



**LEGAL NOTICE**

**REQUEST FOR PROPOSAL  
SEALED PROPOSAL # 14-089**

**For**

**St. Charles County Next Generation 9-1-1 Cloud System**

**For**

**ST. CHARLES COUNTY GOVERNMENT  
ST. CHARLES, MISSOURI**

St. Charles County is seeking proposals for **St. Charles County Next Generation 9-1-1 Cloud System**. The County reserves the right to terminate the contract for any violation, by the successful bidder, of any term or condition of the contract by giving thirty (30) days written notice stating the reasons therefor and giving the party time to remedy any deficiencies. All response prices submitted shall be guaranteed for one-hundred and eight (180) days from the RFP due date.

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## 2. INSTRUCTIONS

One original and six (6) signed copies of the response must be received in sealed envelopes, in accordance with Section 3.1 of the RFP, plainly marked “**14-089 Next Generation 9-1-1 Cloud Based System**” with the due date and time in the lower left corner of the envelope.

An authorized representative of the vendor submitting the proposal must sign it in blue ink.

Responses must be submitted to the St. Charles County Finance Department, 201 North Second Street, Room 541, St. Charles, MO 63301, prior to **07/01/2014 at 3:00 PM CST**.

St. Charles County reserves the right to accept and/or reject any and all responses.

### 2.1. INQUIRIES

**Any questions or clarifications concerning this Request for Proposal must be submitted in writing via E-mail (preferred), mail or fax to:**

Kurt Mandernach, Purchasing Manager  
St. Charles County Government  
Finance Department  
201 North Second Street, Suite 541  
St. Charles, Missouri 63301  
Fax: (636)949-7589  
[purchasing@sccmo.org](mailto:purchasing@sccmo.org)

**Technical inquiries concerning the specifications should be made to:**

Wade Forbush, Project Manager  
St. Charles County Government  
Information Systems  
201 North Second Street, Suite 313  
St. Charles, Missouri 63301  
[wforbush@sccmo.org](mailto:wforbush@sccmo.org)

- The RFP number and title shall be referenced on all correspondence.
- **All questions must be received no later than on 05/02/2014 at 5:00 PM CST**
- Any question received after this deadline may not be answered.

**Responses to questions/clarifications will be placed on the County's website (<http://finance.sccmo.org/finance>). Vendors should check this website frequently for updates and any addenda that are issued.**

St Charles County shall not orally or telephonically address any question or clarification regarding specifications or procedures. St Charles County is not bound by any oral representations, clarifications, or changes made to the written specification by County employees, unless such clarification or change is provided to the vendors in a written addendum from St Charles County in accordance with this Section 2.1.

**Prohibited Communication**

***Contact with any representative, other than through the procedure outlined in this section 2.1, concerning this request is prohibited. "Representative" shall include, but not be limited to, all elected and appointed officials, and employees of St. Charles County and the agencies within St. Charles County.***

***Any Vendor engaging in such prohibited communications may be disqualified at the sole discretion of St. Charles County.***

## 2.2. SCHEDULE OF EVENTS

Item	Event	Responsibility	Date
1.	Issue of RFP		April 2, 2014
2.	Mandatory Pre-Response Conference		<b>Time: April 16, 2014 @ 9:00am</b> Location: City of St. Charles Police Department, Community Room 1781 Zumbahl St. Charles, MO 63303
3.	PSAP Tours		<b>April 16, 2014 @ 11:00am</b> (following pre-response conference) Location: City of St. Charles Police Department, Community Room 1781 Zumbahl St. Charles, MO 63303  <b>April 16, 2014 @ 2:00pm</b> Location: St. Charles County Dispatch Center, 1605 Wentzville Parkway Wentzville, MO 63385
4.	Deadline to submit Letter of Intent to Respond	Vendor	April 18, 2014 at 5:00 PM CST
5.	Deadline to submit questions	Vendor	May 2, 2014 at 5:00 PM CST
6.	Issuance of County Sample Contract	County	May 2, 2014
7.	Response to Written Questions/Addenda	County	May 30, 2014
8.	Submission of Responses	Vendor	July 1, 2014 at 3:00 PM CST
9.	Notification to Short Listed Vendors	County	August 4, 2014
10.	Oral Presentation and / or Product Demonstrations by Finalist(s)		August 19 <sup>th</sup> and 20 <sup>th</sup>
11.	Finalist selected		August 29, 2014



12.	Negotiate Contract		Complete by September 30, 2014
13.	Contract Award		October 31, 2014
14.	System Implementation Complete		January 15, 2015

The County reserves the right to change the schedule of events at its sole discretion.

**2.3. PRE-RESPONSE CONFERENCE AND PSAP TOURS**

A mandatory Pre-Response Conference is scheduled on April 16, 2014 at 9:00AM CST at the City of St. Charles Criminal Justice Center, Community Room @ 1781 Zumbahl Road, St. Charles, MO 63303. Vendors shall be prepared to identify their designated point-of-contact at the mandatory Pre-Response Conference. **St. Charles County will not consider a response from any vendor that fails to attend the mandatory Pre-Response Conference and PSAP Tours.**

**2.4. MANDATORY LETTER OF INTENT**

In order to participate in the response process, vendors must submit to the St. Charles County Purchasing Manager a written Letter of Intent to Respond including a statement that the vendor accepts the terms and conditions as set forth in Sections 2-3 of the RFP. The deadline for submission of the Letters of Intent is April 18, 2014, at 5:00 PM CST.

### 3. TERMS AND CONDITIONS

- No additions, deletions, corrections, or adjustments will be accepted from the vendor after submissions are opened. County reserves the right to ask for and receive clarification after submissions are opened.
- St. Charles County will not award any proposal to an individual or business having any outstanding amounts due from a prior Contract or business relationship with the County or who owes any amount(s) for delinquent taxes, fees or licenses.
- Sealed submissions received after the designated due date and time set forth in this RFP will be considered “VOID” and will not be opened.
- Failure to observe any of the instructions or conditions in this RFP may constitute grounds for rejection of the response.
- The successful firm is specifically prohibited from using in any form or medium the names of St. Charles County or any other public agency of St. Charles County Government for public advertising unless express written permission is granted by an authorized representative of St. Charles County.
- All firms must possess the necessary and appropriate business and/or professional licenses in their field.
- Award will be made to the firm best qualified and capable of performing the desired work, subject to successful contract negotiations.
- The County shall furnish no material, labor or facilities unless so provided for in the RFP.
- The County reserves the right to reject or accept any or all responses and to waive technicalities, informalities and minor irregularities in the responses received.
- The County reserves the right to make an award as deemed to be in its best interest, in its sole discretion which may include awarding a response to a single vendor or multiple vendors; or to award the whole response, only part of the response, or none of the response to a single or multiple vendors.
- The contract may be cancelled or annulled by the County in whole or in part by written notice of default to the vendor upon non-performance or violation of any contract term. An award may be made to the next highest rated responsive and responsible vendor, or articles specified may be purchased on the open market similar to those terminated or the County may issue a new Request for response.

In any event, the defaulting vendor (or its surety) shall be liable to the County for costs to the County in excess of the defaulted contract prices; provided, however, that the vendor shall continue the performance of this contract to the extent not terminated under the provisions of this clause. Failure of the vendor to deliver materials or services within the time stipulated in its response, unless extended in writing by the Purchasing Manager, shall constitute contract default.

- Vendors offering and quoting on substitutions or who are deviating from the attached specifications shall list such deviations on a separate sheet to be submitted with their Response. The absence of such a substitution list shall indicate that the Vendor has taken no exception to the specifications contained therein.
- The County may choose not to accept the response of any vendor who is in default on the payment of taxes, licenses or other monies owed to the County.
- St Charles County reserves the right to retain all responses submitted, and to use any idea in any response regardless of whether that response is selected.
- All work performed by the successful vendor shall be performed in compliance with all applicable local, state and federal laws, rules and regulations, including but not limited to Title VII and the Americans with Disabilities Act.
- Prices quoted in the response shall be firm and best prices. Prices quoted shall be valid for a minimum of one hundred eighty (180) days from the date of bid opening. Upon review and evaluation of responses, St. Charles County reserves the right to negotiate final price.
- The cost for developing a response shall be borne by the vendor. St Charles County is not liable for any costs incurred by the vendor in preparation and/or presentation of responses to this RFP or for travel and other costs related to this RFP.
- Each response is received with the understanding that acceptance in writing by the County of the offer to furnish any or all of the commodities or services described therein shall constitute a contract between the vendor and the County which shall bind the vendor to furnish and deliver the articles or services quoted at the prices stated in the accepted response as set forth in the negotiated and executed contract. The County, on its part, may order from such Vendor, except for cause beyond reasonable control, and to pay for, at the agreed prices, all articles specified and delivered.
- Vendor warrants that this bid is genuine and not collusive nor sham and that it has not conspired nor agreed in any manner to fix any bid price or any element of such price, payment or agreement for commission percentage, brokerage, or any other compensation for the procurement of this contract.

- Upon receipt of the St. Charles County "Sample Contract" as part of the requirements, it is understood that the vendor has reviewed the documents and understands that St Charles County requires that all agreements between the parties shall be entered into via these documents. If any exceptions are taken to any part of these documents, each exception shall be stated in detail and submitted as part of the response document. If no exceptions are stated, it the vendor is deemed to have fully agreed to the "Sample Contract" in its entirety. The County reserves the right to make changes to the "Sample Contract".
- Vendor agrees that St. Charles County and/or any of the participating PSAP jurisdictions (City of St. Charles, City of St. Peters, City of O'Fallon, City of Lake St. Louis and City of Wentzville) can purchase directly from the vendor by means of this RFP and prices quoted as part of vendor's response and contract subsequently negotiated and entered into with the County. Such purchases shall be effected by a separate contract between vendor and the PSAP jurisdiction, which contract shall incorporate by reference the contract documents between the vendor and the County.

### 3.1. PROPOSAL, AWARD & CONTRACT

- Vendors must submit one (1) original and six (6) signed copies, as well as one (1) CD or flash drive of their **Response** to the Purchasing Manager. The original shall be in flat unbound form to facilitate filing and archiving (no binder).
- Vendors must submit one (1) original and six (6) signed copies, as well as one (1) CD or flash drive of their Bid Form/Pricing to the Purchasing Manager. The Bid Form must be submitted in a separate sealed envelope marked "Bid Form/Pricing" separate from the Response. The Bid Form/Pricing must show all costs for software, deployment, training, shipping, program management, services and maintenance. The Bid Form/Pricing should be accompanied by supporting documentation sufficient in detail for the County to identify the cost for deployment and operation of each separate PSAP.
- An authorized officer of the company submitting the response must sign all copies, in blue ink.
- To facilitate comparative analysis and evaluation of responses it is desired that a uniform format, consistent with this RFP, be employed in structuring each response. The vendor's degree of compliance with the presentation and documentation requirements of the RFP shall be a factor in the evaluation of the response. Responses with major deviations or omissions may not be considered. Responses shall become part of the contract with St. Charles County should they be selected.

- Award shall be made to the highest scoring responsive and responsible vendor according to the criteria outlined herein. The County may make such investigations as it deems necessary to determine the ability of the vendor to perform, and the vendor shall furnish to the County all such information and data for this purpose as the County may request.

### **3.1.1. EVALUATION PROCESS**

The Evaluation Process shall involve extensive review of the vendor's response including future operation and maintenance needs. Both objective and subjective rationale shall be involved in the Evaluation Process. An evaluation committee will review the responses to ensure that the system selected meets all specified requirements found within this document and provides the best value for the County and its participants.

