

General Instructions

1. Completion of the Cost Proposal is MANDATORY. The workbook provided does not contain any pre-populated formulas. **PROPOSER 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 Proposer response but does not obligate the City to purchase the good or service. **IT IS NOT OPTIONAL FOR PROPOSER TO PRICE IT, AND PROPOSER 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 – MOBILE COMMAND POST, SPARES, AND TEST EQUIPMENT
 - d. TABLE 4 – IMPLEMENTATION SERVICES
 - e. TABLE 5 – SUBSCRIBER EQUIPMENT
 - f. TABLE 6 – OPTIONAL SYSTEM SUPPORT
 - g. TABLE 7 – OPTIONAL SUBSCRIBER EQUIPMENT AND FEATURES
 - h. TABLE 8 – OPTIONAL COMPONENTS
4. Proposer 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 – SUBSCRIBER PRICE SUMMARY
2. Proposer shall populate the equipment costs in TABLE 1.A with totals from the following tables:
 - a. TABLE 2 – SYSTEM SITES EQUIPMENT
 - b. TABLE 3 – MOBILE COMMAND POST, SPARES, AND TEST EQUIPMENT
3. Proposer shall populate the implementation services costs in TABLE 1.A with totals from TABLE 4 IMPLEMENTATION SERVICES.
4. Proposer shall calculate and provide a SYSTEM PROPOSAL PRICE.
5. If applicable, Proposer shall provide any additional system discount(s) in dollar amount for equipment and services. If no discount is being offered, Proposer shall enter “0.”
6. Proposer shall provide a SYSTEM DISCOUNTED PROPOSAL PRICE. If no discounts are offered the amount in this cell shall match the SYSTEM PROPOSAL PRICE.

7. Proposer shall populate TABLE 1.B – SUBSCRIBER PRICE SUMMARY with totals from TABLE 5 SUBSCRIBER EQUIPMENT.
8. Proposer shall calculate and provide a SUBSCRIBER PROPOSAL PRICE.
9. If applicable, Proposer shall provide any additional system discount(s) in dollar amount for equipment and services. If no discount is being offered, Proposer shall enter “0.”
10. Proposer shall calculate and provide a SUBSCRIBER DISCOUNTED PROPOSAL PRICE.
11. Proposer shall calculate and provide a TOTAL DISCOUNTED PROPOSAL PRICE.

Table 2 SYSTEM SITES EQUIPMENT

1. Proposer shall provide detailed site costs based on the proposed design. In this table, Proposer shall list and price the System site equipment on a site-by-site basis. Proposer 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 and Voting Equipment, Software, and Licensing (as applicable)
 - c. P25 Radio System (RF Site) Equipment, Software and Licensing
 - d. UHF 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 10 sites, however there may not be that many sites in the System. Proposer may leave site(s) blank as need be. Note that that all categories may not apply for each of the sites.
3. Proposer 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. Proposer shall modify site count as needed.
4. For each proposed item, Proposer shall enter a **Unit Price** and **Quantity** in their respective columns. Proposer shall calculate and provide an extended price. Enter a discount percent in the Column labeled Discount %. Enter “0” if no discount is being offered. Proposer 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, Proposer shall designate the first site as the System control site. If using a distributed architecture, Proposer shall indicate distributed equipment and pricing as applicable at any or all sites in the proposed design.
6. Proposer 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, Proposer 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. Proposer 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. Proposer shall include pricing for **UHF 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. Proposer 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, Proposer 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. Proposer 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. Proposer shall include any upgrades or replacement of existing logging recorder as needed.
12. Proposer 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. Proposer 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, Proposer shall populate the discounted Totals in column B. If no discount is being offered, Proposer shall enter “0.” Totals from this table shall be rolled into TABLE 1 – TOTAL PRICE SUMMARY.

Table 3 MOBILE COMMAND POST, SPARES, AND TEST EQUIPMENT

1. Proposer shall list and price the MOBILE COMMAND POST equipment in TABLE 3.A.
2. Proposer shall itemize the recommended initial outfitting for SPARES and TEST EQUIPMENT, as applicable, to be purchased with the system, including at a minimum, the following components:
 - B. System Control Equipment Spares
 - C. Simulcast Control Equipment Spares
 - D. Voting System Equipment Spares
 - E. P25 Repeater/Receiver Equipment Spares
 - F. UHF Antenna Systems and Equipment Spares
 - G. Backhaul and Networking Equipment Spares
 - H. Dispatch System Equipment Spares
 - I. Network Management System Spares
 - J. Site Infrastructure Equipment Spares
 - K. Radio System and Backhaul Test Equipment
 - L. Subscriber Unit Test Equipment
3. Examples of 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.
4. For each item, enter a unit price and quantity in their respective columns. Proposer shall calculate and provide an extended price. Enter a discount percent in the Column labeled Discount %. If no discount is offered, enter “0.” Proposer 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.
5. Proposer shall calculate and provide a **TOTAL MOBILE COMMAND POST, SPARES, 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. Proposer shall provide pricing for Implementation Services of equipment and sites included in all proposed phase(s). Proposer shall take into consideration the need for repeat activities in a phased implementation of the system.
2. Proposer shall provide pricing for **Project Management** and any other services needed for system implementation. Proposer shall specify and provide pricing for any other service(s) not listed.

