

**Request for Proposal (RFP)**  
**Communications System Upgrade**

**City of Taylorsville**

**Spencer County, Ky**

**June 24, 2025**

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# 1 Summary

The City of Taylorsville, Kentucky is soliciting proposals from qualified firms to provide a new, commercial-grade two-way digital land mobile radio system that meets or exceeds the needs and functional requirements of the system users. The selected respondent, in conjunction with Spencer County personnel, must engineer, furnish, configure, and provide commissioning support for the new digital radio system. Any deviation from the requirements must be specifically noted as an exception in the Proposal. City of Taylorsville must have the sole authority to determine compliance with the stated system requirements and the acceptability of any stated exception(s).

## 2 Background

### 2.1 Existing Two-Way Radio System (Spencer County)

City of Taylorsville currently operates a two-way analog and digital land mobile radio system. The system operates on a 136-174 MHz (VHF) frequency, licensed under the FCC. The frequency must be re-used by the new City of Taylorsville Public Safety System. The existing system provides communication across the county using a repeater at the Hunter Road. The individual radios currently in use are Kenwood but vary by features/functions and age. There is an existing opportunity to consolidate and modernize the radio infrastructure and standardize the inventory of mobile and portable radios.

### 2.2 New Two-Way Radio System

The new radio system will replace the legacy digital/analog system. The new system must improve reliability, ease-of-use and operational costs. The new digital radio system will be capable of providing new communication functions and features and will operate at greater spectral efficiency. To the extent possible, the build-out of the new digital land mobile radio system will utilize existing infrastructure including existing buildings and tower structures. The system will be interconnected through microwave systems.

The future system, at a minimum, should provide everything that the current system provides. In addition, the new system must provide:

- Improved Coverage
- Increased Capacity
- Subscriber Unit Standardization
- Enhanced features and functionality

## 3 Proposal Guidelines

### 3.1 General

Proposals must contain the information requested and must be in sufficient form and detail to enable comprehensive understanding and analysis. Prior to evaluation, fire district personnel may review proposals to determine compliance with preparation instructions, terms and conditions, and other administrative conditions. Failure to comply with the requirements of this solicitation may cause a proposal to be rejected without further consideration.

### 3.2 Qualifications

Bidders should provide the following items as part of their proposal for consideration:

- Description of experience in planning, building, and hosting corporate communications systems
- Testimonials from past clients on communications system building and hosting work

### 3.3 Budget

All proposals must include proposed costs to complete the tasks described in the project scope. Costs should be stated as one-time or non-recurring costs (NRC) or monthly recurring costs (MRC). Pricing should be listed for each of the following items, at a minimum:

- Project Initiation and Planning
- Infrastructure Equipment
- Subscriber Equipment (Installation and Accessories must be included)
- Site Development
- Site Testing
- Site Deployment
- FCC Licensing
- Acceptance Testing
- System Commissioning

NOTE: All costs and fees must be clearly described in each proposal.

## 4 Scope and Requirements

### 4.1 Project Scope

The following items are included in the scope of the proposal:

1. Provide all new equipment needed to deploy the new digital land mobile radio system infrastructure, including:
  - New antennas and transmission feed lines at all repeater sites.
  - Antenna combining systems for all repeater sites. Combiners will be configured for frequencies within the 136-174MHz band.
2. Provide new digital mobile and portable radios and other user equipment as required.

### 4.2 General Requirements

All equipment and services offered must be of high quality and suitable for the intended purpose. No discontinued, used, or refurbished equipment may be supplied. The respondent must be an authorized sales and service agency for the equipment being offered. All equipment and devices proposed must be current models with full manufacturer support.

### 4.3 Operational Requirements

The new system must provide fault tolerant, highly reliable, high-quality, minimum latency 2-way communications throughout the service area. The system architecture must provide the radio user transparent communications across the entire area of coverage.

### 4.4 Technical Requirements

#### 4.4.1 Infrastructure

The system shall be 1 Channel 3 site P25 simulcast. The radio system must be fully compliant with Project 25, APCO 25 or P25 standards. System should be capable of supporting voice, GPS, texting, and low speed data services. The system must be capable of supporting interoperability with other digital land mobile push-to-talk (PTT) radio applications. The system shall be replacing existing dispatch channels. The system shall provide 95% coverage at street level through a mobile radio in the county. The system shall be 1 channel. The backhaul links must be licensed microwave in the 6, 11, or 18 GHz spectrums.