#### **Oral Presentations**

Upon evaluation of responses compliant with the Terms and Conditions set forth above, the Evaluation Committee shall select responses which the Committee desires to hear Oral Presentations from the respective vendors. These Oral Presentations shall be scheduled in advance, at a location to be determined by the County, and limited in time. Location of the presentations shall be pre-arranged by the County. The presentations shall demonstrate the capability of the system to meet specified requirements within this RFP.

#### **Evaluation Criteria**

In order to be considered compliant, each vendor's response must meet or demonstrate the vendor's ability to meet all the requirements of this RFP; otherwise the response shall be deemed non-responsive and shall be disqualified.

As this project is for a mission critical 9-1-1 system, time is of the essence and Project Schedules are an essential term and strict requirement. Only those vendors with the necessary resources and commitment to complete all project work on schedule shall submit a response.

The County will utilize a set of criteria for the qualitative evaluation of competitive Responses. The structure of the evaluation shall be to assign points to each Response in a number of categories. A non-response to a specific category shall result in no points being awarded for that category. Final rankings shall be based on a combination of factors:

Qualifications & Experience	20%
System Architecture	25%
System Features, including NG9-1-1 capability	20%
Maintenance Services and Support	15%
System Implementation	10%
Price	10%

All Response requirements must be met or be capable of being met by the responding firm or the Response shall be disqualified as non-responsive. Project schedules are required to be met as this project is for a 9-1-1 Emergency call system. Only those firms or teams with the necessary resources and a commitment to complete all project work on schedule shall submit a Response.

### 3.2. FORM OF RESPONSE

The evaluation and selection of a Vendor shall be based on the information submitted in the Vendor’s Response (Bid Form, Response Form and all other required documentation), required on-site visits and oral presentations and such other information gathered by or made available to the County through the evaluation process.

Vendor shall note that non-negotiable, mandatory requirements are referred to as a “shall” and flexible requirements are referred to as “should”.

Each vendor will be provided an MS Word 2010 copy of the RFP along with a MS Excel 2010 copy of the Response Form and Vendor MUST provide one of the responses below for each numbered requirement contained within Section 5 of this RFP.

**Comply** – The proposed solution shall fully meet requirements, and functionality is currently supported in the current product software release.

**Does Not Comply** – The proposed solution does not fully comply with this requirement.

**Exception** – The proposed solution does not fully comply with this requirement but can be modified. Vendor shall provide explanation or propose an alternative.

**Vendor must provide responses to Section 5.4 through 5.75 in the Response Form spreadsheet, included as part of this RFP, for each**

**requirement and each response will be accompanied by comments or explanations in accordance with the prompt or as appropriate to provide the county sufficient information by which to evaluate the response.**

**3.3. SHIPPING**

All items shall be shipped FOB-Destination to the following PSAP addresses:

St. Charles County Sheriff's Department	1605 Wentzville Parkway Wentzville, Missouri 63385
St. Charles County Dispatch and Alarm	1605 Wentzville Parkway Wentzville, Missouri 63385
City of St. Peters Justice Center	1020 Grand Teton Drive St Peters, Missouri 63376
City of Wentzville PD	1019 Schroeder Creek Blvd Wentzville, Missouri 63385
City of O'Fallon PD	100 North Main Street O'Fallon, Missouri 63367
City of Lake St. Louis PD	200 Civic Center Drive Lake St Louis, Missouri 63367
St. Charles County Emergency Management	301 North Second Street St. Charles, Missouri 63301
City of St. Charles Criminal Justice Center	1781 Zumbahl Road St. Charles, Missouri 63303

**3.4. PAYMENT**

Payment shall be made as follows:

- 25% at contract signing
- 50% after installation, configuration and training
- 25% upon final and formal system acceptance

**3.5. SALES TAX**

Missouri state and local tax should not be included in the Response; tax shall not be paid as the County is a governmental entity exempt from sales tax.

### **3.6. INSURANCE**

#### **3.6.1.EVIDENCE OF INSURANCE**

The successful vendor (“Contractor”) shall procure and maintain, at its own expense, and provide evidence of insurance as proof of compliance for all insurance requirements contained herein. Contractor’s insurance shall cover all of the work performed under the contract, whether the work is performed by Contractor or its subcontractors. Contractor’s insurance shall cover the entire project. The evidence of insurance shall provide for ten (10) days written notice of cancellation for nonpayment of premiums, or forty-five (45) days written notice of cancellation for any other reason, including non-renewal. Contractor shall delete the phrase “will endeavor to” preceding all references to provisions of notice by the insurance company in the evidence of insurance. A Certificate of Insurance indicating certain specified amendments and attachments shall be acceptable, but the County reserves the right to request a complete certified copy of any policy, at its sole discretion. No work shall start until proof of insurance has been submitted to the County. If the insurance required by this section should become no longer commercially reasonable, as determined by the County, the County will work with Contractor to find commercially reasonable alternatives to the required coverages that are acceptable to the County.

#### **3.6.2.A.M. BEST RATING**

All insurance companies providing policies obtained to satisfy these insurance requirements shall have an A.M. Best rating of A- or better.

#### **3.6.3.FULL FORCE AND EFFECT**

The commercial general liability, excess (umbrella) liability, and professional liability insurance coverage requirements shall remain in full force and effect until Project Final System Acceptance at which time Contractors shall maintain completed operations insurance throughout the term of all warranties or as otherwise required by the Contract Documents, whichever is greater.

#### **3.6.4.NO RECOURSE**

There shall be no recourse against the County for payment of premiums or other amounts with respect to the insurance provided by Contractor, or for deductibles under these policies. This provision does not affect any rights Contractor is otherwise entitled to under this contract.

#### **3.6.5.INDEMNIFICATION**

The insurance coverage provided pursuant to this section shall support, but is



not intended to limit the Contractor's indemnification obligations under the contract.

### **3.6.6. WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY COVERAGE**

Contractor shall furnish evidence to the County that, with respect to the work to be performed under the contract, Contractor carries workers' compensation insurance, or is qualified by the Missouri Division of Workers' Compensation as self-insured, and carries insurance for employer's liability sufficient to comply with all obligations under state laws relating to workers' compensation and employer's liability. Contractor shall require each of its subcontractors on the project to make the same evidence available to the County at the County's request. This evidence shall be furnished to and approved by the County prior to the time Contractor commences work on any site or furnished and approved by the County at the time it is requested by the County for a subcontractor.

### **3.6.7. COMMERCIAL GENERAL LIABILITY INSURANCE**

Contractor shall provide commercial general liability broad form coverage for bodily injury, property damage, personal injury and advertising liability written on an occurrence form that shall be no less comprehensive or more restrictive than the coverage provided by Insurance Services Office (ISO) for CG 00 01 10 01.

1. Limits of liability. General liability:
  - i. \$2.5 million - each occurrence.
  - ii. \$2.5 million - general aggregate (annually). The general aggregate limit shall apply separately to the project.
  - iii. \$2.5 million - personal injury/advertising liability.
  - iv. \$2.5 million - products/completed operations liability.
2. Such insurance shall include, by its terms or appropriate endorsements, bodily injury, property damage, legal liability, personal injury, blanket contractual, independent contractors, premises, operations and products and completed operations.
3. Products and completed operations coverage shall be continued for a minimum of five (5) years from Final System Acceptance.
4. Owner shall be an additional insured with respect to liability arising out of acts or omissions of Contractor or its subcontractors, whether on or off the sites.

### **3.6.8. AUTOMOBILE LIABILITY INSURANCE**

Contractor shall provide occurrence-based commercial automobile liability

insurance covering all owned/leased, non-owned and hired vehicles used in the performance of work, both on and off the sites, including loading and unloading.

The following limits of liability and other requirements shall apply:

1. \$2.5 million combined single limit for bodily injury and property damage liability.
2. Coverage shall be provided on ISO form number CA 00 01 10 01 or equivalent.
3. The policy shall be endorsed to include Motor Carrier Act endorsement – Hazardous Materials Cleanup (MCS-90), if applicable.

### **3.6.9. EXCESS (UMBRELLA) LIABILITY INSURANCE**

Contractor shall provide umbrella or excess liability insurance with limits of not less than \$25 million per occurrence and \$25 million annual aggregate which shall provide bodily injury, personal injury and property damage liability at least as broad as the primary coverages set forth herein, including employer's liability, commercial general liability and commercial automobile liability, as set forth herein.

### **3.6.10. ADDITIONAL INSURED**

Each policy of commercial general liability insurance, commercial auto liability and excess liability (umbrella) insurance shall name the County and the County's officers, agents and employees as additional insured. Each of such policies shall also contain a separation of insured condition. The insurance afforded by Contractor shall be primary insurance.

### **3.6.11. PROFESSIONAL LIABILITY INSURANCE**

Contractor's design professionals shall provide professional liability coverage for the protection of all design professionals associated with the Project as follows:

1. Limits of Liability shall be \$2.5 million per claim and an annual aggregate of \$2.5 million.
2. The policy shall have a five (5) -year extended reporting period from Final System Acceptance with respect to all events that occurred, but were not reported, during the term of the policy.
3. The policy shall protect against any negligent act, error or omission arising out of design or engineering activities with respect to the project.
4. The policy shall have a retroactive date of no later than NTP1.

**3.7. Employment of Unauthorized Aliens Prohibited (Missouri Revised Statutes Section 285.530)**

As a condition for the award of any contract or grant in excess of five thousand dollars by St. Charles County to a business entity, the business entity shall, by sworn affidavit and provision of documentation\*\*, affirm its enrollment and participation in a federal work authorization program (**E-Verify**) with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. [RSMo 285.530 (2)]

An employer may enroll and participate in a federal work authorization program (**E-Verify**) and shall verify the employment eligibility of every employee in the employer's hire whose employment commences after the employer enrolls in a federal work authorization program. The employer shall retain a copy of the dated verification report received from the federal government. Any business entity that participates in such program shall have an affirmative defense that such business entity has not violated subsection 1 of this section. [RSMo 285.530 (4)]

Any entity contracting with St. Charles County shall only be required to provide the referenced affidavit on an annual basis. A copy of the affidavit is included in this proposal request. Vendors may choose to send the required documentation using one of the following options:

- Send the notarized affidavit and E-Verify MOU signature page to: St. Charles County, Attn: Purchasing Manager, 201 N Second Street, Room 541, St. Charles, MO 63301 prior to responding to any solicitations; **OR**
- Send the notarized affidavit and E-Verify MOU signature page along with a proposal solicitation response.

These documents will be kept on file. The notarized affidavit will remain current for **one year** from the date of the notarized affidavit.

**\*\* PLEASE NOTE:**

***Acceptable enrollment and participation documentation consists of a valid copy of the signature page of the E-Verify Memorandum of Understanding, completed and signed by the Contractor, and the Department of Homeland Security - Verification Division***

***The online address to enroll in the E-verify program is:***

<https://e-verify.uscis.gov/enroll/StartPage.aspx?JS=YES>

**3.8. OPEN RECORDS**

Any and all information contained in or submitted with the proposal becomes a public

record subject to the Missouri Sunshine Law (Chapter 610, RSMo) when a contract is executed or all proposals are rejected. If the proposer believes that any information contained in or submitted with the proposal is protected by the Missouri Sunshine Law, the proposer must clearly identify what information proposer believes is so protected and must also clearly identify the legal basis therefor.

