

General Instructions

1. Completion of the Cost Proposal is MANDATORY. The workbook provided does not contain any pre-populated formulas. **BIDDER IS RESPONSIBLE FOR THE ACCURACY OF ALL DATA AND ALL TOTALS, INCLUDING ANY ERRORS OR OMISSIONS WITHIN THEIR FORMULAS.**
2. **“System”** refers to the new City public safety Project 25 (P25) system. "OPTIONAL" designates a requirement for a product or service that requires a Bidder response but does not obligate the City to purchase the good or service. **IT IS NOT OPTIONAL FOR BIDDER TO PRICE IT, AND BIDDER SHALL COMPLETE ALL TABS IN THE PRICING ATTACHMENT.**
3. The cost workbook contains the following 8 tables, each in separate spreadsheet tabs:
 - a. TABLE 1 – TOTAL PRICE SUMMARY
 - b. TABLE 2 – SYSTEM SITES EQUIPMENT
 - c. TABLE 3 – SPARE AND TEST EQUIPMENT
 - d. TABLE 4 – IMPLEMENTATION SERVICES
 - e. TABLE 5 – SUBSCRIBER EQUIPMENT
 - f. TABLE 6 – OPTIONAL SYSTEM SUPPORT
 - g. TABLE 7 – OPTIONAL SUBSCRIBERS AND FEATURES
 - h. TABLE 8 – OPTIONAL FEATURES AND COMPONENTS
4. Bidder shall enter their company name at the top of each table.

Table 1 TOTAL PRICE SUMMARY

1. This pricing worksheet is composed of the following tables:
 - a. TABLE 1.A – SYSTEM PRICE SUMMARY
 - b. TABLE 1.B – CITY SUBSCRIBER PRICE SUMMARY
 - c. TABLE 1.C – COUNTY SUBSCRIBER PRICE SUMMARY
2. Bidder shall populate the equipment costs in TABLE 1.A with totals from the following tables:
 - a. TABLE 2 – SYSTEM SITES EQUIPMENT
 - b. TABLE 3 – SPARE & TEST EQUIPMENT
3. Bidder shall populate the implementation services costs in TABLE 1.A with totals from TABLE 4 IMPLEMENTATION SERVICES.
4. Bidder shall calculate and provide a SYSTEM PROPOSAL PRICE.
5. If applicable, Bidder shall provide any additional system discount(s) in dollar amount for equipment and services. If no discount is being offered, Bidder shall enter “0.”

6. Bidder shall provide a SYSTEM DISCOUNTED PROPOSAL PRICE. If no discounts are offered the amount in this cell shall match the SYSTEM PROPOSAL PRICE.
7. Bidder shall populate TABLE 1.B – CITY SUBSCRIBER PRICE SUMMARY with totals from TABLE 5 SUBSCRIBER EQUIPMENT.
8. Bidder shall calculate and provide a CITY SUBSCRIBER PROPOSAL PRICE.
9. If applicable, Bidder shall provide any additional system discount(s) in dollar amount for equipment and services. If no discount is being offered, Bidder shall enter “0.”
10. Bidder shall calculate and provide a CITY SUBSCRIBER DISCOUNTED PROPOSAL PRICE.
11. Bidder shall populate TABLE 1.C – COUNTY SUBSCRIBER PRICE SUMMARY with totals from TABLE 5 SUBSCRIBER EQUIPMENT.
12. Bidder shall calculate and provide a COUNTY SUBSCRIBER PROPOSAL PRICE.
13. If applicable, Bidder shall provide any additional system discount(s) in dollar amount for equipment and services. If no discount is being offered, Bidder shall enter “0.”
14. Bidder shall calculate and provide a COUNTY SUBSCRIBER DISCOUNTED PROPOSAL PRICE.
15. Bidder shall calculate and provide a TOTAL DISCOUNTED PROPOSAL PRICE.

