

Request for Proposal

NG9-1-1 Network for Shelby County

Introduction

Shelby County 9-1-1 is accepting sealed bids with best and final pricing on an IP based 9-1-1 call delivery system, associated databases, and any software applications necessary to utilize and maintain same. Vendors are encouraged to propose innovative solutions that improve the delivery of 9-1-1 service, increase network diversity/redundancy, and prepare Shelby County to participate in NG9-1-1.

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 by the National Emergency Number Association will be a critical part of the evaluation process.

Questions or request for clarifications should be sent to John Ellison via email john@shelby911.org. Questions and answers 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 in Alabama 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 network 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.

Time Line

Bids will be opened on Monday, May 5, 2008 at 11:01am at Shelby County 9-1-1, 1004 County Services Dr., Pelham, Alabama. Bids will be accepted until 11:00am and must be in a sealed package clearly marked "NG9-1-1 NETWORK – MAY 2008"

Vendors are welcome to attend the bid opening but it is not required. The responding vendors and their total price for one-time and annual recurring expenses 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 invitations to present may be offered.

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.

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Existing System Overview

Shelby County 9-1-1 operates two (2) primary PSAPs and one (1) secondary PSAP. The first phase of this project will involve only the main PSAP, Shelby 9-1-1. Pelham PD is the other primary PSAP and after a successful period of operation we may install the IP network there. As part of this project we would like to eliminate the secondary PSAP equipment at Alabaster PD and provide service using the IP network described below.

The main PSAP has eight (8) workstations, Pelham PD has four (4), and Alabaster PD has two (2). A system that allows a temporary increase in call-taker work stations during weather events or other times of increased call volume is desired.

We currently use *Dispatch Works* from Baker Integrated Technologies for call taking workstations and intend to do so for the first phase of this project. We are open to a solution that provides a new call-taker application if budget constraints allow.

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.

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 under contract and will be intimately involved in this project.

The PSAP 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.

Vendors are encouraged to leverage these existing network assets in system design. Terminating one IP circuit at the PSAP and one in Columbiana could achieve a high level of survivability if it is technically feasible. The ability to use the public Internet as a tertiary backup is also of high interest.

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

We intend to replace the eight (8) existing 9-1-1 call delivery trunks, two (2) ALI database circuits used for wireless calls, and the on-site ALI database used for wired calls. The system must handle 9-1-1 calls originating on wired, wireless, VoIP, and/or other networks and provide a means to receive ALI records for each.

Continuity of operations is a critical factor motivating this RFP. Systems proposed should improve redundancy, diversity, and the ability to restore service after interruptions. The ability to distribute calls across multiple sites or even to employee's homes in time of pandemic or travel difficulties is of interest.

Shelby County is served by all major wireless carriers and forty (40) plus wired carriers. AT&T is the predominate provider with 85% of ALI records. (The current ALI database record counts are included at the end for reference.)

The vendor will assume responsibility for interconnect with each carrier and will act as Shelby 9-1-1's agent to arrange call delivery and receipt of service order activity as/if needed to maintain an ALI database.

We also expect a browser-based means to maintain the MSAG and submit corrections to ALI records. The ability to edit MSAG / ALI records directly in the database is of high interest. A means for dispatchers to view MSAG data to aid in problem call handling is also of interest.

We routinely transfer calls to other PSAPs and to 7-digit numbers at police dispatch centers and receive transfers from other PSAPs. The system must provide interconnect with the existing AT&T network that serves all PSAPs in the Birmingham metro area to allow transfers to and from other PSAPs.

Response

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.

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Response

Your response begins at this point and must address all number items. Please include three (3) copies.

- 1) Your company/corporate name and legal structure.
- 2) Is your company a certified telecommunications provider in Alabama? If no – 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 public safety customer?
- 6) Identify the primary contact for questions concerning this proposal.
- 7) Describe your strategic plan for NG9-1-1 networks.
- 8) If you are awarded this contract how soon can you have the network complete and ready for testing?
- 9) Describe the acceptance testing process.
- 10) Describe the transition process from the existing network.
- 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.

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Include a network diagram for reference. If answers are redundant, you may simply reference a previous answer number and add any specifics unique to one type of calls.

