

Request for Proposal

9-1-1 Call Taking System for Shelby County Alabama

Introduction

Shelby County 9-1-1 is soliciting proposals with best and final pricing on an IP based 9-1-1 call taking solution to include all hardware, software, and services necessary to utilize and maintain same. Vendors are encouraged to propose innovative solutions that improve the delivery of 9-1-1 service, increase diversity/redundancy, and prepare Shelby County to participate in NG9-1-1.

The system proposed must use IP for internal communications and be capable of accepting IP connectivity from the 9-1-1 network when available. A primary decision factor in evaluating proposals is the extent to which continuity of operations is achieved. Adherence to standards, guidelines, best practices, and recommendations established/endorsed by the National Emergency Number Association will be a critical part of the evaluation process.

Questions should be sent to John Ellison via email john@shelby911.org Questions and answers of a general / clarification nature will be sent to all vendors who have indicated their intent to respond. The identity of the questioner will not be included in the distribution.

Responses are considered public records and are subject to inspection and copying. Do not include proprietary or confidential information in your response. If Shelby 9-1-1 asks for further details we will enter into a non-disclosure agreement to protect proprietary or confidential information.

While Shelby 9-1-1 intends to purchase a new call taking system and associated services based on the proposals received, we may elect to delay or defer the project after evaluating costs and benefits. You assume responsibility for any and all expenses you incur in responding to this request.

Process

It is our intent to conduct an open procurement that identifies a solution with the best combination of features, benefits and price. We will rank the responses using a cost / benefit analysis and then begin an in-depth review of the leading candidate(s). If there is not a considerable difference in cost between two or more proposals we may begin the in-depth review process simultaneously with two or more vendors.

If during the due diligence / evaluation / contract process we discover an issue that eliminates the leading candidate we will then begin the process with the next leading candidate. A detailed contract with deliverables, timelines, statements of work, payment schedules, etc will be developed with the selected vendor.

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Time Line

Proposals will be opened on Monday, March 9, 2009 at 9:11am at Shelby County 9-1-1, 1004 County Services Dr., Pelham, Alabama. Proposals will be accepted until 9:09am and must be in a sealed package clearly marked "9-1-1 Call Taking System – March 2009"

Vendors are welcome to attend the response opening but it is not required. The responding vendors and their total price for one-time and annual recurring expenses for each pricing option will be read aloud.

It is expected to take several weeks to review and analyze the responses. Vendors may be contacted to clarify or elaborate as needed and presentations may be requested.

Assuming pricing and benefits are acceptable, we intend to award the bid at the end of the evaluation period and develop a contract with the most responsive bidder specifying payments and a installation / implementation schedule agreeable to both parties.

Existing System Overview

Shelby County 9-1-1 operates two (2) primary PSAPs and one (1) secondary PSAP.

Primary PSAP – Shelby County 9-1-1, receives 9-1-1 calls from Shelby County with the exception of the Cities of Pelham, Hoover, and Birmingham. Hoover and Birmingham maintain private municipal 9-1-1 systems and are not part of our planning or operational responsibility.

Primary PSAP – Pelham Police Department, receives all calls within the city of Pelham

Secondary PSAP – Alabaster Police Department, receives transfers for law enforcement calls in the city of Alabaster.

Shelby 9-1-1 has *Dispatch Works* from Baker Integrated Technologies.

Pelham PD has *Synapse* from Plant/CML, originally a TCI product.

Alabaster PD has a *Lifeline 100* from Positron purchased through AT&T.

The main PSAP has eight (8) workstations, Pelham PD has four (4), and Alabaster PD has two (2). All workstations at Shelby 9-1-1 currently have phone, radio, and CAD. We may change this model based on pricing and this is one reason we ask for pricing per position.

Our expectation is that the new system will replace all three existing systems.

Intergraph CAD is used by Shelby 9-1-1 and Alabaster PD, Pelham PD uses Spillman. There is no interest in changing CAD systems by any of the agencies. Mapping is furnished through CAD at all locations and is not required as part of this solution.

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Existing System Overview (continued)

Our current evacuation location is the Shelby County Sheriff's Office in Columbiana. This is the County seat and many county operations are located in this community, including the Shelby County Information Technology Department. SCIT provides IT support to Shelby 9-1-1 and will be intimately involved in this project.

