# **Arkansas City Public Schools USD 470**

**Telephone System** 

**Request For Proposal** 

June 11, 2019

#### Overview

Arkansas City Public Schools USD 470, to be referred to as USD 470 or the District in this document, is soliciting a Request For Proposals (RFP). The District is seeking proposals from highly experienced and professional firms to provide, install, and service a new premise or hosted telephone system (system) to support current and future locations.

USD 470 reserves the right to modify the Scope and Specifications as circumstances require, including but not limited to adding, changing, or deleting proposed locations.

RFP responses should include all costs regarding hardware, software, shipping, and any other cost associated with the particular item.

SEALED SUBMITTAL REQUIREMENTS: (1) original and (1) electronic copy in PDF format for a total of (2) complete sets of the Proposal for a Telephone System shall be SEALED and submitted to Will Pfannenstiel, Director of Business and Operations, as deadline noted on page 4, to be considered in this process. Any entry that is entered after this date and time will not be considered. A hard copy of the proposal must physically arrive at 2545 Greenway, Arkansas City, KS 67005, as described in the aforementioned manner. Electronic copies are to be emailed to will.pfannenstiel@usd470.com.

#### All questions regarding this RFP should be directed to sydney.hankins@usd470.com

The proposal is to be signed only by persons authorized to enter into a contract with Arkansas City Public Schools.

USD 470 will review and score each RFP response based on the predefined assessment criteria noted in this document. As a result, items such as solution price, capability, interoperability, and brand reputation/experience may be considered in the final selection decision. In the event the primary selection cannot provide the products an alternate company will be used. All companies will be notified of selection decision.

Upon selection, the company will communicate with district staff regarding delivery timelines. All products will be expected to be delivered at the price indicated in the RFP. All contracts and supporting documentation will be approved by both parties before any costs are incurred. Contracts may be reviewed by district counsel and any contract terms that are not acceptable by the district may be grounds for dismissing the selected vendor.

A vendor-neutral approach is taken for this project. Offering must correspond to current inventory and technical compatibility. Lack of required functionality is not acceptable.

USD 470 – Arkansas City Public Schools reserves the right to accept any part of a proposal and reject any and/or all proposals in response to this request. Force Majeure is in effect.

## **PROPOSAL SUBMITTED BY:**

(Company Name)		
(Address)		
(State/Zip Code)		
(Typed Name of Person Submitting th	e Proposal)	
(Phone #)	(Fax #)	(Email)
(Date of Proposal Submission)		

#### **IMPORTANT DATES:**

Mandatory Pre-Proposal Conference June 27, 2019 1:00 PM CD

Location: Gene Snyder Administrative Center, 2545 Greenway, Arkansas City, KS

67005

Telephone Number: 620-441-2000

Last Day for Questions July 26, 2019 12:00 PM CDT

Proposal Due Date August 14, 2019 2:00 PM CDT

Finalist Presentations (If Requested) Week of September 2, 2019 (Estimated)

Project Completion/Full Implementation: To be determined based on scope of work. Project to be completed and fully operational no later than June 30, 2020.

Timeline subject to change.

## **Table of Contents**

SUBMITTAL REQUIREMENTS AND PROPOSAL FORMAT	6
Proposal Clarification Questions	6
Submittal Requirements	6
Exceptions to the RFP	7
Alternate Proposals	7
Vendor Contact/Questions about the RFP	7
TERMS AND CONDITIONS	9
Contract	9
Safety	10
Ownership of Work Product(s)	10
Warranty of Integrated Telephone System	10
Independent Contractor	10
Nondiscrimination	10
Default and Cancellation	11
Severability	11
Third-Party Products	11
Return of Assets	12
Excessive Downtime	12
Proposal Acceptance/Rejection	12
Firearms	12
Other Contract Terms	12
Force Majeure	12
Payment Terms	13
PROJECT SCOPE	13
Description	13
Completion	13
CONTRACTOR, INSTALLATION, AND MAINTENANCE	14
Contractor Responsibility	14
Project Manager	14
Specific Onsite Installation Requirements	15
EXISTING INFRASTRUCTURE	21
TELEPHONE SYSTEM PROPOSALS	24
Proposal Architecture	24
System Feature Requirements	24
PSTN SERVICES	29
Evaluation Rubric	30

#### SUBMITTAL REQUIREMENTS AND PROPOSAL FORMAT

#### 1. Proposal Clarification Questions

a. After reviewing all proposals received in response to this RFP, the District may develop a list of clarification questions to be addressed by the Vendor. The District shall send these questions to the Vendor for clarification. The Vendor shall provide a response within three (3) working days following the inquiry.

#### 2. Submittal Requirements

- a. Proposals shall be submitted by tab number as instructed below. The Vendor agrees and shall comply with all provisions and specifications as stated in this RFP unless otherwise stated in the Exceptions section of this RFP. Any additional cost or factors to meet a specification or requirement must be noted in the Exceptions section. Failure to respond to these requirements may result in the proposal being considered non-responsive.
- b. Tab 1 Minimum Criteria
  - i. Cover letter with overall price, any special conditions, and signature
  - ii. A brief profile of the firm, including the following:
    - 1. A brief history of the business
    - 2. Organizational structure of business
    - 3. Minimum of 2 references
  - iii. The overall qualifications of the business to provide the services requested
- c. Tab 2 Vendor/Sub-Contractor(s)
  - i. Proof of required insurance
  - ii. Certifications and/or letter from manufacturer(s) that the firm is an authorized installer and maintenance provider
  - iii. Five-year maintenance support guarantee from manufacturer and vendor
  - iv. Addenda Any addenda issued subsequent to the release of this solicitation must be signed and returned with the firm's proposal. Failure to return signed addenda may be cause for the proposal to be considered non-responsive.
  - v. Sub-Contractor(s)
- d. Tab 3 Executive Summary/Overview
  - . Written summary of the understanding of the scope of work to be performed
- e. Tab 4 Technical summary of the system proposed, including details about any "improvements" over and above the base request (for example, resiliency/redundancy, system management, database consolidation, or larger number of ports)
- f. Tab 5 Form A: Manufacturer
- g. Tab 6 Form B: Technology
- h. Tab 7 Form C: Vendor
- i. Tab 8 Form D: Exceptions and Clarifications
- j. Tab 9 Form E: Cost Worksheet and Bill of Materials
- k. Tab 10 Sales Documents and Brochures



#### **3.** Exceptions to the RFP

a. Vendors may find instances where they must take exception with certain requirements or specifications of the RFP. All exceptions shall be clearly identified in the Exceptions Form D, and written explanations shall include the scope of the exceptions, the ramifications of the exceptions for the District, and a description of the advantage to be gained or disadvantages to be incurred by the District as a result of these exceptions.

#### 4. Alternate Proposals

a. Vendors who wish to submit an alternate premise-based proposal may do so. If more than one proposal is submitted, all must be complete and comply with the instructions set forth in this RFP.

#### 5. Vendor Contact/Questions about the RFP

- a. Vendor communications shall be limited to contacts defined herein. Failure to comply with this provision may result in disqualification or evaluation penalty. It shall be the Vendor's responsibility to learn all aspects of the RFP requirements. Should any details necessary for a clear and comprehensive understanding be omitted or any error appear in the RFP documents, or should the Vendor note facts or conditions that in any way conflict with the letter or spirit of the RFP documents, it shall be the responsibility of the Vendor to obtain clarifications before submitting a proposal.
- b. Questions may be submitted up until the date and time shown under the Important Dates section of this RFP to the Technology Department at sydney.hankins@usd470.com

#### c. Addenda

i. It is incumbent upon each Vendor to carefully examine all specifications, terms, and conditions contained herein. Any inquiries, suggestions, or requests concerning interpretation, clarification, or additional information shall be made in writing, through the recipient named above. The District shall not be responsible for any oral representation(s) given by any employee, representative, or others. The issuance of a written addendum is the only official method by which interpretation, clarification, or additional information can be given. No addenda shall be issued later than five (5) business days prior to the date for receipt of proposals, except an addendum postponing or withdrawing the request for proposals. Vendors must acknowledge receipt of addenda in their proposals.

#### ii. Request for Proposal

1. It is the sole responsibility of the Vendor to ensure that they have received the entire Request for Proposal.

#### iii. Descriptive Material

1. The District is not responsible for locating or securing any information that is not identified in the Vendor's proposal and reasonably available to the District. To ensure that sufficient information is available, Vendor must furnish as a part of the proposal all descriptive material necessary for the District to (1) determine whether the product offered meets the requirements of the RFP and (2) establish exactly what the Vendor proposes to furnish in terms of supplies, materials, and services.

