

REQUEST for PROPOSALS

P25 Radio Subscribers and Services

RFP# 20-21-35

Proposal Due Date: June 1, 2021

Location: City of Greenville Financial Services Department/Purchasing Division Attention: Denisha Harris 201 West 5th Street Greenville, NC 27858

Questions: Denisha Harris, Financial Services Manager 252.329.4862 Email: dharris@greenvillenc.gov

Date: April 30, 2021

Dear Sir or Madam:

The City of Greenville, North Carolina, is now accepting Proposals for P25 Radio Subscribers. The requirements for submitting a Proposal are stated in the attached Request for Proposals (the "RFP").

Sealed proposals endorsed "P25 Radio Subscribers" to be furnished to the City of Greenville (the "City") will be received by the Financial Services Department, Purchasing Division at 201 West 5th Street, Greenville, NC until 4:00 pm, June 1, 2021. The City reserves the right to reject any or all proposals.

This RFP outlines a description of the products and services sought as well as the corresponding documents. Interested firms will be required to submit one (1) electronic copy of the Proposal on a CD or flash drive in PDF and one (1) original Proposal signed in ink by a company official authorized to make a legal and binding offer. The RFP must be submitted in a sealed box or opaque envelope plainly marked with the Proposal number and service description as follows:

Request for Proposals Attention: Denisha Harris [Name of Company Submitting Proposal] P25 Radio Subscribers RFP # 20-21-35

It is the intent of the City to select a single provider to provide all the products and services outlined in this RFP. RFP questions must be directed to Denisha Harris, Financial Services Manager, Purchasing Division, per the enclosed instructions.

Sincerely,

Denisha Harris Financial Services Manager

1. SECTION ONE: GENERAL INSTRUCTIONS TO VENDORS

1.1. READ, REVIEW, AND COMPLY:

It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and any addenda thereto, and comply with all requirements specified herein, regardless of whether appearing in these Instructions to Vendors or elsewhere in this RFP document.

1.2. LATE PROPOSALS:

Late proposals, regardless of cause, will not be opened or considered, and will automatically be disqualified from further consideration. It shall be the Vendor's sole responsibility to ensure delivery at the designated office by the designated time.

1.3. CITY RIGHTS AND OPTIONS:

The City, at its sole discretion, reserves the following rights:

- To supplement, amend, substitute, or otherwise modify this RFP at any time.
- To cancel this RFP with or without the substitution of another RFP.
- To take any action affecting this RFP, this RFP process, or the Services subject to this RFP that would be in the best interests of the City.
- To issue additional requests for information or clarification from Offerors or to allow corrections of errors or omissions.
- To require one or more Service Providers to supplement, clarify or provide additional information in order for the City to evaluate the Responses submitted.
- To negotiate a contract with a Service Provider based on the information provided in response to this RFP.

1.4. PUBLIC RECORDS:

Any material submitted in response to this RFP will become a "public record." Proposers must claim any applicable exemptions to disclosure provided by law in their response to this RFP. Proposers must identify materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary and legal. The City reserves the right to make all final determination(s) of the applicability of North Carolina General Statutes § 132-1.2, Confidential Information.

1.5. ACCURACY OF RFP AND RELATED DOCUMENTS:

Each Company must independently evaluate all information provided by the City. The City makes no representations or warranties regarding any information presented in this RFP, or otherwise made available during this procurement process, and assumes no responsibility for conclusions or interpretations derived from such information. In addition, the City will not be bound by or be responsible for any explanation or conclusions regarding this RFP or any related documents other than those provided by an addendum issued by the City. Companies may not rely on any oral statement by the City or its agents, advisors, or consultants.

If a Company identifies potential errors or omissions in this RFP or any other related documents, the Company should immediately notify the City of such potential discrepancy in writing. The City may issue a written addendum if the City determines clarification necessary. Each Company requesting an interpretation will be responsible for delivering such requests to the City's designated representative as directed in RFP Section Three.

1.6. EXPENSE OF SUBMITTAL PREPARATION:

The City accepts no liability, and Companies will have no actionable claims, for reimbursement of any costs or expenses incurred in participating in this solicitation process. This includes expenses and costs related to Proposal submission, submission of written questions, attendance at pre-proposal

meetings or evaluation interviews, contract negotiations, or activities required for contract execution.

1.7. PROPOSAL BINDING:

This proposal is binding for a period of ninety (90) days.

2. SECTION TWO: GENERAL TERMS AND CONDITIONS

2.1. NON-DISCRIMINATION:

The City of Greenville does not discriminate on the basis of race, color, sex, national origin, religion, age or disability. Any contractors or vendors who provide services, programs or goods to the City are expected to fully comply with the City's non-discrimination policy.

2.2. NON-COLLUSION:

Respondents, by submitting a signed proposal, certify that the accompanying submission is not the result of, or affected by, any unlawful act of collusion with any other person or company engaged in the same line of business or commerce, or any other fraudulent act punishable under North Carolina or United States law.

2.3. PAYMENT TERMS:

The City agrees to pay all approved invoices Net Thirty (30) days from the date received and approved. The City does not agree to the payment of late charges or finance charges assessed by the seller or vendor for any reason. Invoices are payable in U.S. funds.

2.4. GOVERNING LAW:

Any agreement, contract or purchase order resulting from this invitation to bid, request for proposals or request for qualifications or quotes, shall be governed by the laws of the State of North Carolina.

2.5. ACCEPTANCE/REJECTION OF PROPOSALS:

The City of Greenville reserves the right to award to the Firm who will best serve the interests of the City. The City also reserves the right to waive minor variations in the specifications and in the bidding process, as well as to accept in whole or in part such proposal(s) where it deems it advisable in protection of the best interests of the City. The City further reserves the right to accept or reject any or all bids/proposals, and to award or not award a contract based on this proposal.

2.6. E-VERIFY COMPLIANCE:

The Contractor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Further, if the Contractor utilizes a Subcontractor, the Contractor shall require the Subcontractor to comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. By submitting a proposal, the Contractor represents that their firm and its Subcontractors are in compliance with the requirements of Article 2 Chapter 64 of the North Carolina General Statutes.

2.7. CONFLICT OF INTEREST:

Each Contractor shall affirm that no official or employee of the City of Greenville is directly or indirectly interested in this proposal for any reason of personal gain.

2.8. EQUAL EMPLOYMENT OPPORTUNITY CLAUSE:

The City of Greenville has adopted an Equal Employment Opportunity Clause, which is incorporated into all specifications, purchase orders and contracts, whereby a vendor agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry. A copy of this clause may be obtained at the City Clerk's Office, located in City Hall-200 W. Fifth Street Greenville, NC. By submitting a proposal, the firm is attesting that they are an Equal Opportunity Employer.

2.9. MWBE PROGRAM:

Minority and/or Women Business Enterprise (MWBE) Program

It is the policy of the City of Greenville to provide minorities and women equal opportunity for participating in all aspects of the City's contracting and procurement programs, including but not limited to, construction projects, supplies and materials purchase, and professional and personal service contracts. In accordance with this policy, the City has adopted a Minority and Women Business Enterprise (M/WBE) Plan and subsequent program, outlining verifiable goals.

The City has established a 2% Minority Business Enterprise (MBE) and 2% Women Business Enterprise (WBE) goal for the participation of M/WBE firms in supplying goods and services for the completion of this project. All firms submitting bids agree to utilize minority and women-owned suppliers and service providers whenever possible.

Questions regarding the City's M/WBE Program should be directed to the M/WBE Office at (252) 329-4862.

2.10. FEDERAL LAW:

Federal law (Rehabilitation Act and ADA) prohibits handicapped discrimination by all governmental units. By submitting a proposal, the vendor is attesting to its policy of nondiscrimination regarding the handicapped.

2.11. TAXES:

Sales taxes may be listed on the proposal, but as a separate item. No charge will be allowed for Federal Excise and Transportation tax from which the City is exempt.

2.12. WITHDRAWAL OF PROPOSALS:

No bid/proposal may be changed or withdrawn after the stated time and date for submittal. Bids/proposals submitted shall be binding for ninety (90) days after the date of submittal.

2.13. SERVICES PERFORMED:

All services rendered under this agreement will be performed at the Seller's own risk and the Seller expressly agrees to indemnify and hold harmless The City of Greenville, its officers, agents, and employees from any and all liability, loss or damage that they may suffer as a result of claims, demands, actions, damages or injuries of any kind or nature whatsoever by or to any and all persons or property.

2.14. INDEPENDENT CONTRACTOR:

It is mutually understood and agreed the Seller is an independent contractor and not an agent of the City of Greenville, and as such, Seller, his or her agents and employees shall not be entitled to any City employment benefits, such as but not limited to vacation, sick leave, insurance, workers' compensation, pension or retirement benefits.