- 12) Is any part of the network or system proposed outsourced to others? If yes describe fully.
- 13) Is the network compliant with NENA standards and recommendations?
- 14) With what other industry standards does your network comply?
- 15) Describe the call flow from AT&T customers.
- 16) Describe the call flow from CLEC customers.
- 17) Describe the call flow from Wireless customers. In particular will your network pass all data elements received from wireless carriers?
- 18) Describe the call flow from VoIP customers.
- 19) Describe the call flow from relay centers, telematics providers, alarm companies, and/or any other access other than an end user dialing 9-1-1.
- 20) If so, describe how the system provides for receipt of text messages, email, photos, and video, both with and without a 9-1-1 voice call.
- 21) Describe how calls will be transferred from the NG9-1-1 network to legacy PSAPs and how call transfers will be received from legacy PSAPs.
- 22) Describe your capabilities to interconnect with other NG9-1-1 providers who may become the service provider for other PSAPs in Alabama. In particular describe how calls will be “transferred” between 9-1-1 network providers.
- 23) 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.
- 24) Describe call routing contingencies during network component failures.
- 25) Describe the call handling process if a network failure or interruption occurs while processing or handling a call.
- 26) Can the Internet be used as a tertiary backup network? If yes - describe what if any hardware and/or software is needed and include pricing as an option.

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- 27) Can employees take calls from home using a cable or DSL Internet connection? If yes – describe the hardware, software, and network requirements and included pricing as an option.
- 28) Is there a single point of failure in the system as proposed? If yes – describe.
- 29) Describe redundancy/diversity with AT&T's network for incoming 9-1-1 calls as well as PSAP to PSAP transfers.
- 30) Describe what if any redundancy is available from other telephone service providers.
- 31) Describe how the proposed network's diversity and redundancy compares to the existing network.
- 32) How many simultaneous 9-1-1 calls will the system support? Describe if this number varies based on transfers or other specific situations.
- 33) Describe how the total capacity of the system is adjusted to accommodate overflow routing and to eventually return a busy signal. Can the total call volume be adjusted temporarily during times of unusually high volume?
- 34) Describe the process for handling TTY / TDD calls.
- 35) Describe the network monitoring process and how notifications of issues are relayed to the PSAP.
- 36) Can the network provide call routing based on geographic / map based data as well as tabular data?
- 37) Describe any standard reports available for call receipt and routing.
- 38) Do you offer a call taker interface/application as an option? If yes – include pricing as an option.
- 39) Can the system transfer voice and data to secondary PSAPs using an IP network? If yes, describe the network bandwidth and hardware/software required. Include pricing as an optional item.
- 40) What is the expected service lifetime of components for which Shelby 9-1-1 is responsible?

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ALI and MSAG Management

- 41) Describe the process to submit MSAG maintenance work.
- 42) Can the system use map data in ESRI format for ALI verification and/or MSAG maintenance?
- 43) Describe the process for correcting ALI records.
- 44) Can ALI records be directly edited by 9-1-1 staff?
- 45) Describe how (or if) telephone service providers will access the MSAG to verify their service orders.
- 46) Describe how ALI errors will be resolved with telephone service providers.
- 47) Describe standard reports available from ALI and MSAG databases.
- 48) Can Shelby 9-1-1 use Crystal Reports for ad-hoc report generation?
- 49) Is there a means for dispatchers to view MSAG data? If yes, describe.

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

50)

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Pricing

The information provided below must include all charges to be incurred by Shelby County 9-1-1 for this project and its on-going annual operation. In each pricing category you must calculate the total value of itemized costs.

- 1) List each one-time fee for the solution as proposed to include project management, administrator and user training, hardware, software, installation, etc.
 - a) Note if any items are priced per position or seat so we may calculate our costs.
- 2) List any annual maintenance, licensing, or other fees associated with items in the one-time charge list.
 - a) Note if any items are priced per position or seat so we may calculate our costs.
- 3) List all recurring annual expenses for the solution as proposed to include fees from telephone service providers, routing, network connectivity, database maintenance, service order activity, etc. that are not associated with one-time items.
- 4) Include annual recurring expenses for six (6) years. Year one is assumed to be the 12 month period following installation and will be less due to warranty coverage. Years 2-6 will represent the full annual cost after the warranty period expires.
- 5) List any options.

Submitted by: (type name here)

Signature:

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ALI record count by TELCO ID as of February 2008.

Telco	Count	
BELSO (AT&T)	91,142	85.4%
CHTR	4,180	3.9%
DLT	2,731	2.6%
NUVOX	2,442	2.3%
TWCOM	1,447	1.4%
TCG	993	0.9%
NWKTL	868	0.8%
USLEC	710	0.7%
MCI	552	0.5%
WIN	465	0.4%
LVL3	342	0.3%
ATTMO	312	0.3%
SPPCS	132	0.1%
NXTL	114	0.1%
TRTEL	94	0.1%
VZW	28	0.0%
SLINC	26	0.0%
TMOB	25	0.0%
AT&T	21	0.0%
TRDO	20	0.0%
TCS	15	0.0%
HBFB	10	0.0%
Grand Total	106,669	