#### iv. Network Diagram

1. Voice and Data Network diagrams shall be submitted with the RFP. The diagrams shall include the proposed system network, connections to the PSTN, location of equipment, migration path, etc.



#### v. Subcontractors

1. If Vendor's organization will use subcontractors, they must be identified under Tab 2 of your response.

#### vi. Request for Additional Information

1. Prior to the final selection, Vendors may be required to submit additional information regarding the Vendor's qualifications and experience that the District may deem necessary to further evaluate the proposal's qualifications.

#### vii. Proposal Award

An acceptable response to the RFP consists of a base proposal configuration that may be
accepted or rejected in its entirety and proposal options that the District may accept or
reject individually without regard to the listing order of the option, but only as the District
determines is in its best interest.

#### viii. Right to Accept/Reject

The District reserves the right to reject any or all proposals and waive any irregularities. The
District also reserves the right to choose the proposal that is deemed in the best interest of
the District based on any or all criteria, etc. In addition, the District reserves the right to
negotiate any or all items and terms of proposal.

#### ix. After Hours Cost

1. The cutover will take place after hours or at a time to be jointly determined by the District and Vendor. These costs shall be included in the total price presented in the RFP response.

#### x. Denial of Reimbursement

1. The District shall not reimburse Vendors for any costs associated with the preparation and submittal of any proposal, or for any travel and/or per diem costs that are incurred before, during, or after the project.

#### xi. Gratuity Prohibition

1. Vendors shall not offer any gratuities, favors, or anything of monetary value to any official, employee, or agent of Arkansas City Public Schools for the purpose of influencing consideration of this proposal.

#### xii. Right of Withdrawal

1. A proposal may not be withdrawn before the expiration one hundred and eighty (180) days from the proposal due date.

#### xiii. Rights to Submitted Material

- All proposals, responses, inquiries, or correspondence relating to or in reference to this RFP, and all reports, charts, and other documentation submitted by Vendors shall become the property of Arkansas City Public Schools when received.
- 2. The District reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the Vendor of the conditions contained in this Request for Proposal.

#### xiv. Selection Criteria

1. Proposals shall be evaluated based on, but not limited to, the following criteria:

- a. Cost
- b. Manufacturer
- c. Technology
- d. Vendor

#### xv. Selection Committee

- 1. Proposals will be evaluated by a Selection Committee as determined by the District.
- 2. The Selection Committee may, at its option, request any or all Vendors to provide on-site demonstrations of the proposed system.



#### xvi. Submittal of Qualifications

- 1. Vendors should submit experience and qualifications as described in the RFP.
- 2. Additional information may be submitted as appropriate to further describe vendor and provide product capabilities.

#### TERMS AND CONDITIONS

#### 1. Contract

- a. Any award of a contract resulting from this RFP will be made only by written authorization from Arkansas City Public Schools upon approval by Arkansas City Public Schools Board of Education.
- b. The contract between the District and the Contractor shall consist of
  - i. the Request for Proposal (RFP) and any amendments thereto and
  - ii. the proposal submitted by the Contractor in response to the RFP. In the event of a conflict in language between these two documents, the provisions and requirements set forth and/or referenced in the RFP shall govern. The District also reserves the right to clarify any contractual relationship in writing with the concurrence of the Contractor, and such written clarification shall govern in case of conflict with the applicable requirements stated in the RFP or the Contractor's proposal. In all other matters not affected by the written clarifications, if any, the RFP shall govern.

#### c. Termination/Cancellation of Contract

i. The District may cancel the contract at any time for breach of contractual obligation, convenience, or non-appropriation of funds by providing the Contractor with a written notice of such cancellation. Should the District exercise its right to cancel the contract for such reasons, the cancellation shall become effective on the date as specified in the notice of cancellation sent to the Contractor.

#### d. Compliance with Laws

i. In connection with the furnishing of supplies or performance of work under the contract, the Contractor agrees to comply with the Fair Labor Standard Act, Equal Opportunity Employment Act, and all other applicable Federal and State laws, regulations, and executive orders to the extent that the same may be applicable, and further agrees to insert the foregoing provision in all subcontracts awarded hereunder.

#### e. Incurred Expenses

i. This RFP does not commit the District to award a contract, nor shall the District be responsible for any cost or expense that may be incurred by the Vendor in preparing and submitting the proposal called for in this RFP, or any cost or expense incurred by the Vendor prior to the execution of a contract agreement.

#### f. Indemnification

i. The Contractor agrees it shall defend, indemnify, and hold harmless the District, its officers, and its employees against any and all liability, loss, costs, damages, and expenses, including attorney's fees that the District, its officers, or its employees may hereafter sustain, incur, or be required to pay arising out of the negligent or intentional acts or omissions of the Contractor's officers or employees.

#### g. Insurance

- i. The Contractor agrees, in order to protect itself and the District under the indemnity provision set forth above, to at all times during the term of this Contract have and keep in force insurance policies that meet the following limits:
  - 1. A commercial general liability insurance policy in the amount of not less than \$500,000.00



- for property damage sustained by any one person, \$500,000.00 for injury and/or damage to any one person, and \$1,500,000.00 for total injuries and/or damages arising from any one accident. The Contractor agrees to name the District as an additional insured on said policy.
- 2. An automobile liability insurance policy, including non-owned and hired autos, in the minimum amount of \$500,000.00 for injury and/or damages to any one person, \$500,000.00 for property damage, and \$1,500,000.00 for total injuries and/or damages arising from any one accident. The Contractor agrees to name the District as an additional insured on said policy.
- 3. Workers Compensation insurance in the statutory amounts.
- 4. Certificates of insurance showing the coverage listed above shall be provided to the District prior to the effective date of this contract, and the District shall be named as an additional insured under the liability policy required above.

#### **2.** Safety

- a. Vendor shall take the necessary precautions and bear the sole responsibility for the safety of the methods employed in performing the work.
- b. Vendor shall insure that all workers are appropriately identified and shall notify the District project manager whenever present on District property.
- c. The Vendor shall at all times comply with the regulations set forth by federal, state, and local laws, rules, and regulations concerning OSHA and all applicable state labor laws, regulations, and standards.
- d. The Vendor shall indemnify and hold harmless the District from and against all liabilities, suits, damages, costs, and expenses (including attorney's fees and court costs) that may be imposed on the District because of the Vendor's, Subcontractor's, or supplier's failure to comply with the regulations.

#### **3.** Ownership of Work Product(s)

- a. Any work product, including but not limited to software programs, documentation, memoranda, correspondence, and/or files generated by the Contractor in the course of this work for the District is the sole property of the District.
- b. All work products must be surrendered to the District at the completion of the Contract.
- c. The Contractor shall prepare and maintain all records required by the District to substantiate the amount and types of services rendered and for other purposes.
- d. The District shall inform the Contractor of the need for and nature of all such records.

#### **4.** Warranty of Integrated Telephone System

- a. In a contract resulting from this RFP, Contractor shall warrant that during the warranty period, all hardware, equipment, and licensed software (including third-party software installed or recommended by Contractor or its subcontractors) of the integrated telephone system solution shall perform at a minimum in all material aspects within the specifications and functional requirements defined by the Scope of Service/Work of the RFP.
- b. The foregoing representations and warranties shall be in force as to each version or release of software, system, components, networks, and equipment.

#### 5. Independent Contractor

- a. Nothing contained in this agreement is intended or should be construed as creating the relationship of co-partners or joint ventures within the District.
- b. The Contractor shall remain an independent contractor, and all employees of the Contractor or its subcontractors shall remain the employees of the Contractor or subcontractor and shall not become the employees of the District.
- c. No tenure or any rights or benefits, including worker's compensation, unemployment insurance, medical care, sick leave, vacation leave, severance pay, or other benefits available to the District employees shall accrue to the Contractor or employees of the Contractor performing services under this agreement.



#### **6.** Nondiscrimination

- a. All Contractors agree that during the life of the contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, marital status, disability, sexual orientation, age, religion, or status with regard to public assistance, and shall intend a similar provision in all subcontracts entered into for the performance thereof.
- b. All proposals shall be accompanied by a signed statement of this fact, with failure to sign reason for proposal rejection.