2.15. VERBAL AGREEMENT:

The City will not be bound by any verbal agreements

2.16. INSURANCE REQUIREMENTS:

Contractor shall maintain at its own expense

- a) Commercial General Liability Insurance in an amount not less than \$1,000,000 per occurrence for bodily injury or property damage; City of Greenville, 200 W. Fifth St. Greenville, NC 27834 shall be named as additional insured.
- **b)** Professional Liability insurance in an amount not less than \$1,000,000 per occurrence-if providing professional services;
- c) Workers Compensation Insurance as required by the general statutes of the State of North Carolina and Employer's Liability Insurance not less than \$500,000 each accident for bodily injury by accident, \$500,000 each employee for bodily injury by disease, and \$500,000 policy limit;
- d) Commercial Automobile Insurance applicable to bodily injury and property damage, covering all owned, non-owned, and hired vehicles, in an amount not less than \$1,000,000 per occurrence as applicable. Certificates of Insurance shall be furnished prior to the commencement of Services.

2.17. IRAN DIVESTMENT ACT:

Vendor certifies that; (i) it is not identified on the Final Divestment List or any other list of prohibited investments created by the NC State Treasurer pursuant to N.C.G.S. 143-6A-4; (ii) it will not take any actions causing it to appear on any such list during the terms of this contract, and (iii) it will not utilize any subcontractor to provide goods and services hereunder that is identified on any list.

3. SECTION THREE: PROCUREMENT PROCESS

3.1. SCHEDULE AND PROCESS

The following chart shows the schedule of events for the conduct of this RFP. The key events and deadlines for this process are as follows:

Event	Date and Time
Issuance of RFP	Friday April 30, 2021
Deadline to submit questions	May 14, 2021 by 4:00 pm EST
Answers to questions provided	May 21, 2021 by 4:00 pm EST
Proposal Due	June 1, 2021 by 4:00 pm EST

Upon review of the RFP documents, firms may have questions to clarify or interpret the RFP in order to submit the best proposal possible. To accommodate the Proposal Questions process, Vendors shall submit any such questions by the above due date.

Written questions shall be emailed to dharris@greenvillenc.gov by the date and time specified above. Vendors should enter as the subject of the email:

"P25 Subscriber Radios and Service RFP # 20-21-35 Questions"

Responses will be posted in the form of an addendum to the RFP on the City's website at https://www.greenvillenc.gov/government/financial-services/current-bid-opportunities and on the State's IPS website www.ips.state.nc.us. No information, instruction, or advice provided orally or informally, whether made in response to a question or otherwise in connection with this RFP, shall be considered authoritative or binding.

No contact regarding this RFP will be allowed between Bidders or potential Bidders and employees of the City staff after issuance of the RFP with the exception of the City contact person named on the cover page. Any such contact may disqualify a firm from further consideration. Requests for

clarification from Bidders will be allowed provided that such requests are made through the Financial Services Manager in writing.

(Remainder of page left intentionally blank)

4. SECTION FOUR: SCOPE OF P25 RADIO SUBSCRIBERS AND SERVICES GENERAL RESPONSE PROVISIONS

4.1. PURPOSE

This Specification encompasses a turnkey project to provide 700/800MHz P25 Subscriber Radios and Services for an existing Project-25 700/800MHz digital simulcast trunked radio network. The City of Greenville, as well as some governmental departments within the City of Greenville operate primarily on the statewide VIPER public safety network and the Pitt County P25 trunked radio system for mutual aid.

This Request for Proposal (RFP) Specification defines key functional and technical aspects of standards based P25 subscriber radios for an enhanced digital radio communications network, aligned toward full Project 25 compliance. The primary public safety agencies that will immediately utilize these new P25 radio subscribers include Greenville Fire and Rescue Department, and Greenville Police Department.

4.2. INSTRUCTIONS

This RFP Specification is a complete document and must be returned intact with vendor responses provided in a point-by-point fashion. The RFP Authorization Form in Section 8 must be completed. All responses and attachments should be placed into the RFP Response immediately behind the area in which the information was requested i.e., a point-by-point response.

If supplementary materials are inserted, each inserted page must be labeled in the bottom margin with the number of the Specification page behind which it is being placed. If more than one page is inserted behind a particular RFP Specification page, then each must be labeled with the appropriate page number plus a letter designator, e.g. 121a, 121b, 121c, etc.

4.2.1. PRE-RFP CONFERENCE

There will be no Pre-RFP Conference for this RFP.

4.2.2. RFP QUESTIONS

If during the review or preparation of the RFP response submittal, a Contractor discovers any errors, omissions or ambiguities, they should submit, in writing, their questions to the Consultant. Written questions should be received by the Financial Service Manager no later than May 14th, 2021.

4.2.3. LATE RFP RESPONSE SUBMISSION

Any RFP Response submitted after the specified submission due date and time, will not be accepted and will be returned unopened to the submitting organization. All RFP responses will be held in confidence, to the extent permissible by State and County law, as applicable.

4.2.4. RFP RESPONSE SUBMITTAL

The Proposal Response shall be divided into two sections: Subscriber User Equipment Technical and Subscriber User Equipment Pricing. One (1) copy electronic and one (1) copy signed and bound are to be submitted. The Subscriber User Equipment Pricing Responses shall be separated from the Subscriber User Equipment Technical Response and independently sealed (including the electronic copy).

Each Proposal Response shall be submitted in standard 8 1/2" x 11" three ring binders, and must include a PDF file version on separate flash drives with both the Subscriber User Equipment Technical submittal and Subscriber User Equipment Pricing submittal. The entire Response package must be submitted in a sealed container addressed to:

Financial Services Manager: Denisha Harris City of Greenville, Purchasing Division 201 West 5th Street Greenville, NC 27858

The time and date of the Proposal Opening must be plainly marked on the container as well as the Proposer's name, address, and State Contractor's License Number. All Proposal Responses should be delivered by hand, with receipt requested, or by certified or registered mail. All Proposal Responses become property of the City of Greenville. A cover letter transmitting the Proposal Response must accompany the package.

All Submittals to this RFP are due no later than 4 PM, Tuesday, June 1st, 2021.

4.2.5. PROPOSAL EVALUATION AND SELECTION

Technical and Pricing Proposals shall be evaluated separately using a point system whereby out of a maximum 100 points may be awarded:

- 50 points maximum shall be allocated to Subscriber User Equipment Technical Proposal evaluation
- 30 points maximum shall be allocated to qualifications and references
- 10 points maximum shall be allocated to Subscriber User Equipment Price Proposals.
- 10 points maximum shall be allocated to the votes of the evaluation committee following the half-day hands-on demonstration

Subscriber User Equipment Technical Proposals will first be evaluated for overall responsiveness and completeness to the RFP Specifications. Proposals that are determined responsive and complete will be evaluated by the City of Greenville and the Consultant. Technical Proposals will be graded in performance, compatibility, expansion capabilities, versatility, vendor qualifications, and references with respect to the requirements as

outlined in this RFP. Points for the corresponding sections will then be awarded by the evaluation committee.

At the direction of the City of Greenville as to the suitability and acceptability of the Subscriber User Equipment Technical Evaluation Results, the City of Greenville and Consultant will next open and evaluate proposed costs for each responsive Subscriber User Equipment Technical Proposal.

The total cost from the Cost Proposals shall be compared, evaluated and scored based on the total cost of ownership for 10 years by the City of Greenville's Finance Department and the Consultant. Thereby yielding a possible total 10 points being allocated to Subscriber User Equipment Price Proposals.

Points will be awarded as follows:

- Least Expense: 10 points
- Second Least Expense: 5 points
- Third Least Expense: 2 points
- Second Most Expense: 0 pts
- Most Expense: 0 pts

The week of June 7th (or date as amended by Addendum), the top two (2) vendors that have submitted a proposal and have not been disqualified by the terms and conditions set forth in this RFP, will be invited to Greenville, NC for a half-day long hands-on demonstration of their End User Subscriber Radio Equipment. During this event, all the agencies cited herein will have a chance to see first-hand all the radios in the proposals. The day following the half day long hands-on demonstration (or as changed by Addendum), the evaluation committee will submit their votes. At that point the proposers will be assigned the appropriate score.

• Most Votes: 8 points

• Least Votes: 2 points

That Contractor Submittal receiving the highest Overall Project Score (Possible points including: 50pts Technical, 30pts References, 10pts Cost, 10pts Assigned by votes after Half-Day Hands on Event) shall be recommended to the City Manager as being the most responsive, best proposal. In the case of a tied Overall Project Score, the Proposal Submittal having the highest Technical Proposal evaluation shall be recommended to the City Manager.

