's warranty for the one (1) year warranty period or the duration of that manufacturer's standard warranty period, whichever is longest.

5.5 Documentation

5.5.1 Operational and Technical Documentation

The Bidder of the selected system must provide the City of Auburn with a minimum of two (2) sets of all available system documentation. Examples of desired documentation are:

- Complete technical and maintenance information and documentation to support the CTI system and support outlined in the final contract.
- Database structure diagram.
- Operations instructions, including backup, recovery, and maintenance procedures.
- User's manuals, to include the basic CTI system, network, and any controller sub-systems.
- Any other documentation the Bidder considers applicable to the administration and use of the system under contract.
- Operating system manuals.
- Any additional documentation as may be requested by the City of Auburn that is applicable to the proposed system.
- CAD Interface manual, if available.

5.5.2 Detailed work plan

The Bidder must provide in the Bid a preliminary high level work plan and project milestones in Gantt chart format to demonstrate the period of time required by the Bidder from finalizing contract negotiations to completing the installation and final acceptance testing.

The successful Bidder will be required to submit a final work plan for City of Auburn's approval prior to beginning installation work.

5.5.3 Network Diagram

A detailed network diagram must be provided in the Bid for the proposed system.

5.6 Training

5.6.1 General

The Bidder must provide training for City of Auburn's personnel at City of Auburn's premises. The times when training courses are given must be subject to City of Auburn approval. Training must be conducted by qualified instructors who may be supported by training aides, computer-based tutorials, or other individualized learning materials. The training must cover all aspects of the 911 PSAP CTI TELEPHONE SYSTEM.

Administrative, user, and supervisor training must be conducted in the customer PSAP unless otherwise agreed upon by City of Auburn.

Participants must receive individual copies of applicable training materials at the time the course is conducted. The courses must be scheduled so that an individual can participate in all courses.

5.6.2 Maintenance Training

The training provided must specifically cover, any maintenance and / or administrative training which is required by the City of Auburn to support the intelligent work station, the server and network, the switch/PBX, the controller, all ancillary equipment, and all other equipment associated with the proposed system:

- Detailed explanation of system design.
- Detailed explanation of data base structure.
- Detailed explanation of communication network structure.
- Detailed instructions on modifying and/or adding new programs.
- Detailed instructions on modifying and/or adding data base tables and data elements.
- Detailed explanation of Program-to-Program interfaces.
- Applicable mathematical models and algorithms.
- Detailed explanations of operational, backup, recovery, and restart procedures.
- Diagnostics.
- Detailed instructions on hardware repair.

System maintenance and/or administrative training must be included as part of the response. The Bidder must describe the scope, duration, and location of the proposed training. Training must be scheduled in concert with the installation and scheduling needs of the attendee's supervisor(s). A minimum of four administrative training slots is required.

5.6.3 Software/Operating System Training

The training provided must specifically cover, but not be limited to, software for the intelligent workstations, the servers and networks, the switch/PBX, the controller, all ancillary equipment, and all other software associated with the proposed system. The course material must be presented in depth. A quick functional overview of the system is not acceptable. The training provided must specifically cover, but not be limited to, the following topics:

- Operating System basics – point, mouse, click, etc.
- Detailed explanation and instructions on adding or modifying functions.
- Detailed explanation and instructions for performing diagnostics on the operation system as well as addressing performance issues.
- Identify and provide cost for any performance tools that would assist in supporting the system (hardware and software).

5.6.4 User and supervisor training

User and supervisor training must be included as part of the response. The Bidder must describe the scope, duration, and location of the proposed training. Separate training for users and supervisors is acceptable. Training must be scheduled as close to the installation date as practical, and be in concert with the scheduling needs of the 911 center supervisor. A minimum of eight user and six supervisor training slots is required.

An option for a two (2) track user training approach must be provided in the Bid. The first track is to be accomplished by the successful Bidder and/or their representative for a group of City of Auburn trainers. The second track is to be accomplished by the successful Bidder and/or their representative and the City of Auburn trainer(s) trained in the first track.

The City of Auburn will view favorably upon bidders who are competitive in the following areas:

- 1) Pricing
- 2) Quality of equipment
- 3) Service response
- 4) Maintenance agreements
- 5) Ease of use
- 6) Proven record of successful, long-term product reliability
- 7) Or any other ancillary service/equipment provided by the Bidder

TO: City of Auburn

We, the undersigned, propose to furnish the item listed below and guarantee that if we are awarded the bid, we will furnish this good in accordance with the attached specifications. **THIS FORM MAY BE COPIED IF YOU WISH TO MAKE AN ALTERNATE BID.**

911 PSAP COMPUTER TELEPHONY SYSTEM

TOTAL BID: _____

BID PRICE IS GUARANTEED FOR SIXTY (60) DAYS AFTER BEING OPENED BY THE CITY OF AUBURN

Authorized Signature

Name of Firm

Printed Name of Signee

Address

Date

City, State, Zip

Phone/Fax No.