#### **7.** Default and Cancellation

- a. If the Contractor fails to perform any of the provisions of this Request for Proposal or so fails to administer the work as to endanger the performance of the contract, this shall constitute default.
- b. Unless the Contractor's default is excused, District may, upon written notice, immediately cancel this agreement in its entirety.
- c. Back orders, failure to meet delivery requirements, or failures to meet specifications in the contract authorizes the ordering entity to cancel the contract, or any portion of it, purchase elsewhere, and charge the full increase in cost and administrative handling to the defaulting Contractor.
- d. In the event of default, the District reserves the right to pursue any other remedy available by law.

#### 8. Severability

a. Every section, provision, or part of this agreement is declared severable from every other section, provision, or part thereof, to the extent that if any section, provision, or part of this agreement shall be held invalid by a court of competent jurisdiction, it shall not invalidate any other section, provision, or part thereof.

#### 9. Third-Party Products

a. Contractor agrees to assign or pass through to the District or otherwise make available for the benefit of the District, any manufacturer's or supplier's warranties applicable to any third-party software, hardware, or equipment provided by Contractor or its subcontractors under a contract resulting from this RFP.

#### b. Title to Software

i. By submitting a proposal, the Vendor represents and warrants that it is the sole owner of the software or, if not the owner, that it has received all legally required authorizations from the owner to license the software, has the full power to grant the rights required by this solicitation, and that neither the software nor its use in accordance with the contract shall violate or infringe upon any patent, copyright, trade secret, or any other property rights of another person or organization.

#### c. New Material

- i. Unless otherwise provided for in this specification, the Vendor represents and warrants that the goods, materials, supplies, or components offered to District under this RFP solicitation are new, not used or reconditioned.
- ii. It represents that they are not of such age or so deteriorated as to impair their usefulness or safety and that the goods, materials, supplies, or components offered are current production models of the respective manufacturer.

#### d. Ownership of Intellectual Property

- All copyright and patent rights to all papers, reports, forms, materials, creations, or inventions created or developed in the performance of this contract shall become the sole property of the District.
- ii. Upon request, the Contractor shall promptly provide an acknowledgment or assignment in a tangible form satisfactory to the District to evidence the District's sole ownership of specifically identified intellectual property created or developed in the performance of the contract. This excludes ownership of proprietary software belonging to the vendor, except software developed specifically for the District for which the District pays.

#### e. Term of Software License

i. Unless otherwise stated in the solicitation, the software license(s) identified in the pricing schedule



- shall be purchased on a perpetual basis and shall continue in perpetuity.
- ii. The District reserves the right to terminate the license at any time, although the mere expiration or termination of this contract shall not be construed as intent to terminate the license.
- iii. All acquired license(s) shall be for use at any computing facilities, on any equipment, by any number of users, and for any purposes for which it is procured.
- iv. The District further reserves the right to transfer all rights under the license to another state agency to which some or all of its functions are transferred.

#### **10.** Return of Assets

a. Except as otherwise provided in the Contract, or upon termination of the Contract, the Contractor shall return all District-owned assets, including but not limited to stored data and information.

#### 11. Excessive Downtime

- a. Equipment or software furnished under the contract shall be capable of continuous operation. Should any part of the equipment or software become inoperable for a period of more than four (4) hours, the Contractor agrees to pro-rate maintenance charges to account for each full hour of inoperability beyond four (4) hours.
- b. The period of inoperability shall commence upon initial notification.
- c. In the event the equipment or software remains inoperable for more than three (3) consecutive calendar days, the Contractor shall promptly replace the equipment or software at no charge upon request of District. Such replacement shall be with new, or refurbished product(s) of comparable quality, and must be installed and operational within three (3) consecutive calendar days following the request for replacement.

#### 12. Proposal Acceptance/Rejection

a. The District reserves the right to accept or reject any or all proposals received as a result of this RFP, or to negotiate separately with competing Vendors, and to waive any informalities, defects, or irregularities in any proposal, or to accept the proposal or proposals that, in the judgment of the proper officials, are in the best interest of the District.

#### **13.** Firearms

- a. No provider of services pursuant to this Contract, including but not limited to employees, agents, or subcontractors of the Contractor, shall carry or possess a firearm on District premises or while acting on behalf of the District pursuant to the terms of this agreement.
- b. Violation of this provision shall be considered a substantial breach of the Agreement and is grounds for immediate suspension or termination of this contract.

#### 14. Other Contract Terms

- a. Compliance with Laws/Standards
- b. General: The Contractor shall abide by all Federal, State, and local laws, statutes, ordinances, rules, and regulations now in effect or hereinafter adopted pertaining to this Contract or to the facilities, programs, and staff for which the Contractor is responsible.
- c. Licenses and Permits: The Contractor shall procure all licenses, permits, or other rights necessary for the fulfillment of its obligation under this Contract. The Contractor indemnifies, saves, and holds harmless the District and any agents, commissioners, officers, employees, or volunteer workers thereof from any and all claims, demands, actions, or causes of action of whatsoever nature or character arising out of, allegedly arising from, or related to the execution or performance of the services of the successful Vendor provided for herein.

#### **15.** Force Majeure

a. Neither party shall be held responsible for delay or failure to perform when such delay or failure is due to any of the following, unless the act or occurrence could have been foreseen and reasonable action could have been taken to prevent the delay or failure: fire, flood, epidemic, strikes, wars, acts of God, unusually severe weather, acts of public authorities, or delays or defaults caused by public carriers, provided the defaulting



party gives notice as soon as possible to the other party of the inability to perform.

#### b. Inability to Perform

- i. Contractor shall make every reasonable effort to maintain staff, facilities, and equipment to deliver the services to be purchased by the District.
- ii. The Contractor shall immediately notify the District in writing whenever it is unable to provide the agreed upon quality and quantity of services or reasonably believes it is going to be unable to provide this level of service.
- iii. Upon such notification, the District shall determine whether such inability requires a modification or cancellation of this Contract.
- iv. In the event the District terminates the Contract for cause in whole or in part as provided above, the District may procure, upon such terms and in such manner as District may deem appropriate, services similar to those so terminated, and the Contractor shall be liable to District for any excess costs for such similar goods or services.
- v. The Contractor shall continue the performance of the Contract to the extent not terminated under the provisions for this section.
- vi. The rights and remedies of the District provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

#### **16.** Payment Terms

- a. Payment terms shall be event based and negotiated with the successful vendor prior to contract signing.
- b. District shall issue no payment until it has verified the invoice.
- c. District shall retain at least 10% of all authorized payments until acceptance of the work is authorized.
- d. Software Licensing Agreements
  - i. Within the RFP response, Contractor agrees to provide copies of software licensing agreements for all proposed software applications and operating systems.

#### PROJECT SCOPE

#### **1.** Description

a. Arkansas City Public Schools (District) is seeking proposals from highly experienced and professional firms to provide, install, and service a new premise or hosted telephone system (system) to support current and future locations.

#### 2. Completion

- a. We expect that this project will be complete by June 30, 2020.
- b. Upon completion of this project the District shall have a system/service provider capable of providing the following:
  - i. Equipment & Systems: All equipment and systems shall be new and currently manufactured.
  - ii. Voice Platform: All locations shall be served by a single IP-based telephone system platform capable of providing feature transparency for all described District locations.
  - iii. Fault Tolerance: The system shall be redundant/resilient and shall be designed to ensure that internal and external traffic can be rerouted or reconnected in the event of a system or major component failure.
  - iv. Survivability: All IP telephones shall register with their local gateway during an outage of the primary controller/server or if the WAN connection is lost and shall have continued access to locally equipped trunks.
  - v. System Management: The management systems shall provide a single point of access to the system for day-to-day administration, reporting, and telephone system maintenance.



- vi. Unified Messaging (UM): The UM system shall be distributed and provide service for all District locations. In addition, it shall support integration with the District's Google email platform or such exception shall be noted.
- vii. Unified Communications: Ideally the system shall provide integration with Google G Suite for Education applications to allow seamless internal and external access to voice and messaging services directly from Google applications such as Hangouts.
- viii. Paging Overhead and Through Telephone Speakers: The system shall support group paging through the District's paging systems and through the speakers on the telephones. The system will support equipment to aid communication in noisy environments such as strobe lights. Page groups shall support a minimum of 32 telephones in a single group.
- ix. Applications: The system shall support a wide variety of applications including unified communications, presence, instant messaging, mobility, audio conference bridge, collaboration, PC desktop call control and video conferencing.
- x. Wireless Headsets: Telephones shall support Electronic Hook Switch Control compliant headsets or similar device to eliminate the need for handset lifters.
- xi. Contractor:
  - 1. The solution shall be provided by an experienced Contractor who has extensive IP telephony, data networking, and unified communications experience.
  - 2. The Contractor shall provide a turnkey system including but not limited to all hardware, software, installation, training, and support.
- xii. Serviceability: All systems shall provide a single system management solution.