4.3. DEFINITIONS

Definitions as used herein:

- a. **Responder, Proposer**: Any organization, company, vendor, or supplier responding to this RFP Specification.
- b. **Contractor**: The Proposer to whom a Contract is awarded.
- c. **Proposal, RFP Response, Submittal**: Correspondence or material furnished by Responders in response to this specification.
- d. The City of Greenville: Client
- e. Tusa Consulting Services 2, LLC, TCS or Consultant: 118 N Conistor Ln, Ste. B, Box 357, Liberty, MO. 64068; (816) 518-9223 Tel.

4.4. RFP PROPOSER STANDARDS

The RFP Responders must have their subscriber radios approved by the North Carolina Voice Interoperability Project for Emergency Responders (VIPER) for use on the VIPER radio network by the time of purchase and must supply documentation supporting this claim. In addition, radio models proposed shall be FCC Type Approved. Radios known to be approved on VIPER are listed: https://files.nc.gov/ncdps/documents/files/2021-VIPER-Approved-Radio-List.pdf.

RFP Responders will likewise be required to provide sufficient information necessary to support claims that user equipment will be functionally and operationally compatible with 700MHz channels (764-767MHz and 773-776MHz, paired with 794-797MHz and 803-806MHz, respectively) as well as the reconfigured 800MHz NPSPAC channel plan as a result of FCC-Ordered 800MHz Rebanding. Failure to propose equipment capable of operations on this new spectrum and/or unable to support Project-25 Phase 1 and Phase 2 operations shall be considered non-responsive and that vendor's RFP submittal shall be given no further consideration.

A factory authorized service center that is fully staffed and trained to support the proposed subscribers, and all related accessories, must be located within 2 hours of the City of Greenville to be considered adequate to satisfy initial installation, warranty and ongoing maintenance needs. The Contractor and all envisioned subcontractors, if any, must be able to legally conduct business within the State of North Carolina, and the City of Greenville.

4.5. WORKMANSHIP

All proposed workmanship supportive of the RFP must conform to normal and accepted standards for the telecommunications industry. The Contractor must completely remove and properly dispose of residue due to its work, return the vehicles to a useable state and will be responsible for the cost of repairing all damage caused by the Contractor or its Sub-Contractors during installation.

The City of Greenville and its Consultant would reserve the right to halt any radio equipment installation process due to poor workmanship, housekeeping, scheduling, work interruptions, etc. Work halts that are the result of poor workmanship would not relieve the Contractor of their responsibility to conform to the installation time requirements as stated by Contract.

4.6. MATERIALS

All equipment, except with the expressed written permission of the City of Greenville and its Consultant, must be new and unused, meet Page 17 of 59 RFP # 20-21-35

telecommunications industry standards, and, where applicable, **be registered with and approved by the Federal Communications Commission**. The City of Greenville or its Consultant would reserve the right to reject and require the return, at the Contractor's expense, of any and all components which are defective or fail to comply with this RFP Specification or lack FCC type approval. Such rejections and/or returns will neither validate nor invalidate the remainder of any Contract. Rejections of material for cause would not provide an extension of time to the Contractor in the performance of contracted requirements.

4.7. SUB-CONTRACTORS

It is intended that a single Contractor have total turnkey responsibility for the subsequent City of Greenville project. Therefore, any Proposer desiring to use Sub-Contractor(s) must include within their RFP Response a list and description of potential, qualified Sub-Contractor(s). The City of Greenville may require documentation and references to ensure the qualification of a proposed Sub-Contractor.

4.8. HANDS-ON PRESENTATIONS

The week of June 7th (or as changed by Addendum), the top two (2) vendors that have submitted a proposal and have not been disqualified by the terms and conditions set forth in this RFP, will be invited to Greenville, NC for a halfday long hands-on demonstration of their End User Subscriber Radio Equipment. During this event, all of the evaluation committee will have a chance to see first-hand all the radios in the proposals.

4.9. CONTACT

All contact and inquiry concerning this RFP Specification shall be directed to:

Financial Services Manager: Denisha Harris City of Greenville, Purchasing Division 201 West 5th Street Greenville, NC 27858

Email: dharris@greenvillenc.gov

Page 18 of 59

4.10. NOTIFICATION

Responders will be notified of the City of Greenville's desire to enter into additional discussions. The City of Greenville's ranking of proposals shall be published after a recommendation of the best and most advantageous proposal is presented to the City of Greenville's Chief Administrative Officer/Manager or other recognized body.

4.11. MANUFACTURER SUPPORT

The City of Greenville shall accept no less than a three-year warranty for user radio equipment and accessories.

4.12. EXTENDED WARRANTY

The Proposer shall provide pricing for an extended warranty option up to the maximum available for the equipment.

4.13. MAINTENANCE AND DEPOT REPAIR

The Proposer shall provide pricing for any maintenance and depot repair options that including the initial warranty period add up to a total of ten (10) years of support for all proposed portable, mobile, and control station equipment.

4.14. PARTS AVAILABILITY

All proposed end user equipment (i.e. portables, mobile, etc.) repair parts shall be available for at least ten (10) years from the date of initial acceptance of the first order of radios from this RFP and for at least five (5) years from the date of cessation of equipment manufacture for all future orders.

4.15. REMEDIES

Vendor shall provide a schedule of work to provide subscribers, fleetmap development, radio testing methodology, installations, training, and all other work products required to complete the P25 radio subscribers and services project.

Remedies shall be part of any Contract awarded and negotiated with the Successful Proposer. The scope of these remedies will become part of a negotiated contract and shall minimally include a graduated set of monetary penalties for unexcused late or delayed performance by the Contractor. The project schedule's indicated completion date shall be the basis for assessment of completion remedies.

Remedies shall be applied as follows:

- A. Unexcused project completion delays of between 1 day and 30 days beyond the Contract's indicated completion date shall be assessed a penalty of \$250 per day. Unexcused completion delays that extend from Day 31 through Day 70 beyond the Contract's indicated completion shall be assessed a penalty of \$375 per day. Unexcused completion delays beyond 70 days shall be assessed a remedy of \$500 per day.
- B. Any unexcused project completion delay that exceeds 180 days from the Contract's indicated completion date shall trigger an automatic default of the Contract. If the Contractor is unable to cure the reason for its completion failure within 45 additional days, the Contract will self-cancel and the Owner will initiate action against the Contractor's performance bond unless some acceptable accommodation is reached by the Contractor with the Owner. During the 45-day default period, remedies will be assessed at the rate of \$750 per day.
- C. Remedies shall also apply to warranty repair service. The RFP and its subsequent contract with the Successful Proposer/Contractor include a mandatory warranty period where repair services performed in the field will

be necessary. These Specifications contain response time periods within which the Contractor is required to provide services and materials. A failure to perform on the part of the Contractor to meet its contracted response time requirements shall result in a financial penalty of the scope and amount indicated by these Specifications or as modified during contract negotiations.

4.16. RIGHT OF REFUSAL

The City of Greenville reserves the right to reject any and all RFP Responses received. Acceptance of any Response will not place the City of Greenville under any obligation to purchase any equipment, system or services.

4.17. PERFORMANCE OF PAYMENT BONDS

A Performance Bond in the amount of one hundred percent (100%) of the Contract Price shall be provided by the Contractor in the event a contract is subsequently awarded through either a sole-source or competitive procurement process. The Performance Bond shall be exercised by the City of Greenville for failure of the Contractor to perform according to the terms of the Contract, i.e., an uncured default condition that results in Contract Cancellation.

The Bond Issuer must be licensed and allowed to operate in the State of North Carolina.

If a Contractor intends to use a subcontractor for the installation of the subscriber radios, a Payment Bond in the amount of one hundred percent (100%) of the Contract price would likewise be required. The Payment Bond must be from a surety company authorized to do business in North Carolina with a rating of A- or better in the most current edition of the A.M. Best Insurance Report.

The cost of these Performance and Payment Bonds shall be the responsibility of the Contractor.

4.18. PROPOSAL PRICING SUMMARY SHEETS

Responders shall provide detailed price breakdown submittals for subscriber equipment items and installation services. It is not acceptable to lump category costs. Proposers must provide sufficient detail in their pricing proposals whereby it is possible to identify equipment types and services groupings. The format of the price submittal shall follow that as indicated by RFP Section 8.

4.19. CORPORATE RESOLUTION

RFP Response submittals must contain a Corporate Resolution or Power of Attorney authorizing and identifying agents to sign their Proposal or other documents as required by this Specification. This Corporate Resolution or Power of Attorney must be certified and notarized.

4.20. NON-COLLUSION AFFIDAVIT

Proposers must complete and submit the Non-Collusion Affidavit form found in the appendix. Attach an executed original in the Original-Marked proposal submittal and a copy of this executed form in all subsequent proposal copies, as required.

4.21. CORPORATE RESOLUTION

The Proposer must have manufactured, delivered, and installed at least three radio projects of comparable technology (700/800MHz Project-25 digital trunked radio subscribers), having comparable size and scope. These three projects shall be described with enough information that the City or its Consultant can reasonably determine their project equivalency. These submittals should include a detailed summary of the system and its significant operational features/components as well as a current customer contact including name, address, and phone number, title, department, and project responsibility.

