

County Alachua

**STATE OF FLORIDA E911 BOARD**  
**E911 STATE GRANT PROGRAM APPLICATION FORM**

Total Amount Requested: \$630,880

Project Title: Alachua County GIS Data Synchronization

1. **Board of County Commissioners Chair:** Robert Hutchinson

Mailing Address: 12 SE 1<sup>st</sup> Street  
2<sup>nd</sup> Floor  
City: Gainesville  
State: FL Zip: 32601 -   
Phone: ( 352 ) 264-6900 Fax:   
Email Address: BOCC@alachuacounty.us

2. **County 911 Coordinator:** A. Keith Godwin, ENP, CPM  
PO Box 5038

Mailing Address:   
City: Gainesville  
State: Florida Zip: 32627 - 5038  
Phone: ( 352 ) 338-7361 Fax: 352-374-5298  
Email Address: kgodwin@alachuacounty.us

3. **Federal Tax ID Number:** 59-6000501

County Alachua

COUNTY INFORMATION  
USE 12 POINT FONT OR LEGIBLE HAND PRINTING

**4. County Fact Information**

County Alachua

Population 266,820

Total Number of Incoming Non-wireless Trunks 7 primary PSAP; 6 backup PSAP

Total Number of Incoming Wireless Trunks 11 primary PSAP; 10 backup PSAP

Number of PSAP's Two (1 primary and 1 back up)

Number of Call- taking Positions per PSAP 12 Primary PSAP w/16 overflow; 10 backup PSAP

Total Volume of 911 Calls 144,000/year

What equipment is needed to provision the Enhanced 911 system?  
None.

What equipment is requested in this grant application?  
No equipment; GIS services.

Financial Information:

- 1.) What are the current annual costs for your E911 system (circuits, customer records hardware and software, etc.) not including maintenance?

\$200,484

- 2.) What are the current annual costs for maintenance of items included in 1?

\$119,500

- 3.) Total amount of E911 fee revenue received in the preceding year.

\$1,076,310 (FY19)

4.) Total amount of county carry forward funding retained in the preceding year.  
\$0.00 (FY18 & FY19)

5.) Current total amount of county carry forward funding?  
\$1,371,589 \* an  
amount of \$349,326.73  
is on the BoCC agenda  
for approval utilizing  
carry forward funds,  
thus reducing the carry  
forward balance to  
\$1,022,262.27

6.) Two year maximum calculated amount for applied carry forward funding  
Calculation (current year carry  
forward funding amount based on  
General Condition 5.12 multiplied  
by 2) \$645,786

7.) Minimum calculated amount for Applied Carry Forward Funding  
Calculation (amount in J.5.  
subtracted by amount in J.6.)  
Insert in Item 12. Budget/Quarterly  
Expenditure Report \$725,803

5. **Describe your county's existing E911 system. Include specific information on existing system equipment upgrades and when the installation of this equipment was completed.** Current 911 system is Solacom Guardian which went live 7 November 2018; the most recent system upgrade was November of 2019. The system is maintained by AK & Associates with a technician in the PSAP three days a week.

6. **Describe the scope of work for the proposed project including any goal(s) and objectives. Include the tasks to be performed as part of the project. Provide scope of work in quantifiable units of deliverables that shall be received and accepted. For each deliverable specify the required minimum level of service to be performed and the criteria for evaluating the successful completion of each deliverable.**

The scope of work requires a GIS professional services company to evaluate and correct all GIS resources used by the County 9-1-1 addressing authority to 98% accuracy. The RFP scope of work stated a respondent to the RFP would receive preference for providing a turn-key solution. Only Akimeka provided a response that, in addition to evaluation of MSAG, ALI, and local GIS data, included all necessary field research to investigate any discrepancies that could not be resolved utilizing other resources such as aerial imagery.

On February 27<sup>th</sup>, the RFP evaluation team reviewed and discussed the five (5) responses to the RFP during a public meeting held in the EOC. The evaluation team selected three (3) respondents to the RFP for further consideration.

On March 3<sup>rd</sup> and 4<sup>th</sup>, the RFP evaluation team participated in oral presentations from GeoComm, Akiemka, and Datamark/Michael Baker Intl, Inc.