#### CONTRACTOR, INSTALLATION, AND MAINTENANCE

#### Contractor Responsibility

- 1. For any items/systems/alternates accepted by the District and made part of the contract, the Contractor shall provide a turnkey solution including but not limited to delivery, installation, configuration, database collection, database entry, testing, training, cutover, and post-cutover support.
- 2. The Contractor and/or its subcontractors are fully authorized/certified to supply, upgrade, install, configure, provide warranty service, and troubleshoot/support the proposed equipment.
- 3. The Contractor shall provide manufacturer trained and certified personnel who specialize in deployment of all items/systems/alternates accepted by the District.
- 4. The personnel listed in the Vendor's proposal shall be the personnel assigned to this project. If changes are required, the Contractor shall gain written approval from the District's project manager prior to assignment of substitutes.

#### Project Manager

- 1. The Contractor shall appoint a project manager who shall be the main point of contact regarding the project for the District. The project manager is responsible for the following:
  - a. Developing a project schedule that identifies in detail the exact tasks and timelines that the District, Contractor, and PSTN providers must perform and/or be responsible for in order to accomplish the delivery, installation, and cutover of the system.
  - b. Guaranteeing the work and performance of all employees and subcontractors who have been hired by the Contractor.
  - c. Verifying closet locations with the District's project manager prior to installation.
  - d. Completing and submitting all required documentation.
  - e. Attending all project coordination and/or construction meetings as required by the District.
  - f. Informing the District of all unexpected conditions and problems that may result in delay or expense. The



Contractor must report issues immediately upon discovery and must provide the District with the option(s) for resolving them.

- g. Scheduling and coordination of all cutovers and porting of telephone numbers with all PSTN service providers.
- h. Arranging for provided training and coordination of scheduling for all training classes.
- i. If the Contractor seeks to change the project manager during the course of the project, such change is subject to prior written approval from the District.
- j. The District reserves the right to request a new project manager during the course of the project if the project manager does not perform to the District's satisfaction.

#### 2. Permission to Proceed

- a. Prior to ordering, furnishing, or installing any equipment, the Contractor shall obtain the District's written approval of equipment, locations, layout, and installation.
- b. The Contractor shall coordinate location of all equipment placements for each location prior to commencement of work.
- c. The Contractor must obtain the District's permission before proceeding with any work necessitating cutting into or through any part of a building structure.
- d. Existing floors, walls, ceilings, or any structural piece shall not be drilled or cut without prior approval of the District. Any modification to existing structure should not degrade original quality and appearance.

#### 3. Damage and Cleanup

- a. The Contractor shall be held responsible for and make payment on any damage caused from the delivery
- b. and/or installation of its work.
- c. The Contractor shall keep the premises clean from debris and rubbish. After each workday, the Contractor shall remove any rubbish or waste from the working area. If the District is required to clean up, the cost shall be charged back to the Contractor.

#### 4. Ordering and Delivery

- a. The Contractor shall take responsibility for proper ordering, shipping charges, storage and delivery of all component parts. This includes any components to be ordered from any third-party companies. The Contractor shall be responsible for proper storage of delivered equipment.
- b. The Contractor shall inventory and unpack equipment from shipping material and organize equipment for deployment. This includes checking to ensure that all equipment is complete and fully functional. The Contractor shall remove and dispose of all empty boxes and packaging.
  - i. All equipment that becomes the property of the District will be logged and tagged as such in a manner approved by the District.

#### Specific Onsite Installation Requirements

#### 1. Data Network

- a. The Contractor shall have as part of its implementation team a data network resource capable of analyzing and implementing proper VLAN and Quality of Service configurations necessary to support advanced real time voice and video applications across the District's data network. This person shall work with the District to develop a mutually agreeable design/scheme to ensure that all network devices are configured to support these applications.
- b. Currently, the District uses a mixture of static addressing and DHCP. The District shall work with the Vendor to enable DHCP addressing for all telephony devices.
- c. The Contractor shall:
  - i. Work with the District to understand its IP addressing scheme and to implement this scheme in the furnished devices, and ensure network visibility of those devices.
  - ii. Work with the District to understand its VLAN scheme and to implement this scheme in the furnished system.



- iii. Work with the District to develop SNMP configurations, community strings, and passwords for all devices and to implement these in the furnished system.
- iv. Work with the District to implement security features as required by the District.
- v. Work with the District to ensure the proper QoS configurations are implemented to support all applications provided under this RFP.
- vi. Learn and understand the District's device naming convention, and implement appropriate device names on all new devices.
- vii. Label all equipment and cables as required by the District.
- viii. Work shall be performed during normal hours of operation for the building where the work is taking place. Any deviations must be discussed with and approved by the District's Project Manager prior to work occurring.
- ix. These standards shall govern the work:
  - 1. IEEE 802.3 (all letter suffixes)
  - 2. ISO/IEC-11801 (all updates)
  - 3. TIA/EIA 568A & 568B
  - 4. TIA/EIA 569
  - 5. ANSI TP-PMD
- x. The Contractor shall install hardware in a secure manner. Screws shall be tightened to a torque just sufficient to secure equipment without deforming washers beyond their original diameter.
- xi. If there is insufficient space in any rack for installation of devices, the Contractor must notify the District's Project Manager immediately and wait for a decision before proceeding with installation at that location. All rack-mount equipment shall be secured as recommended by the manufacturer with consideration to airflow, power, and patch cable connections.
- xii. The Contractor shall provide all hardware required to rack mount equipment in the District's racks including rails when required.
- xiii. The Contractor shall neatly dress all cables including but not limited to switch tails, ground cable and power cables. All cables shall be secured with Velcro tie wraps between devices, termination panels or blocks, PDUs, UPS systems, or wall power plugs.
- xiv. The Contractor shall use the District's cable management system where equipped to provide a neat and efficient means for routing and protecting fiber and copper cables and patch cords on telecommunication racks and enclosures.
- xv. Provide additional system components typically and reasonably required to make the system operational even though not specifically indicated in appendices, or specifications, including but not limited to patch cables, connectors, connecting accessories, power supplies, power cords, rack mounting adapters and shelves, cover plates and related connector and termination hardware required by but not supplied with the equipment.
- xvi. Velcro straps shall be installed snugly without deforming cable insulation. Straps shall be spaced at uneven intervals not to exceed four feet.
- xvii. All cutovers shall be scheduled to limit any disruption of service and may take place outside normal business hours.
- xviii. Install products in accordance with manufacturer's instructions. Mechanical connections shall be accessible for inspection and checking. No insulation shall be installed over mechanical ground connections. Ground connection surfaces shall be cleaned and all connections shall be made so that it is impossible to move them.
- xix. Install District-provided patch cables with appropriate connectors to interconnect all systems provided under this contract.
- xx. The finished installations must be tidy and the cabling well supported. No plastic tie wraps may be used. Hook and loop type material (e.g., Velcro) ties may be used to bundle cables. Patch cables may not be twisted, bent, or otherwise deformed beyond standard allowable bend radius.



- xxi. The Contractor shall use the District's cable management system where equipped to provide a neat and efficient means for routing and protecting fiber and copper cables and patch cords on telecommunication racks and enclosures.
- xxii. All labeling formats shall be coordinated and approved by Districts Project Manager prior to installation.
- xxiii. The Contractor shall be responsible to label all cables and equipment components installed as part of this project. In doing so, make the labeling of each component unique, to prevent it from being confused with other similar components; and legible and permanent enough to last the life of the component. Handwritten labels are not permitted.

#### 2. Removal of Existing Systems

- a. The Contractor shall be responsible for the collection, removal, and disposal of all existing voice, equipment not incorporated into the new system, including but not limited to items listed below.
  - i. All existing telephone and voicemail components except hard drives and other hardware that may contain proprietary data/information
  - ii. Unused MDF and IDF cross-connects at each building
  - iii. Telephones
  - iv. Old patch cables
  - v. The Contractor shall remove all hard drives from all voice and voice mail equipment prior to disposal and deliver them to the District's project manager.