### **3.9. BONDS**

**Performance Bond-** A 100% Performance and Payment Bond in favor of the County shall be required. The security company representing Contractor must be authorized to do business in the State of Missouri and be approved by the County.

**Bid Bond-** A 5% deposit of the bid total, presented in the form of a cashier's check, certified check, or bid bond, made payable to St. Charles County shall be required.

### **PREVAILING WAGE ORDER**

Contractor must comply with all provisions of the Prevailing Wage Law under **Annual Wage Order #20 as amended 1/23/2014** for this project. Contractor will forfeit a **penalty** to the County of \$100 per day (or portion of a day) if a worker is paid less than the prevailing rate for any work done under the contract by the contractor or by any subcontractor (see section 290.250, RSMo). **Certified payroll shall be submitted with request for payment.**

### **3.10. SEX OFFENDER REGISTRATION**

Contractor/Supplier shall comply with City of St. Charles Code of Ordinance Section 145.040 regarding the registration of sex offenders with the Police Department.

**3.10. BID FORM**

TO BE INCLUDED IN SEPARATELY SEALED ENVELOPE

Next Generation 9-1-1 Cloud System  
For ST CHARLES COUNTY, MISSOURI

Response of \_\_\_\_\_, a corporation licensed to do business in the State of \_\_\_\_\_, as shown on the following cost summary sheets.

Vendor hereby attests by signature that he/she has read and shall comply with all provisions of this entire document including Addenda Numbers \_\_\_\_\_.

Bid for Turn-Key NG9-1-1 Cloud System	\$
Bid for Employee Training	\$
Bid for 24x7 Remote System Monitoring and System Diagnostics	\$
Bid for PSAP Totals	\$
Bid for Other (define)	\$
Bid for Other (define)	\$
<b>Total Cost of Next Generation 9-1-1 Cloud System</b>	<b>\$</b>
Extended Warranty Cost for Year 2	\$
Extended Warranty Cost for Year 3	\$
Extended Warranty Cost for Year 4	\$
Extended Warranty Cost for Year 5	\$
<b>Total Contract Value</b>	<b>\$</b>
Optional: Out of Scope Enhancement (define)	\$
Optional: Out of Scope Enhancement (define)	\$
Optional: Out of Scope Enhancement (define)	\$

Date: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
(Signature)

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**3.11. PSAP DETAILED BID FORM**

Vendor shall copy and provide the following detail for each PSAP included in the Response in a separately sealed envelope along with the Bid Form. If the line item is not required, please indicate by placing "N/A" in the appropriate location. Please expand for more detail if required.

Next Generation 9-1-1 Cloud System DETAIL OF TURN-KEY (SUMMARY) BY PSAP				
PSAP NAME				
Description	Quantity	Unit	Extended Price	
<i>Network Hardware</i>				
1. (Define)		\$	\$	
2. (Define)		\$	\$	
<b>Network Hardware Total</b>		<b>\$</b>	<b>\$</b>	
<i>Dispatch Position Hardware</i>				
1. (Define)		\$	\$	
2. (Define)		\$	\$	
<b>Dispatch Position Hardware Total</b>		<b>\$</b>	<b>\$</b>	
<i>Dispatch Position Software</i>				
1. (Define)		\$	\$	
2. (Define)		\$	\$	
<b>Dispatch Position Software Total</b>		<b>\$</b>	<b>\$</b>	
<i>3<sup>rd</sup> Party Interface Hardware/Software</i>				
1. Computer Aided Dispatch		\$	\$	
2. Call Logging/Recording		\$	\$	
3. (Define)		\$	\$	
<b>3<sup>rd</sup> Party Interface Hardware/Software Total</b>		<b>\$</b>	<b>\$</b>	
<b>TOTAL IMPLEMENTATION COST FOR PSAP NAME</b>			<b>\$</b>	
Annual Subscription		\$	\$	
<b>Bandwidth</b>		<b>Position</b>		<b>PSAP</b>
1. Primary Circuit				
2. Secondary Circuit				
3. (Define)				

**THIS FORM MUST BE COMPLETED AND ENCLOSED WITH THE PROPOSAL**

**3.12. AUDIT CLAUSE FOR CONTRACTS**

Examination of Records

The Contractor's records must include, but not be limited to, accounting records (hard copy, as well as computer readable data), written policies and procedures, subcontractor files, indirect cost records, overhead allocation records, correspondence, instructions, drawings, receipts, vouchers, memoranda, and any other data relating to this contract shall be open to inspection and subject to audit and/or reproduction by the County Auditor, or a duly authorized representative from the County, at the County's expense. Contractor must preserve all such records for a period of three years, unless permission to destroy them is granted by the County, or for such longer period as may be required by law, after the final payment. Since the Contractor is not subject to the Missouri Sunshine Law (Chapter 610, RSMo), information regarding the Contractor's operations, obtained during audits, will be kept confidential.

Contractor will require all subcontractors under this contract to comply with the provisions of this article by including the requirements listed above in written contracts with the subcontractors.

Vendor Information

Company Name: \_\_\_\_\_

Business Address: \_\_\_\_\_

\_\_\_\_\_

Business Hours: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

(Indicates acceptance of all proposal terms and conditions)

Date: \_\_\_\_\_

**3.13. AFFIDAVIT OF WORK AUTHORIZATION**

The proposer/contractor who meets the section 285.525, RSMo definition of a business entity must complete and return the following Affidavit of Work Authorization.

Comes now \_\_\_\_\_ (Name of Business Entity Authorized Representative) as \_\_\_\_\_ (Position/Title) first being duly sworn on my oath, affirm \_\_\_\_\_

(Business Entity Name) is enrolled and will continue to participate in the E-Verify federal work authorization program with respect to employees hired after enrollment in the program who are proposed to work in connection with the services related to contract(s) with the County for the duration of the contract(s), if awarded in accordance with subsection 2 of section 285.530, RSMo. I also affirm that \_\_\_\_\_

\_\_\_\_\_ (Business Entity Name) does not and will not knowingly employ a person who is an unauthorized alien in connection with the contracted services provided to the contract(s) for the duration of the contract(s), if awarded.

In Affirmation thereof, the facts stated above are true and correct. (The undersigned understands that false statements made in this filing are subject to the penalties provided under section 575.040, RSMo.)

\_\_\_\_\_  
**Authorized Representative's Signature**

\_\_\_\_\_  
**Printed Name**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**E-Mail Address**

Subscribed and sworn to before me this \_\_\_\_\_ of \_\_\_\_\_ . I am

(DAY) (MONTH, YEAR)  
commissioned as a notary public within the County of \_\_\_\_\_, State of  
(NAME OF COUNTY)

\_\_\_\_\_, and my commission expires on \_\_\_\_\_.  
(NAME OF STATE) (DATE)

\_\_\_\_\_  
**Signature of Notary**

\_\_\_\_\_  
**Date**



### **3.14. AMERICAN MADE:**

In accordance with the Domestic Product Procurement Act (hereinafter referred to as the Buy American Act) RSMo 34.350-34.359, the bidder is advised that any goods purchased or leased by any public agency where the purchase, lease or contract involves the expenditure of twenty-five thousand dollars (\$25,000) or more, shall be manufactured or produced in the United States. Section 34.350.2(1) of that Act specifies that the term "public agency" includes all political subdivisions of the State of Missouri, which definition includes counties.

The requirements of the Buy American Act shall not apply if other exceptions to the Buy American mandate in RSMo 34.353 are met.

If the bidder claims there is only one line of the good manufactured or produced in the United States, RSMo 34.353 (2), or that one of the exceptions of RSMo 34.353 (3) applies, the Department Head or Elected Official bears the burden of certification as required prior to the award of a contract.

In accordance with the Buy American Act, the bidder must provide proof of compliance with RSMo 34.353. Therefore the bidder should complete and return Exhibit A, certification regarding proof of compliance, with the bid. This document must be satisfactorily completed prior to an award of a contract.

**EXHIBIT A**

**ST. CHARLES COUNTY  
DOMESTIC PRODUCTS PROCUREMENT ACT (BUY AMERICAN)**

The Missouri Domestic Products Procurement Act (34.350-34.359 RSMo) requires that for all bids with a value of \$25,000 or more, the goods or commodities purchased by any public agency (which definition includes all political subdivisions of the State, including counties) or used or supplied in the construction, alteration, repair, or maintenance of any public works must be **manufactured or produced** in the United States. As defined in 34.350 RSMo, United States means the United States of America, the District of Columbia, and all territories and possessions subject to the jurisdiction of the United States. The law also requires that the bidder must provide proof of compliance. **Note: In general, if an import tariff is applied to an item, it does not qualify for the Buy American preference. In addition, Most Favored Nation status does not allow application of the preference.**

**Section A – All Products Are Manufactured or Produced In U.S.**

If all products bid qualify as domestic products under Missouri law, complete only Section A.

I hereby certify that all products qualify as domestic, that the information provided is true and correct, and complies with all provisions of Sections 34.350-34.359 RSMo. I understand that any misrepresentation herein constitutes the commission of a class A misdemeanor pursuant to Section 34.355 of the Revised Statutes of Missouri.
SIGNATURE
COMPANY NAME

**If Section A is completed, do not complete Section B.**

**Section B – Only One Product Line or No Products Are Manufactured or Produced In U.S.**

If only one product line or no products are manufactured or produced in the U.S. complete only section B.

I hereby certify that there is only one product line or no product manufactured or produced in the U.S., that the information provided is true and correct, and complies with all provisions of Sections 34.350-34.359 RSMo. I understand that any misrepresentation herein constitutes the commission of a class A misdemeanor pursuant to Section 34.355 of the Revised Statutes of Missouri.
SIGNATURE
COMPANY NAME

**Section C – Products May Qualify Because of Qualifying Treaty**

If some or all products bid qualify for domestic status because of a trade treaty, etc., then the bidder must identify each product, country and qualifying treaty, etc. below. The bidder must list ALL products which are or may qualify as domestic below. If more space is needed, please copy this form and submit as an attachment.

BID ITEM NUMBER(S)	COUNTRY WHERE MANUFACTURED OR PRODUCED	QUALIFYING TREATY, LAW, AGREEMENT, OR REGULATION

**SECTION C**

I hereby certify that the specific items listed above are domestic, that the information provided is true and correct, and complies with all provisions of Sections 34.350-34.359 RSMo. I understand that any misrepresentation herein constitutes the commission of a class A misdemeanor pursuant to Section 34.355 of the Revised Statutes of Missouri.
SIGNATURE
COMPANY NAME

## 4. OVERVIEW

St. Charles County is seeking responses from qualified vendors to furnish, install and configure all materials, equipment, accessories, hardware, software, labor, training, materials and support for a Next Generation 9-1-1 Cloud system. The proposed system shall serve the eight (8) Public Safety Answering Points (PSAPs) in St. Charles County. These PSAPs are located at St. Charles County Dispatch Center (both Sheriff Department Dispatch (primary) and Dispatch & Alarm (secondary) at same situs address), City of St. Charles Police Department, City of St. Peters Police Department, City of Wentzville Police Department, City of O'Fallon Police Department, City of Lake St. Louis Police Department and the St. Charles County Division of Emergency Management. Currently, as further described below, St. Charles County and the City of St. Charles operate two separate 911 systems. St. Charles County and the City of St. Charles desire to purchase a single 911 system from a sole vendor that provides the required redundancy and capacity as outlined in this Request for Proposal.

