

## 911 Public Safety Radio System

**Category:** 911 Communications

**Location:** County Wide

**Estimated Cost:** \$18,211,536

### Project Description

Fayette County currently is operating a Motorola 800MHz ASTRO Simulcast system, which was purchased in December 2002. The County Public Safety Radio System consist of a single PSAP with ten (10) workstations; six (6) telecommunicator workstations; and two (2) 911 and CAD workstations able to communicate via radio with the County Sherriff, five (5) local law enforcement agencies, three (3) fire agencies and two (2) emergency medical service providers. The public safety system consists of ten (10) channels and seven (7) cell towers and communicates with approximately 1,800 mobile and portable radios. The primary tower located behind the 911 Center at 110 Volunteer Way. The project was implemented and serviced by Diversified Electronics from Forest Park, Georgia.

The existing public safety radio system contains many components that are nearing their end of life. Fayette County is in the early stages of a comprehensive needs assessment to upgrade and/or replace the existing radio system with state of the art system based on the current market of the industry. Once this is completed, the County will determine which approach is best suited for Fayette County.

### Porter Road



### Highway 54



### Peachtree City Town Hall



# 911 Communications

## Benefits

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To improve the current Motorola 800MHz ASTRO Simulcast radio system with a state of the art system based on the current market of the industry through a phase proposal, to determine which approach is best suited for Fayette County – upgrade and/or replacement.

## Needs Assessment

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**Background:** Fayette County currently is operating a Motorola 800MHz ASTRO Simulcast system, which was purchased in December 2002. The County Public Safety Radio System consist of a single PSAP with ten (10) workstations; six (6) telecommunicator workstations; and two (2) 911 and CAD workstations able to communicate via radio with the County Sherriff, five (5) local law enforcement agencies, three (3) fire agencies and two (2) emergency medical service providers. The public safety system consists of ten (10) channels and seven (7) cell towers and communicates with approximately 1,800 mobile and portable radios. The primary tower is located behind the 911 Center at 110 Volunteer Way. The project was implemented and serviced by Diversified Electronics from Forest Park, Georgia.

**Objective:** The existing public safety radio system contains many components that are nearing their end of life. Fayette County is in the early stages of a comprehensive needs assessment to upgrade and/or replace the existing radio system with a state of the art system based on the current market of the industry. Once this is completed, the County will determine which approach is best suited for Fayette County.

The estimated cost to upgrade and/or replace the existing 911 Public Safety Radio System is \$18,211,536, detailed below:

### 911 Public Safety Radio System – Capital Improvement Program (CIP) Plan

# of Projects	Source Funding	Department	Funding Source	Project Description	Total CIP Plan
7	100	Bldg & Grounds	375	Radio Replacements	71,316
12	100	EMA	375	Radio Replacements	29,800
48	100	Road	375	Radio Replacements	142,091
55	100	Sheriff	375	Radio Replacements (141 Dual Band Mobile)	944,700
56	100	Sheriff	375	Radio Replacements (245 Portable)	1,058,829
66	270	Fire	375	Radio Replacements	562,300
70	272	EMS	375	Radio Replacements	252,500
New	505	Water	505	Radio Replacements	150,000
<b>Radio Replacements</b>					<b>\$3,211,536</b>
57	215	E911	375	Trucked Public Safety Radio System	15,000,000
<b>Public Safety Radio Project</b>					<b>\$15,000,000</b>
<b>911 Public Safety Radio Project</b>					<b>\$18,211,536</b>

The timetable for Fayette County to fully implement this public safety radio system is three years. Outlined below are the expected phases:

Phase	Begin	End	Days	911 Center	Radio(s)
Phase I	01/01/2016	12/31/2016	365	80%	20%
Phase II	12/31/2016	07/01/2017	182	60%	40%
Phase III	07/01/2017	12/31/2017	183	40%	60%
Phase IV	12/31/2017	07/01/2018	182	20%	80%

### **Phase I – Needs Assessment and Request for Proposal (RFP) Development**

Fayette County needs assessment will include all aspects of the public safety community, as we evaluate our mission-critical public safety radio system needs for the future. Public safety radio systems are complex and expensive to upgrade and/or replace. First responders are challenged with critical service delivery and must rely upon sophisticated safety features, such as emergency notification, “caller identification,” and multiple channels or talk groups for each incident response. The scope of service will include the following areas:

- Select a consultant to assist the County in replacing and/or upgrading public safety radio system to meet a deadline of July 1, 2018.
- Meet with stakeholders to document their needs and expectations to gain a complete understanding of the desired functionality for the new system.
- Tour and appraise any physical locations such as tower sites and local emergency service providers if needed to understand elements of the current system and inventory equipment.
- Facilitate discussions and guide decision making process among stakeholders to build consensus around required and optional system elements to maximize stakeholder buy-in.
- Review County’s RFP template and contracting process with the County’s Project Management Team to gain a full understanding of how the County intends to carry out this public procurement.
- Prepare a written scope of work detailing system requirements and specifications in a manner that can be integrated into the County’s RFP template.
- Utilize best practices and professional knowledge of 911 industry to determine and ensure the County’s current and future interoperability requirements are addressed in the scope of work.
- Develop a Scope of Services to solicit the type of critical information from potential Radio System vendors necessary to allow the County to comprehensively evaluate and compare proposals received so as to arrive at an informed decision and recommendation.
- Coordinate and lead any mandatory pre-bid site visits.
- Evaluate the current Motorola 4.1, 800 MHz system including tower sites, radio consoles, mobiles, and portables.

- Determine equipment needs for municipalities to ensure compatibility with the new system on a case by case basis.
- Review existing Motorola service agreements.
- Evaluation of voice and data functionality.
- Evaluation of equipment migration.
- Meeting with all Users groups – interoperability; capacity and expectations.
- Assessment of equipment compliance.
- Optimizing existing radio system – staffing, training, and equipment.

### **Phase II – Proposal Evaluation and Contractor Selection**

- Consultant would be excluding from bidding on public safety radio system and prohibited from colluding with any potential radio system contractors.
- Evaluate and score each proposal based on established evaluation criteria, providing an analysis identifying any advantages or concerns found in any of the proposals.
- Coordinate vendor presentations that may be necessary and independently score and evaluate each presentation and vendor.
- Consultant will be available to interpret, clarify, and discuss material in submitted proposals and presentations, with the proposal evaluation team, and provide professional opinions and advice to the evaluation team throughout the vendor selection process.

### **Phase III – Project Management during System Implementation**

- Conduct, organize, coordinate, and invite stakeholders to a project kickoff meeting with the selected provider.
- Coordinate activities and manage communications between Provider and stakeholders.
- Consultant will provide project management services to County throughout the implementation to ensure Contractor’s adherence to the established scope of work, schedule, and budget.
- During implementation, Consultant will prepare and submit a weekly progress report to the County. Updates to provide high level update and schedule of upcoming activities that can easily be copied into regular communications to project stakeholders to be distributed by the County and document action items, responsible parties, and highlight any areas of concern pertaining to the scope of work, schedule, budget, or Contractor performance.
- Address contract obligation issues or concerns that may develop through implementation and work to resolve them.
- Consultant will review all Provider payment request and respond to the County within three (3) business days with an updated financial overview and note to the County affirming invoiced costs are reasonable and cover work which has been performed in accordance with the contract requirements.

- Throughout implementation, Consultant will develop and maintain a punch list of outstanding items that Contractor, County and/or local emergency service providers are held accountable.
- Ensure system testing is conducted and that all training requirements are met.

#### **Phase IV – Post Cut-over Monitoring**

- For three (3) months following cut-over, Consultant will serve as the point of contact to the County and local emergency service providers for reporting all radio system performance issues.
- Consultant will document, prioritize, and investigate each issue, then identify the likely root cause, possible solutions, and the party responsible for resolving the issue. List of resolved and unresolved issues with the above information must be sent to the County on a weekly basis.
- Consultant will work with and coordinate activities of responsible parties to attempt a resolution of each issue reported with the new radio system.
- Consultant is expected to build radio system performance guarantees into the Contractor's scope of work and ensure that Contractor has contractual responsibility and capacity to resolve radio system performance issue and provide routine maintenance to the system in a timely manner.
- At the end of three (3) months monitoring period following cut-over, Consultant will provide a final report to the County documenting the status of all issues reported since cut-over. Any outstanding issues must have the root cause, potential solution and responsible party documented.
- Based on this report, with mutual agreement in writing, the County and Consultant may extend this contract to allow Consultant to continue coordinating efforts with responsible parties to resolve any outstanding issues.