#### 3. System Design Reviews & Database Collection

- a. Client quantities included in this RFP are for bidding purposes, slight adjustments may be necessary. The Contractor shall be required to perform station surveys to verify quantities. Any increases in components prior to acceptance shall be at pre-cutover costs, and deletions shall not be charged restocking fees.
- b. As these specifications are put together with no specific equipment or Vendor in mind, the Contractor shall include in the installation cost one informational presentation to the District's management. The purpose of the meeting is to provide the District with an overview of the system capabilities and establish standards for how the system is to be installed.
- c. The Contractor's Project Manager shall inform the District's Project Manager of decisions that they need to make regarding the items/systems/alternates being installed. The District's Project Manager shall set standards and determine which decisions are available for the departments to make. Any decisions or requests at the department level that either increase cost or are outside of the District standards shall need the written approval of the District's Project Manager and District Administration.
- d. The Contractor's Customer Service personnel shall meet directly with the District Project Manager and Building Administration at each location across the District to determine telephone type and physical location, features and applications assignments, auto attendants, call routing, restrictions, etc., on a per location and user basis. The District shall assist with scheduling, but the Contractor is responsible for collecting any and all information required to install and cutover all systems.
- e. The Contractor shall identify the exact location of all telephones, modems, and fax machines and mark the location on customer-provided floor plans.

#### 4. Security

- a. When deploying any product, software, or application associated with this RFP, the Contractor shall harden the resulting system(s). Hardening includes the following actions:
  - i. Determining the purpose of the system and minimum software and hardware requirements
  - ii. Documenting the minimum hardware, software, and services to be included on the system
  - iii. Installing the minimum hardware, software, and services necessary to meet the requirements using a documented installation procedure
  - iv. Installing necessary patches
  - v. Installing the most secure and up-to-date versions of applications
  - vi. Configuring privilege and access controls by first denying all, then granting back the minimum



- necessary to each user
- vii. Configuring security settings as appropriate, enabling allowed activity and disallowing other activity
- viii. Enabling logging sufficient for the District IT staff to determine equipment faults or configuration problems in the telephony equipment
- ix. Archiving the configuration and checksums in secure storage prior to system deployment
- x. Testing the system to ensure a secure configuration
- xi. Using secure replication procedures for additional, identically configured systems, making configuration changes on a case-by-case basis
- xii. Changing all default passwords, document all assigned passwords and provide to the District.
- xiii. Test the resulting systems to include but not limited to penetration test on all external facing systems and IP addresses
- xiv. Document all test results and provide to the District.

#### 5. Database Entry

- a. The Contractor shall provide all system programming and database entry, including but not limited to stations and station features, voice mail boxes, auto attendants, trunks, least cost routing, networking, and integrated connections to the voice mail system, system management, contact center, and data network to provide a fully operational turnkey system.
- 6. Telephone, FXS, & Trunk Placement and Connections
  - a. When applicable, the Contractor shall provide and complete all required cross-connects or patch cord connections between the telephone system equipment and the telephones at the telco dmarc and all telecommunication room (TR) locations, including all required connections between the data switch and VoIP telephones.
  - b. The Contractor shall tone, test, and identify all cable and make all required cross-connects needed to extend PRI and analog trunks, fax, modem, or telephone services between the telephone system and the dmarc or end device.
  - c. The Contractor is responsible for placing, testing, and labeling all phones. Every phone, fax, and modem line shall be tested to ensure it can make and receive calls at the assigned number and the assigned features and PSTN connections function properly when placed.
- 7. PC Desktop & Mobile Client Software Distribution
  - a. The Contractor shall train the District's desktop support staff on the process for deploying all UC desktop and mobile software.
- 8. Interconnection and Coordination with Local Telephone Utility
  - a. The local exchange carrier and/or alternate carrier shall provide PRI, analog, and SIP trunks. The Contractor shall provide complete coordination with the District and local telephone utility regarding connection and testing of trunks and SIP services to the telephone system.

#### 9. Documentation

- a. When installation is complete, the Contractor shall furnish the District a complete set of project documentation in electronic format as follows:
  - i. All naming standards/schema to be used in documentation must comply with the existing District standards and be pre-approved by the District's project manager.
  - ii. Acceptable documentation formats include Microsoft Word, Microsoft Excel, Google Sheets, Google Docs any other format will be pre-approved by the District Project Manager.
  - iii. Logical diagrams for the voice and data products provided, installed, and connected to the network including:
    - 1. Overall District wide network diagram.
    - 2. Detailed diagram of Core infrastructure components and connections.
    - 3. Diagram of all equipment and connections in each building excluding telephones.
    - 4. Static IP numbers assigned to all voice and data equipment, noted both on diagrams and on a separate table/spreadsheet



- 5. Additional Voice Documentation:
  - a. Standard templates for all telephones provided
  - b. Numbering plan design for each location
  - c. Least cost call routing schemes
  - d. Class of restriction tables
  - e. Class of service tables
  - f. Route and trunk configuration tables
  - g. Documentation of all auto attendants/self-service trees/menu services

#### 10. Training Requirements

a. All costs for training shall be included in the proposals.

#### 11. Telephone and Voicemail End User:

- a. Admin Users: The Contractor shall conduct on-site, hands-on user training sessions for all users, limited to a maximum of 12 people in any one session. Training will be conducted at the District office location.
- b. Basic/Class Room Users: Provide a minimum 4 large group auditorium style training sessions for teachers and custodial staff in locations yet to be determined.
- c. Applications End User: The Contractor shall conduct webinar training sessions and record them for future access on the utilization of all applications purchased by the District as a result of this RFP. The minimum number of sessions for each application is as follows:
  - i. UC desktop (2) one-half-hour sessions
  - ii. UC Mobility (2) one-half-hour sessions
  - iii. Conference collaboration (2) one-half-hour sessions
  - v. Telephone System Management: The Contractor shall provide a minimum of eight (8) hours of training for at least two (2) system administrators on the use of the management tools for the telephone system plus four (4) additional hours for each option purchased. The training shall include the following:
    - 1. Familiarization with features of all components and systems
    - 2. Client installation
    - 3. Database management
    - 4. Adds, moves, or changes
    - 5. Add or change user templates
    - 6. Add or change class of service and trunk group restriction
    - 7. Add or change auto attendants
    - 8. Configuration details of purchased applications, and how to configure new users, groups, and reports
    - 9. Generate reports
    - 10. Find unused numbers
    - 11. Use IP troubleshooting tools
    - 12. Overview of system documentation and use of all system manuals
    - 13. Process for obtaining technical support
    - 14. Review daily, weekly, monthly, and annual maintenance and backup tasks.

#### 12. Pre-Cutover Testing

- a. Contractor shall complete all manufacturer recommended testing and provide the District with documented proof that all steps have been completed a minimum of one week prior to the scheduled cutover(s)
- b. Contractor shall verify all registered components, phones, gateways and applications failover/re-register to backup servers/gateways during a simulated component or network failure and fully restore to normal operation when service is restored. Testing shall also verify that trunk access is maintained for inbound, outbound and 911 calls.
- c. The following testing shall be completed in the presence of a District representative a minimum of one week



#### prior to cutover.

- i. Core Call Control redundancy/ resilience failover and restore
- ii. Unified Messaging redundancy/resilience failover and restore
- iii. Gateways failover/resiliency and restore
- iv. UC Applications failover and restore
- v. Survivability verify all telephones register with local gateway and can complete outbound calls on equipped trunks.
- vi. E911 Testing
  - 1. Test E911 calls from each emergency response location and document results.
  - 2. E911 failover and restore

#### 13. Cutover and Post Cutover Requirements

- a. Cutover Time: To prevent business interruption, all cutovers shall take place outside the District's normal business hours
- b. Cutover Support: The Contractor is required to provide a project team for all cutovers including on-site technical and training support for all systems and options purchased and remote helpdesk support.
- c. First Day of Service: At a minimum, the Contractor shall provide an on-site project team to include technical and training resources that are fully capable of supporting all systems and options purchased for the first business day following all cutovers for a minimum of eight (8) hours.
- d. Technical Issues: The Contractor will provide on-site resources for as many days as required following the first day of service to resolve any outstanding technical issues.
- e. Adds, Moves, or Changes: The Contractor is required to complete any outstanding adds, moves, or changes within the first 30 days following the cutover of each location.