This solicitation is for the purchase of information technology goods and services and shall be awarded as per the St. Charles County purchasing ordinance (Chapter 135, St. Charles County Ordinances) and the guidelines set forth herein. The Responses received shall remain confidential until the contract is awarded; therefore there shall not be a public bid opening. The contract shall be awarded to the company that submits the best overall response in accordance with the RFP.

### 4.1. Background on Current Environment

In 2012, the population of St. Charles County was approximately 369,000.

There are approximately twenty-nine (29) 9-1-1 PSAP call takers at the seven (7) primary and one (1) secondary PSAPs and additionally there are 106 total dispatchers including supervisors at the primary and secondard PSAPs. The Division of Emergency Management back up PSAP site does not have regular call taking or dispatching services on site, however they have two working 9-1-1 call taking positions at the facility.

Approximately 893,199 telephone calls for service were responded to by call takers in 2013. Of these, 147, 330 were 9-1-1 and 745,819- seven digit emergency and administrative.

The County's current 9-1-1 system was installed in 2004 and the City of St. Charles system was installed shortly before. The County 911 System uses Cassidian – TCI Avaya InVision Synapse work stations. The current system is a VOIP network which works with standards POTS lines as well as digital cards and analog lines.

The City of St. Charles system uses Plant-Vesta workstations with digital TDM network that works with CAMA trunks and analog phone circuits.

The current 9-1-1 system supports twenty- nine (29) call-taking positions—twenty-two (22) police dispatch positions, five (5) fire dispatch (includes call-taking supervisors) positions and two (2) backup positions at the Division of Emergency Management. See attached Table 1: PSAP Breakdown

## 5. VENDOR RESPONSE AND SCOPE OF WORK

### 5.1. Company History and Capacity

- A. Vendor shall provide the following information:
- The company name, headquarters business address, and phone number.
  - Total number of employees within the company
  - Number of employees dedicated to research, development, and maintenance of NG 9-1-1 Cloud Systems
  - Number of employees in customer support of NG 9-1-1 Cloud Systems
  - A brief description and history of your company, its organization, markets served, products and services provided, and years of operation.
  - Total annual revenue from software sales, total annual revenue from NG 9-1-1 Cloud System sales
- B. Vendor shall demonstrate experience in deploying and maintaining cloud-based 9-1-1 systems and shall provide a list of at least five (5) installed systems including customer name, contact person, telephone number and cutover date.
- C. Vendor shall demonstrate experience in deploying multiple PSAP systems that provides configurability and customization to the separate PSAP.

### 5.2. System Objectives

The vendor-supplied systems solicited via the RFP for a Next Generation 9-1-1 System must meet the following objectives:

- A. Provide a virtual environment hosted by a Vendor that is offered as an NG9-1-1 software-as-a-service or equivalent which has sufficient capability and capacity to provide full system operation for current and future needs of the County.
- B. Provide an answering point for all emergency 9-1-1 calls with Automatic Location Identification (ALI) provided for all calls, and all call types, received.
- C. Enable migration to a NG9-1-1 call taking solution as standards develop.
- D. Distribute call-taking operations between the primary fire and police PSAPs and the backup located at Division of Emergency Management.
- E. Be flexible and scalable.
- F. Include and implement NG9-1-1 MIS solution.
- G. Include and implement NG9-1-1 Mapping solution.

- H. Be capable of integrating with local jurisdictions' logging recorders and telephony systems as specified by each individual PSAP.
- I. No single component included in the proposed system will create a single point of failure for the system, either individually or as a whole.
- J. Provide manual input of telephone numbers in case of ANI failure in order to receive Automatic Location Identification (ALI) display.
- K. Provide the fastest possible transfer of emergency calls to other agencies to be determined at the time of installation. Star Codes to transfer ANI/ALI information on wireless calls is a required system feature.
- L. The system shall allocate logical system resources, and call handling rules on a per agency basis.
- M. The solution shall meet the applicable standards that make up the NG9-1-1 system.
- N. The system shall support the creation of multiple agencies in the system allowing the allocation of lines and resources on a per agency basis.
- O. The system shall allow for flexible rules based call routing using different gateways in different locations, including automated fail-over in case a gateway is temporarily unavailable.
- P. System equipment shall be certified to the ISO 9001:2008 Standard
- Q. The County intends to be able to handle NG9-1-1 compliant call (instant messaging, cellular phone texting, multi-media messaging, video messaging and non-human initiated calls (i.e. alarms and vehicle emergency devices)) in the future, potentially before national standards are fully adopted. NG9-1-1 shall be defined NENA, APCO, FCC, UL, Telcordia and where applicable (e.g., text to 9-1-1), ATIS standards and system shall comply with these standards.
- R. Vendor provided Project Management Team for program planning, direction, structure and controls in order to provide superior service and to ensure strict adherence to all contract requirements and specifications.

### 5.3. System Overview

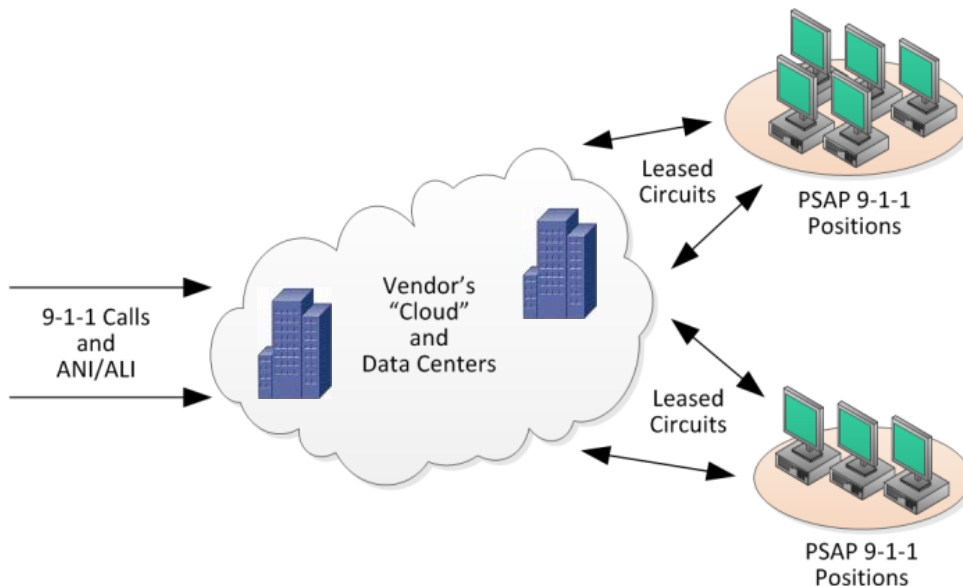
- A. Provide a description of any Remote Monitoring and Response functionality. Additional descriptions for Disaster Recovery, Patch Management and Virus Protection offered by the Vendor from a 24X7 service center are required.
- B. Provide a description of how the vendor supports the agreement by the four main carriers to make text-to-9-1-1 available to all PSAPs that request it by May 15, 2014 (Agreement Between National Wireless Carriers and Public Safety Organizations to Accelerate Nationwide Deployment of Text-to-911) which has also been incorporated into the FCC's Notice of Proposed

Rulemaking, (<http://www.fcc.gov/document/text-9-1-1-further-notice-proposed-rulemaking>).

- C. Provide a description of how the vendor supports ATIS implementation Guidelines for Text Messaging to 9-1-1 Emergency Services, J-STD-110, the interim standard for accommodating SMS text to 9-1-1 and the vendor's commitment to supporting long-term text-to-9-1-1 standards as outlined in NENA 08-003 (the "i3" standard) and other NENA standards that may arise specific to text-to-9-1-1.
- D. Provide a description of what types of emergency SIP trunking standards the Vendor's solution shall support.
- E. Provide a description of the vendor's "map driven" public notification system, i.e., can operators draw circles, polygons, etc. on a map interface and launch calls, texts, etc. out to folks in specific geographic areas, including which types of public notification system (i.e., media types) the vendor supports. Additionally, the vendor shall provide a description of how they answer INBOUND 911 calls from the map interface, if available.
- F. Provide a description of what VoIP switching architecture is used for the call control fabric of the solution: i.e., has the open source platform been modified by the vendor, or is the vendor using open source / proprietary VoIP switch code, etc. The Vendor shall describe when the development was initiated on the switch code and when it was last updated, and the SIP versions supported.
- G. Provide a description of whether the system is capable of working with various versions of CAD, including in the description whether the vendors support NENA's standard CAD interface, as outlined in NENA 04-001 and whether the Vendor has integrated their call taking solution to the CAD systems set forth below, which CAD products are in use at the sites described in this request for Responses.
- H. Provide a description of the EIDD standards of the Vendor's intent to use the joint NENA / APCO / IJIS Emergency Incident Data Document (EIDD), which is the agreed-upon go forward standard for call taking, CAD, and other downstream systems to exchange information about incidents.

#### 5.4. Hosted System Capability

- A. The system shall be hosted in a cloud environment and shall be capable of hosting multiple remote PSAPs in multiple jurisdictions.



- B. **Vendor shall provide negotiated carrier agreements for optimal network connectivity, bandwidth and latency requirement between the client positions to the vendor's proposed cloud solution. Vendor shall present bandwidth allocation and a cost breakdown per individual position for each PSAP.**
- C. The system shall support end-to-end IP connections for the call-taker positions at the provided locations.
- D. Vendor shall also describe any additional data or networking equipment required.
- E. Vendor shall additionally provide SSL VPN connections to the cloud based system.

#### 5.5. Geo-Diverse Redundant Configuration

- A. The system shall support a "geo-diverse" redundant configuration to be located in at least two physically distinct locations to act as a standby for data processing as well as provide for data replication services.
- B. A minimum of two redundant paths shall be utilized for connectivity, each provided by different carriers with divergent paths such that the proposed network(s) shall have no single point of failure. Vendor shall provide certified



statements by the needed carriers demonstrating redundant connections to the proposed system.

- C. Each location shall have local survivability such that if one location becomes completely unavailable due to a catastrophic natural or man-made event, the other locations shall continue to process 9-1-1 calls without intervention.
- D. Vendor shall describe fault tolerance and disaster recovery configuration, call flow and the impact of a call in progress in the event one or more systems suffer a catastrophic failure.

#### **5.6. System Diagrams**

- A. Vendor shall provide system diagrams for their proposed solution in both printed in the Response and electronic form (.pdf and native Microsoft Visio formats) showing:
  - Proposed System Architecture
  - System Connectivity (including end-to-end)
  - System NG9-1-1 Functionality

#### **5.7. System Availability**

- A. The system shall deliver an industry standard up time of 99.999%. Section 5.70 defines acceptable failure levels.
- B. Vendor shall describe any predictable maintenance or upgrade processes affecting hardware, firmware or software that would require the proposed solution be removed from service for any length of time.

#### **5.8. Expansion Capability**

- A. Vendor shall describe the limitations of the proposed cloud solution.

#### **5.9. System Sizing**

- A. The system shall be sized to support each PSAP per Table 4: PSAP Demographics.

#### **5.10. Scalability**

- A. The system shall have sufficient scalability to allow for increase call volume of an additional 5% per year for the length of the agreement.
- B. Vendor shall support increases in call volume and/or network traffic without degradation in system performance.

