



**Forsyth County  
Emergency Services**

**Request for Proposal  
For  
911 Recording System**

**Proposals Will Be Received Until  
12:00 Noon, Tuesday, October 17, 2017**

**City/County Purchasing Department  
City Hall Suite 324  
101 North Main Street  
Winston-Salem, NC 27102**

**ADVERTISEMENT FOR BIDS**

**Forsyth County Emergency Services 911 Recording System**

Sealed proposals endorsed **Forsyth County Emergency Services 911 Recording System** to be furnished to Forsyth County will be received by the City/County Purchasing Department in Suite 324, City Hall Building, 101 North Main Street, Winston-Salem, N.C. **until 12:00 Noon, Tuesday, October 17, 2017**. To obtain the complete proposal document or receive instructions for submitting proposals contact Jerry Bates via email [jerryjb@cityofws.org](mailto:jerryjb@cityofws.org), phone 336-747-6939, or visit the Purchasing Department at same location from 8:00 A.M. to 5:00 P.M. Monday through Friday. The County reserves the right to reject any and/or all proposals, bids, to waive informalities in the bids, and to choose the bid that is in the best interests of the County.

Jerry Bates  
Purchasing Director

**This document IS NOT the complete proposal.** To obtain the completed proposal specifications contact Jerry Bates via email [jerryjb@cityofws.org](mailto:jerryjb@cityofws.org), by phone 336-747-6939, or visit the Purchasing Department, City Hall Building, Suite 324, 101 North Main Street, Winston-Salem, NC during regular office hours.

## INSTRUCTIONS TO PROPOSERS

### INTRODUCTION:

This entire set of documents constitutes the RFP. The proposer must return the RFP with all information necessary to properly analyze the proposer's response in full, in the same numerical order in which it was issued. Proposer's notes, exceptions, and comments may be rendered on an attachment, provided the same format of this RFP text is followed.

### RFP Response Submission

**All proposals shall be returned in a sealed container or opaque envelope containing one original proposal (please mark document as original) showing original signatures and seals and two (2) printed copies and one (1) digital copy of the complete proposal including the pricing structure, marked 911 Recording System.** Proposals must be submitted to the City/County Purchasing Department in Suite 324, City Hall Building, 101 North Main Street, Winston-Salem, NC, no later than **12:00 Noon, Tuesday, October 17, 2017. Late proposals will not be considered.** Submittals will not be accepted by fax or electronic mail.

The County will not be obligated for the expenses of any provider arising out of preparation and/or submittal of responses to this RFP. Any and all proposals to this RFP are to be prepared at the cost and expense of the respondents, with the express understanding that there may be no claims whatsoever for the reimbursement of any costs, damages, or expenses relating to this procurement from the County or any other party for any reason (including the cancellation of this RFP).

Proposals must be made in the official name of the individual, firm, or corporation under which the business is conducted (showing official business address) and must be signed in ink by a person duly authorized to legally bind the business entity submitting the proposal.

All proposals should be complete and carefully worded and must convey all of the information requested by the County. If errors or exceptions are found in the proposal, or if the proposal fails to conform to the requirements of the RFP, the County will be the sole judge as to whether that variance is significant enough to reject the proposal.

Proposals should be prepared simply and economically. All data, materials, and documentation shall be available in a clear, concise form. The County reserves the right to reproduce proposals for internal use in the evaluation process.

Proposers are expressly forbidden from contacting any other County employee or Forsyth County elected official regarding this Request for Proposals. Any such outside contact may result in disqualification from the request for proposal process.

### Proposer Questions and Inquiries

Proposer Questions and Inquiries relative to this RFP must be submitted **in writing only by 12:00 Noon, Friday, October 6, 2017**, to Jerry Bates, City/County Purchasing Director, 101 North Main Street, Winston-Salem, NC 27101 or e-mail: [jerryjb@cityofws.org](mailto:jerryjb@cityofws.org) (**Email is preferred**), Fax: (336) 727-2443. The County will provide written responses to all inquiries received by this date, and responses will be made available to all recipients of this RFP. Any oral responses made by any representative of the County may not be relied upon. Any supplements or amendments to this RFP will be in writing and furnished to potential bidders.

► All proposals should include a signed acknowledgement of any addendums issued.

# **Forsyth County Emergency Services 911 Recording System**

## **TECHNICAL SPECIFICATIONS AND REQUIREMENTS**

### **PROJECT OVERVIEW**

Forsyth County Emergency Services 911 PSAP is in the process of relocating to the Forsyth County Public Safety building located at 301 N. Church St, Winston-Salem, NC 27101. The new PSAP will be co-located with the existing Forsyth County Sheriff's office secondary PSAP which will also be included in this bid.