Shelby 9-1-1 is connected to the Sheriff's Office via MetroE high speed, redundant data circuits. We are connected to Alabaster PD via a 10mbps fiber connection leased from Charter Cable that can be increased to 100mbps if needed. There is no existing connectivity to Pelham PD, it will be purchased as part of this system upgrade – but is not the responsibility of the vendor.

Shelby 9-1-1 shares CAD with the cities of Calera and Montevallo who both dispatch their law enforcement officers. It is desired that the new system utilize the 10mbps Ethernet connection to these locations to receive 9-1-1 transfers and access to regular administrative phone service via IP from the PRI service at Shelby 9-1-1.

Details about Shelby 9-1-1 and call volume may be found on our web site. www.shelby911.org You are welcome to schedule a visit to the site(s) if it will aid in your response. We also welcome phone calls or emails if you need additional information.

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General Expectations

- The system will be IP based and handle calls using commonly accepted industry standards.
- Common off the shelf components and equipment are desired.
- The system proposed must allow for the physical separation of the common equipment in two of our facilities. Either set of equipment must be capable of supporting the complete system independently. 9-1-1 network facilities will be terminated at both locations and will be in active use during normal operations and will carry the entire call load if one facility fails or suffers a network interruption.
- The ability to distribute calls among PSAPs for unusual call loads, network failure, evacuation of a PSAP, and other contingencies is desired.
- The ability to use an Internet VPN to allow employees to work from home in time of emergency, pandemic, or travel difficulties is of high interest.
- The system must connect to the existing AT&T 9-1-1 network system and an IP (SIP) based 9-1-1 network when available. The system must be capable of connecting to both the legacy and IP system at the same time as we expect to use a “split” in-bound 9-1-1 system in the near future.
- NG9-1-1 type data features are not available now, but proposals must include how the system anticipates accepting and utilizing data when such is available.
- Our radio control application and long-term recording solution will also be replaced during 2009 as part of our overall emergency communications system upgrade. If your company desires to propose solutions for these applications, a separate request for proposal will be available soon.
- A vendor who can provide a truly integrated 9-1-1, telephony, and radio solution would be evaluated favorably.
- We have always operated with one PC at each workstation and this will be a very important part of our evaluation of proposals. Intergraph / Spillman CAD will be one of the applications on the workstations along with the new 9-1-1 call taking and/or radio control applications.
 - If Intergraph or Spillman CAD have not been certified to run on the same PC with your application you must include any costs for testing and certification.
 - An innovative solution to using multiple PCs and a single keyboard/mouse or alternate input device will be reviewed favorably.

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Assumptions

- The terms “9-1-1 call taking solution”, “the system”, and similar phrases refer to what we have called a “9-1-1 switch” or “CPE” in the past. This request for proposal is for a complete solution to handle voice 9-1-1 and normal phone calls as we know them today as well as the data that will be available in the NG9-1-1 system of the future.
- “9-1-1 Systems” offer many of the same functions and this request does not go into detail about creating an audible sound when a call is present or the ability to transfer a call to another PSAP. Our assumption is all responders provide a system with basic telephony features so your response does not need to mention common features unless you have a unique or innovative means of providing a common feature that might establish a higher value for your system.
- We have intentionally been non-specific as to how the new system will achieve desired functions and features. We desire an innovative, creative response that best utilizes the unique features of your solution and are willing to consider changes to operational practices to receive the maximum benefit of your solution.
- Our existing Baker system is a truly integrated telephony and radio solution and as such we have both applications at each position at our main PSAP. We desire to maintain this functionality but may consider not having both applications at each position if cost is prohibitive. Pricing is requested per position to facilitate a cost / benefit analysis of continuing this model.
- ALI is currently retrieved at Pelham and Alabaster from an off-site database maintained by Intrado for AT&T. At Shelby 9-1-1 we use a local ALI database for wired customers and the same off-site database for wireless ALI. We are open to solutions using either method based on the solution that is most cost effective.
- We will purchase new PCs for the workstations and install the system for testing and training prior to deployment.
- We will provide conditioned electrical service to include UPS and generator at each site.