Table 2 SYSTEM SITES EQUIPMENT

1. Bidder shall provide detailed site costs based on the proposed design. In this table, Bidder shall list and price the System site equipment on a site-by-site basis. Bidder shall itemize each proposed item in the following pre-populated categories listed in Column A:
 - a. System Control Equipment, Software, and Licensing (as applicable)
 - b. Simulcast Control Equipment, Software, and Licensing (as applicable)
 - c. P25 Radio System (RF Site) Equipment, Software and Licensing
 - d. 800MHZ Antenna Systems and Equipment
 - e. Backhaul and Networking Equipment, Software, and Licensing
 - f. Dispatch System Equipment, Software, and Licensing
 - g. Network Management System, Software, and Licensing (as applicable)
 - h. Site Infrastructure Equipment / Improvements (as applicable)
2. The worksheet has a placeholder for up to 40 sites, however there may not be that many sites in the System. Bidder may leave site(s) blank as need be. Note that that all categories may not apply for each of the sites.
3. Bidder shall provide a **Site Name** on Row 2 and a **Site Description** (i.e., Control, Dispatch, Simulcast, Multicast, Backhaul) on Row 3 for each site in the proposed design. Site may serve multiple purposes and shall be labeled as such. Bidder shall modify site count as needed.

4. For each proposed item, Bidder shall enter a **Unit Price** and **Quantity** in their respective columns. Bidder shall calculate and provide an extended price. Enter a discount percent in the Column labeled Discount %. Enter “0” if no discount is being offered. Bidder shall calculate the discounted price. Repeat these steps for all subsystem categories and all sites included in this region.
5. If using a centralized architecture, Bidder shall designate the first site as the System control site. If using a distributed architecture, Bidder shall indicate distributed equipment and pricing as applicable at any or all sites in the proposed design.
6. Bidder shall include pricing for **System Control Equipment, Software, and Licensing** for applicable sites. Control equipment includes, but is not limited to; call processing servers, databases, storage devices, and other necessary hardware, software, and licensing. All software licenses shall be included for specified system features, as well as capacity for the proposed quantity of base radios, user radios, and dispatch consoles. Add additional rows as necessary.
7. Where applicable, Bidder shall include **Simulcast Control and voting Equipment** to support any proposed multi-site simulcast cell(s). Simulcast control and voting equipment, includes but is not limited to, simulcast control equipment, global positioning system (GPS) reference, oscillators, voting equipment and other necessary hardware, software, and licenses. Add additional rows as necessary.
8. Bidder shall include pricing for **P25 Radio System (RF Site) Equipment, Software, and Licensing**. Radio equipment for remote sites includes, but is not limited to, site control equipment, transmit and receive base radios, receive-only base radios, software, licensing, racks, and accessories.
9. Bidder shall include pricing for **800MHZ Antenna Systems and Equipment**. Antenna systems include, but are not limited to, System transmit and receive antennas, GPS antennas, modules and cables, transmission lines, transmit combiners, receive multicouplers, tower top amplifiers (TTA), mounting hardware, lightning protectors, ground kits, and entry ports. Add additional rows as necessary.
10. Bidder shall include pricing for **Backhaul and Networking Equipment, Software, and Licensing**. **Networking** includes, but is not limited to, optical fiber interface units, routers, switches, gateways, firewalls, network time protocol (NTP) servers, virtual private network (VPN) servers, and all other associated hardware and technologies. If applicable, Bidder may include microwave radios (hardware, software, and licensing), antennas, coaxial cable, waveguide and accessories, equipment rack and accessories, T1 Multiplexers, Multi-protocol label switching (MPLS) routers, GPS based timing system, and dehydrators. Add additional rows as necessary.
11. Bidder shall include pricing for **Dispatch System Equipment, Software, and Licensing** including radio dispatch consoles, display monitors and accessories, backup RF control stations, control station antenna systems, analog/conventional channel gateways (as needed), and console networking equipment. Bidder shall include any upgrades or replacement of existing logging recorder as needed.