5. INSTALLATION AND TRAINING

5.1. INSTALLATION TIMEFRAME

The Project's anticipated time frame for completion is no greater than six months from a formal Notice to Proceed.

So-called vendor "Standard Contracts" will not be acceptable unless suitably modified to be in compliance with this RFP and/or subsequent RFP Specifications.

5.2. PROJECT MANAGEMENT

The Contractor must prepare and submit a migration plan that will provide a smooth transition to the new subscriber radios including training and cutover prior to beginning any installation work. This plan must be approved by the City of Greenville or its designee. The Contractor shall provide and submit as part of this RFP a plan that shall include:

- A. A completion time period (in days) for the project, based on the City of Greenville's execution of a Notice to Proceed. Proposers shall provide a hypothetical migration plan. These required proposal submittals will be used by the City of Greenville's evaluation committee and Consultant to evaluate the Proposer's ability and understanding of Specification requirements to perform this work in a manner that offers no disruption to ongoing public safety communication operations.
- B. Progress review meetings, in which the Proposer will participate, whose schedule shall be allied with the intensity of installation activities. During actual installation, progress review meetings will be conducted frequently and not less than on a weekly basis. The Contractor shall be responsible for updating and correcting the Project Time Line in response to the actions taken at each progress review meeting such that Proposer's and the City of Greenville's work task responsibilities, and the dates for task completion, are clearly delineated.

C. A time schedule for the training of user personnel. Contractor will supply time schedules for the orderly transfer of departments onto the new equipment and the estimated time period when the transfer could be completed.

5.3. TESTING AND ACCEPTANCE PRIOR TO IMPLEMENTATION

Prior to Contract execution, the Successful Contractor must commence negotiations with the City of Greenville's Project Representative and its Consultant to develop a test plan that addresses, minimally, the following major functionality and operability issues:

New user subscriber radios must be tested in coordination with the City of Greenville or its designee prior to installation to gain acceptance. That is, new user subscriber radios will be tested as operationally ready before any new radios are installed or existing radio communications equipment can be decommissioned. This includes testing and approval of the new personality/codeplug. The Contractor must remove the existing user subscriber radios as new subscriber radios are installed. These costs and related engineering services must be included in the RFP Response. Including personality/codeplug creation.

A. End User Subscriber Equipment Testing Requirements

Contractor shall perform a random field test of ten (10%) percent of each type or model of portable radio device provided by the Contract. Failed radios are to be repaired or replaced as necessary. If more than ten (10%) percent of a type or model of equipment tested fails to meet the manufacturer's specifications, then the Contractor shall be required to perform a test of one hundred (100%) percent of that type or model and to replace or repair all failed radios. All mobile radio installations shall require 100% operational test verifications:

1. Verify compliance with vendor specifications for transmitter, receiver and control circuitry;

- 2. Check for compliance with RFP requirements and originally proposed functionality;
- 3. Check for proper user profile programming of equipment and operation on the network;
- 4. Testing of supportive equipment, i.e., speaker/microphone, battery chargers, batteries etc.
- B. Proposers shall submit within their Proposal Submittal a sample test plan that is representative of the scope and complexity of the proposed end user subscriber equipment. This plan must address those items described in this Section.

Contractor is responsible for the provisioning and cost of warehousing, insurance, storage and security of radio user equipment prior to and during the installation phases of the project.

Contractor will assign a Project Manager as a single point of contact between the City of Greenville's Project Representative and the Consultant. Proposer's Project Manager shall be approved by the City of Greenville or designee prior to assignment. The City of Greenville reserves the right to require replacement of the Proposer's Project Manager or its Sub-Contractors at any time during the project should those party's specific workmanship fall below Industry-accepted levels and/or where mandatory project submittals are deficient, are of poor quality or are materially delayed.

Contractor must supply comprehensive training on user operation of portable radios, mobile radios and other user equipment as required by the Contract.

5.4. TRAINING

The City of Greenville considers training to be of paramount importance. User training shall be completed on-site. The City of Greenville would prefer train-Page 25 of 59 RFP # 20-21-35

the-trainer training for 10 people. The Contractor must identify in their RFP Proposal all direct or indirect costs necessary for user training.

The Contractor shall also provide pricing for any options for online or remote continuing education training that can be completed after the project is complete.

5.5. RADIO PROGRAMMING

Contractor will be provided user identification and talk path assignments necessary for personality/codeplug development. Contractors use the existing personality/codeplug to create the necessary file for the new subscriber radios. Contractor shall make recommendations for modifications to the existing programming based on new button and feature availability. Contractor shall provide the necessary programming software for use by the City of Greenville after project acceptance.

Contractor shall program all portable radios, mobile radios, control stations and all other equipment supplied by the Contractor to operate on the FCC-licensed operating frequencies and the talk paths provided by the City of Greenville.

Contractor shall prepare and furnish to the City of Greenville's Project Representative "as programmed" records for each radio placed on the system. These records shall also document the versions of firmware/feature codes installed in user radios.

Contractor must provide to the City of Greenville no less than four sets of radio programming software, appropriately configured laptop computers, and all other support equipment and special cables necessary to program each type of user and control station equipment/device supplied by the Proposer.

6. PRICING CONSIDERATIONS

6.1. GENERAL PRICING CONSIDERATIONS

This subscriber equipment-pricing portion of this Specification is developed as a guide for Proposers so that the necessary information is provided to the City of Greenville, their designee and Consultant for it to conduct an accurate assessment of proposed cost.

Subscriber equipment (mobiles, portables, control stations and accessories) is intended to be purchased as part of this Specification. Some or all user equipment purchases, and quantities ordered may be delayed or not ordered depending on the City of Greenville financing options and capabilities. The pricing of this equipment for both initial and future purchases will be considered in determining the most advantageous price.

The City of Greenville retains the right to perform life-cycle analysis in determining the best price-value. One important component of such as analysis involves knowledge of the life cycle of the various equipment elements making up a Proposer's solution. The production age of equipment families affects the downstream ability to source software support and is a key factor in determining the operational life of a technology or product.

Proposers shall disclose as part of their Pricing Proposal when user equipment families and the operational software for the technology was first released for sale to the Public. Proposers shall also provide a life-cycle roadmap, referenced by year and so depicts when each of those proposed product elements is likely to be discontinued and when parts/software support will cease to be available.

6.2. PRICING SUMMARIES

Pricing Summaries for Subscriber equipment shall be provided as part of the Proposal Submittal.

6.3. FUTURE PRICING CONSIDERATIONS

It is the intent of the City of Greenville to operate these new radios for, minimally, the next ten years. As some portions of the subscriber equipment purchased may only be available from one vendor, it is important that the City of Greenville receive reasonable safeguards with regard to future pricing.

6.4. IMMEDIATE FUTURE DISCOUNTS

The City of Greenville requires within the Proposal a certainty of continued purchase at the beneficial initial-contract costs of all equipment, components, parts, materials and software for a minimum of 5 years.

For all purchases within five (5) years after the acceptance date, the discount percentage received by the City of Greenville will be identical to the discount percentages derived from list-price unit equipment costs and proposed unit costs. The Contractor shall define the discount structure for subscriber equipment.

6.5. PURCHASE PRICE DISCOUNT YEARS 6 - 10

For years six (6) through ten (10) after the acceptance date, the City of Greenville's discount from the manufacturer's published equipment list price, as delivered to their authorized sales agents, shall be as follows:

- Subscriber Equipment _____%
- Accessories____%

6.6. PRICE DISCOUNT YEARS 11 - 15

For years eleven (11) through fifteen (15) after the equipment's acceptance date, the City of Greenville's discount from the manufacturer's published equipment list price as delivered to their authorized sales agents, shall be as follows:

- Subscriber Equipment ____%
- Accessories____%

6.7. SUBSCRIBER EQUIPMENT PRICING

Proposers shall develop cost proposals for the subscriber radio, control station, and services listed in this RFP of radio products using the grouped radio for pricing page templates.

Additionally, Proposers shall prepare a detailed optional equipment catalog that describes the full range of options available for all radio groups and indicated portable and mobile radio configurations. The submitted catalog shall include list prices and the proposed discount percentage-reduced initial purchase price.

(Remainder of page left intentionally blank)

7. PUBLIC SAFETY RADIO SUBSCRIBERS

7.1. GENERAL

Currently the City of Greenville utilizes a standard based Project 25 Phase 1 Frequency Division Multiple Access (FDMA) and Phase 2 Time Division Multiple Access (TDMA) simulcast trunking radio system operated by the State of North Carolina known as VIPER. The system was designed to provide 95% mobile coverage statewide. Portable coverage has been determined to be below 95% in-building within the Service Area Reliability at DAQ 3.4 on within the City of Greenville.