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Response Requirements

To facilitate response analysis and evaluation we require that you respond using the format provided. You may elaborate and/or propose alternative means to achieve a function or feature. Ease of evaluation will be facilitated by plain answers not flowery marketing prose.

We encourage vendors to propose features and/or options we may not have included. If there are additional costs for any features or options proposed, please include them clearly as options on the pricing summary page.

We will ask for customer references and additional company information after evaluating responses.

Include a cover letter that asserts that the proposal is a valid offer and will be honored for a period of at least 180 days signed in ink by an employee/officer authorized to legally bind the company.

Pricing

There is a spreadsheet provided for your pricing response. You are encouraged to add as many rows as needed to properly represent your system and to make pricing for optional items easy to understand. We do not want to see the detail of the number and type of cables and other miscellaneous pieces and parts needed for the system if they are not optional.

Our goal is to be able to easily determine what your system will cost initially and then to operate based on what if any options we select.

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Response

Your response begins at this point and must address all numbered items. Please submit three (3) printed copies and one (1) soft copy on CD/DVD or flash drive.

- 1) Your company/corporate name and legal structure.
- 2) Is your company a certified telecommunications provider in Alabama?
 - a) Do you think this will be required to implement the system proposed?
- 3) Provide a brief historical overview of your company.
- 4) Total number of employees directly involved in 9-1-1.
- 5) Has the company ever been party to a law suit with or by a customer?
- 6) Identify the primary contact for questions concerning this proposal.
- 7) Describe your strategic plan for NG9-1-1 call taking solutions.
- 8) Contract how soon can you have the system installed and ready for testing on our premises?
- 9) Describe the acceptance testing process you recommend.
- 10) Describe the transition process from the existing system you recommend.
- 11) During times of severe weather we have a temporary need to increase workstations. This occurs less than four times per year and typically lasts 12-16 hours. We also occasionally need extra workstations for training. Describe what if any means you offer to temporarily increase our total number of workstations / licensed users?

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Include a system diagram for reference. If answers are redundant, you may simply reference a previous answer number and add any specifics unique to the question at hand.

- 12) Is any part of the system equipment, installation, training, and/or service outsourced to others? If yes – describe fully.
- 13) Describe what operational benefits we will receive from sharing infrastructure among multiple PSAPs.
- 14) Describe the call flow internally from the servers to the workstations.
- 15) Describe the network equipment (routers, gateways, servers, etc) required at a PSAP that is not co-located with the primary servers?
 - a) How many workstation positions can be supported by the base equipment package provided?
(This allows us to calculate the incremental cost to add a new workstation up to the capacity of the system as priced.)
- 16) As we desire to support PSAPs using existing IP connectivity, describe the bandwidth per position, per call, or in other measure that your system requires. Include any network protocols, ports, routing requirements, quality of service levels, or other IP networking issues/considerations we should include in our evaluation of your solution's impact on our network and/or costs to obtain connectivity at new locations.
- 17) Describe how the system anticipates handling text messages, email, photos, and video, both with and without a 9-1-1 voice call, to include data sent to the CAD port.
- 18) Describe how you will handle the CAD dumps needed at different PSAPS using different brands of CAD? *(Pelham PD has Spillman and Shelby 9-1-1 has Intergraph)*
- 19) Describe how calls will be transferred, conferenced, and routed among the PSAPs on the shared system. Include options for routing by conditions such as all positions busy, network failure, time of day, etc.
- 20) Describe call routing contingencies during system component and/or network failures.
- 21) Describe how calls will be transferred to and/or conferenced with regular PSTN customers such as non-PSAP dispatch centers, language translation services, and crisis centers. *(We have a full 23 channel PRI phone service at the 9-1-1 center and we also intend to connect to admin dial tone at the secondary server location in Columbiana.)*
- 22) Describe the call handling process if a system failure or interruption occurs while processing or handling a call.
- 23) Can the Internet be used as a tertiary network system? If yes - describe what if any hardware and/or software needed and include pricing as an option.