12. Bidder shall include pricing for **Network Management System, Software, and Licensing** which includes, but is not limited to, network management system (NMS) server hardware, software, and licenses, site remote terminal unit (RTU) hardware, software, and licenses, and network management terminal (NMT) hardware, software, and licenses. Add additional rows as necessary.
13. Bidder shall include pricing for **Site Infrastructure Equipment and Improvements** which includes, but is not limited to, existing site upgrades, new tower structure, new equipment shelter, new backup generator, new fuel system, new automatic transfer switch (ATS), new uninterruptible power supply (UPS), grounding systems, and perimeter security. Add additional rows as necessary.
14. After entering pricing data for all proposed equipment and sites, Bidder shall populate the discounted Totals in column B. If no discount is being offered, Bidder shall enter "0." Totals from this table shall be rolled into TABLE 1 – TOTAL PRICE SUMMARY.

Table 3 SPARE AND TEST EQUIPMENT

1. Bidder shall itemize the recommended initial outfitting for spare and test equipment to be purchased with the system, including at a minimum, the following components:
 - a. System Control Equipment
 - b. Simulcast Control Equipment
 - c. P25 Radio System Site Equipment
 - d. 800MHZ Antenna Systems and Equipment
 - e. Backhaul and Networking Equipment
 - f. Dispatch System Equipment
 - g. Network Management System
 - h. Site Infrastructure Equipment
 - i. Subscriber Unit Test Equipment
2. Examples of system items include, but are not limited to, site repeaters, base stations, voting equipment, microwave radios, LMR and GPS antennas, microwave dishes, consoles, field replaceable units, circuit boards, power supplies, routers, switches, parts, test equipment, calibration equipment, diagnostic equipment, and repair kits.
3. For each item, enter a unit price and quantity in their respective columns. Bidder shall calculate and provide an extended price. Enter a discount percent in the Column labeled Discount %. If no discount is offered, enter "0." Bidder shall calculate the discounted price. Repeat these steps for all recommended items. Add additional rows as necessary and label each sub-table for each system component.
4. Bidder shall calculate and provide a **TOTAL SPARE AND TEST EQUIPMENT PRICE** for all recommended components and quantities. Totals from this table shall be rolled into TABLE 1 – TOTAL PRICE SUMMARY.

Table 4 IMPLEMENTATION SERVICES

1. Bidder shall provide pricing for Implementation Services of equipment and sites included in all proposed phase(s). Bidder shall take into consideration the need for repeat activities in a phased implementation of the system.
2. Bidder shall provide pricing for **Project Management** and any other services needed for system implementation. Bidder shall specify and provide pricing for any other service(s) not listed.
3. Bidder shall provide line-item pricing for the following **Engineering Services**:
 - a. Detailed Design including but not limited to:
 - i. Physical site surveys
 - ii. Radio coverage analysis
 - iii. Microwave path analysis
 - iv. Spectrum/Interference analyses
 - v. System and rack diagrams
 - vi. IP addressing scheme and plan
 - vii. Acceptance Test Plans development
 - viii. Migration/Cutover Plan development
 - ix. Fleet Map Plan development
 - x. Detailed design review meetings
 - b. Structural Analyses
 - c. FCC License Preparation
 - d. Frequency Coordination
 - e. Factory/Staging Acceptance Testing
 - f. Delivery/Shipping
 - g. Installation
 - h. Coverage Testing
 - i. Acceptance Testing (including field/functional and final system testing)
 - j. Decommissioning
 - k. Documentation
 - l. Other (any other service(s) not listed)
4. Bidder shall provide pricing for **Site Development Services** and provide pricing for any other construction related service(s) not listed. Site Development includes, but is not limited to, existing site improvements, new site construction (developed or Greenfield) including new tower structure, new equipment shelter, new backup generator, new fuel system, new ATS, new UPS, grounding systems, perimeter security, and any other associated needs.
5. Bidder shall provide pricing for **Migration Services**. Migration services shall include any temporary lease space (during transition period) on tower, and shelter. Migration services shall include installation and programming of radios, which may require multiple touches throughout the implementation. Migration services shall include all other proposed activities per the Bidder's Migration/Cutover Plan. Bidder shall specify and provide pricing for any other service(s) not listed.