#### 14. Project Closeout and Acceptance

- a. Punch List: Work or materials found to be incomplete, of unsatisfactory quality, failing to meet the specifications in the RFP package and resulting contract, and/or unacceptable to the District shall be documented in a punch list by the District and provided to the Contractor to rectify.
- b. Punch List Approval: The punch list shall be considered complete only after having been signed by the District.
- c. Acceptance: Acceptance shall occur after all of the following conditions have been met:
  - i. All items/systems have been delivered, installed, configured, tested, and transitioned into service.
  - ii. All of the work has been completed in accordance with the contract and RFP specifications (including testing procedures as outlined in the accepted response).
  - iii. Public Switched Telephone Network connections with desired local and long distance call routing options requested by the District (least cost, next best route, etc.) are all functioning correctly.
  - iv. The system operates in conformance with manufacturer's published specifications.
  - v. The system, including all ancillary devices, applications, and options made part of the contract, has had 30 consecutive days with 100 percent availability.
  - vi. Training as specified is complete.
  - vii. All the documentation requirements have been met.
  - viii. All outstanding punch list items have been completed.
  - ix. The system post-cutover requirements have been completed.
  - x. The Contractor has certified in writing to the District that the system is installed and operational in accordance with these specifications.
  - xi. Once all of the above requirements are complete, and upon the District's written acceptance, operational control becomes the responsibility of the District. This constitutes Date of Acceptance. The warranty for components and service begins as of this date.

#### 15. Warranty Period and Maintenance

- a. Warranty: Warranty will begin at acceptance.
- 16. Maintenance Guarantee



- a. Provide letters from both the Vendor and all manufacturers guaranteeing maintenance support of the proposed system(s) for a minimum of five (5) years.
- b. Should the manufacturer discontinue this product or cease to do business, the Vendor guarantees to stock an adequate supply of components to maintain the system for a minimum of five (5) years. Further, should the Vendor cease to do business, the manufacturer guarantees to provide components and services for this installation for a minimum of five (5) years.
- 17. Voice Systems Service and Support
  - a. The following must be included in the warranty period and under maintenance contract:
    - i. Monday-Friday, 8:00 a.m. to 5:00 p.m. remote support on minor alarms
    - ii. Seven day per week 24-hour remote support and call-out coverage shall be provided for the items listed below:
      - 1. Critical alarms and or system outages including 10% or more of telephones or trunks at any District location or department shall have:
        - a. One-hour remote access response time
        - b. Two-hour on-site response time
        - c. Call out on site support to be billed hourly at the rate provided in the Cost Worksheet
        - d. Software upgrades for all systems provided
        - e. Patches
        - f. Corrective maintenance
        - g. All parts and materials
        - h. Four-hour replacement of critical components for all locations
        - i. Next business day for non-critical components
        - j. 24-hour x 7 days a week telephone service support center to assist District IT personnel with technical and system management issues and questions
        - k. 24-hour x 7 days a week service center
    - iii. Vendor must include all hardware and software required to support this application in base telephone system cost.
    - iv. Alarm notifications system shall also provide notification to District personnel via email, external dialing and dry contact closure.
    - v. The Contractor shall provide semi-annual review and audit of all applications and performance and make recommendations on any required changes.

#### **EXISTING INFRASTRUCTURE**

- 1. Telephone System:
  - a. Cisco Unified Communications telephone system, AT&T Plexar services, and two-way paging systems.
  - b. All attendance buildings have classroom telephones and utilize the two-way communications capabilities of the paging system to communicate between the front office and classroom.
  - c. 11 Cisco 2821 Voice Gateways supporting 911 and rollover via 11 AT&T POT connections.
  - d. Current handset distribution

Location	Street	Cisco 7942	Cisco 7962	Cisco 7937
Central Office	2545 Greenway	7	7	1
Tech Office	2207 North 8th	6	3	1



High School	1200 West Radio Lane	99	5	
Middle School	400 East Kansas Ave.	74	3	
Jefferson	130 Osage	28	3	
C-4	11945 292nd Road	19	2	
Adams	1225 North 10th	48	5	
Frances Willard	200 North 4th	31	3	
IXL	6758 322nd Road	29	3	
Roosevelt	300 North B	30	3	
CDS	1625 North 7th	3		
Transportation	420 South 5th	3	2	
Maintenance	715 South 1st	2		
New Property	2500 North 15th	3	1	1
Spares		20	5	
Totals		402	45	3

## e. Current DID Ranges in area code 620

Begin	End
3077100	3077199
3077912	3077913
4412000	4412000
4412003	4412003
4412005	4412005
4412010	4412010
4412014	4412016
4412018	4412018
4412020	4412020
4412023	4412023
4412030	4412030
4412033	4412033
4412035	4412035
4412039	4412040
4412045	4412045
4412050	4412050
4412055	4412055



4412060
4412068
4412070
4412075
4412078
4412080
4412082
4412085
4412088
4412092
3077299
3077401

f. AT&T IP Flex DMARC Locations and concurrent call capacity

Location	Street	Concurrent Calls
High School	1200 West Radio Lane	25
Middle School	400 East Kansas Ave.	15

#### 2. LAN/WAN

- a. LAN/WLAN: Dell switches upgraded in 2018. Wireless access points are Aerohive or Ubiquiti.
- b. WAN: 5 Gigabit AT&T Service to main hub with individual locations having connections from 1 Gigabit to 5 Gigabit. The High School location is connected to the hub by District owned fiber.
- c. Cable
  - i. The existing cable infrastructure is comprised primarily of CAT 6 cable. The District has implemented a pervasive wireless network across all District locations. Because of this, most of the CAT 6 cable infrastructure is no longer used except to support miscellaneous devices such as printers.
  - ii. The existing cable may be used to support the new VoIP telephones.
- d. Primary Network Center is the Technology building
  - i. Servers
    - 1. Hardware: Dell Servers
    - 2. Software
      - a. VMWare ESXi 6.5 free version (No Vsphere install or licensing)
      - b. Windows Server 2012 Standard Edition
- 3. Email Platform: Google G Suite for Education
- 4. Desktop Operating Systems
  - a. Windows 10 Pro
  - b. Chrome OS
  - c. iOS
  - d. Android
  - e. MacOS 10.13+
- 5. LDAP
  - a. Samba 4 Domain (Active Directory 2008 R2 compatible)
  - b. Freeradius 3.0 802.1x support
- 6. Unified Communications



- a. The District utilizes Google G Suite for Education and the Hangouts application to support several unified communication (UC) applications such as presence, instant messaging, collaboration and video conferencing.
- b. Other than the limitations associated with voice calling and SMS messaging externally, the Google application meets the District's requirements.

#### **TELEPHONE SYSTEM PROPOSALS**

#### **Proposal Architecture**

All options must include licensing and ability to deploy and restrict mobile applications to iOS and Android platforms for extension mobility.

- 1. Option 1 Premise Based System
  - a. The design architecture shall provide redundant/resilient call control appliances/servers.
  - b. The telephone platform shall be designed and configured with sufficient capacity to ensure all IP telephones and PRI/SIP gateways have a secondary call control appliance/server that they can re-register with should their primary call control appliance/server fail or be unavailable due to a WAN outage.
  - c. All trunks, including SIP, digital and analog, shall be accessible from any location on the network.
- 2. Option 2 Hosted System
  - a. The hosted solution shall provide dedicated diverse data connections between the host providers data centers and the District primary data centers.
  - b. The system shall be designed to ensure that internal and external traffic may be rerouted in case of WAN outage.
- 3. Option 3 Updating Current System
  - a. CUCM must be updated to version 12.5 or the latest version at the time of installation. This includes any hardware associated with said upgrade.
  - b. Virtualization requires Contractor to provide a single Dell Host at of at least Comparable to the PowerEdge R730. VMWare ESXI of at least version 6.5 will be installed on said server as outlined under <u>EXISTING</u> <u>INFRASTRUCTURE</u>. This host is necessary as there is currently no virtualization hosts at the Middle School location coinciding with the second AT&T IP Flex dmarc.
  - c. The design architecture must include updating Cisco Hardware used in the infrastructure as outlined under <a href="EXISTING INFRASTRUCTURE">EXISTING INFRASTRUCTURE</a>.
  - d. The contractor must troubleshoot and interface with AT&T if required to assure POTS are functional and rollover redundancy is viable in case of connection failure with CUCM cluster.
  - e. The contractor must replace all handsets with comparable models as outlined under <a href="EXISTING">EXISTING</a> INFRASTRUCTURE.