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- 24) Can employees take calls from alternate locations using a Cable or DSL class Internet connection? If yes – describe the network, hardware, software, and system requirements. Include pricing as an option if this is not a standard feature.
- 25) Is there a single point of failure in the system as proposed? If yes – describe.
- 26) Describe the system monitoring process and how notifications of issues are relayed to the PSAP.
- 27) Can the system provide call routing to workstations based on geographic / map based data as well as tabular data?
- 28) Describe the database tables accessed for ad-hoc reporting and the database system used. (MySQL, Oracle, SQL, etc)
- 29) Is there a dashboard type application to monitor the system status and workload? If not included in the base price – include as an option.
- 30) What development / programming language(s) are used to create the applications?
- 31) Are you willing to escrow the source code?
- 32) Are you willing to provide a copy of the source code to Shelby 9-1-1?
- 33) What operating system(s) and versions are used? (Windows, Linux, etc)
- 34) Are timestamps derived from a server or the originating workstation?
- 35) Describe how analog audio is delivered to a logging recorder.
 - a) Can the system deliver VoIP to a capable logger?
 - b) Do you have a VoIP capable logging partner/product?
- 36) Will the system handle administrative phones in the PSAP such as break rooms, administrative/supervisor offices, equipment rooms etc?
If yes – describe any limits of number of sets, capabilities, etc.
 - a) Will the system support PRI and VoIP administrative telephone service?
- 37) Describe the rack unit(s) / floor space needed at the primary server site and each PSAP. (We may have rack space available based on your requirements.)
- 38) Describe the AC power requirements at the primary server site and for the backroom equipment at each remote PSAP.

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Workstation Features / Functions

Briefly discuss how the system provides the following features and functions and include any capacity or quantity limits.

- 39) What class/type of wiring and how many of each is required to support a workstation?
- 40) How many and what size monitors are needed for optimum use of the system?
- 41) Can the system operate using a “virtual phone”?
 - a) Is a physical phone set available if desired?
 - b) Can a physical set be the only device at a workstation? For example – a police department with a dispatcher on duty during limited hours or other low-use or overflow situations.
- 42) Discuss any unusual or unique operational benefits your system offers in the traditional functions of:
 - a) Answering calls
 - b) Queue and/or ACD type features
 - c) Transferring calls
 - d) Calling back disconnected calls
 - e) Retrieving ALI from a previous call or another workstation
 - f) Instant recall recorder

Warranty and Maintenance

- 43) Describe your warranty period.
- 44) Describe your model(s) for delivering service / maintenance after the warranty period. Options to help contain costs if we provide a first level support are of particular interest.
- 45) Do you offer different levels of support such as contracting for remote support and paying time and materials if an on-site visit is required?
- 46) Describe your policy concerning software updates/revisions?

Features and Benefits not discussed above.

Please list (and number) any features or benefits that distinguish your system and/or add value that should be considered in our evaluation.

47)

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Traditional Pricing

To ensure an accurate cost / benefit analysis it is required that you submit pricing using the spreadsheet provided. If pricing is not plain and easy to understand it may result in your proposal being determined non-responsive and not considered. Add as many rows to each section as needed to properly represent your solution and provide a clear understanding of options. Add comments as needed.

We do not want to see details of wiring, cables, connectors and other such pieces and parts that are not optional or in some way needed to clearly depict the costs of your system versus standard offerings.

We will compare the total cost of ownership for six (6) years for our pricing analysis.

Please note there are comments in the spreadsheet to provide additional explanation.

- 1) List the one-time fee for the solution as proposed to include all costs such as project management, administrator / user training, hardware, software, installation, etc.
- 2) List any annual maintenance, licensing, or other fees associated with items in the one-time charge list. (Include software licensing from third parties.)
- 3) List the cost for equipment at a “remote” PSAP. (A PSAP that is not co-located with a set of primary system servers.)
- 4) Include annual recurring expenses for six (6) years. Year one is assumed to be the 12 month period following installation and is typically less due to warranty coverage. Years 2-6 will typically represent the full annual cost after the warranty period expires. If your warranty period is longer or shorter, make comments and enter rows as needed.
- 5) List any features discussed /proposed that are options and the cost.

Optional Pricing

We also ask for pricing for a hosted infrastructure model but it is not required that you offer both models to respond. Hosted means the vendor owns the common equipment and one or more ECDs pay for a service. The assumption is this will reduce the one-time costs and increase the annual operating costs for network and “service subscription” fees.

Vendors are not required to provide guaranteed network pricing for the proposal but must provide the actual required bandwidth and a best-estimate of the market price for the required bandwidth.