6. At a minimum, Bidder shall provide pricing for the following Operational Training categories:
 - a. APCO P25 Fundamentals
 - b. P25 Portable Unit Operation
 - c. P25 Mobile Unit Operation
 - d. P25 IP Console Operation
7. At a minimum, Bidder shall provide pricing for the following Technical Training categories:
 - a. P25 Systems Operations
 - b. P25 Control Site Design
 - c. P25 Repeater Site Design
 - d. P25 Digital Simulcast Design and Interference Analysis
 - e. P25 System Troubleshooting
 - f. P25 Base Station Programming and Maintenance
 - g. P25 Subscriber Programming, and Maintenance
 - h. Fleet mapping and Template Development
 - i. Coverage Mapping Tools, Propagation Analysis & Prediction Modeling
 - j. Dispatch Console maintenance, configuration, and troubleshooting
 - k. NMS maintenance, configuration, troubleshooting and report generation
 - l. Microwave radio maintenance, configuration, and troubleshooting
 - m. Router maintenance, configuration, and troubleshooting
8. At a minimum, Bidder shall provide pricing for the following **System Management Training** categories:
 - a. Planning and setting up the System and network
 - b. Building and implementing system and network profiles and configurations
 - c. Performing database management functions
 - d. Monitoring and managing the System's performance
 - e. Writing and printing system reports.
9. Bidder shall specify and provide pricing for any **Other Training** not listed but needed for the proposed system.
10. Bidder shall specify and provide pricing for any other service(s) not included in System Equipment Services, System Engineering Services, Site Development Services, Migration Services, Project Management, or System Training.
11. Bidder shall calculate and provide a **TOTAL SERVICES PRICE** for all implementation services proposed.

Table 5 SUBSCRIBER EQUIPMENT

1. Bidder shall use this worksheet and modify it as needed to provide **City Subscriber Equipment** and implementation services prices for the following departments:
 - A. Paducah Police
 - B. Paducah Fire -Admin & Training

- C. Engineering-Public Works (Street, Solid Waste, Fleet, Maintenance, Engineering, Flood Control, Junked Radios, Missing Radios)
 - D. Park Rangers - (Parks Services 2401)
 - E. Parks & Grounds Maintenance
 - F. E-911 Communications
 - G. Paducah Power
 - H. Paducah Water
 - I. Swift & Staley (PGDP)
 - J. Barkley Regional Airport
 - K. Mercy Regional EMS
 - L. Paducah Schools
2. Bidder shall use this worksheet and modify it as needed to provide **County Subscriber Equipment** and implementation services prices for the following departments:
- A. McCracken County Schools
 - B. Reidland-Farley Fire Dept
 - C. Concord Fire
 - D. Joint Sewer Agency
 - E. McCracken County Road Department
 - F. McCracken Co Emergency Management
 - G. West McCracken Fire Dept.
 - H. McCracken County Animal Control
 - I. McCracken County Jail
 - J. McCracken County Coroner
 - K. McCracken County Sheriff's Office
 - L. Melber Fire Department
 - M. Kevil Fire Department
 - N. Lone Oak Fire Department
3. Bidder shall reference the Functional Specifications for departmental quantities of mobile radios, portables radios, and control stations, and their associated tiers and accessories.
4. Examples of subscriber equipment items include, but are not limited to, mobile and portable radios, control stations, batteries, speaker microphones, Bluetooth headsets, earpieces, antennas, wiring kits, control heads, software, software licensing, and extended warranty.
5. Bidder shall maintain pricing and applicable discounts for the user radio equipment and accessories, including every feature and every option, for life of the contract.
6. Bidder shall provide a detailed list of equipment and services per department and specified quantities.
7. Bidder shall include itemized, recommended spares for each department. Examples of subscriber items include, but are not limited to, chargers, batteries, belt clips, speaker microphones, Bluetooth headsets, earpieces, antennas, wiring kits, control heads, programming kits.

8. For each item, enter a unit price and quantity in their respective columns. Bidder shall calculate and provide an extended price. Enter a discount percent in the Column labeled Discount %. If no discount is being offered, Bidder shall enter "0." Bidder shall calculate the discounted price. Repeat these steps for all equipment items. Add additional rows as necessary.
9. Bidder shall identify and include the necessary services costs (i.e., programming, installation) for each department and quantities.