Through this RFP, Forsyth County 911 intends to procure a 911 center quality recording system for both PSAPs (301 N. Church St.) along with the backup PSAP (3000 Aviation Dr) as part of this project.

Pricing shall be presented as follows:

Forsyth County ES 911 (301 N. Church St.)  
Forsyth County Sheriff's Office (301 N. Church St.)  
Both PSAPs together (301 N. Church St.)  
Forsyth County ES 911 Backup Location (3000 Aviation Dr.)

### **VENDOR REQUIREMENTS**

- Vendor must have sold and successfully installed at least 10 communication recording systems (please list the agency name and install date for each) in NC in the last 18 months
- Vendor must employ a minimum of 4 service technicians who are located in NC (or within 200 miles of Forsyth County) and must be trained or certified by the manufacturer of the proposed system.
- Each of the 4 service technicians must be CJIS certified.
- Ability to provide 24/7 remote and onsite response by manufacturer certified technicians who are employees of your company for any time period under warranty or while under an annual maintenance plan.
- Ability to provide unlimited remote or onsite training for any time period under warranty or while under an annual maintenance plan.

### **Forsyth County ES 911 New Primary Location (301 N. Church St.):**

Ability to record Motorola 4.1 SmartZone Trunked Radio Talk Groups via 15 Over-the-Air radios and the ability to upgrade to a P25 radio system interface

Ability to record Select Audio from 8 Motorola Centracom Gold Elite Radio Consoles

Ability to record 8 Intrado/West Viper Phone Positions via VoIP

Ability to record 8 Intrado/West Viper Phone Positions via Analog with Contact Closure relay trigger

Ability to capture ANI/ALI data from Intrado/West Viper CPE and assign data to both Analog and VoIP Phone Position recordings

Ability to record screens from 8 CAD workstation PCs

Ability to record 15 CAMA Trunks

Ability to record 6 Admin PoTS Trunks and 8 PoTS Ringdown Trunks

System should use a fault-tolerant, hardware based hot swap RAID-5 local storage sub-system with battery backed cache and a minimum of 6TB of capacity

System should be capable of recording and displaying SMS-to-911, MMS to 911 and TTY transcripts as searchable text using both TTY decoding (baudot) and SIP-text decoding

The server hardware should include redundant power supplies and redundant network interfaces

### **Forsyth County Sheriff's Office PSAP Existing Primary Location (301 N. Church St.):**

Ability to record Select Audio from 7 Motorola Centracom Gold Elite Radio Consoles

Ability to record 7 Intrado/West Viper Phone Positions via VoIP

Ability to record 7 Intrado/West Viper Phone Positions via Analog with Contact Closure relay trigger

Ability to capture ANI/ALI data from Intrado/West Viper CPE and assign data to both Analog and VoIP Phone Position recordings

Ability to record screens from 7 CAD workstation PCs

Ability to record 5 Admin PoTS Trunks and 2 PoTS Ringdown Trunks

System should be capable of recording and displaying SMS-to-911, MMS to 911 and TTY transcripts as searchable text using both TTY decoding (baudot) and SIP-text decoding

System should use a fault-tolerant, hardware based hot swap RAID-5 local storage sub-system with battery backed cache and a minimum of 6TB of capacity

The server hardware should include redundant power supplies and redundant network interfaces

### **Forsyth County ES 911 Backup PSAP Location (3000 Aviation Drive):**

Ability to record 15 CAMA E911 Trunks

Ability to record Select Audio from 8 Motorola Centracom Gold Elite Radio Consoles

Ability to record 8 Intrado/West Viper Phone Positions via VoIP

Ability to record 8 Intrado/West Viper Phone Positions via Analog

Ability to capture ANI/ALI data from Intrado/West Viper CPE and assign data to VoIP Phone Position recordings

Ability to record screens from 8 CAD workstation PCs

Ability to record 6 Admin PoTS Trunks and 8 PoTS Ringdown Trunks

Ability to record 10 conventional radio channels/trunked talk groups from local/backup control stations

System should use a fault-tolerant, hardware based hot swap RAID-5 local storage sub-system with battery backed cache and a minimum of 6TB of capacity

Ability to have unlimited amount of users with up to 16 concurrent users for BackUp location

System should be capable of recording and displaying SMS-to-911, MMS to 911 and TTY transcripts as searchable text using both TTY decoding (baudot) and SIP-text decoding

The server hardware should include redundant power supplies and redundant network interfaces

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### **Common Requirement across all systems:**