#### **5.11. Security**

- A. The system shall allow for varying levels of administration and security for all reconfiguration, monitoring, diagnostic and maintenance activities.
- B. The system shall appear to be a dedicated system for each PSAP. However, each PSAP shall have configurable visibility into the activities of other PSAPs.
- C. Vendor shall describe how the system ensures end-to-end security of individual PSAPs. End-to-end shall be interpreted as the carriers' demarcation points as provided by the Vendor.
- D. Vendor shall specify whether their solution requires a firewall within its network design to provide security and protection to the system. If so, the Vendor shall provide firewall requirements and the proposal shall include a firewall provided for each PSAP as an option. If a firewall is not needed, the vendor shall give a detailed description why one is not needed.
- E. The system shall provide an audit trail to provide documentary evidence for all administration and configuration modifications of the system. Vendor shall describe their auditing parameters.

**5.12. Production Version**

- A. All responses must refer to the current, in-production version of the Vendor's software/solution.
- B. If, between the time of Response and the time of final acceptance a new release of the element is marketed and available, all upgrades and/or updates shall be incorporated into the system without additional charge(s).

**5.13. Next Generation Functionality**

- A. The proposed system shall have the demonstrated ability to manage and process the call formats including Instant Messaging (IM), Voice Over IM (VoIM), Short Message Service (SMS, "Cellular Text").
- B. The system shall provide an upgrade path to emerging and new NG9-1-1 capabilities as envisioned by USDOT, NENA, APCO and others.
- C. PSAPs and call-takers shall experience zero down time during updates and upgrades.
- D. Describe how the proposed system supports multi-media calls now or how it will in the future. Please describe any industry testing the Vendor has participated in and describe any prototypes or production models that have been developed to support multi-media calls
- E. Immediate compliance with all new standards as soon as they are released is not expected but the Vendor shall describe how the lag between ratification of a standard and compliance will be minimized.

- F. Vendor shall describe how the system shall comply with standards as they emerge for such core NG9-1-1 functions such as but not limited to:
- Emergency Call Routing Functions (ECRF)
  - Emergency Services Routing (ESRP)
  - Emergency Call Routing Proxy (ECRP)
  - Border Control Function (BCF)

#### **5.14. Protocols**

- A. The system shall use TCP/IP network connectivity.
- B. Calls shall be transported as industry standard protocol between the Vendor's hosted solution and PSAP 9-1-1 positions.
- C. SIP-based signaling shall be used for IP-connected calls.
- D. Bridging shall be used in NG9-1-1 to transfer calls and conduct conferences.
- E. The system shall provide interoperability through a standard framework to allow flexibility in interfacing with and passing meta-data to other call-center applications (CAD, voice logging, etc.)

#### **5.15. System Access and Call-Taker Roles**

- A. The system shall provide log-on capability for each call-taker. Each call-taker shall only be allowed to log-on at one (1) position at a time. Each call-taker shall be prompted to log-on based on a name and password. Upon successful log-on, all personalized features, functions, and capabilities shall be made available to the call-taker regardless of login location.
- B. The system shall provide the ability to assign multiple roles to a call-taker.
- C. A call-taker can be assigned roles from different agencies allowing the call-taker to answer calls from any agency at any position in the system.
- D. The role shall define the agency ID, Automatic Call Distribution (ACD) routing, line mapping, permissions, all possible operator configurations, screen layout, contact list and audible alerts to be used by the call-taker at login to any workstation.
- E. A call-taker shall be able to choose any of their assigned roles during their login.

#### **5.16. Automatic Call Distribution (ACD)**

- A. The system shall be equipped with an ACD of which the following types are required:

- I. Ring All
  - II. Ring All with Conference (i.e., rings all operators and as each answer they are added to the conference)
  - III. Priority
  - IV. Round Robin
  - V. Longest Idle
  - VI. Circular distribution
  - VII. Linear Distribution
- B. The system shall provide management of the ACD with the ability to control and program the following features:
- I. Script-Based Routings
  - II. Skills-Based Routing
  - III. Network Call Routing
  - IV. Longest Idle Period
  - V. All phones
- C. Each PSAP shall be able to individually configure the type of ACD among its answering positions.
- D. The system shall be configurable to allow call-takers to bypass ACD assignment and answer any ringing calls directly. Permission to change this feature shall be assigned on a per call-taker basis.
- E. Proposed system shall support a minimum of 4 call queues per PSAP 9-1-1 position.
- F. The ACD shall support the ability to overflow to a different queue based on maximum wait time, maximum calls in queue or no call-taker signed in to the queue.
- G. The ACD shall support answer modes to play audio messages to the caller.
- H. The ACD audio messages shall include an audio message when the caller enters the queue and a separate message played while the caller is in queue.
- I. The ACD shall provide the ability to automatically provide a post-call-works time for giving the call-taker time to wrap up the previous call.
- J. The ACD shall enable the configuration of the post call work time.
- K. The ACD shall re-queue a call when the call is presented to a call-taker and not answered in a configured amount of time.
- L. The ACD shall re-queue a call when a system user interface (SUI) failure is encountered during the call.
- M. The ACD shall provide routing based on answering positions and/or based on call-taker login.

- N. The ACD shall support a wall display panel configurable to show number of calls in queue, longest call waiting time, number of active calls and number of available call-takers.
- O. The system shall provide the ability to route any call to a specific queue based on the Direct Inward Dial (DID) number dialed by the caller.
- P. The system shall support the ability to transfer a call from a user system interface to any ACD queue in the system.
- Q. The system shall support multiple roles per call-taker and allowing the ACD to distribute calls based on the active role for each call-taker.
- R. The ability to set up and manage call queues such that call routing can be programmed by queue. Example: A 9-1-1 call is received and queued to go to the call-taker with the longest idle time. However, if all call-takers are busy, then the call is then sent to all answering positions.
- S. The system shall provide call-takers the ability to control and program the following features of the ACD:
  - i. The user system interface shall provide the ability for a call-taker to refuse an ACD call presented to the answering position and whereby the refused call is re-queued to the ACD.
  - ii. The user system interface shall provide the ability for a call-taker to change their state to and from ready and not ready to receive an ACD call.
  - iii. The user system interface shall provide the ability to automatically answer incoming ACD calls.
  - iv. The user system interface shall provide the ability for a call-taker to pre-record greetings based on their role and the line type of the incoming call whereby when the call is answered at the user system interface the caller is automatically played the appropriate call-taker greeting based on the line group and the call-taker's current role.
- T. The Vendor shall describe in detail the proposed ACD functions and capabilities.
- U. The Vendor shall describe the ACD support for the call routing and skill based routing.
- V. The Vendor shall describe the ACD support for supervisor monitoring.

**5.17. Automatic Call Detail Record (CDR)**

- A. The system shall capture, and store, all available information pertaining to each 9-1-1 call and be accessible for reports.
- B. The system shall provide QoS information, per NG9-1-1 standards, for each call to ensure that Service Level Agreements are being met; QoS information should be accessible through the SUI.

- C. The system shall be capable of creating call detail records and system event records with the information gathered from the system answering positions in the event that a PSAP'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.
- D. The records shall be capable of being sent to a number of different destinations, such as to a printer to create a hard copy or external databases. Vendor shall describe CDR data state should PSAP position experience short or long-term loss of connectivity.

#### **5.18. Text Telephones/Telecommunications Device for the Deaf (TDD/TTY)**

- A. NG9-1-1 anticipates that deaf and hard of hearing callers will migrate from TTY to other forms of communication including real time text devices and various forms of relay. Although use of TTY is expected to decline, it shall not be assumed that TTY will be completely gone by the time transition to NG9-1-1 is complete.
- B. PSAPs shall be capable of receiving calls from TTYs. As it cannot be assured that all audio calls will transit a transcoder, the NG9-1-1 stations will need to recognize baudot tones and display text, as well as accept typed text and generate baudot tones on either 9-1-1 calls or 10-digit emergency lines.
- C. The system shall internally, without operator intervention, immediately recognize incoming TTY and TDD calls and immediately activate functions germane to TTY and TDD calls. TTY and TDD calls shall have the same logging and reporting capabilities as voice calls.
- D. The system shall allow call-takers to communicate with TDD/TTY callers directly from their station, without requiring the use of any external device.
- E. Call-takers shall also be capable of manually connecting to emergency calls originating from ASCII- type TDD/TTY equipment, as well as originating both Baudot and American Standard Code for Information Interchange II (ASCII) calls from their answering position.
- F. All stations shall allow operators to store, access and send a minimum of twenty (20) pre-programmed TDD/TTY messages.
- G. The console shall provide the ability to program an automated TDD answering string.
- H. 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; law enforcement, fire protection, and emergency medical services.
- I. The system shall provide call-takers the ability to search for predefined messages/strings.

- J. The system shall provide call-takers the ability to assign predefined messages to "hot keys", i.e., F1 - F12, or a CTRL key combination.
- K. The system shall provide a single window for viewing transmitted and received TDD characters and a separate window for viewing pre-canned messages.
- L. TDD/TTY text shall be saved to the master call record database and be available for reporting and printing.
- M. Call-takers shall also have the ability to create a conference between the TDD/TTY caller and up to four (4) non- TDD/TTY parties in 9-1-1 call-taking mode.
- N. The TDD/TTY function shall allow a call-taker to transfer a TDD/TTY call to another call-taker position.
- O. The TDD/TTY function shall allow the call-taker to alter its operation to comply with ADA requirements for HCO (Hearing Carry Over) and VCO (Voice Carry Over) calls.
- P. The two-way TDD/TTY conversation and text information should also be stored on the system.

#### **5.19. Automatic Number Identification (ANI)**

- A. The system shall be capable of providing visual display of the emergency caller's telephone number and NG9-1-1 compliant standards.
- B. The system shall be compatible with eight, ten, and twenty-digit ANI delivery, and other call signaling (NCAS, HCAS, CAS) solutions

#### **5.20. Automatic Location Identification (ALI)**

- A. The system shall be capable of connecting to the ALI service provider using a TCP/IP connection.
- B. The solution, including software, hardware and interconnections, proposed by the Vendor in response to this RFP shall be compatible with ALI service provider's network infrastructure.
- C. The system shall be capable of providing visual display of the calling party's street address information based on legacy ANI and ALI and any NG9-1-1 compliant standards. The system shall also be capable of extracting geographical coordinate information from the ALI file received and transmitting this information to geographical mapping software with NG9-1-1 standards.
- D. The system shall support ALI parsing to extract Class of Service, ESN and CPN (Calling Party Number).

- E. The system shall utilize support multiple ALI request schemes including Priority, Simultaneous and Alternating ALI requests.
- F. The system shall provide the ability to create an incorrect location information report on a per agency basis and send it to a printer and email to a pre-configured email address.
- G. The system shall provide multiple channels to share ALI information with other applications, such as a mapping or CAD application. Vendor shall indicate how many channels are available for sharing.
- H. The system shall provide for at least one-hundred (100) viewable saved ALI requests per call-taker session. In addition, all non-manual ALI requests shall be automatically saved for the duration of the call-taker session.

#### **5.21. Wireless Compatibility**

- A. The system shall be Wireless Phases I, II and NG compatible per FCC requirements.
- B. The system shall 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).

#### **5.22. Wireless Call Handling**

- A. All stations shall present Wireless calls and shall include all standard call-handling features.
- B. System shall perform a manual ANI callback for wireless calls.

#### **5.23. Automatic ALI Rebid**

- A. The system shall automatically update location information at regular intervals. This feature shall be configurable as to the number and frequency of intervals on a per wireless provider basis.