Table 6 OPTIONAL SYSTEM SUPPORT

1. Bidder shall include pricing of an initial 1-year warranty, including cybersecurity, remote and on-site support for all hardware, software and firmware for all Contractor-supplied system components (including third-party equipment).
2. Bidder shall list line-item prices for the following post-warranty service(s) for all supplied equipment for a 10-year period following warranty expiration (i.e., Year 2 to Year 11), which may or may not be purchased in conjunction with the system:
 - a. Remote technical support
 - b. Software support and upgrades
 - c. Cybersecurity support
 - d. Hardware refresh
 - e. Onsite support and repair
 - f. Network Operations Center (NOC) monitoring
3. Bidder shall offer these post-warranty services in annual increments for a 10-year period following warranty expiration. Hardware refresh may not be required annually, therefore Bidder shall provide pricing based on their recommended hardware upgrade cycle(s).
4. Bidder shall offer any discount(s) available for purchase of multiple years or bundled package. Add additional rows as needed.
5. Bidder shall offer post-warranty services for any new equipment and/or sites added to the system.

Table 7 OPTIONAL SUBSCRIBERS AND FEATURES

1. Bidder shall provide unit pricing for other optional subscriber types and tiers not included in Table 5:
 - a. Fire Service High-Tier Portable Radio
 - b. Other Mid-Tier Portable Radio
 - c. Other Low-Tier Portable Radio
 - d. Fire Service High-Tier Mobile Radio
 - e. Motorcycle Mobile Radio
 - f. Multi-Band Control Station

2. Bidder may provide pricing for other tiers and types of portable radios that Bidder wishes to propose. Bidder shall provide pricing for different battery options. Add additional rows as needed.
3. Bidder shall provide single-unit pricing for accessories for radios offered including standard batteries, high-capacity batteries, belt clips, speaker microphones, Bluetooth headsets, earpieces, antennas, wiring kits, control heads, software, software licensing, and any other associated equipment.
4. Bidder may provide pricing for other tiers and types of mobile radios that Bidder wishes to propose. Pricing for remote- and dash-mount options shall be provided. Add additional rows as needed.
5. Bidder may provide pricing for other tiers and types of control stations (i.e., single-band, dual-band) that Bidder wishes to propose. Add additional rows as needed.
6. Bidder shall include pricing for equipment, software, licensing, and services for implementation of the following OPTIONAL subscriber features and equipment:
 - a. Portable Radio, Wi-Fi capability
 - b. Portable Radio, LTE capability
 - c. Portable subscriber radios high-capacity batteries
 - d. Mobile Radio, Wi-Fi capability
 - e. Mobile Radio, LTE capability
 - f. Vehicular Extender
 - g. Suitcase Repeater

Table 8 OPTIONAL FEATURES AND COMPONENTS

1. Bidder shall provide unit pricing for the following OPTIONAL system components that may be purchased by the City for future expansion of the system:
 - a. Geo-redundant, backup or secondary system control equipment
 - b. Cloud-based, backup or secondary system control equipment
 - c. Geo-redundant, simulcast control and voting equipment
 - d. Over-the-air rekeying (OTAR)
 - e. Over-the-air programming (OTAP)
 - f. Tier 2 GPS Unit Location Services
 - g. Smartphone/broadband device integration solution
 - h. P25 Repeater
 - i. Dispatch Console
 - j. Logging Recorder
 - k. Microwave radio
 - l. Site router
 - m. Site switch
 - n. 48VDC system
 - o. 10kVA UPS
 - p. 25kW generator

- q. Other (any other component(s) not listed)
- 2. Bidder shall include pricing for implementation services associated with each OPTIONAL system enhancement or equipment, including the following items (as applicable):
 - a. Project Management
 - b. Engineering Services (as applicable)
 - i. Detailed Design
 - ii. Structural Analyses
 - iii. FCC License Preparation
 - iv. Frequency Coordination
 - v. Factory/Staging Acceptance Testing
 - vi. Delivery/Shipping
 - vii. Installation
 - viii. Coverage Testing
 - ix. Acceptance Testing
 - x. Decommissioning
 - xi. Documentation