On March 10<sup>th</sup>, the RFP evaluation team met during a public meeting and discussed the oral presentations. Based on the technical and written scores as well as the oral presentation scores, the evaluation team ranked the three (3) final respondents in the following order:

- 1) Akimeka, LLC
- 2) Geo-Comm, Inc
- 3) Datamark/Michael Baker International, Inc

Alachua County is preparing for NG9-1-1 and requires synchronization of the GIS, MSAG, and ALI data which is critical to support the accuracy required in locating callers to 9-1-1. Each one of these databases holds valuable information in identifying the exact location of a caller. It is imperative that Alachua County performs due diligence to ensure that the record reflected during a call is accurate within each of the three databases. If one data element is missing or incorrect, the possibility of having inaccurate information displayed increases. The current County GIS resources are insufficient to perform this level of detailed work, and outside support is necessary.

Alachua County is currently researching NG9-1-1 service providers, and developing a strategic plan to transition from a legacy local exchange carrier network to an ESInet (Emergency Services Internet Protocol Network). The 9-

1-1 database synchronization effort must be completed to make the transition to NG9-1-1, and will take at least 12-18 months to complete. Alachua County is requesting Florida E911 Board 911 grant funding as part of the county's strategic plan to transition to NG9-1-1.

The key elements of the project include:

Deliverable One: Topology cleanup: Line (road) segments shall be split on intersections, ESZ boundaries, and jurisdictional boundaries. Invalid dangle nodes should be removed. Coincident boundaries between polygons, eliminating gaps and overlaps. Coincident road network with road networks of seven (7) neighboring counties. Standard: 98% accuracy.

Deliverable Two: Creation of Emergency Service Boundary layers for Fire, Law, and EMS response as outlined in NENA Standard for NG9- 1-1 GIS Data Model (latest version). Creation of Provisioning Boundary as outlined in NENA Standard for NG9-1-1 GIS Data Model (latest version.) Ensure coincident edges of polygon with neighboring counties. Standard: 98% accuracy.

Deliverable Three: Update/correction of road centerlines layer to match MSAG. Adjust accordingly to achieve at least a 98% match. Populate Parity Left and Parity Right data fields. Reduce number of segments by merging road centerlines that do not need to be split (for example, merge segments if there is not a change in ESN/municipality).

Deliverable Four: Update/correction of address points layer to match ALI. Adjust accordingly to achieve at least a 98% match.

The County is aware that the above four (4) deliverables contain content that may be supported by the content of another deliverable phase. In all cases, the County has the final decision authority to pay the Contractor for any phase due to phase content being supported by another phase.

Provide monthly status reports describing all activity and progress during the performance period. Details within the reports will include any changes made to the MSAG, ALI, or GIS databases, as well as the summary of the impact of any changes. Reports will document the progress toward synchronization, including a synchronization report. Discuss coordination ideas to ensure daily work requests (new address and streets) are included and that the corrected GIS data is transitioned back into the County 911 Office working layers/SDE database.

As the Contractor manipulates the County 911 Office GIS data, the 911 Office staff are also creating and editing data. The Contractor must explain the coordination process between these two separate activities to avoid inconsistencies within any data fields.

**7. Justification of the need for the proposed project. Provide detailed information on the existing system's condition including a detailed justification for any system with an expected remaining life of less than 1 year on system, standalone equipment or Software (SW) replacement, addition or upgrade requests.**

A cursory analysis by Akimeka of the GIS to MSAG resulted in a match rate of 13.8%. After the community field was excluded, the GIS to MSAG match rate increased to 21.9%.

The County 9-1-1 Office is the addressing authority for unincorporated county, all municipalities, and the University of Florida. The three (3) GIS staff remain 100% confined to providing addressing services as well as roadway creation and investigating discrepancies throughout the county. There is not enough staff to conduct detailed analysis of the amount of discrepancies contained within the data to bring it to 98% accuracy.

Alachua County is preparing for NG9-1-1 and needs the synchronization of GIS, MSAG and ALI which is critical to support the accuracy required in locating 9-1-1 callers. Each one of these databases holds valuable information in identifying the exact location of a caller. It is imperative that Alachua County performs due diligence to ensure that the record reflected during a call is accurate within each of the three databases. If one data element is missing or incorrect in one of the databases, the possibility of having inaccurate information displayed increases. Again, the current County GIS resources are insufficient to perform this level of detailed work, and outside support is necessary.