Units from the City of Greenville are allowed to utilize the Pitt County P25 trunked system as necessary for mutual aid when providing aid for a County incident.

7.2. NPSPAC MUTUAL AID SYSTEM

The radios will be capable of using the National 7/800MHz Mutual Aid system.

7.3. SUBSCRIBER RADIO GROUPS

Proposers shall develop proposals for the following groups of radio features and functions using the following general format and having, minimally, the following capabilities:

1. FIRE PORTABLE – FIREFIGHTER

FEATURES ACTIVATED/READY TO USE

- 1. At least 800 talkgroups/channels
- 2. 700/800MHz operation;
- 3. APCO Project 25 Phase 1 and Phase 2
- 4. Multi-line alpha-numeric LCD text display
- 5. Radio/ Network status icons
- 6. Limited button keypad

- 7. IMBE/AMBE+ vocoders
- 8. Emergency Button
- 9. Programmable option buttons
- 10. Talk group scan
- 11. System Scan
- 12. Wide range of optional accessories
- 13. Spare Battery
- 14. Separate volume and talk group selection knob
- 15. Rugged / Fire Rated
- 16. Noise Cancelation

CAPABLE

- 17. Private/Individual Call
- 18. AES voice encryption/multi-key
- 19. Integrated voice/data
- 20. Large Knobs
- 21.GPS

2. FIRE PORTABLE – ADMIN

FEATURES ACTIVATED/READY TO USE

- 1. At least 400 talkgroups/channels
- 2. 700/800MHz operation;
- 3. APCO Project 25 Phase 1 and Phase 2
- 4. Alpha-numeric LCD text display
- 5. Radio/ Network status icons
- 6. Full Keypad
- 7. IMBE/AMBE+ vocoders
- 8. Emergency Button
- 9. Programmable option buttons
- 10. Talk group scan
- 11. System Scan
- 12. Wide range of optional accessories
- 13. Spare Battery

- 14. Separate volume and talk group selection knob
- 15. Noise Cancelation

<u>CAPABLE</u>

- 16. Private/Individual Call
- 17. AES voice encryption/multi-key
- 18. Integrated voice/data
- 19.GPS

3. POLICE ADMIN PORTABLE – OFFICER ADMIN

FEATURES ACTIVATED/READY TO USE

- 1. At least 400 talkgroups/channels
- 2. 700/800MHz operation;
- 3. APCO Project 25 Phase 1 and Phase 2
- 4. Alpha-numeric LCD text display
- 5. Radio/ Network status icons
- 6. Full keypad
- 7. IMBE/AMBE+ vocoders
- 8. Emergency Button
- 9. Programmable option buttons
- 10. Talk group scan
- 11. System Scan
- 12. Wide range of optional accessories
- 13. Spare Battery
- 14. Separate volume and talk group selection knob
- 15. AES voice encryption/multi-key
- 16. Noise Cancelation

CAPABLE

- 17. Private/Individual Call
- 18. Integrated voice/data
- 19.GPS

4. POLICE OFFICER PORTABLE - OFFICER

FEATURES ACTIVATED/READY TO USE

- 20. At least 400 talkgroups/channels
- 21.700/800MHz operation;
- 22. APCO Project 25 Phase 1 and Phase 2
- 23. Alpha-numeric LCD text display
- 24. Radio/ Network status icons
- 25. Limited keypad
- 26. IMBE/AMBE+ vocoders
- 27. Emergency Button
- 28. Programmable option buttons
- 29. Talk group scan
- 30. System Scan
- 31. Wide range of optional accessories
- 32. Spare Battery
- 33. Separate volume and talk group selection knob
- 34. AES voice encryption/multi-key
- 35. Noise Cancelation

CAPABLE

- 36. Private/Individual Call
- 37. Integrated voice/data
- 38.GPS

7.4. SUBSCRIBER RADIO TYPES & QUANTITIES NEEDED

The following is a list of subscriber radio quantities, types and accessories that are needed per agency.

The City of Greenville Fire Department

- 24 Quantity 700/800 MHz Remote Mount Mobiles
- 28 Quantity 700/800 MHz Dual Head, Remote Mount Mobiles
- 100 Quantity 700/800 MHz Firefighter, Fire Rated Portables
- 20 Quantity 700/800 MHz Fire Admin, Fire Rated Portables
- 8 Quantity 700/800 MHz Control Stations
- 20 Multi-unit Chargers
- 40 Single-unit Chargers
- 20 Vehicular Charger
- 100 Spare Batteries
- 100 Radio Speaker Microphones Rugged/Fire
- 20 Radio Speaker Microphone Standard
- 100 Holster with Strap
- 20 Belt Clip
- 6 Multi-unit Charger Wall Mounting Bracket

Pricing Notes:

- Portables may have optional yellow housing
- Portables must be Hazard Locations rated C1D2.
- Control stations must include antenna systems and the installation of the antenna system, plus a 2-hour battery backup.

The City of Greenville Police

- 175 Quantity 700/800MHz Remote Mount Mobiles
- 10 Quantity 700/800MHz Police Admin
- 240 Quantity 700/800MHz Officer Portables
- 2 Quantity 700/800MHz Control Stations
- 10 Multi-unit Chargers

- 250 Single-unit Chargers
- 50 Vehicular Chargers
- 250 Spare Batteries
- 250 Radio Speaker Microphones
- 250 Earpieces/lapel
- 427 AES Encryption/Multi-key
- 250 Belt Clips
- 10 Multi-Unit Charger Wall Mounting Bracket
- 2 Control Station Mounting Brackets
- 50 Quarter Wave Short Antenna

Pricing Notes:

Control stations must include antenna systems and the installation of the antenna system, plus a 2-hour battery backup.

(Remainder of page left intentionally blank)

8. IDENTIFIED USER NEEDS

8.1. GENERAL

Proposers to this RFP will not be responsible for the development of talk group structures and will be provided all necessary talk group structure information for programming into their end user subscriber radios.

8.2. PUBLIC SAFETY NEEDS

8.2.1. ENCRYPTION

Digital voice encryption, using Advanced Multi-band Excited (AMBE+) vocoder technology coupled with the federally approved Advanced Encryption Standard (AES) digital encryption scheme, is a required feature of the end user subscriber radios.

8.2.2. END USER EQUIPMENT

Law enforcement communications needs have generally shifted from patrol car based, with equipment fixed within vehicles to patrolman based where portable equipment is assigned to individual officers. These same user trends exist within the Fire Service and related public safety agencies.

This migration to portable units, with their reduced output power and oftendegraded antenna performance, has placed greater technical demands on radio communications network infrastructures. The coverage needs for mobile-based systems are relatively straightforward as the available effective radiated power from a mobile unit can closely approach that of a base station. Talk-in/talk-out balance for mobile-only operations historically have been readily achieved using straightforward repeater-type configurations.

Portable radio coverage needs place far more stringent demands on radio infrastructure solutions. In most instances, portable radio users often

operate within radio-resistant areas such as warehouses, office buildings, apartment structures and single-family dwellings. The need for reliable communications within building structures requires increased talk-in/talk-out system gain that impacts system complexity and cost.

Further complicating the design of portable-based radio systems are desired mechanical and ergonomic features, as summarized below:

- 1. The radio package, itself, must be simple to operate and have a minimum of operator controls or feature selections.
- 2. Radios contain a microphone, speaker, talk group selector, volume control, power switch, emergency button, and normal transmit push-to-talk button. All of these input/output devices are subject to near-constant physical abuse within a public safety environment.
- 3. Transmit and receive audio quality and clarity must be high with little evidence of distortion and background "static". The use of adaptive noise cancellation technology has been shown to materially improve signal clarity in high-noise environment
- 4. User must be able to disable message authorization tones. In fact, the ability to visually depict different radio talkgroup selections by virtue of radio display color changes is desirable.
- 5. The volume control must be fully adjustable from zero to maximum audio output level. Volume and talkgroup selection shall not be aggregated into a single knob control.
- 6. Unit must be extremely rugged to withstand shock and vibration typical of public safety operations. For the Fire Service, other features such as Hazardous Location rating C1D2 operation and the ability for the equipment to survive short-term water submersion are required. Additionally, these highest grouped portable radios must be capable of GPS location transmissions imbedded within P25 voice transactions.