#### **System Feature Requirements**

- 1. AREA/OFFICE CODE RESTRICTION: The ability of the switching system to selectively identify six-digit area and office codes and either allow or deny passage of long distance calls to those specific six-digit codes. This type of restriction is usually provided on a trunk group basis and on an "allowed" rather than "denied" basis.
- 2. AUTOMATIC CALL DISTRIBUTION SERVICE: Ability of the system to offer uniform distribution of incoming calls to station users (called agents) on a random basis or to the station that has received the fewest calls. This facility generally includes the capabilities to queue, on a first-in, first-out basis, a predetermined number of delay announcements; to identify incoming calls; to transfer to supervisory positions; to transfer to other groups of agents; and to originate non-ACD calls.
- 3. AUTOMATIC RINGBACK ON HELD CALL: When a station user or attendant places a given line circuit on hold and goes on-hook, the held line shall automatically revert to an incoming call condition after a prescribed period of time.



- 4. CALL FORWARDING: Allows a station user to program at any time any internal station number (or the attendant), and when activated by the station user, all incoming calls to this station shall be automatically re-routed to that preprogrammed number.
- 5. CALL FORWARDING BUSY LINE: Automatically reroutes incoming Direct Inward Dialing (DID) calls, attendant processed calls, incoming CCSA calls, or direct terminating tie line calls directly to attendant or predetermined secondary station when the called station is busy.
- 6. CALL FORWARDING DON'T ANSWER: Similar in function to the "busy line" version of Call Forwarding, automatic rerouting of an incoming call to the attendant or a preprogrammed secondary station occurs when a given station doesn't answer within a prescribed time interval.
- 7. CALL FORWARDING DON'T ANSWER/BUSY LINE ON A PREVIOUSLY FORWARDED CALL: In essence, the ability to forward a previously forwarded call.
- 8. CALL FORWARDING EXTERNAL: The ability to forward a call to a telephone number external to the system (local or long distance).
- 9. CALL FORWARDING SOURCE DEPENDENT: Allows the system to be pre-programmed by extension to route calls when an extension is busy, not answered, or in a Do Not Disturb mode to different destinations based on a source being internal or external.
- 10. CALL PARK: Once a call is placed in the "park" condition, any station within the system may retrieve it by either dialing the appropriate access code or by pressing a special feature button on a station instrument.
- 11. CALL SPLITTING: The ability to speak privately with one of the parties engaged in a three-party conference call and alternate between the two.
- 12. CALL WAITING: The ability to hear or produce a beep tone to a busy phone, alerting the user that another call is ringing in. The user then has the choice to alternate between calls, hang up on the original call and take the new call, or ignore that beep tone.
- 13. CALLING PARTY NUMBER AND NAME: The ability to display the number and associated name from which an external call originated.
- 14. CONFERENCE CALLS: The ability to connect, at minimum, six but preferably more internal or external parties into one phone conversation.
- 15. DIRECTED CALL PICK-UP: A station user is able to answer calls ringing on any other station within the system by dialing a unique answer code of that particular station to be answered.
- 16. DISTINCTIVE RINGING: Provides a unique pattern of station ringing to permit the user to distinguish internal from external calls.
- 17. TIME OF DAY/DAY OF WEEK NIGHT SERVICE: Allows incoming central office calls, normally answered at the attendant position or central answering point, to be rerouted to pre-selected stations within the system based on the time of day or day of week
- 18. FLEXIBLE NIGHT SERVICE: Permits the attendant to set up night connections in accordance with day-to-day requirements, with full flexibility in the assignment of incoming trunks to various stations. Such night service assignments must be established by the attendant on each occasion they are activated.
- 19. HOT-LINE STATIONS: Instruments are specially programmed to dial a specific internal station number or "0" for the attendant when the station user goes off-hook.
- 20. INCOMING DIGIT MANIPULATION: Ability to add, strip, or completely change the digits of any incoming DNIS, DID, or Tie Line number in order to reroute the call to the appropriate location.
- 21. LAST NUMBER REDIAL: Memory contained either within the system common equipment or within the station instrument; enables the station user to dial a special access digit and activate a speed calling treatment of the last 10 numbers that were dialed or received from/at that station instrument.
- 22. LEAST COST ROUTING WITH 6-DIGIT SCREENING: The ability to screen the first six digits of the dialed number, normally the NPA and NXX, to determine the least expensive trunk group(s) on which to route the call.
- 23. MESSAGE WAITING: The ability to activate a message waiting lamp on the user's telephone from the attendant console, telephones with appropriate class of service, and voicemail systems.
- 24. MULTIPLE TRUNK GROUPS: An indication that the switching system is capable of being equipped (and accessed



- accordingly by station dialing) for more than one group of outgoing trunk circuits.
- 25. MUSIC ON HOLD ACCESS SYSTEM: Ability to connect customer provided audio source output to the system to provide music or information to all external callers while on hold or waiting for an ACD agent to answer.
- 26. 911 DIAL PLAN: Users must be able to dial either 9-911 or 911 for access to emergency services. If a caller dials 911, the system should automatically insert the trunk access code (usually a 9).
- 27. PROGRAMMABLE OUTGOING NUMBER DISPLAY: Allows the outgoing calling line identification for each telephone to be changed to any 10-digit number.
- 28. TOUCH-TONE: Dual Tone Multi-Frequency signaling shall be transmitted by all instruments, attendant consoles, and softphones to establish a call or once the call has been connected.
- 29. TRAFFIC REPORTS: Provides the customer with detailed data on the traffic carried by the switching equipment, including peg counts, CCS (centum call statistics) measurements and overflow measurements for all trunks and trunk groups' attendant consoles, stations, features, and any time slot sensitive infrastructure of the proposed system.
- 30. TRUNK ANSWER FROM ANY STATION: A night service facility activated by the attendant, whereby incoming calls normally directed to the attendant activate a common alerting system (bells, gong, etc.) on the customer's premises. These incoming calls from non-restricted stations thereby "meet" the incoming call.
- 31. UNIFORM CALL DISTRIBUTION: Hunt group that evenly distributes calls to all telephones in the associated hunt group.
- 32. PAGING THROUGH TELEPHONES: Allows attendants and station users to page all users or a group of users through the telephone speakers.
- 33. PAGING THROUGH OVERHEAD PAGING SYSTEM: Provide interface to support access between the phone system and customer provided loudspeaker paging equipment.
- 34. Maintenance Alarm
  - a. The system should define an alarm as an event that takes place when an anomaly is detected and corrective action is required.
  - b. An alarm condition is cleared when the fault is resolved.

#### 35. Security

- a. The system offers comprehensive Toll Control as an integral part of the Call Control. It allows restriction of user access to trunk routes and/or specific external directory numbers.
- b. It also allows Class of Restriction (COR) and Class of Service (COS) features that can substantially reduce the risk of toll fraud.
- c. Authorized access to the system tools provides protection for various administration commands from unauthorized users. The web-based system tools are as follows:
  - i. System Administration
  - ii. Group Administration
  - iii. Personal Desktop User

#### 36. E-911

- a. All 911 calls originating from a District location provides an emergency line identification number (ELIN) that could be used by the public safety automatic location identification (PSALI) database to identify the designated emergency response location (ERL) of the calling party. The ELIN is assignable to a single telephone or group of telephones that are in the same location or ERL.
- b. The system should have the ability to provide multiple levels of notification that a 911 call has been made.
- c. Call back from the PSAP, the system automatically routes an inbound call to the ELIN number to the most recently associated telephone or group of phones associated with the ELIN.

#### 37. System Management

- a. The system must offer a complete telecommunications management tool that enables the following:
  - i. Provides multiple levels of system administrative access based on login credentials.
  - ii. Provides user data administration including the ability to schedule updates (e.g., integrate network telephone directory with network directory service database, schedule MACs, add and delete users, audit status of managed devices).
  - iii. Provides templates for all telephone models and configurations.



- iv. Provides alarm monitoring and management with remote notification including email.
- v. Provides scheduling of maintenance functions such as software upgrades and database backup, and restore.
- vi. Provides remote software distribution and installation.
- vii. Locates unused directory numbers and unused circuits.
- viii. Provides tools that allow maintenance personnel to troubleshoot IP-related issues down to the telephone level, including but not limited to congestion, packet loss, jitter, and CMOS scores.