**8. Describe why your county will not be able to complete this project without this grant funding.**

Alachua County is currently researching NG9-1-1 carriers and service providers, and developing a strategic plan to transition from a traditional local exchange carrier business model to an ESInet. All available evidence indicates that this transition and subsequent services will be extremely expensive, and that recurring costs may be as much as 15-25% higher than current system costs. After careful financial planning and analysis, county personnel have determined that the current carry forward balance may not be enough for this transition, and that current fund revenues may also be inadequate for future service costs. Therefore, the county is using all available fiscal

resources, including grant revenues, to accomplish this goal. The 911 database synchronization effort must be completed to make the transition to NG9-1-1, and will take at least a year to complete. Alachua County is requesting this funding as part of the county's strategic plan to transition to NG9-1-1.

Alachua County plans on utilizing carry forward funds, an amount between \$500,000 and \$800,000, as a one-time non-recurring amount to reduce the annual cost to acquire and maintain next generation core services and IP routing of 911 traffic.

Additionally, an amount of \$349,326.73 from carry forward funds is pending approval by the BoCC for the cost to support replacing the logging recorder.

With a current carry forward balance of \$1,371,589.00, and planned expenditures from the fund between \$849,326.73 and \$1,149,326.73, the need for grant funding is paramount to accomplish those items listed in the County five year plan as well as planned equipment replacement projects.

**9. Briefly describe how this grant project would conform with the State E911 Plan.**

The E911 Board has applied for and received approval for a federal grant which includes GIS services. This project is in concert with the E911 Boards plan to improve statewide GIS data.

Alachua County has an E9-1-1 system that is Phase II compliant, as defined in the State E9-1-1 Plan. Our goal with this requested grant is facilitating necessary data base corrections and GIS updates is to ensure that the county's E9-1-1 GIS files are continually maintaining compliance with the State E9-1-1 Plan data and mapping requirements for the safety and protection of our residents and visitors.

**10. Describe the required steps with an anticipated time schedule with procurement and payment milestones and a total project completion date.**

Deliverable One: Topology cleanup: Line (road) segments shall be split on intersections, ESZ boundaries, and jurisdictional boundaries. Invalid dangle nodes should be removed. Coincident boundaries between polygons, eliminating gaps and overlaps. Coincident road network with road networks of seven (7) neighboring counties. Standard: 98% accuracy.

Deliverable Two: Creation of Emergency Service Boundary layers for Fire, Law, and EMS response as outlined in NENA Standard for NG9- 1-1 GIS Data Model (latest version). Creation of Provisioning Boundary as outlined in NENA Standard for NG9-1-1 GIS Data Model (latest version.) Ensure coincident edges of polygon with neighboring counties. Standard: 98% accuracy.

Deliverable Three: Update/correction of road centerlines layer to match MSAG. Adjust accordingly to achieve at least a 98% match. Populate Parity Left and Parity Right data fields. Reduce number of segments by merging road centerlines that do not need to be split (for example, merge segments if there is not a change in ESN/municipality).

Deliverable Four: Update/correction of address points layer to match ALI. Adjust accordingly to achieve at least a 98% match.

The 9-1-1 MSAG and GIS Database Correction and Maintenance contract shall begin at time of awarded contract, indicated by the Project Kick-off (Date TBD). The timeline of current project with this grant funding is 12-18 months after time of award.

#### Payment Schedule

Contract signed by County *milestone one of three	2.5%
Project kickoff meeting *milestone two of three	2.5%
One of four deliverables received	30%
Two of four deliverables received	20%
Three of four deliverables received	20%
Four of four deliverables received	20%
Acceptance by County *milestone three of three	5%

- 11. If applicable, sole source justification must include sole source letter from county's purchasing department; see instruction 5.5.**



Not applicable

## 12. Budget/Quarterly Expenditure Report

Prepare an itemized Grant Budget ("Line Item" breakdown should include separated systems, i.e.; 911 system, logging recorder, centerline mapping, etc. and services items). The completed form shall be used to complete quarterly report requirements, listing expenditures and revisions {if any} in appropriate columns. If there is insufficient space, please include details in an attachment. **Budget costs should match requested vendor quote.**

<b>County:</b>	Alachua	<b>Grant Number:</b>		<b>Report Date:</b>	
----------------	---------	----------------------	--	---------------------	--

For Grant Period Ending:	<input type="checkbox"/> March 31	<input type="checkbox"/> June 20	<input type="checkbox"/> September 30	<input type="checkbox"/> December 31	Year:
--------------------------	-----------------------------------	----------------------------------	---------------------------------------	--------------------------------------	-------