Ability to have unlimited amount of users and playback workstations with at least 16 concurrent users for Forsyth County Fire and 16 concurrent users for Forsyth County Sheriff Office

All recording systems and NAS should be capable of 365 days of on-line audio storage with automatic purging of recordings that exceed a user-defined retention period

The recording system should be capable of configuring recording retention periods on a per-channel basis

Playback software should be capable of accessing recordings from all recording servers simultaneously, or recordings should be centrally located for playback

All recording systems should have the ability to recognize record activation by VOX, hook voltage, and dry contact closure, on a per channel basis

The recording systems should be capable of automatic time synchronization with an NTP time server or Net Clock

System reliability is paramount. Describe how your system design mitigates any single point of failure at the primary site (Fire and Sheriff Office) from preventing recording of any channels

The system design should provide multiple levels of security, including per-channel and per-talkgroup

Security settings should be user specific and have the ability to be assigned by group and by

individual

Audio files should be written to media in a secure manner. It should not be possible to delete a recording other than by trained service staff

All recordings should be cataloged to include date/time, source and any caller identification (whether 911 ANI/ALI or Enhanced Caller ID) and Radio ID/Alias and talk group

System features should include instant recall, scenario reconstruction, call tagging, redaction, obfuscation (voice disguise), live monitoring, recording export, etc.

Systems should be capable of searching the catalog for recordings by date/time, channel number, channel name, caller identification (Caller ID or ANI), Telecommunicator ID and/or name, Street Address, Caller Name, Class of Service, Phase 2 coordinates, Radio ID/Alias and talk group and Memo field

Systems should display the fields listed above and allow the user to sort by any field and change order in which fields are displayed on the screen

Systems should decode and store any DTMF digits with the recorded call

Systems should allow a user to define groups of channels for searching that can be stored and recalled on a per-user basis independent of which workstation used to access the system

Both systems (Primary and Backup) should replicate to each other in case of a single location failure

Systems should allow a user to save custom search settings that can be recalled on a per-user basis independent of which workstation used to access the system

The system should retain a system-wide audit trail to show all activity including which users have replayed and exported which recordings and when

System should have the ability to recreate “scenarios” of recordings that include associated telephone, radio, and screen recordings, and permit users to upload external documents related to the scenario

Systems should be able to simultaneously record and playback or live monitor

Systems should not segment recordings when there is extended silence during a call. Systems should not combine recordings of back to back calls which have little or no silence between calls

Systems should have the capability of multi-channel synchronized replay. It should be possible to play simultaneous recordings at all positions

Systems should have the capability of concatenating recordings from the same or different channels for replay or export as a combined file

Systems should have a graphical timeline representation of each segment of a multi-channel recording/scenario

Systems should have a spoken date/time feature which can be user enabled. When enabled the

spoken time announcement should be able to occur at the beginning and/or end of each file or any specific point in a recording

The user should be able to enable or disable auto-skip of silent periods during replay and export

The user should be able to add annotations to specific time points within recordings (e.g. the note “shots fired” tagged to the point of “1 minute, 32 seconds” within the recording) that are saved with the recording and any exported file

The user should have the ability to edit or redact portions of a recording and the edited recording saved on the system for later recall without affecting the original unedited recording

The user should have the ability to edit or redact portions of a recording by modifying or deleting a caller's voice for the purpose of protecting patient identity and confidentiality as it pertains to HIPPA regulations.

The user should have the ability to mark selected recordings in the playback software to be exempted from recording retention rules

The user should be able to export any recording or group or recordings/scenarios as a file on their local workstation. The file should be playable on any workstation without the need for proprietary decompression algorithms

The user should be able to include edited/redacted recordings as part of exported recordings/scenarios

The user should be able to create an optional password that is required for playback of any exported recording or group of recordings/scenarios

The user should be able to create an audio-CD with a copy of the recorded call(s) or complete scenario

When playing back multiple simultaneous calls the user should have the ability to mute or adjust the volume of each channel independently

The user should be able to add comments about a recording in a searchable memo field

Instant Recall should function in a web browser interface and should allow a Telecommunicator to replay recent recordings. The instant recall software should allow playback even if the call is still in progress

Instant Recall software should allow playback of the last 60 minutes of recordings and optionally allow playback of up to 72 hours or recordings

Instant Recall software should allow the user to show details on the call including ANI/ALI or Caller ID information and date/time and channel name and number

Playback and scenario reconstruction functions should be available through a web browser interface not requiring installation of vendor specific software

The Playback and Instant Recall web interface should be compatible with Google Chrome, Mozilla

Firefox, Microsoft Internet Explorer/Edge, and Apple Safari web browsers  
The systems should perform diagnostics on boot-up and on-going self-checks