#### b. Integrated Voice Messaging

- i. Any proposed system shall provide unified/integrated messaging interoperability with the District's email system.
- ii. Email Delivery: The system shall deliver voice and fax messages to a user's email inbox with unique identifiers for each.
- iii. Message Management
  - 1. New messages will be delivered to users' voicemail box and email inbox regardless of the status of the users email login status.
  - 2. Users must be able to reply to an internal voice mail message with voice or email response.
  - 3. System shall provide the option to allow a user to place a voice call directly to the caller while listening to the message.
  - 4. System shall allow users to save a voice message as a .WAV/MPEG file so that it can be saved to a file folder or attached to an email and sent to any email address.
  - 5. Deleted voicemail messages will be removed from the email inbox and voice mailbox regardless of the interface used to delete them.
  - 6. Message waiting will be turned off no matter what interface is used to listen to a new message.
  - 7. The message status will be changed from "New" to "Listened to" no matter what interface is used to listen to a message.
  - 8. Computer/Tablet Playback Options
    - a. Provide a playback tool that has the following attributes:
      - i. Does not require any secondary login to voicemail or Computer/Tablet playback control client or playback browser in order to play message.
      - ii. Allows user to control playback of message through any user- defined multimedia device or telephone.
      - iii. Computer/tablet playback control will allow user to respond via email, voice mail, or direct dial, delete message, forward message, or save message.
  - 9. Emergency Call Recording: Allow user to record calls in progress directly to their mailbox by pressing a button on their telephone.
  - 10. Password Protection: Access to a subscriber's mailbox will be password protected.
  - 11. Answer Greeting: Individual personalized greetings of up to three minutes for each mailbox are required. At a minimum, the system will provide standard and extended absence greetings.
  - 12. Message Waiting Light: Provide a message-waiting light on the telephone, along with the option to allow a user to set up external notification to cell phone, or other telecommunications device when a new message has arrived.
  - 13. User Mailbox Administration: Allows users to change their personal voice mailbox features such as zero out attendant, schedules, and greetings.
- 38. Auto Attendant: Provide multiple auto attendants or trees with the ability to do the following:
  - a. Play different multilevel greetings depending on the time of day, day of week, or day of year.
  - b. Provide a company directory that allows dial-by-number or dial-by-name.



- c. Provide separate auto attendant or trees for departmental use as required. Can be configured/revised by user-department staff.
- d. Provide zero-out option to predefined extension number or secondary tree.
- e. Call Answer: Calls will be answered on the first ring and be time and date stamped.
- 39. Disconnect Detection: Detect that a caller has hung up and immediately disconnect and restore the line to service.
- 40. DTMF Signaling: Must be able to receive and generate standard DTMF tone signaling.
- 41. Escape: A caller shall have escape options before, during, or after leaving a message by dialing 0 to reach an operator or up to five digits to an extension.
- 42. Integration: Must fully integrate with the proposed unified communication system and applications.
- 43. PSTN Connection Blocking: It shall not be possible for a caller connected to the PSTN to be reconnected to the PSTN.
- 44. Security: A caller shall not be able to pass through any auto attendant to reach an outside line.
- 45. System Backup: Provide a means to backup all system configurations, including mailboxes, greetings, auto attendants, and messages. This is normally provided via connection to a separate storage device through the LAN/WAN.
- 46. Unified Communication: Google Hangouts: The District's preference is that the solution provides a plug in or full integration with Google Hangouts to allow users to access call control and telephone presence information directly from their Google Hangouts desktop.
- 47. Standard Computer Desktop Call Control
  - a. Directory/Contacts Dialing: Provide a drop-down box for name entry and dialing from internal directory or email contacts.
  - b. Call Control: Provide call control, including dialing, disconnect, transfer, and conference.
  - c. Speed Call List: Allow user to program numbers into a personal speed call list.
  - d. Call History: Allow user to view and redial a minimum of the last 25 calls placed or received at their telephone extension. The history must include the following:
    - i. Date
    - ii. Start and end time
    - iii. Telephone number
    - iv. Name from system directory and email contacts database
- 48. Status Change: Allow user to select a status that approximates their current state from a group of predefined definitions
- 49. Standard UC Presence Application
  - a. Presence: The ability to dynamically display a person or group of peoples' availability or status for various communication systems, including desktop and mobile telephone, IM, desktop keyboard or activity, and Google calendar information.
- 50. Work Groups/Buddy List: Each user must be allowed to define work groups or a buddy list and assign other users as required, provided their restriction class allows.
- 51. Restriction Class: Provide a means to restrict which users an individual can view in their buddy list or workgroup.
- 52. Collaboration: Provide the means to allow real time file and screen sharing, and white boarding.
- 53. Instant Messaging: Provide the ability to send and receive secure text messages within the District's network. The system must provide logging and archive capabilities and support authentication and encryption.
- 54. Docking: Allow user to dock the application on the top, side, or bottom of monitor or minimize to system tray if desired.
- 55. Mobile/Softphone Unified Communications Application on Computers, Smartphones and Tablets
- 56. Provide visual voicemail review and access.
- 57. Mobile device users' availability shall be updated based on the current state of the telephone.
- 58. Instant Messaging: Provide the ability to send and receive secure text messages from the presence application to the user's mobile telephone.
- 59. Video: Support video calling to any video enable UC device.
- 60. Softphone: Allow user to receive and place calls directly from the mobility application without the need for a physical telephone.



- 61. Shall be available utilizing public and private networks. Contractor to include any hardware or software required to allow access between the public network and the District network.
- 62. Twinning Single Number Reach for Mobile User: Allow user to define when and how calls that are presented to a user's PBX telephone are distributed to their mobile or stationary device, including the following:
  - a. Time of day and day of week
  - b. Call ringing location
  - c. Desk phone
  - d. Cell phone
  - e. Other location
  - f. Simultaneous ring at desk phone and designated alternate
  - g. Number of rings before forwarding
- 63. Call Hand-off: Allow user to hand off active call from desk phone to mobile or from mobile to desk phone without interrupting the call.
- 64. Call Control: Allow user to access PBX features, including the ability to transfer, conference, and place outgoing calls utilizing simple feature/access codes.

#### **PSTN SERVICES**

- I. Global Functional Description Requirements and General Information
  - A. If the SIP circuits are busy in one location, the DID number shall route to the alternate location.
  - B. SIP trunks shall support dynamic allocation and allow trunk port expansion and contraction as required at District facilities.
  - C. DID numbers shall be assignable to any location.
  - D. The vendor must be able to use the existing telephone numbers.
  - E. If there is a failure at any of the locations (equipment or network), calls shall route to the alternate location.
  - F. Support non-sequential DID numbers.
  - G. Provide inbound/outbound calling party number identification.
  - H. Ability to add incoming calling party name information.
  - I. Support outgoing calling party number identification as defined by the Districts telephone system.
- II. Contractor requirements
  - A. Contractor will be required to order CSR records from AT&T and verify that all numbers, lines and circuits are properly identified and moved as appropriate to their service.
  - B. Provide E911 call screening/routing and database provisioning for the transmission of the calling party ELIN information provided by the District's PBX system via the ISDN-PRI or SIP facility to local emergency services authorities PSALI database. The PSALI database associated with the ELIN shall allow the District to designate address and room or building coordinates or section information.
  - C. Provide the District access to update the ANI/ALI database associated with their trunks and DID range.
  - D. The provider shall be responsible for tagging and labeling all circuits and interface equipment provided with the proper circuit ID and telephone number. In addition, they will provide the District with a list of all provided circuits and detailed account information.
- III. Options for Implementation
  - A. Option 1: Support for current infrastructure
    - 1. The provider shall install the SIP circuits and extend it from the DMARC locations as outlined under EXISTING INFRASTRUCTURE.
    - 2. B. All local SIP trunks shall be terminated on a service provider supplied Session Border Controller as indicated under EXISTING INFRASTRUCTURE.
  - B. Option 2: Deployment of new infrastructure
    - 1. The provider shall be responsible for install of any new DMARC locations
    - 2. All SIP trunks shall be terminated on a supplied Session Border Controller for implementation

- requiring district supplied networking
- 3. The provider shall provide all documentation of locations and troubleshooting procedures involved with any new equipment if any.
- 4. The provider shall provide methods of redundancy

# **Evaluation Rubric**

Rubric Component	Points Possible
Specifications	
Meets or exceeds all specifications and best	
serves the needs of the District	25
Warranty/Service after sale	
Repair/technical support	10
Financial Consideration	
Initial cost, licenses, software, maintenance,	
etc	30
Compatibility	
Corresponds to current technology and	
technical capabilities; full functionality.	15
Reputation/Experience	
Includes but not limited references and readily	
available research	20
Total	100