Is This a Final Report? Yes ☐ No ☐

**(To request reimbursement please submit appendix IV)**

Proposed Budget					USE FOR QUARTERLY REPORTS	
Line Item –Provide detail itemized information	Unit Price (\$)	Quantity	Total Cost (\$)		Revised Budget	Total Cumulative Expenditures (\$)
A. Systems (Hardware, Software, Equipment & Labor)						
	Total System Items					
B. Services (Training, Maintenance and Warranty Items)  Geographic Information System (GIS), Master Street Address Guide (MSAG), and Automatic Location Identification (ALI) Database Corrections for Next Generation 9-1-1 (NG9-1-1)	\$630,880		\$630,880			

	Total Service Items	\$630,880		
Less any Applied County Carry Forward or other Funding (if applicable)		\$200,000		
	Grant Request Total	\$430,880		

USE FOR ALL REPORTS	
Total Amount of Grant Awarded	
Final Completion Date	

\_\_\_\_\_  
Signature, County 911 Coordinator

### 13. Assurances

ACCEPTANCE OF TERMS AND CONDITIONS: The grantee accepts all grant terms and conditions. Grantee understands that grants are contingent upon the availability of funds.

DISCLAIMER: The grantee certifies that the facts and information contained in this application and any attached documents are true and correct. A violation of this requirement may result in revocation of the grant and return of all grant funds and interest accrued (if any), pursuant to the E911 Board authority and any other remedy provided by law.

NOTIFICATION OF AWARDS: The grantee understands and accepts that the notice of award will be advertised on the Florida E911 website.

MAINTENANCE OF IMPROVEMENT AND EXPANSION: The grantee agrees that any improvement, expansion or other effect brought about in whole or part by grant funds will be maintained. No substantial changes or departures from the original proposal shall be permitted unless the E911 Board gives prior written authorization. Any unauthorized change will necessitate the return of grant funds, and accrued interest (if any) to the E911 Board.

Failure to utilize grant funds as represented may jeopardize eligibility to be considered for future funding.

### 14. Authority

I hereby affirm my authority and responsibility for the use of funds requested.

\_\_\_\_\_  
SIGNATURE – CHAIR, BOARD OF COUNTY COMMISSIONERS      DATE  
or COUNTY MANAGER

Robert Hutchinson  
Printed Name

Chair  
Position

## ***Appendix I***

**NO requests for funding will be acknowledged for any items not specified in Section 365.172, Florida Statutes, Emergency communication number “E911”; paragraph (10) (shown below).**

Section 365.172 (10), Florida Statutes

### **AUTHORIZED EXPENDITURES OF E911 FEE.—**

- (a) For purposes of this section, E911 service includes the functions of database management, call taking, location verification, and call transfer. Department of Health certification, recertification, and training costs for 911 public safety telecommunications, including dispatching, are functions of 911 services.
- (b) All costs directly attributable to the establishment or provision of E911 service and contracting for E911 services are eligible for expenditure of moneys derived from imposition of the fee authorized by subsections (8) and (9). These costs include the acquisition, implementation, and maintenance of Public Safety Answering Point (PSAP) equipment and E911 service features, as defined in the providers' published schedules or the acquisition, installation, and maintenance of other E911 equipment, including circuits; call answering equipment; call transfer equipment; ANI or ALI controllers; ANI or ALI displays; station instruments; E911 telecommunications systems; visual call information and storage devices; recording equipment; telephone devices and other equipment for the hearing impaired used in the E911 system; PSAP backup power systems; consoles; automatic call distributors, and interfaces, including hardware and software, for computer-aided dispatch (CAD) systems; integrated CAD systems for that portion of the systems used for E911 call taking; GIS system and software equipment and information displays; network clocks; salary and associated expenses for E911 call takers for that portion of their time spent taking and transferring E911 calls, salary, and associated expenses for a county to employ a full-time equivalent E911 coordinator position and a full-time equivalent mapping or geographical data position, and technical system maintenance, database, and administration personnel for the portion of their time spent administering the E911 system; emergency medical, fire, and law enforcement prearrival instruction software; charts and training costs; training costs for PSAP call takers, supervisors, and managers in the proper methods and techniques used in taking and transferring E911 calls, costs to train and educate PSAP employees regarding E911 service or E911 equipment, including fees collected by the Department of Health for the certification and recertification of 911 public safety Telecommunicator's as required under s. [401.465](#); and expenses required to develop and maintain all information, including ALI and ANI databases and other information source repositories, necessary to properly inform call takers as to location address, type of emergency, and other information directly relevant to the E911 call-taking and transferring function. Moneys derived from the fee may also be used for next-generation E911 network services, next-generation E911 database services, next-generation E911 equipment, and wireless E911 routing systems.