#### **5.24. ALI Parsing**

- A. The system shall guarantee that ALI data is appropriately and consistently displayed when interfacing with different ALI providers that send their information in various formats (i.e. wireline vs. wireless).
- B. The system shall provide a method for formatting the ALI for calls with 20-digit ANI Call Path Associated Signaling (CAS) and 10-digit Non-Call Path Associated Signaling (NCAS) so the CPN appears in the same location as it does for landline calls. This formatting or "normalizing" shall provide the CPN to the ANI callback list for CAS, HCAS, and NCAS calls received.



### **5.25. Remote ALI Retrieval System Interface**

- A. Vendor shall provide proposals for accessing and editing ANI/ALI Databases provided by the ALI service provider. The ANI/ALI system must interface to the ALI service provider database(s).
- B. The system shall have at least two output IP interfaces for transmission and receipt of wireless and VoIP call data to the ALI database.
- C. The proposed system shall have auto ALI Rebid capability and shall also be configured to allow Manual ALI queries.
- D. The ANI/ALI Equipment shall be compatible with eight and ten digit remote database query methods.
- E. The system should also support advanced NENA Extensible Markup Language (XML) tags for standardized data exchange.

### **5.26. ALI Caching**

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

### **5.27. ANI/ALI Data Capture**

- A. ANI/ALI, location information and other NG9-1-1 information as NG9-1-1 standards are developed shall be captured and stored with each 9-1-1 call.
- B. The following items from the ANI/ALI data stream shall be captured and stored in their own individual database fields of appropriate size that is sortable and searchable and as NG9-1-1 standards are implemented that ability to capture and to comply with NG9-1-1 standards:
  - i. Originating Phone Number (ANI)
  - ii. Address or Coordinate (ALI)
  - iii. Caller Name
  - iv. ANI/ALI Time of Initiation
  - v. ANI/ALI Time of Pickup
  - vi. ANI/ALI Time of Disconnect
  - vii. ANI/ALI Date
  - viii. ESN
  - ix. Class of Service
  - x. Carrier

### **5.28. Interfaces**

- A. The vendor shall provide for NG9-1-1 compliant interfaces for the delivery of callback and location information to CAD, mapping applications and voice recorders. The system shall be capable of delivering location information to CAD and mapping applications natively via IP without a hardware or software upgrade being required. The system shall also support delivery of legacy serial ANI/ALI information.
- B. Vendor shall describe the design of the interfaces used in this design.

### **5.29. System User Interface (SUI)**

- A. The SUI is the proposed interface consisting of a graphical user interface which allows for personalized screen layout and shall consist of a number of windows, each of which can be located and saved in a position on the screen deemed most optimal by the call-taker and administrative personnel. The system shall permit customization of the operator interface on a per operator and role basis and including window and button layout, window sizes, control element sizes and properties, font size and types.
- B. The system shall be capable of locally integrating administrative lines such that administrative line call information can be displayed in the SUI.
- C. The system shall provide operator specific information upon command. Information such as number of calls taken, trunk or line status by operator, special qualifications, working assignment, and other related, operator specific information for operator logged onto the system at the time of inquiry shall be provided.
- D. The SUI shall operate independent of any associated telephone instrument. If a fault occurs in the SUI while a call is active the call shall be presented to another operator.
- E. The system shall provide supervisors and/or system administrators current system and call-taker specific information available to them upon command. Information shall be readily accessible, easy to retrieve, current, accurate, and changeable.
- F. The system shall provide supervisors and/or system administrators the capability to monitor call status for every position in the system. This includes the position designation, the number of calls taken, active calls, calls on hold and other call related information.
- G. The system interface shall provide the call-taker with on-screen access to all telephone features. The interface shall provide the call-taker with the ability to access the applications via easy to use icons and pictures. Call-takers shall be released from having to remember long, complicated command structures in favor of icons.

- H. The system shall support the assignment of multiple screen layout and configuration based on the role of the operator.
- I. The system shall allow a supervisor to modify the system sounds and button icons.
- J. Supervisors shall have the capability to restore the original screen layout while making modifications.
- K. Call-takers shall be able to view each status category to obtain more information about calls in each category:
  - i. ANI
  - ii. Position
  - iii. Call Taker
  - iv. Start Time
  - v. Call-Taker
  - vi. Start Time
- L. To save the operator valuable time, the system shall provide numerous "canned" predefined messages based on incident type, i.e., Law Enforcement, Fire Protection, and Emergency Medical Services. The system shall permit the administrator to select and change screen colors for those features not systematically predetermined by color.
- M. The system shall 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 shall be listed in the response.
- N. The system shall provide a multiple levels of system access for administrators, supervisors, and operators. Unique system access level setting for each authorized operator is most desirable. Administrators shall be provided the capability to access, add, change, delete, etc. every feature, function, and parameter in the system. The system shall provide a selectable subset of administrator functions for supervisors and operators. Vendors shall state the number of access levels available.
- O. The system shall provide the capability for system operators to securely log onto the system by using an Operator ID and operator-selected password.
- P. The system shall include a shared call appearance resource that shall show the status of the line, pre-answer ALI of the caller, ability to pick up that line, join the call or determine which call taker is on that line.
- Q. The system shall include a multi-call appearance that queues multiple calls from assigned line groups and rings multiple positions. The multi-call appearance shall indicate to all consoles the number of calls queued on that appearance as well as the waiting time for the oldest call.

- R. Vendor shall provide a single ringtone that is consistent system-wide.
- S. The system shall provide for a call-taker to request supervisor help whereby the request shall be routed to a designed group of supervisors and each supervisor shall receive an audible and visual indicator of the help request. At this point, any one of the supervisor can accept the help request and be automatically conferenced with the call-taker requesting help.
- T. Vendors shall indicate what provisions are included in the proposed system user interface that shall assist individuals who may have difficulty distinguishing between standard color shades in identifying line status, such as incoming call, held call, steady call, and/or active call.

**5.30. Call / Line Indicators**

- A. The system shall indicate incoming calls by both audible and visual means.
- B. The system shall also have the ability to visually display the status (connected, ringing or on hold) of each call.
- C. The system shall provide comprehensive call-taker information in real-time, including console and Dispatcher ID, Dispatcher name, logged-in time, ACD state, ACD time in state, call state, call type, call state time.

**5.31. Routing Status**

- A. The system should provide a visual display of the routing status of the call:
  - i. Normal – the first attempt to route the call was successful
  - ii. Overflow – the first route was busy or congested
  - iii. Alternate – the first route attempt failed and another route was attempted
  - iv. Transfer – the call was transferred
  - v. Not Available – no routing status was received

**5.32. Overflow Capability**

- A. The system shall allow calls to be routed to a designated alternate location if all call takers are busy.

**5.33. Call Queue Management**

- A. The system shall 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.
- B. The system shall display the number of calls in the queue and the time the oldest call has been in the queue on all answering points. It shall display the number of operators on calls or a list of calls ringing and in progress.

- C. The system shall readily identify the highest priority unanswered call.
- D. The system shall provide queue information for each call queue to be displayed at each answering point.
- E. The system shall notify the supervisor positions and/or the local system administrator when thresholds have been exceeded. The system shall identify the threshold exceeded.
- F. The system shall present call-takers with the status of the following categories:
  - vi. Number of Active 911 Calls
  - vii. Number of 911 Calls on Hold
  - viii. Number of 911 Calls Ringing
  - ix. Number of Active Call-takers
- G. Describe in detail the real-time monitoring capabilities of the proposed system.
- H. The system shall allow supervisors to configure alarms on any single event or combination of events.

**5.34. PSAP Marquee Display**

- A. The system shall provide call queue information on a large, display located in the PSAP. The display shall show the number calls in the queue and the time the longest ring call has been in the queue, as well as the number of call-takers answering calls. The marquee shall be capable of being displayed in different formats (e.g., list format.)

**5.35. Call Taking Mode**

- A. The system shall have the ability to present inbound calls in bridged call appearance (BCA) mode. BCA mode shall display all lines on the call-taking positions and shall cause all call-taking positions to signal an incoming call with an audible and visual indication. The call shall be delivered to the first call-taker who “answers” the ringing call.

**5.36. Call Transfers**

- A. Call transfer shall occur immediately with a minimal number keystrokes or mouse clicks.
- B. Call-taker and supervisor functions associated with normal call taking and monitoring shall apply to transfer calls.
- C. Call-takers shall be capable of transferring calls manually and/or through speed dial functions from the keyboard and/or mouse.

- D. The system shall provide notification of an incoming transferred call, including call data and from whom the call is being transferred.
- E. The call-taker originating the transfer and all supervisors shall 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 shall be noted on the originating call-taker and all subsequent call-takers' SUI until the call is complete.
- F. Call data shall be maintained for calls transferred within the system throughout the duration of the call without regard to quantity of subsequent transfers.
- G. All transfer functions shall comply with NG9-1-1 standards.
- H. The system shall provide the call-taker to transfer a call to an agency and establish a conference call.

### **5.37. Conference**

- A. The system shall provide the call-taker the ability to remain on a call and add a new party to the conversation without putting the caller on hold - the caller shall remain on-line at all times.
- B. Vendor shall define the number of parties that can participate on a conference call and the maximum number of conferences per PSAP at any given time.
- C. Any party shall be able to drop out of the conference; leaving the others talking as long as at least one of the other parties possesses supervision on their connection.
- D. Call-takers shall be able to mute any participant in the conference and shall be able to exclude any participant from hearing other parties in the conference to allow for private consultation. The system shall support the ability to selectively drop, hold and unhold individual parties of a conference call.
- E. The status of the call shall be presented visually while also showing the status of all other calls at the PSAP (active, abandoned, on hold).
- F. The system shall provide the ability for a call-taker to join a call on any of the shared line appearances configured on the system. When joining, the call-taker that was initially on the call shall receive information that another call-taker has joined as well as the identification of that call-taker.
- G. The system shall provide the ability to perform a no-hold conference where the existing parties on the call are not put on hold when conferencing in a new party.
- H. The system shall provide the ability to perform a hold conference where the existing parties on the call are put on hold when conferencing in a new party.

- I. The system shall support the ability to drop the last party added to the conference call.
- J. Any conferencing function shall not degrade the quality of the audio.
- K. The Vendor shall describe the call conferencing process, and the number of lines that can be included during a single conference call without degradation.

**5.38. Callback**

- A. The system shall save and allow the call-taker to redial, at a minimum, the last one-hundred (100) callers (ANI/ALI).
- B. The system shall provide a one button callback from the recent call list.

**5.39. Hold**

- A. Call-takers shall be permitted to immediately place a call on hold with a single keystroke, or mouse click.
- B. The system shall put a call on local hold, where only the call-taker who placed the call on hold can retrieve the call, or on system hold, where any call-taker within the defined PSAP can retrieve the call.
- C. Information regarding the time the call was placed on hold, the duration the call has been on hold, and the call-taker that placed it on hold shall be made available on the SUI for each call on hold and available for viewing through the proposed system reporting capabilities.
- D. The system shall also alert the Dispatcher when a call has been on hold longer than a pre-configured amount of time.

**5.40. Call Monitoring**

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

**5.41. Muting**

- A. Call-takers shall have the ability to block a caller from hearing and talking with the remaining parties in the conference and manually mute any audio outputs individually or all simultaneously at the click of one button.

**5.42. Make-Busy/Do Not Disturb**

- A. Call-takers, with appropriate system permissions, shall be capable of temporarily removing themselves from a ring group (call queue) in order to

wrap up a previous call or perform another task such as radio dispatched while remaining logged on. Call-takers shall click a single "Make Busy" icon (or similar) to remain logged on but not in a queue to receive calls.