Equipment provided at each RF site must consist of base stations and all other associated hardware and software for the proposed system. The site equipment must be expandable to accommodate future radio channels and users. All transmitting and receiving equipment must be capable of 100% continuous duty cycle operation. Equipment must be housed in standard 19-inch racks. All hardware and software necessary to perform the functions and to meet the system requirements shall be provided and housed in these racks.

Each site must be fault tolerant and include a minimum of four (4) hours of backup power for all equipment.

##### 4.4.1.1 Installation and Grounding

All site installations must conform to the most current codes for construction, fire, electrical, grounding / bonding and lightning protection.

##### 4.4.1.2 Repeaters/Base Stations

All repeater and base station equipment must comply with the same P25 standards listed above, and meet the minimum operational requirements listed in the table below.

REPEATERS AND BASE STATIONS	
Frequency Range	VHF: 136-174 MHz
Channel Capacity - Waving this requirement	1000
Zone Capacity - Waving this requirement	50
Channel Spacing	12.5 KHz
Power Supply	120 VAC /13.6 V $\pm$ 15%
Frequency Stability	$\pm$ 0.5 ppm
RF Power Output	High 45-50 Watts; Low 2-25 Watts
Receiver Sensitivity (Digital)	0.20-0.25 $\mu$ V/ BER 5%

#### 4.4.1.3 Antenna Systems

Suppliers must submit recommendations for antenna design with required antenna types. Combiners, as required, must be designed to accommodate each site with assigned frequency pairs. Transmission lines must be constructed from one continuous length of low-loss dielectric coaxial cable. Depending on the length of the transmission line required at a site, the Supplier must provide recommendation of types of line that may be used for transmitting and receiving, connectors, grounding kits, cable hangers, cable hoisting grips and/or any other type of materials required.

#### 4.4.1.4 Dispatch Interface

The equipment proposed must connect to the dispatch consoles at the designated dispatch center.

#### 4.4.1.5 System Management

Base station and associated equipment must be capable of secure remote network diagnostics, management, and control, including firmware/software upgrades/ patches, and user access lists. The system management device must run on a currently supported, modern, commercial-grade operating system.

### 4.4.2 Coverage Requirements

The system must provide the ability to place and receive calls to and from any point in the network covered by the P25 repeater sites. All sites shall be linked to the area wide radio network by means of microwave transport. Suppliers must state the backhaul requirements for each repeater site i.e., needed data throughput, latency, jitter, etc. Proposals shall include:

- Detailed description of sites analyzed.
- Detailed description of sites selected.
- RF Coverage predictions for each site, as well as a combined prediction that includes all sites.
- Backhaul network performance analysis.

#### **4.5 Project Management**

Supplier will be responsible for assigning a Project Manager or Specialist to work directly with the City Project point of contact. The Project Manager will coordinate all project activities and provide necessary documentation throughout each phase of the project's life cycle.

#### **4.6 Project Engineering**

Supplier will provide a Responsible Engineer to provide all necessary design documentation and perform or assist with functional testing.

#### **4.7 Maintenance and Support**

##### **4.7.1 Warranty**

Proposals shall include detailed information on the warranty of infrastructure and subscriber equipment including start and end of warranty period. Bidders shall provide a warranty list for all products involved with the project, including serial numbers where applicable.

##### **4.7.2 Maintenance**

Proposals shall include pricing for a maintenance contract to commence upon the expiration of the warranty period. The maintenance contract shall include 24/7/365 support and include all necessary spare equipment. Pricing shall be for a period of one year and include an option for two- and three-year periods.

### **5 Evaluation of Proposals**

Proposals must contain the information requested and shall be in sufficient form and detail to allow a comprehensive understanding and analysis. Prior to evaluation, City personnel may review proposals to determine compliance with preparation instructions, terms and conditions and other administrative conditions. Failure to comply with the requirements of this solicitation may cause a proposal to be rejected without further consideration. In comparing proposals and making awards, City of Taylorsville will evaluate the following, at minimum:

#### **5.1 Company Background**

Bidders shall include a brief history of the company, and any comparable projects completed.

#### **5.2 Liability**

Bidders must provide a certificate of liability insurance of at least \$1 million dollars.

#### **5.3 Specification Compliance**

Proposals shall meet the technical specifications outlined in Section 4 of this document.

#### **5.4 Overall Cost**

#### **5.5 Bid Submission**

Bids must be submitted within the guidelines and timeframe outlined in this document.

We may consider various factors in addition to cost, such as relative quality and adaptability of supplies or services, financial responsibility, skill, experience, past performance, record of integrity in dealing, technical capability, and time of delivery.