(c) The moneys should not be used to pay for any item not listed in this subsection, including, but not limited to, any or operational costs for emergency responses. Even any which occur after the call transfer to the responding public safety entity and the costs for constructing, leasing, maintaining, or renovating buildings, except for those building modifications necessary to maintain the security and environmental integrity of the PSAP and E911 equipment rooms.

## Appendix II

## Request for Change

---

---

BUDGET LINE ITEM	CHANGE FROM	CHANGE TO
TOTAL	\$	\$

Justification For Change:
---------------------------

Signature of Authorized Official

Da

**For E911 Board use only.**

Approved: Yes ☐ No ☐

### E911 Board's Authorized Representative

---

Date

**Appendix III**

**Quarterly Status Report**

**County:**

\_\_\_\_\_

**Grant Number:**

\_\_\_\_\_

**Report Date:**

\_\_\_\_\_

**Grant Period Ending:**

\_\_\_\_\_

**Project Status Update:**

**Problems/Delays:**

\_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Date

## Appendix IV Financial Reimbursement of Expenditures Reporting Form

Prepare an itemized request for reimbursement expenditures in each budget categories for each deliverable. Attach copies of purchase orders and paid vouchers, invoices, copies of checks, journal transfers, required for expenditure justifications. If there is insufficient space, please include details in an attachment.

County:	Grant Number:	Request Number:	Request Date:
---------	---------------	-----------------	---------------

Budget Categories						
Deliverable Items	Unit Price (\$)	Quantity	Total Amount (\$)		Previous Request Amount (\$)	Current Request Amount (\$)
A. Systems (Hardware, Software, Equipment & Labor)						
B. Services (Training, Maintenance and Warranty Items)						
<b>Grant Request Total</b>						

<b>Request payment of funding (if applicable)</b>	<input type="checkbox"/>
Justification of payment funding need:	

\_\_\_\_\_  
Signature, County 911 Coordinator



## Addendum I

### Funding Priorities for the E911 State Grant Program

The criteria for determining acceptability for disbursement of funds from the State of Florida E911 State Grant Program will be made on a PRIORITY basis. There will be nine (7) priorities as identified below:

- PRIORITY 1: Primary and/or Secondary PSAP systems that require immediate system replacement to provision enhanced 911 status or when the expected remaining life of the system is less than 1 year.
- PRIORITY 2: Systems that require new or replacement of critical or necessary hardware or software. This may include the following Primary and/or secondary PSAPs system equipment, listed in order of funding priority a-h:
- a. Hardware and software for communications or terminal equipment located at a PSAP for 911 call processing, ANI and ALI display and call answering.
  - b. Lightning Protection Equipment
  - c. Uninterruptible Power Supply system and or Generator
  - d. E911 Logging Equipment
  - e. County E911 Standalone ALI Database Equipment
  - f. E911 Map Display Equipment
  - g. New additional 911 Call Taker Position Equipment
  - h. Net clock
- PRIORITY 3: Consolidation of E911 PSAPs, which decreases the number of Primary or Secondary PSAPs in the county by a minimum of one. This may include regional consolidated backup systems for counties consolidating backup systems for two or more counties.
- PRIORITY 4: Mapping system and services necessary for provisioning Geographic Information Systems (GIS). This may include the following, listed in order of funding priority a through c:
- a. E911 Map System Equipment - E911 map generation hardware and software licensing is limited to components for two stations
  - b. GIS Centerline, point generation and map accuracy systems
  - c. GIS Data support
- PRIORITY 5: Development and maintenance of 911 routing statewide, geographic, and management information systems. (Funded by Prepaid wireless)
- PRIORITY 6: NG-911 Equipment and Services.
- PRIORITY 7: Backup system equipment (see Priority 2)
- PRIORITY 8: Aerial Photography / Imaging
- Overhead (Nadir) images

PRIORITY 9: Infrastructure cabling and building entrance buildout cost.

PRIORITY 10: 911 call taker workstation console/furniture (the portion related to 911 )  
Telecommunicator Workstation Console / Furniture

Regional E911 system project requests related to systems and equipment will be considered the highest priority within each priority category.

Grants awards will be funded in order of priority assigned.