#### **5.43. Barge-In**

- A. The system shall provide the capability to interrupt conversations, "barge-in" on in-coming and out-going calls. The answering position originating with the interrupted call shall visually display that the call is being interrupted.
- B. Upon entering any call for which ANI/ALI or Caller-ID information is available; such information shall be immediately displayed on the call taker's display.
- C. A maximum six participants should be able to use the barge-in feature on a single call.

#### **5.44. Abandoned Call Handling**

- A. The system shall provide the ability to notify the call-taker of any abandoned calls. The notification shall be in the form of a visual indicator showing the quantity of abandoned calls as well as an audible indicator specific to abandoned calls.
- B. The system shall provide the ability to either automatically distribute the callback of the abandoned calls to individual answering positions or to allow call-takers to selectively perform callback of abandoned call from the PSAPs abandoned call list.

#### **5.45. Abandoned Call Capture**

- A. The system shall be capable of collecting the ANI digits and processing the ALI lookup regardless of the condition of the call: active or on-hook.
- B. The ANI of the abandoned caller shall be available for viewing by the call taker and the abandoned call shall remain in queue. However, it shall be possible to sort the calls in queue to meet the requirements of PSAP protocols.
- C. The system shall provide call-takers the capability to capture abandoned call information, and redial the abandoned number automatically upon command. A list of abandoned calls shall be provided in table format, and be selectable for redial with a minimum number of screen touches, keystrokes, or mouse clicks.
- D. Abandoned calls for a specific agency shall be presented only to call-takers logged into that PSAP.



#### **5.46. Forced Disconnect**

- A. The system shall allow the releasing an existing call at any time, regardless of whether the calling party has disconnected.

#### **5.47. Contacts Management /Dialing**

- A. The contact management system shall allow the call-taker to quickly access frequently called telephone numbers from a pre-programmed list of contacts groups and individual contacts.
- B. The system shall support the creation of a minimum of fifty (50) contact groups for dialing, with each contact group assignable based on the role or agency of the call-taker.
- C. The contact list shall provide the ability to define up to ten (10) custom fields for each contact group.
- D. Describe the limits of preprogramming numbers into a speed dial function for the purpose of reducing the time necessary to connect to another party.
- E. The system shall provide the ability to assign any contacts to an ESN group to be used by a call-taker for selective transfer based on the ESN. The contacts associated to a caller's ESN can then be accessed with one click of the mouse or button.
- F. The system shall support dialing rules based on different context including the line type and the state of the console.
- G. A contact dialing instructions can be programmed to also include call control commands such as transfer and conference.
- H. The console shall provide a call-taker interface where contacts can be displayed for one click dialing.
- I. Multiple layers of these buttons can be organized such that a call taker shall be able to navigate to the appropriate contact button for dialing.
- J. The system shall also provide a search capability of all contacts whereby the search results are narrowed and displayed as the call-takers enters characters in the search field.
- K. The search capability shall provide a simple search of the contact name or an advanced search where the call-taker can enter additional search criteria for other fields in the contact record.
- L. The system shall provide a list of recent incoming and outgoing calls for up to the last 100 calls. The list shall show detailed information about the call including the date and time, CPN, ALI and ESN.

- M. The system shall provide the ability to perform a conference, a blind or supervised transfer with one click to any contact in the contact list.

**5.48. Intercom**

- A. The system shall provide an internal position-to-position intercom. Call-takers and supervisors shall have the capability to select whether the intercom audio is routed to an external speaker at the workstation and/or the handset at each workstation. Use of the intercom feature shall occur with a minimal number of keystrokes, or mouse clicks.
- B. The system shall provide an all-position (PSAP-wide) intercom. Call-takers and supervisors shall have the capability to select whether the intercom audio is routed to an external speaker at the workstation and/or the headset/handset at each workstation. Use of the intercom feature shall occur with a minimal number of keystrokes, or mouse clicks.

**5.49. Instant Messaging**

- A. Instant messaging should be available from each answering point and be configurable or disabled according to individual PSAP requirements. Each call-taker shall have the ability to send an instant message to any other call-taker on the system.

**5.50. Remote Keypad**

- A. Vendor shall equip all answering points with a programmable keypad or equivalent that will allow call-takers to perform basic system functions without using the computer keyboard. The keypad shall have a sealed housing unit and measure approximately 5” W x 3”. The desired layout is illustrated below.



### **5.51. Call Playback**

- A. In addition to data captured on logging recorders, the system shall provide separate functionality for recording and playing back all calls, voice, TTY, TDD, and radio for the most previous sixty (60) minutes of operation without need to connect to existing call recording system(s).
- B. Playback functions shall occur without delay with a minimal number of keystrokes, or mouse clicks.
- C. The call playback function shall record all portions of the conversation. None of the conversation shall be lost due to a change of condition, i.e., going from "sleep mode" to "wake up" mode.
- D. The system shall allow the call-taker to playback the audio to external speakers, headsets/handsets, or a called or calling party or any combination thereof.
- E. At a minimum, the call playback function shall provide the following features:
  - i. Play
  - ii. Pause
  - iii. Stop
  - iv. Play forward/Fast forward
  - v. Rewind
  - vi. Repeat
  - vii. Forward file to another position
  - viii. Display ANI
  - ix. Display Calling Line ID (if available)
  - x. Save

### **5.52. Headset/Handset**

- A. The Vendor shall provide audio specifications and describe how system audio outputs are configured.

### **5.53. Call Note**

- A. The system shall provide the ability for an operator to attach a call note to the call record associated with any particular call. The note shall be recorded and be available for viewing by other personnel.

### **5.54. Computer Aided Dispatching (CAD) Integration, (See Table 3.)**

- A. The system shall provide interface to multiple CAD servers using a standard NENA CAD spill over IP.
- B. The system shall also be capable of sending the data to multiple IP addresses.

- C. The system shall provide the allocation of up to 99 CAD groups to be assigned on a per position basis so that the CAD spill can be directed to the appropriate CAD port.
- D. The system shall provide an optional CAD spill update when ALI is rebid.
- E. The system shall provide telephone System fields available for transfer to the CAD system and propose varying degrees of telephone/CAD integration. At a minimum the name, address, XY coordinate, telephone number of the calling party, the time of call received (first ring) and the time the call answered shall transfer to the respective CAD fields from the telephone system.
- F. Vendor shall describe telephone system fields available for transfer to the CAD system and propose varying degrees of telephone/CAD integration.
- G. The integration methods employed by the Vendor shall meet the PSAP's approval and not effect warranties, agreements, or proprietary rights of the existing CAD systems' manufacturers.

**5.55. Mapping**

- A. The system shall have an integrated mapping function compliant with NG9-1-1 standards.
- B. The mapping function shall be centralized with a shared map between all PSAPs.
- C. The mapping function shall be configurable according to individual PSAP requirements.
- D. Vendor shall describe how the mapping function updates all maps in the proposed system.
- E. Vendor shall provide a method for identifying and correcting conflicting information between the ALI database and the GIS MSAG.

**5.56. Active Directory (AD) or Lightweight Directory Access Protocol (LDAP) Authentication**

- A. The system shall be capable of integrating with Active Director and LDAP.

**5.57. Data Integration and Analysis**

- A. The system shall have comprehensive data analysis functionality for reviewing real-time and historical information stored on the system.
- B. The system shall be capable of integrating multiple databases with the ability to add attachments to the call record.

- C. Vendor shall provide certification that data elements are reduced to an atomic unit of data to ensure that authorized users have the ability to group and sort data to ensure data integrity of returned queries on virtually any set of given parameters. Vendors are encouraged to submit a high-level data dictionary to demonstrate the data elements captured for storage and retrieval.

### **5.58. System Administration**

- A. Administration shall be integrated into the system and user access is via role assignment.
- B. At a minimum, the administration functions shall include:
  - i. Tandem transfer code configuration
  - ii. User configuration
  - iii. AII configuration
  - iv. Resources configuration
  - v. Services configuration
  - vi. Agency information
- C. Vendor shall describe system administration features and capabilities including all configurable items (CIs) for the system and staff.

### **5.59. Reporting**

- A. The system shall have a comprehensive reporting functionality to produce real-time and historical information reports.
- B. The system shall have “canned” reports including but not limited to a variety of standard reports based on event-driven data providing information on:
  - i. Hourly and daily system overview reports, including all calls,
  - ii. Call-taker overview report, indicating total number of calls handled, percentage of total number of calls, average ring, talk, and hold duration
  - iii. Duplicate Caller report
  - iv. Abandoned Caller report
  - v. Ability to identify which party (caller or called) terminated the call
  - vi. Ring Time Statistics, including the time the call was received, began ringing, was answered, call was ended, which party terminated the call.
  - vii. Viewing Records and reports shall be viewable from the screen.
  - viii. Skill set Performance
  - ix. Call-taker Performance
  - x. Call-by-Call Statistics
  - xi. Supervisor Properties
  - xii. Call-Taker Properties

- xiii. Call-Taker by Supervisor Properties
- xiv. Call-Taker Skill set Properties
- xv. Call-Taker Supervisor Assignment
- xvi. Call-Taker Skill Set Assignment
- xvii. Network Application Properties
- xviii. Network Application Performance
- xix. Network Incoming Calls

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

- i. ANI/ALI/Location Information
- ii. Seizure time
- iii. Position answered
- iv. Answer time
- v. Disconnect time
- vi. Total count of call type(s) such as but not limited to wireline, wireless, VoIP and NG9-1-1 call types.
- vii. Average Call Waiting Report
- viii. Average call duration
- ix. Duration of transferred calls
- x. Number of calls transferred to each PSAP
- xi. Total number of times a caller is transferred and to which PSAPs
- xii. Total Abandoned calls
- xiii. Call by hour of day
- xiv. Calls answered by position
- xv. Calls answered by all positions
- xvi. Calls answered by PSAP
- xvii. Call answered by user ID

D. At a minimum, the following reports based locality driven data shall be provided:

- i. based on position(s)
- ii. based on call takers(s)
- iii. based on groups of positions
- iv. based on time of day
- v. based on shift
- vi. based on day of week
- vii. based on week
- viii. based on month
- ix. based on quarter
- x. based on abandoned calls
- xi. based on inbound calls
- xii. based on duplicate callers

- xiii. based on call duration, time of answer, time of hold, time of talk, time of disconnect and/or transfer
- xiv. based on land-line, wireless, or VoIP
- xv. based on individual jurisdiction
- xvi. based on ESN
- xvii. call history by call number
- xviii. call taker response breakdown
- xix. manual ANI query by call taker
- xx. call log report detail and summary
- xxi. speed dial list by agency and common lists

E. At a minimum, the following reports based application driven data shall be provided:

- i. ANI- Caller's Telephone Number
- ii. ALI - Caller's Address Information
- iii. TDD Text
- iv. Any supplemental information received in the ALI record such as but not limited to; Emergency Service Number, Business, and Residence.

F. The system shall have the ability to schedule report generation at set time(s) during the day for all predefined reports and auto-distribute via pre-set printer addresses or e-mail services.

G. Call-takers, supervisors, and maintenance personnel shall have the capability to query the database(s), create and print customized reports in an ad hoc fashion. An ad hoc report shall mean the ability to build a report template from scratch; not select filtered items from a list.

H. Call-takers, supervisors, and maintenance personnel shall have the capability to create and save customized queries and reports.

I. Use of records management and report functions shall not negatively impact NG9-1-1 system's operational performance.

J. Vendor shall describe system reporting capabilities including statistics, metrics and key performance indicators (KPI's) (real-time and historical) for the system and staff and include a list of available reports.