3. Proposer 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. Proposer 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. Proposer 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 Proposer's Migration/Cutover Plan. Proposer shall specify and provide pricing for any other service(s) not listed.
6. At a minimum, Proposer 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, Proposer 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, Proposer 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. Proposer shall specify and provide pricing for any **Other Training** not listed but needed for the proposed system.
 10. Proposer 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. Proposer shall calculate and provide a **TOTAL SERVICES PRICE** for all implementation services proposed.

Table 5 SUBSCRIBER EQUIPMENT

1. Proposer shall use this worksheet and modify it as needed to provide **Subscriber Equipment** and implementation services prices for the following departments:
 - A. Police Department
 - B. Parks & Recreation
 - C. Electric
 - D. Solid Waste
 - E. Water
 - F. Wastewater
 - G. Public Works / Fleet / Facilities
 - H. Streets
 - I. Transit
 - J. Airport
 - K. Urban Forestry
 - L. Purchasing & Warehousing

- M. City / City Hall
 - N. Radio Shop
 - O. Spare Equipment
2. Proposer shall reference the Functional Specifications for departmental quantities of mobile radios, portables radios, and control stations, and their associated tiers and accessories.
 3. 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.
 4. Proposer shall maintain pricing and applicable discounts for the user radio equipment and accessories, including every feature and every option, for life of the contract.
 5. Proposer shall provide a detailed list of equipment and services per department and specified quantities.
 6. Proposer 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.
 7. For each item, enter a unit price and quantity in their respective columns. Proposer shall calculate and provide an extended price. Enter a discount percent in the Column labeled Discount %. If no discount is being offered, Proposer shall enter "0." Proposer shall calculate the discounted price. Repeat these steps for all equipment items. Add additional rows as necessary.
 8. Proposer shall identify and include the necessary services costs (i.e., programming, installation) for each department and quantities.

Table 6 OPTIONAL SYSTEM SUPPORT

1. Proposer 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. Proposer 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. Proposer 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 Proposer shall provide pricing based on their recommended hardware upgrade cycle(s).

4. Proposer shall offer any discount(s) available for purchase of multiple years or bundled package. Add additional rows as needed.
5. Proposer shall offer post-warranty services for any new equipment and/or sites added to the system.

Table 7 OPTIONAL SUBSCRIBERS AND FEATURES

1. Proposer shall provide unit pricing for the following subscriber types and tiers:
 - A. High-Tier Portable Radio
 - B. Mid-Tier Portable Radio
 - C. Low-Tier Portable Radio
 - D. High-Tier Mobile Radio
 - E. Mid-Tier Mobile Radio
 - F. Low-Tier Mobile Radio
 - G. VHF High-Tier Fire Service Portable Radio
 - H. VHF High-Tier Fire Service Mobile Radio
 - I. Mid-Tier Motorcycle Mobile Radio
 - J. VHF/UHF/700/800 Multi-Band Control Station
2. Proposer may provide pricing for other tiers and types of portable radios that Proposer wishes to propose not already included in Table 5. Add additional rows as needed.
3. Proposer 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. Proposer may provide pricing for other tiers and types of mobile radios that Proposer wishes to propose not already included in Table 5. Pricing for remote- and dash-mount options shall be provided. Add additional rows as needed.
5. Proposer may provide pricing for other tiers and types of control stations (i.e., single-band, dual-band) that Proposer wishes to propose. Add additional rows as needed.
6. Proposer 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 Radio, AES encryption
 - D. Portable Radio, OTAR capability
 - E. Portable Radio, OTAP capability
 - F. Portable Radio, GPS unit location service
 - G. Portable Radio, high-capacity batteries
 - H. Portable Radio, antennas and accessories
 - I. Mobile Radio, Wi-Fi capability
 - J. Mobile Radio, LTE capability
 - K. Mobile Radio, AES encryption

- L. Mobile Radio, OTAR capability
- M. Mobile Radio, OTAP capability
- N. Mobile Radio, GPS unit location service
- O. Mobile Radio, antennas and accessories

Table 8 OPTIONAL FEATURES AND COMPONENTS

1. Proposer shall provide unit pricing for the following OPTIONAL system components that may be purchased by the City for future expansion of the system:
 - A. VHF system replacement
 - B. Geo-redundant, backup or secondary system control equipment
 - C. Cloud-based, backup or secondary system control equipment
 - D. Geo-redundant, secondary simulcast control equipment
 - E. Over-the-air rekeying (OTAR)
 - F. Over-the-air programming (OTAP)
 - G. Tier 2 GPS unit location services
 - H. Smartphone/broadband device integration
 - I. UHF P25 trunked repeater
 - J. VHF conventional repeater
 - K. Fixed dispatch console
 - L. Deployable dispatch console
 - M. Computer aided dispatch (CAD) application programming interface (API)
 - N. Logging recorder
 - O. Indoor microwave radio
 - P. Split-mount microwave radio
 - Q. Outdoor microwave radio
 - R. Site router
 - S. Site switch
 - T. 48 VDC system
 - U. 10 kVA UPS
 - V. 25 kW generator
2. Proposer 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
 - 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