- 7. Units must be operable, within the coverage requirements using the smallest half wave flexible antenna available.
- 8. Radio unit battery packs must provide sufficient power for a twelvehour work period typical for public safety operations. A range of accessories must be available for support in-field/in-vehicle battery charging.
- Radio units must be equipped with multi-line alphanumeric displays to more readily identify selected talk groups and operating modes, i.e. clear voice, encrypted voice, unit calling, etc.
- 10. Radios must be capable of operation with traditional speaker/microphones as well as subminiature radio surveillance accessories.
- 11. Radio units should be capable of being remotely reprogrammed using the radio system's inherent digital signaling capability. It is highly desirable for radios to also be reprogrammable using local-area private Wi-Fi, Bluetooth and/or commercial cellular (i.e., LTE) connectivity.
- 12. In addition to the specific desired features indicated above, all furnished equipment must meet minimum equipment requirements identified in Section 8.3

8.3. MINIMUM RADIO EQUIPMENT REQUIREMENTS

This section describes the minimum-acceptable requirements for mobile, portable, and control station. All radio equipment installed by Contractor shall be FCC type accepted under Part 90 of the FCC Rules and Regulations. Additionally, all RFP proposed equipment shall be in current production and shall meet or exceed the requirements of this Section.

The stated minimum requirements, below, for end-user equipment will not necessarily be required on all individual units assigned to differing user Page 38 of 59 RFP # 20-21-35

agencies. Section 6, Pricing Considerations contains those user radio configurations required for each agency/department. All user equipment must be capable of operating on various P25 radio system infrastructures now available from, but not necessarily limited to, major vendors such as JVC Kenwood, L3Harris, Motorola, and Tait. The degree of operations on these other radio systems allows for radio affiliation and use of basic communication functions as defined by current P25 published standards and as verified by independent P25-certfied testing facilities.

This RFP allows for vendors to include proprietary features within their radio products to differentiate their products from those offered by competitors. Yet, such proprietary features shall not inhibit the operation and attributes of basic P25 functionality as defined by published TIA-102 trunked feature specifications. Any such degradation found during the implementation of the Contractor's equipment may delay system acceptance and shall be remedied by the Contractor at no additional cost to the City of Greenville.

8.3.1. MOBILE RADIO EQUIPMENT

- A. Meet APCO minimum recommendations and EIA/TIA standards for Project-25 Public Safety 700/800MHz trunked radio systems. Furnished equipment must be operable on both Phase 1 and Phase 2 infrastructures.
- B. Incorporate heavy-duty construction, weather-sealed enclosures and weather-sealed controls to meet Military Standard 810 (latest revision) for water, shock, vibration, dust, humidity and high/ low temperature performance.
- C. Allow operations on Project-25 trunked and conventional (analog/Project-25) systems with priority scan of talk groups or channels.
- D. Front mount and rear mount, dual control-head with single rear mount radio and dual radios with single control-head configurations must be Page 39 of 59
 RFP # 20-21-35

available to meet the needs of the different public safety departments. Rear mount radios may require weatherproof control heads, speakers, microphones and other accessories (specific for fire operations). Multiband mobile radio configurations (using one control head/speaker/microphone to simultaneously control two or more mobile radio transceivers or transceivers having broad-spectrum capabilities) must be available to allow 800MHz trunked/800MHz conventional; VHF/800MHz; UHF/800MHz or VHF/UHF operations, depending upon the types of radio transceivers employed.

- E. Incorporate electronic, alphanumeric displays to provide visual indication of system availability, channel/talk group selection, incoming user ID, call alerts and operational status such as scan and channel busy.
- F. Emergency priority button on mobile radio control panels to initiate an emergency priority call.
- G. External alarm dry-contact closure to provide activation of a horn, light, etc. whenever the radio unit is individually called.
- H. Data transmission capability and appropriate accessory connection to devices supplied by others (i.e., vehicular-mounted computing devices).
- Digital voice encryption, using P-25 compliant IMBE/AMBE+ vocoder technology and federally approved AES coding, to provide security during transmission and reception of sensitive communications; required for police, capable for fire.
- J. Radio operating software shall be contained in an electrically erasable memory form that allows remote updating of software configurations and related performance data. Unit shall allow software updates/reprogramming locally from a computer or via the P25 radio network (also known as Over-the-Air Programming or OTAP). Sufficient quantities of programming cables and software shall be part of the

delivered equipment. Additional methods for programming user radio remotely shall be considered in addition to P25 OTAP, such as via a private, local Wi-Fi connection or through other secured commercial means.

- K. Transmit Time-Out Timer to warn the user of excessive transmission length. Time out timer should automatically disable the radio's transmitter after a pre-determined period, thereby eliminating talk group/channel interference caused by either a defective speaker/microphone or PTT button. Timer should be reset upon operator rekeying (PTT) the radio.
- L. Minimum Electrical Specifications as follows:
 - Frequency Range: 764 to 869MHz (standard post rebanding public safety frequencies)
 - Channel Capacity: 24 channels/system (8 systems/tiers)
 - Channel Spacing: 25/12.5KHz; NPSPAC
 - 6.25KHz or TDMA Equivalent
 - Talk Group Capacity: 16 talk groups/system
 - Primary Input Voltage: 11 to 16VDC, negative ground
 - Battery Drain: Standby: 1.5 amperes max.
 - Receive: 4.5 amperes max.
 - Transmit: 15.5 amperes max.
 - Environmental: MIL-STD 810 (C,D,E,F&G) for shock, vibration, humidity, temperature and blowing rain. EIA/TIA-603 for shock and vibration stability.
 - Talk Group Selection: Rotary-knob style.

Transmitter

- RF Output Impedance: 50 Ohms
- Output Power:Sufficient power to achieve required coverage, not less than 10 watts
- Frequency Stability: +/- 1.5PPM from -30°C to 60°C
- Modulation Deviation:
 - +/- 5KHz for 25KHz Channel (FM)
 - +/- 4KHz for NPSPAC (FM)
- P25 Phase 1 C4FM/12KHz channel
- P25 Phase 2 TDMA
- Audio Response:Within +1, -3dB of a 6dB/ octave
- Audio Distortion: Less than 2% @ 1KHz
- Spurious/Harmonic:-60db below carrier
- Hum and Noise: -45db or greater
- Duty Cycle (EIA): Transmitter 20%

Receiver

- Modulation Acceptance: +/- 7KHz
- Selectivity: -60dB minimum for 12.5KHz channel.
- Sensitivity: -116 dBm (5% BER (C4FM))
- Intermodulation: -75dB
- Spurious/Image: -80dB

- Frequency Stability: +/- 1.5PPM from -30° to 60°C
- Audio Output: 10 watts, with no more than 3% distortion at 1KHz
- Duty Cycle (EIA): Receiver 100%

8.4. PORTABLE RADIO EQUIPMENT

- A. Meet APCO minimum recommendations and EIA/ TIA standards for Project-25 Public Safety 700/800MHz trunked radio systems. Furnished equipment must be operable on both Phase 1 and Phase 2 infrastructures.
- B. Heavy duty construction and weather-sealed cases to meet Military Standards 810 C,D,E,F&G for shock, vibration, dust, humidity, high/low temperature and blowing rain.
- C. Allow operations on Project-25 (Phase 1 and 2) trunked and/ or conventional (analog/ Project-25) systems with priority scan of talk groups or channels.
- D. Top-mounted rotary controls with positive stops for volume and channel selection. Control placement must be sufficient to allow gloved-hand operation, as is typically needed by the fire service.
- E. Incorporate electronic, alphanumeric display to provide visual indication of system availability, channel/talk group selected, incoming user ID, call alerts and operational status such as scan, transmit or low battery.
- F. Transmit Time-Out Timer to warn the user that the radio may be transmitting longer than a predetermined time limit and then automatically disable the transmitter. Timer is to be reset upon the operator rekeying (PTT) the radio
- G. No protruding push-to-talk switch, thereby preventing accidental transmitter operation or damage to the switch as caused by impact.

- H. Protected emergency button to allow easy access when needed but incorporating an ergonomic design whereby the emergency function could not be accidentally activated.
- I. An accessory receptacle shall be provided for the connection of external devices such as remote microphones or combination remote speaker/microphone units (with or without antenna), vehicular adapters and mobile data computer equipment.
- J. Radio operating software shall be contained in an electrically erasable memory form that allows remote updating of software configurations and shall related performance data. Unit allow software updates/reprogramming locally from a computer or via the P25 radio network (also known as Over-the-Air Programming or OTAP). Sufficient quantities of programming cables and software shall be part of the delivered equipment. Additional methods for programming user radio remotely shall be considered in addition to P25 OTAP, such as via a private, local Wi-Fi connection or through other secured commercial means.
- K. Portable radios, batteries and accessories (used by the fire & some police service) proposed must be approved by Factory Mutual as intrinsically safe as per FM Approved Class Number 3640: Approved Standard for Land Mobile Radios for use in Class I, Division 1 Hazardous (Classified) Locations.
- L. Carrying case options should include leather-carrying case with swivel mounts, as well as chemical-resistant cases (nylon or similar plastic material) for use by hazardous material groups.
- M. Optional surveillance accessories such as miniature microphones, earpieces and remote microphones and headset speaker microphones must be available.