K. All reports shall be exportable in spreadsheet and word processing formats. Vendor shall specify spreadsheet and word processing formats available, e.g., .xlsx, .docx, .odt, .ods, and .pdf formats.

### **5.60. Archiving and Backup**

- A. Vendor shall describe the data sets and length of time data is accessible prior to archiving. Vendor shall also describe the data archiving process including backups, data restoration and archive access.

### **5.61. Print Capabilities**

- A. The system shall provide an interface for manual printing of any call record, location and TDD/TTY conversation or other media upon call release. It is required that the system enable any user the ability to print on a local or network printer of choice.

### **5.62. Emergency Notification System**

- A. The Vendor shall provide pricing for an optional Emergency Notification System which will allow call takers to notify portions of the population of hazards or other conditions via mass notification. It is highly desirable that the ENS be fully integrated into the proposed NG9-1-1 system so that call takers may access the ENS from the SUI to activate notifications. The system will utilize the integrated mapping function to determine the population to be notified.
- B. The ENS shall be configurable to automatically schedule call-backs and pre-determined intervals.
- C. The ENS shall include a complete audit trail of all activations. The call list shall be generated via integrated mapping function.

### **5.63. Help Documents**

- A. A user friendly, searchable help file is required to be accessible from each system user interface (SUI).

### **5.64. Manuals**

- A. Provide documentation for set-up, operation and administrative functions of the system. Manuals will be in both printed and electronic form (.pdf and native formats). Three (3) sets of customized manuals for each PSAP will be in printed form.

### **5.65. Training**

- A. Training on all system functions shall be provided by the vendor prior to acceptance of the system. Training shall include sufficient information and experience to familiarize personnel (administration and supervisors) with all system functions, features and operations for their particular assignments.



- B. Vendor shall provide full training curriculum for various levels of employees including support personnel. Training shall be detailed in the Response and tailored to the following staff categories:
  - i. Call Takers
  - ii. Supervisors
  - iii. Administrative
  - iv. Technical Support
- C. Vendor shall implement a train-the-trainer plan for call-takers and PSAP administrators for staff refresh and turn-over.
- D. Vendor shall be responsible for coordinating with the selected training committee for training material development. All curriculum and training schedules shall be approved by St. Charles County prior to delivery. Training materials shall become property of St. Charles County.
- E. All training materials shall be printed for attendees and Vendor shall deliver electronic copies (.pdf and Microsoft Word 2010).
- F. Vendor shall propose a training schedule, sample curriculum and description on how these requirements will be met.

**5.66. System Implementation Schedule**

- A. St. Charles County’s goal is have the proposed system completely operational within ninety (90) days after contract execution.
- B. St. Charles County understands that implementation will also include training and potential legacy data import.
- C. Vendor shall propose a complete implementation schedule including transition and project close out. The schedule shall breakdown all key milestones with an included risk register.
- D. For the purposes of schedule, Vendor shall assume responsibility for furnishing, installing and configuring all required equipment and cabling.

**5.67. Project Management**

- A. The Project Manager’s primary responsibility shall be to prepare a comprehensive management plan for technical services staffing. Vendor shall provide an overview of their standard management process.
- B. The Vendor shall be responsible for assessment of all hardware, software, supporting and interconnecting systems in all PSAPs.
- C. Vendor shall provide assigned project manager’s resume with references and experiences on similar projects.

- D. The vendor is required to submit a task-oriented Gantt chart detailing the system installation utilizing MS Project 2010. The proposed start date for the project shall utilize a "contract date" for competitive and demonstrative purposes. The project plan shall identify critical dependencies and typical timelines.

**5.68. Acceptance Testing**

- A. Vendor is required to ring-talk test each PSAP position endpoint multiple times prior to cutover.
- B. Vendor shall log all troubles found and make any necessary repairs or adjustments at their cost. These reports shall be submitted to the County showing all errors found and corrective action taken to resolve troubles.
- C. Vendor shall thoroughly test the entire system prior to implementation and provide testing processes and procedures as part of the Response. All acceptance plans shall be approved by St. Charles County prior to testing.
- D. Testing shall include a measurable testing process for each functional and technical aspect of the specifications listed in the Vendor's proposal, and system performance measurements based on the telephone activity to date.
- E. St. Charles County will not accept or certify the system until all items on the acceptance test plan are met to the satisfaction of the County. Degrees of system failure and operability for acceptance testing purposes are determined solely by St. Charles County.

**5.69. Cutover Support**

- A. Vendor shall provide, at a minimum, onsite support for all personnel shifts before, during and after cutover.

**5.70. Failure Level Definitions**

- A. Major failures are issues that render the system completely unusable or significantly reduce system operability, and are considered to be operationally unacceptable by the County or which result in the system delivering less than 99.999% of system up time. An example of significantly reduce system operability is on a per PSAP basis such that the total number of answering points at a particular PSAP is reduced to 50% or fewer. This level of failure shall count against system availability as described in Section 5.7 above.
- B. Minor failures are open punch list items that minimally reduce system operability or issues that have little or no effect on system operability and usability, and are considered to be operationally acceptable only during the acceptance testing phase by the County.

### 5.71. Final Acceptance Testing

- A. Final acceptance testing is expected to commence immediately upon system cut over and proceed for fourteen (14) consecutive Major Failure alarm free days. If a Major Failure occurs during the final acceptance testing period, the final acceptance testing period will be stopped, and the failure or failures expediently fixed to St. Charles County's satisfaction.
- B. The final acceptance testing period of fourteen (14) consecutive Major Failure free days will restart the day after repairs are completed, at St. Charles County's sole discretion.
- C. The Vendor shall assume that Final System Acceptance will not occur until all work, training, punchlists, and documentation has been formally accepted in accordance with the contracted requirements.
- D. In measuring acceptance, system failures resulting from external causes, including but not limited to acts of God, fire, or PSAP supplied hardware, software or connectivity failure, will be excluded from the acceptance testing.

### 5.72. System Alarms and Notification

- A. The system shall self-monitor vital processes and send alarms in the event of an alarm conditions.
- B. The system shall notify key personnel and provide real-time notification to the Vendor's 24-hour technical maintenance and support center upon detection of an alarm and give a brief description of the alarm condition.
- C. When any aspect of the system is experiencing a fault, the system shall notify call-takers through configurable visual and audible alarms and the system shall send alarm data to an external networks/monitoring services and applications as designated.
- D. Administrators shall be able to query, view and print historical reports for all system alarms for up to 14 months.
- E. Vendor shall describe the system alarm capabilities, categories and Vendor's priority response.

### 5.73. Service and Support

- A. Service and Support shall include system maintenance and customer support consisting of support twenty-four (24) hours per day, seven (7) days per week.
- B. Vendor shall propose a service and support agreement for the entire system maintenance and support including configuration management for a period of five (5) years.
- C. Vendor shall describe escalation procedures for problem resolution.

- D. Vendor shall describe service and support protocols that address system discrepancies, failures and/or defective components and service restoration.
- E. The vendors shall specify the number of trained technicians on staff.
- F. Vendor shall provide current offerings of Service Level Agreements (SLAs).
- G. Vendor shall provide along with their response a narrative regarding the procedures for reporting trouble including telephone number and email address for first, second and third level supervision and general maintenance overview.
- H. If required, Vendor shall provide guarantee of providing all hardware, firmware and software updates and patches for the proposed release versions until vendor production and support have ended.
- I. Describe how frequently system software updates or upgrades shall be available or provided to St. Charles County and identify any incremental cost to the County for such software updates or upgrades.
- J. Describe the proposed non-compliance penalty for failing to meet the support service level specified and system availability requirements.
- K. Vendor shall describe how system updates/upgrades can or shall be accomplished on the proposed system without taking the system out of service.

**5.74. System Upgrades**

- A. Vendors are encouraged to provide a support program designed to enhance the system and to keep the system fully operational for a period beyond the initial five (5) year term (Years 7+).
- B. If proposed, Vendor shall describe the support program and pricing accordingly.

**5.75. Out of Scope Enhancements**

- A. The vendor is encouraged to provide optional pricing for the addition of extra hardware, software or services which, in the vendor’s opinion, would significantly add to the reliability or robustness of the proposed system but which are not explicitly called for in this RFP.

## 6. TABLES

**6.1. Table 1: PSAP Breakdown**

Location	Call-Taker Only Positions	Dispatch Only Positions	Combined Position	Supervisors
Sheriff's Department			5	6
Dispatch and Alarm (secondary)			5	
City of St. Peters PD	1		2	
City of Wentzville PD			3	
City of O'Fallon PD		1	3	
City of Lake St. Louis PD			2	
Division of Emergency Management - Not Applicable – back-up site			2	
City of St. Charles			6	

**6.2. Table 2: Telephony and Logging Systems**

Location	Model	Version
Sheriff's Department	Nice	
Dispatch and Alarm (secondary)	Verint Audiolog	
City of St. Peters PD	Oaisys Tracer	4.1.3.5
City of Wentzville PD	Eventide Mediaworks	1.9
City of O'Fallon PD	BusCom Audiolog	
City of Lake St. Louis PD	Verint Audiolog	5
Division of Emergency Management	Not applicable	
City of St. Charles	Eventide	VR-778

**6.3. Table 3: Computer Aided Dispatch**

<b>Location</b>	<b>Vendor</b>	<b>Modules</b>	<b>Version</b>
Sheriff's Department	ITI	CAD	4.21.1.0
Dispatch and Alarm (secondary)	TriTech	CAD, AVL/MD	5.4
City of St. Peters PD	PAMET	CAD	4.1.3.5
City of Wentzville PD	ITI	CAD/RECORDS	
City of O'Fallon PD	ITI		4.21
City of Lake St. Louis PD			
Division of Emergency Management	Not applicable		
City of St. Charles	OSSI Sunguard	CAD/RMS/JMS	10.6.2.140

#### 6.4. Table 4: PSAP DEMOGRAPHIC SUMMARY<sup>(1)</sup>

Element	Totals	SCC Sheriff's Department	SCC Dispatch and Alarm (2)	St. Peters. City of	Wentzville. City of	O'Fallon, City of	Lake St. Louis, City of	St. Charles, City of	SCC Emergency Management (3)
PSAP Count	8	1	1	1	1	1	1	1	1
Workstation Count		5	5	3		4		6	
9-1-1 Trunks		4	4	3	3	3	2	4	2
Wireline		4	4	36 <sup>(5)</sup>	3	3	2	4	2
Wireless		0	0	0	0	0	0	0	0
Administrative Lines		6	6	4	5	5	2	4	
Population Served		94,360	368,666	54,078	32,198	81,979	18,210	66,463	
2012 9-1-1 Call Count	127,230 <sup>(4)</sup>	23,059	23,818	22,860	11,133	25,568	8,164	36,446	
2013 9-1-1 Call Count	123,543 <sup>(4)</sup>	22,245	23,787	21,990	11,490	24,113	7,430	36,275	
Agencies Served									
Law		1		1	3	1	2	1	x
Fire			x						x
EMS			x						x
Personnel		21	22	12		16	11	16	
Managers		1	2			1		1	
Supervisors		6	4	1	1	1	1	3	
Operators		14	16	11	14	14	7FT, 3 PT	15	

#### Notes

- 1) Vendor is advised to validate the data supplied for accuracy in reporting and Response pricing
- 2) Secondary PSAP
- 3) Emergency Backup
- 4) Primary Only
- 5) 8-line VOIP system, each line can handle 4 calls each