## **6 Solicitation Schedule**

EVENT	DATE
Issue RFP	
Mandatory Pre-Bid Meeting	
Proposal Due Date	
Anticipated Award Date	

\* Note: Proposed dates are subject to change. Bidders will be notified of any changes in the solicitation schedule.

## **7 Terms and Conditions**

### **SECTION I - BIDDER QUALIFICATIONS**

Prospective bidders must attend the mandatory pre-bid meeting as listed in Section 6 Solicitation Schedule.

The opening and reading of a proposal shall not be construed as an acceptance of the bidder as a qualified, responsible bidder. We reserve the right to determine the competence and responsibility of a bidder from its knowledge of the bidder's qualifications or from other sources. We shall require submission with the Proposal of the following supporting data regarding the qualifications of the bidder to determine whether it is a qualified, responsible bidder.

The vendor/contractor shall have substantial experience (a minimum of twenty (20) years of preferred experience) dealing with public safety communications, in the installation and service of complex two-way radio systems.

Responses must include a complete resume of the service and installation agency proposed. It shall detail the company's experience in the installation and maintenance of the bidder's product.

Selection of the vendor/contractor will not be based solely on price. The proposals will be evaluated according to the following criteria: (a) prior experience; (b) price; (c) qualifications; (d) references; (e) compatibility of new equipment with existing equipment; (f) switch over plan (lack of any down time); (g) record of service after installation; (h) overall benefit to Spencer County, and (i) any other factors deemed relevant by Spencer County.

### **SECTION II - SUBCONTRACTORS**

Bidders must list in their proposal the names, addresses and telephone numbers of each subcontractor the bidder intends to employ in the installation and ongoing maintenance of the equipment. Complete resumes of these service and installation agencies shall be included to establish the competency of the subcontractor.

We reserve the right to reject any subcontractors. Should a subcontractor be rejected the bidder will be required to provide an acceptable alternative. Failure to provide acceptable subcontractors shall be cause for rejection of the bid.



Should a subcontractor fail to provide the established level of service and response, the primary vendor/contractor must contract with another agency for these services in a timely fashion. Any additional costs associated with securing a competent subcontractor shall be the sole responsibility of the prime vendor/contractor.

### **SECTION III - INSTRUCTIONS TO BIDDERS**

Read all documents contained in the bid specifications.

Sealed bids will be received in person until: **July 21, 2025, at 12:00 pm** EST., at which time they will be opened and read aloud. Bidders are responsible for submitting their bids to the appropriate location on or prior to the time indicated in these instructions. No bid shall be accepted after the due date and time.

The following forms must be submitted for this bid.

The Proposal and Bid Form.

Qualifications as described in Section I - Bidders Qualifications.

List of Subcontractors as described in Section II - Subcontractors.

We require three (3) copies of all Bid response documentation to be submitted. All bids must be filled out in ink or typewritten. Bids submitted in pencil will be rejected as unresponsive. Bids, which have been corrected by white out or cross out, and have not been initialed and dated, will be rejected as unresponsive.

Each bid shall be enclosed in a sealed envelope bearing the name of the project, Name of the submitting firm, and the bid due date and time. Failure to do so may result in rejection of the bid as being unresponsive.

We reserve the right to reject any or all bids, to waive any irregularities and/or informalities in the bids, to reject any and all bids or parts of any and all bids for any one or more supplies or contractual services included in the bid, when such rejection is in the best interest of the fire district, and to make an award in any manner consistent with the law deemed to be in the best interest.

The contract will be awarded to the BEST, RESPONSIBLE BIDDER. (A responsible bidder is a manufacturer, producer, vendor, dealer, or bona fide manufacturers agent who has demonstrated judgment and integrity, is of good reputation, experienced in their work, whose record of past performance in the trade is established as satisfactory, and whose financial status is such to provide no risk to the fire district in its contractual relations.)

Any bidder may withdraw their bid, either in person or by written request, any time prior to the scheduled date and time of bid opening.

Upon acceptance of any bid, the successful bidder shall execute a contract, in accordance with the specifications, with fire district.

Bidders are responsible for reporting, in writing, any errors or questions in the bid specifications to:

Questions or clarifications regarding the technical specifications must be made in writing, on **or before July 14, 2025**. Verbal questions will not be entertained. The Police Chief's Office will respond in writing 72 hours prior to the bid opening.

Specifications may be viewed in person or may be examined at:

Or for a copy to be mailed to you, call 502-4773230 and speak with the Police Chief and/or her designee shall be the only ones authorized to make changes or alterations to anything contained in these specifications. Such changes or alterations shall be made in writing to all interested bidders who have previously provided a mailing address to City.