- M. Digital voice encryption, using both APCO Phase 1 and Phase 2 vocoders (i.e., Digital Voice Systems, Inc. IMBE and AMBE+ vocoder, respectively) and federally approved Advanced Encryption Standard (AES) coding, to provide enhanced security during transmission and reception of sensitive communications. It should be possible to re-key encrypted radios remotely via the P25 radio network using a secure method having programmer authentication; required for police, capable for fire.
- N. Provide single unit 120VAC rapid chargers capable of fully charging a discharged high-capacity battery pack within a four-hour period. Provide optional single unit 12VDC rapid chargers for vehicular operation. Quantities required are contained in RFP Section 2.
- O. All battery packs, including spare battery packs, shall utilize Lithium chemistry and shall operate the proposed radio equipment a minimum of twelve-hours using a duty cycle of 5% transmit, 5% receive and 90% standby.
- P. Radios must be operable on post-Rebanding 800MHz NPSPAC frequencies as well as 700/800MHz conventional and trunked frequencies.
- Q. User-programmable audible alert notification in the event of loss of P25 network trunked control channel (i.e., out-of-range condition). This must be a standard feature in present and all future-proposed public safety models. Once an out-of-range condition has been observed, the radio (using a pre-programmed sequence of roaming commands/parameters) shall automatically initial and seek to affiliate with an authorized nearby radio system(s), if available.
- R. Minimum electrical specifications as follows:
 - Frequency Range: 764 to 869MHz (standard post Rebanding public safety frequencies)
 - Channel Capacity: 24 channels/system (8 systems/tiers)

- Talk Group Capacity: 16 talk group/system
- Channel Spacing: 25/12.5KHz; NPSPAC/
- 6.25KHz or TDMA Equivalent
- Temperature Range: -30°C to +60°C
- Humidity:95% relative humidity @ 50°C
- Environmental: MIL STD 810 C,D,E,F&G for shock, vibration, humidity, temperature and blowing rain. EIA/TIA-603 for shock and vibration stability.
- Talk Group Selection: Rotary-knob style

Transmitter

- RF Output Impedance: 50 Ohms
- Power Output: Sufficient power to achieve required coverage, but not less than 2.5 watts
- Frequency Stability: +/- 1.5PPM from -30°C to +60°C
- Modulation Deviation:
 - +/- 5KHz for 25KHz Channel (FM)
 - +/- 4KHz for NPSPAC (FM)
- P25 Phase 1 C4FM/12KHz channel
- P25 Phase 2 TDMA
- Audio Response: Within +1, -3dB of a 6dB/ octave
- Audio Distortion: Less than 2% @ 1KHz

- Spurious/Harmonic: -75dB
- Duty Cycle (EIA): N/A

<u>Receiver</u>

- Mod. Acceptance: +/- 7KHz
- Selectivity:-70dB minimum (25KHz channel)
- Sensitivity: -116 dBm (5% BER (C4FM))
- Intermodulation:-70dB
- Spurious/Image: -70dB
- Frequency Stability: +/-1.5PPM from -30° to +60°C
- Audio Output: 500 milliwatts @ no more than 2% distortion
- Duty Cycle (EIA): Receiver 100%

8.5. CONTROL STATION EQUIPMENT

- A. Available either as integrated 120VAC-powered desktop radio cabinet or a remotely located, AC-powered radio package each having the capability of being operated via a separate, extended remote control unit (capacity to be operated from no less than two remote locations within 500ft of host control station).
- B. Provision shall be provided for both local and remote-control operation of the control station.
- C. Meet APCO minimum recommendations and EIA/TIA standards for Project-25 Public Safety 700/800MHz trunked radio systems. Furnished equipment must be operable on both Phase 1 and Phase 2 infrastructures.

- D. Allow operation on Project-25 (Phase 1 and 2) trunked and conventional (analog/ Project-25) systems with priority scan of talk groups or channels.
- E. Digital voice encryption, using both APCO Phase 1 and Phase 2 vocoders (i.e., Digital Voice Systems Inc. IMBE and AMBE+ vocoder, respectively) and federally approved Advanced Encryption Standard (AES) coding, to provide enhanced security during transmission and reception of sensitive communications. It should be possible to re-key encrypted control station radios remotely via the P25 radio network using a secure method having programmer authentication; required for police, capable for fire.
- F. Incorporate electronic, alphanumeric displays to provide visual indication of system availability, channel/talk group selection, incoming user ID, call alerts and operational status such as scan and channel busy.
- G. Transmit Time-Out Timer to warn the user that the radio may be transmitting longer than a predetermined time limit and then automatically disable the transmitter. Timer is to be reset upon re-keying (PTT) the radio.
- H. Control station packaging shall incorporate sufficient electro-magnetic shielding of radio and power supply components to allow multiple control stations to be located at the same physical site/facility without causing unit-to-unit interference.
- Proposed control station radios must be operable on post-Rebanding 800MHz NPSPAC frequencies as well as 700/800MHz conventional and trunked frequencies.
- J. Minimum electrical specifications as follows:
 - Frequency Range: 764 to 869MHz (standard post rebanding public safety frequencies)
 - Channel Capacity: 24 channels/system (8 systems/tiers)
 - Talk Group Capacity: 16 talk groups per system/tier, minimum

- Channel Spacing:
 - +/- 5KHz for 25KHz Channel (FM)
 - +/- 4KHz for NPSPAC (FM)
- P25 Phase 1 C4FM/12KHz channel
- P25 Phase 2 TDMA
- Input Voltage:120VAC, 60Hz, single-phase with 3 conductor grounded line cord
- Environmental: MIL-STD 810 C,D,E,F&G for shock, vibration, humidity, temperature and blowing rain. EIA/TIA-603 for shock and vibration stability.
- Talk Group Selection: Rotary-knob and via remote controller(s)

<u>Transmitter</u>

- RF Output Impedance: 50 Ohms
- Power Output: Sufficient power to provide required radio coverage, but not less than 10 watts
- Frequency Stability: 1.5PPM from -25°C to 60°C
- Modulation Deviation:
 - +/- 5KHz for 25KHz Channel
 - +/- 2.5KHz for 12.5KHz Channel
 - +/- 4KHz for NPSPAC
- Emission Designators:11K0F3E;8K10F1E;16K0F3E; 8K10F1D
- Spurious/Harmonic: At least 70 dB below carrier

- Audio Response: Within +1, -3dB of a 6dB/ octave
- Audio Distortion: Less than 3% @ 1KHz
- Duty Cycle (EIA): Transmitter 20%

Receiver

- Modulation Acceptance: +/- 7KHz
- Selectivity:-60dB
- Sensitivity:-116 dBm (5% BER (C4FM))
- Intermodulation:-70dB
- Spurious/Image: -75dB
- Frequency Stability: 1.5PPM from -25° to 60°C
- Audio Output: 1.5 watts @ no more than 3% distortion at 1KHz
- Duty Cycle (EIA): Receiver 100%

Proposal Authorization Form (To be submitted with each Price Proposal)

I (or we) do hereby declare that I (or we) have carefully examined this RFP Specification and the annexed Addenda numbered ______, and I (or we) have a clear understanding of said Specifications, and shall provide the required communications equipment and the necessary tools, machinery, apparatus, and other means of construction/installation, and to furnish all labor, materials, and services specified in the Contract or called for in the said Specifications (including all taxes/fees) necessary for the completion of the work described herein.

Respectfully submitted,

By:

Authorized Signature	Title
Business Name	Business Address
Telephone Number	Date

NON-COLLUSION AFFIDAVIT

STATE OF		
COUNTY OF		
	, being first duly sw	orn, deposes and

says that:

- Executor is (Owner) (Partner) (Officer) (Representative) or (Agent), of
 ______, the Proposer that has submitted the attached Proposal Response;
- Such Proposal Response is genuine and is not a collusive or sham Proposal;
- (3) Neither the said Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly, or indirectly with any other Proposer, firm or person to submit a collusive or sham Proposal in connection with the Contract for which the attached Proposal Response has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly sought by agreement or collusion or communication or conference with any other Proposer, or to fix any overhead, profit or cost element of the Proposer price or the Proposer price of any other proposer, or to secure through any advantage against the City of Greenville or any person interested in the proposed Contract; and
- (4) The price or prices quoted in the attached Proposal Response are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Subscribed and sworn to, this ______ day of _____, 201____.

1.1. BROKERAGE FEE

The Contractor warrants that he has not employed any person to solicit or secure this Contract upon an agreement for a commission, percentage, brokerage or contingent fee. Breach of this warranty shall give the City of Greenville the right to terminate the Contract, or, at the discretion of the City of Greenville, to deduct from the Contract price or consideration, the amount of such commission, percentage, brokerage or contingent fee. This warranty shall not apply to commissions payable by contractors upon contracts or established commercial or selling agencies maintained by the Contractor for the purpose of securing business. No elected official or employee of the City of Greenville shall be permitted to share any part of this Contract or any benefit that may arise wherefrom, and any contract made by the City of Greenville in which such individual(s) shall be personally interested shall be void, and no payments shall be made thereon by the City of Greenville or any officers thereof.