The systems should provide an error log to keep track of alerts, error messages and failures

The systems should have audible and visual alarms that sound at a remote workstation in the event of an alert or failure. The user should have the option of muting the alarm

The systems should be able to detect if a phone line or other recording source becomes disconnected

The systems should be integrated with the Intrado/West Viper phone system to receive caller data from ANI/ALI system and Enhanced Caller ID

The data received should be parsed and stored in the call catalog in appropriate searchable fields for the associated recordings

The following data should be captured when available:

ANI

Caller Name

Street Address

City

Class of Service

Wireless Phase 1 callback number

Wireless Phase 2 coordinates

The systems should provide a way for the user to print the call details listed above from within the web interface

The systems should capture the radio control channel information and parse the data and store it in the call catalog in the appropriate fields for the associate recordings

The following data should be captured when available:

Radio ID or Alias

Talk group ID

Talk group Name

RF Channel number or name

Each radio transmission should be recorded as a separate recording

The systems should allow seamless replay of a talk group regardless of the number of RF trunks a conversation may span

The systems should allow the system administrator the ability to select which talk groups are enabled for recording, should support an unlimited quantity of talk groups (up to the Motorola radio system limit) and talk groups can be enabled for recording on a per talk group basis

The systems should permit administrative configuration functions such as user account creation and channel configuration from within a web browser



The systems should include a statistical reporting feature

The systems should include pre-defined reports including report of number of recordings and recording time by channel for a specific time and date range

The systems should allow the user to create custom or ad-hoc reports on any database information including ALI, RadioID, Telecommunicator Name, etc.

The systems should allow reports to be created, modified, and viewed from within a web browser interface

Reports and graphs should be exportable for easy viewing and distribution. Export formats should include Microsoft Excel (xls) and Adobe Acrobat (PDF)

Reports and graphs should have a function to generate automatically based on a schedule and automatically send scheduled reports to specified email recipients

Systems should have the ability to record “screen shots” or keystrokes, mouse movement, etc. of the CAD workstations to be associated with recording scenarios. Must be compatible with existing CAD workstations

Package should have the ability to select recordings and screenshots and link them to a scenario

Package should have the ability to export these scenarios for quality assurance review

Systems should have a web browser interface software package for managing quality assurance reviews for up to 60 agents/users

Package should have the ability to create custom forms or checklists to be used in performing quality assurance checks

Package should record data and comments entered during the quality assurance review

Package should include the capability to automatically notify an agent via email that a quality assurance review has been completed, and provide access to the grading and associated recordings

### **Network Attached Storage:**

All recording system servers should have the capability to automatically store backup copies of audio recordings and associated data to network attached storage

The server operating system should be running on Windows Server 2016

System should use a fault-tolerant, hardware based hot swap RAID-5 local storage sub-system with a minimum of 12TB of capacity

The server hardware should include redundant power supplies and redundant network interfaces

## References

- A resume of references shall be submitted with the Provider's proposal including the following:
  - A list references that had projects of a similar type and size as this including contact names and telephone numbers for each. Government references preferred.
  - A description of the experience of the Provider's personnel that will install and service the equipment.

## Equipment Installation

The Provider must include, as part of the equipment installation, all supplies needed for the equipment to ensure that it is fully operational at the time of startup. The Provider must include an operation manual. The Provider is responsible for ensuring the equipment is fully operational before it will be accepted by the County. The Provider will be responsible for removing any and all packing and debris associated with the delivery and installation of the equipment. Any labor, materials and/or equipment which is not in the bid documentation or specifications herein, but is necessary and/or incidental to completing the entire installation, as intended, must be furnished and installed by the provider at no additional cost to the County.

## Training

The Provider will provide documentation on how to operate the equipment and provide training on the use of the equipment. Indicate what, if any, ongoing support that is provided in regards to the use of the equipment.

## Proposal Reservations

In submitting a proposal, it is understood by the Provider that Forsyth County reserves the right to accept any or all proposals, to reject any or all proposals as non-responsive and to waive minor immaterial irregularities or defect in proposal when in the best interest of the County. The County may consider any alternative proposal that meets its basic needs.

Nothing contained herein allows the Provider to perform in a manner deficient of providing Forsyth County with a complete and accurate job. Any errors or omissions contained herein do not preclude the Provider from furnishing and installing a functional system. If such an omission is apparent to the Provider upon review of this specification and scope of work, the Provider bears responsibility to inform Forsyth County so adjustments can be made. This process places the burden of such omissions and errors upon the Provider, and discharges Forsyth County of its responsibility for a complete and total system installation.

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