Any bidder, vendor/contractor, or manufacturer who, in the course of their work, uses or supplies products which may be toxic or harmful, shall provide MSDS material sheets to Andrew Hires prior to the use of those products by City or the vendor/contractor.

Bidders who are required to adhere to the prevailing wage schedule shall obtain and maintain a current schedule from the Insert name for the entire term of the contract. City of Taylorsville may audit adherence to this schedule at any time during or after the contract period.

## **SECTION V - GENERAL REQUIREMENTS**

### **Insurance**

Before execution of the contract by the vendor/contractor, the vendor/contractor shall provide at its own expense proof of the following insurance coverage:

### **Workers' Compensation**

Statutory Workers Compensation coverage, in compliance with the Insurance Law of the State of Kentucky

### **General Liability**

Coverage in the comprehensive general liability form including blanket contractual coverage for the operation of the program under this agreement in the maximum amount of \$1,000,000.00. This insurance shall include coverage for bodily injury and property damage. The City of Taylorsville must be listed as an additional named insured.

### **Automobile and Vehicle**

Automobile liability insurance coverage for all owned, leased, or non-owned vehicles in the amount of \$1,000,000.00 per occurrence. This insurance shall include coverage for bodily injury and property damage. The Spencer County must be listed as an additional named insured.

### **State Labor Law**

Rates will be available upon request. This project is "Public Work" and is subject to all provisions contained in the Kentucky State Labor Law. Any Vendor/Contractor submitting a bid on this project shall acknowledge that said project is "Public Work", shall agree to comply with all the provisions of the Labor Law, including but not limited to prevailing wages as defined in said law, to all laborers, workers and mechanics, and shall require all subcontractors to do the same.

In order to insure compliance with these provisions, fire district shall be entitled to review and audit the vendors/contractors payroll records from time to time, receive certified copies of payrolls, and may require the vendor/contractor to make said records available to us, either at the vendor/contractors place of business or, at the option of the county, city, and fire district, to submit certified copies with requests for payment or at such other times as we may require.

Each bidder must provide an affirmative statement that the bidder has not been found guilty of a willful violation of the Kentucky State Labor Law for failure to pay prevailing wages and supplements, as defined by the Kentucky State Labor Law, within the twelve (12) months immediately preceding the submission of the bid.

If the vendor/contractor should fail, in one or more instances, to pay the prevailing wages and supplements in accordance with the Kentucky State Labor Law should be considered a material breach of the contract.

In the event the vendor/contractor violates the Kentucky State Labor Law, We shall have the option of terminating the contract immediately on notice to the vendor/contractor in addition of any other rights or remedies we may have included but not limited to civil or criminal penalties.

The conditions contained herein are designed to encourage compliance with the Labor Law and to provide a greater means to detect violations. In the event violations are detected, either by county, city, fire district or other agency, the remedies contained in said law shall be exclusive and shall not create any obligations by us to enforce said law on behalf of anyone nor create any rights on behalf of anyone against the fire district.

### **Taxes**

This is a tax-exempt organization and will take title to materials used in the project to permit tax exemption. We will furnish a certificate with the Tax Exemption Number to the Vendor/Contractor for use in purchasing tangible property required for the project.

### **Payment Schedule and Pricing**

The bidder and City will mutually agree upon a payment schedule during contract negotiations.

### **Standards**

Only new equipment of the latest design in current production will be considered. Under no condition will the equipment under development and without proven Beta test on all proposed features be considered. Only equipment that meets current industry standards will be considered. All equipment shall meet or exceed the latest industry standards as specified by Federal Communications Commission, Electronic Industries Alliance, Telecommunications Industry Association, Underwriters laboratories, Inc, American National Standards Institute, National Electrical Manufacturers Association, National Emergency Number Association, National Fire Protection Association, Institute of Electrical and Electronics Engineers, Inc.

### **Safety**

The Bidder shall be familiar with and operate within the most recent guidelines set forth by the Occupational Safety and Health Act. (OSHA)

### **Quality**

All equipment provided shall be of the highest professional quality and reliability. All materials shall be new and the best of their respective kinds, free of any defects, physical or electrical. Design and construction shall be consistent with the highest engineering practice, performed in a neat and craftsman-like manner.

### **Contact Information**

A list of personnel involved in all aspects of the project shall be provided. This list shall include each of the names, addresses, telephone and fax numbers, pager numbers, and cell phone numbers of those involved.

**Submission**

Within twenty (20) working days from the award of the contract for their work, the vendor/contractor shall submit to the fire district for approval a schedule of all relevant work required for the coordination and execution of their work.