1.2. CONFLICT OF INTEREST

In the interest of ensuring that efforts of the Contractor do not conflict with the interests of the City of Greenville, and in recognition of the Contractor's professional responsibility to the City of Greenville, the Contractor agrees to decline any offer of employment if its independent professional work on behalf of the City of Greenville is likely to be adversely affected by the acceptance of such employment. The initial determination of such a possibility rests with the Contractor. It is incumbent upon the Contractor to notify the City of Greenville and provide full disclosure of the possible effects of such employment on the Contractor's independent, professional work on behalf of the City of Greenville. Final decision on any disputed offers of other employment for the Contractor shall rest with the City of Greenville.

1.3. CONTRACTS

This Specification and the Proposer's Response will be an integral part of the Contract. Any and all statements made in the Proposal Response will automatically become part of the final Contract for equipment and services. Inability to contractually guarantee any statement made in their Proposal Response will result in Proposer disqualification.

Omission in the Proposal Response of any equipment, services or provisions herein prescribed shall not be construed so as to relieve the Contractor of any responsibility or obligation necessary to the complete and satisfactory installation of any and all systems, equipment, and services specified. Any optional prices quoted must include all equipment, service, features, materials, labor, etc. necessary to make all the features, services, and equipment, which are included, fully functional. The Proposer agrees that the cost of additional equipment, materials, or labor necessary to meet these requirements, which was not otherwise calculated in his Proposal Response, shall be solely at the Contractor's expense.

If there are specific items that are purposefully excluded in the Proposer's indicated price, those must be defined by the Proposer's submittal. If, however, those Proposer-excluded items are what the City of Greenville and its Consultant consider to be normal and customary for a project of this type, any proposal response excluding such items will be graded as not meeting minimum requirements for the appropriate Specification category(s) that are impacted by that exclusion.

Each Proposal Response must be signed by a duly authorized officer who is empowered to contractually bind the Proposer.

The City of Greenville shall enter into contract negotiations with the apparent responsive and best Proposer. Should the City of Greenville be unable to negotiate a Contract with the apparent responsive and best Proposer, the City of Greenville may exercise the right to enter into Contract negotiations with the apparent responsive Proposer having the next-highest evaluation score.

1.4. NON-APPROPRIATION OF FUNDS

In the event no funds or insufficient funds are appropriated and budgeted by the City of Greenville or are otherwise unavailable for fulfilling the requirements of the Contract, the obligations of the City of Greenville shall terminate on the last day of the fiscal period for which appropriations are received without penalty or expense to the City of Greenville of any kind whatsoever. The City of Greenville will immediately notify the Contractor or its assignee of such occurrence. In the event of such termination, the City of Greenville agrees to peaceably surrender possession of the equipment to the Contractor or its assignee on the date of such termination. The Contractor will be responsible for packing all equipment and any freight charges. The City of Greenville will not cancel if any funds are appropriated to it, or by it, for the acquisition, retention or operation of the equipment or other equipment performing similar functions for the current fiscal period in which the termination occurs or the next succeeding fiscal period thereafter and that it will not during the funding period give priority to other functionally similar equipment or services.

The Contractor shall covenant and agree to indemnify and hold the City of Greenville harmless against any loss, damage liability, cost, penalty, or expense, including attorney's fees, which it is not otherwise agreed to by the City of Greenville in the equipment Contract and which is incurred and arises upon a failure of the City of Greenville to appropriate funds in the manner described herein for a continuation of the Contract or exercise of the option to purchase the equipment.

1.5. TERMINATION FOR CONVENIENCE ("TFC").

Without limiting any party's right to terminate for breach, the parties agree that the City may, without cause, and in its discretion, terminate this contract for convenience by giving the Contractor written notice that refers to this section. TFC shall be effective at the time indicated in the notice.

1.6. CHOICE OF LAW AND FORUM;

This contract shall be deemed made in Pitt County, North Carolina. This contract shall be governed by and construed in accordance with the law of North Carolina and not the United Nations Convention on Contracts for the International Sale of Goods. The exclusive forum and venue for all actions arising out of this contract shall be the North Carolina General Court of Justice, in Pitt County. Such actions shall neither be commenced in nor removed to federal court.

1.7. PURCHASE PAYMENT SCHEDULE

The following payment schedule shall apply:

- 20% at Contract execution
- 50% at delivery of and inventory by the City of Greenville designee of components to Proposer's warehouse within 2 hours of the City of Greenville
- 15% upon issuance of portable subscriber equipment and satisfactory completion of all training
- 15% upon installation of mobile subscriber equipment and control stations and satisfactory completion of all training

The Proposer agrees that all prices quoted in its Proposal Response are valid for one year from the Contract execution date. Future price discounts are valid for the time periods indicated in Section 6.3.

1.8. CONTRACTOR'S INSURANCE

The Contractor shall be responsible for any and all loss of material connected with the construction due to unexplained disappearance, theft or misappropriation of any kind or nature. The foregoing provisions shall not

operate to relieve the Contractor and any Subcontractors of responsibility for loss or damage to their own or rented property or property of their employees of whatever kind or nature, including but not limited to tools, equipment, forms, scaffolding and temporary structures including their contents. The City of Greenville shall in no event be liable for any loss or damage to any of the aforementioned items or any other property of Contractor and any Subcontractors, which is not included in the permanent construction. The Contractor and any Subcontractors hereby waive any right of recovery they may have against the City of Greenville for damage or destruction of property of whatever kind or nature whether it is their own property or property of their employees.

The Contractor shall procure and maintain for the duration of the Contract the following insurance policies as mandated by and with minimum limits set by the City of Greenville's Procurement Policy with coverage for occurrences and claims that may arise from or in connection with the performance of the obligations hereunder by the Contractor, its agents, employees, representatives and subcontractors:

- A policy or policies to insure the Contractor for legal liability on account of personal injury (including death resulting wherefrom) or loss of or damage to property however arising in the execution of this Contract and specifically including explosion, collapse, and underground damage. The combined liability limits shall not be less than \$2,000,000. This insurance shall include coverage for (a) Premises - Operations; (b) Broad Form Contractual Liability; (c) Products and Completed Operations; (d) Use of Contractors and Subcontractors; (e) Personal Injury; (f) Broad Form Property Damage. "Claims made" form shall not be acceptable. The "occurrence form" shall not have a "sunset clause".
- 2. The policy or policies for this combined liability shall also include products/completed operations liability for one year after completion of the work and acceptance by the City of Greenville.

- 3. A policy to cover the full liability of the Contractor in accordance with the provisions of the Worker's Compensation Law of the State of North Carolina. The Contractor shall also maintain employer's liability coverage with limits of not less than \$2,000,000 per year. The Contractor shall also obtain from its Workers' Compensation Insurance carrier a waiver of subrogation in favor of the City of Greenville.
- 4. The Contractor will provide evidence of automobiles liability coverage for owned, non-owned and/or hired vehicles in limits not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
- 5. The policies or certificates evidencing the coverage provided above shall be submitted at a Pre-Construction Conference prior to commencing any work or the City of Greenville issuance of a formal Notice to Proceed. Such policies or certificates shall provide that insurance will not be materially altered or cancelled without thirty (30) days prior written notice to the City of Greenville.

1.9. OTHER PROVISIONS

The insurance policies required by the Contract shall contain, or be endorsed to contain, the following provisions:

- 1. The City of Greenville, its officers, agents, servants and employees, shall be added as "additional insureds" under the Comprehensive General Liability and Automobile Liability Coverages.
- 2. The Workers' Compensation and Employer's Liability coverages shall contain an express waiver of all rights of subrogation against the City of Greenville, its officers, agents, servants, and employees, for losses arising from work performed by the Contractor for the City of Greenville.
- 3. All insurance policies required by this Contract shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, or

reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail has been given to the City of Greenville.

1.10. ACCEPTABILITY OF INSURERS

All insurance required by this Section shall be placed with insurers that are authorized to do business in North Carolina and have a rating of no less than A- in the most current edition of the A.M. Best Insurance Report. Insurers shall have a minimum financial size category of V2I according to A.M. Best.

1.11. CERTIFICATES OF INSURANCE

The Contractor shall furnish to the City of Greenville Certificates of Insurance affecting coverage required by this Contract. The certificates are to be signed by a state licensed agent authorized by that insurer to bind coverage on its behalf and endorsements. The certificates and endorsements must be received and approved by the City of Greenville prior to the Contract's effective date.

1.12. INDEMNITY

Indemnity shall be negotiated with the apparent responsive and best Proposer as part of Contract negotiations.

END OF FORM