

FRIDLEY SCHOOL DISTRICT

**REQUEST FOR PROPOSAL
FOR
VOICE SYSTEM AND DATA SWITCHES**

February 11, 2014

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SECTION I – GENERAL INFORMATION

1.0 Background and Purpose

This request for proposal (RFP) invites vendors to propose voice and voice mail system and data switches for local area network and all implementation services for Fridley School District (“District”). Section II specifies the requirements for the voice system including supporting voice system components. Hosted voice solution is also requested as part of this section. Section III specifies requirements for data switches, network management, and an alternate for UPS. .

Vendors may choose to response to either Section II - voice system or hosted solution and/or Section III - data switches or both sections of the RFP.

The District may choose to award contract to a single vendor or multiple vendors.

1.1 Vendor Questions and Dates

Questions and/or correspondence related to this RFP document or procurement must be in writing and e-mailed to:

Yvonne Anderson
Director of Technology
E-mail: Yvonne.anderson@fridley.k12.mn.us

The following project dates have been established:

RFP Issued:	February 11th, 2014
Site Surveys:	February 20th, 2014 (9:00 am local time)
Written Questions from vendors:	February 26th, 2014 by 4:00 pm local time
Written Answers Provided:	March 3rd, 2014
RFP Response Due	March 12th, 2014 – 2 pm local time
Contract Award (estimated)	end of March 2014
System installed and in operation	July 2014

Note: Site survey will start at 9:00 am at the District Office – 600 West Moore Lake Drive, Fridley, MN 55432. Vendors should contact Yvonne Anderson at email: Yvonne.Anderson@fridley.k12.mn.us if they plan to do a site survey. There will be no makeup time for site visits. Site visits are not mandatory but vendors will be responsible for meeting the installation and cabling requirements.

1.2 RFP Response, Bonds, and Affidavit

Response to this RFP must be received at the following address:

Fridley School District
Attn: Yvonne Anderson
Fridley Public Schools
6000 West Moore Lake Drive

Minnesota, MN 55432

One signed, original (with signature of authorized executive) and two copies of the RFP response must be submitted and clearly marked:

"RESPONSE TO FRIDLEY SCHOOLS VOICE SYSTEM AND DATA SWITCHES RFP"

A bid bond or certified check in the amount of 5 percent of the 'proposal cost' (Total one-time costs for each Section II and Section III) made payable to Fridley School District must be submitted with the response. Certified checks shall be returned to unsuccessful vendors after award of a contract or rejection of all responses.

All proposals received after the time and date stated above will not be considered and will be returned. The vendor assumes the risk of any delay in the mail or in handling of the mail by employees of the School District. Whether sent by U.S. mail or by means of personal delivery, the vendor assumes responsibility for having this proposal deposited on time at the place specified. Facsimile responses will not be accepted.

The successful vendor shall furnish the School District with a Performance and Payment bond in the amount of 100% of the awarded contract to guarantee delivery and performance of the contract. Once the bond is received and accepted, the District will issue a purchase order and notify the vendor that the purchase orders may be executed.

The District reserves the right to waive technicalities or irregularities, to accept any portion of a response when responses are by items, to reject any or all responses, and to make arrangements for the best interest of the District. Response to this RFP should be presented in the same order as is this RFP (item by item.)

The vendor must include as part of their response:

- A. A signed affidavit of non-collusion
- B. A signed Statement of Affirmative Action Compliance

The District may apply for E-Rate funding for equipment and services procured under this RFP. Vendors should be willing to participate in and comply with the E-rate program and apply for a Service Provider Identification Number (SPIN) if they do not already have one. Vendors who have a SPIN should include it as part of their response.

Proposals may not be withdrawn for ninety (90) days after the scheduled time of response submission without the consent of the District. The District reserves the right to accept any proposal or parts of such proposals, to reject any or all proposals, and to waive irregularities and informalities in the RFP procedures, and to act in its best interest.

The District will only provide the names of vendors who have submitted proposals by the due date and time if requested. Once the responses received are reviewed and recommendations made to the School Board, vendor responses received will be made public and available for review.

1.3 RFP Response Format

Vendors must include the following in their response:

- A. Vendor qualifications as outlined in section 1.5.
- B. Description (including diagrams) of the proposed hardware/software solution. Solution must comply with the requirements as outlined in the RFP.
- C. Cost information as requested in the RFP.

Failure to submit proposals in accordance with the requirements of this RFP will be grounds for rejection. Vendors must warrant that the proposed design solution meets or exceeds all specifications contained or referenced herein. Vendors should, in presenting their design proposals, list types and quantities of materials to be used in its implementation. Vendor remains solely responsible for the accuracy of the proposal as to system performance, material quality, and material quantity. The cost section of the response must not contain any erasures, corrections, or white outs. Failure to comply will result in the response being rejected.

1.4 General Requirements and Instructions to Vendors

The primary intent of this document is to provide vendors with sufficient information and a point of reference to propose a solution and associated services that will satisfy the objectives of the District as stated in the RFP.

Vendors must respond to the all the components (except as noted) as set forth in the RFP. Final determination of what is procured is dependent on the responses provided by the vendors and other budgetary considerations.

The following must be considered in responding to this RFP.

- a. The specifications provided herein are intended to facilitate an understanding of the District's needs and are to be considered the minimum requirements. It is the responsibility of the vendor to propose a technically sound and operationally functional system.
- b. The proposed system must be designed and installed to provide a highly reliable grade of service. All parts, materials, and service proposed must be currently available on the market and in continuing production (no discontinued manufacturers or parts). Any components included in the response must be new. In addition, the vendor must clearly demonstrate that they have installed all components of the system or the service as proposed and that those components or services are fully operational at all customer sites. Vendors must document conformance with the performance requirements in the RFP.
- c. Each vendor is required to submit proposed contracts, catalog data, and technical information including design calculations and layout drawings that completely describes the system and associated services. Information provided will be used during the evaluation process. All general contents of this RFP and technical specifications herein, as well as the complete response of the successful vendor, will be included in any contract between the District and the successful vendor.
- d. The District reserves the right to determine whether a vendor is responsive and has the ability and resources to locally perform the contract in full and comply with the specifications. Inability to demonstrate vendor experience with installations and support of equivalent systems will result in rejection of the proposal.
- e. The District reserves the right to request additional information from the vendor to satisfy any questions that might arise, and the right to reject any or all proposals and/or to issue invitations for new proposals.
- f. The District assumes no responsibility for understanding or representations concerning conditions made by its officers or employees prior to the execution of a legal contract, unless such understanding or representations are specifically incorporated into this RFP.
- g. Verbal discussions pertaining to modifications or clarifications of this RFP will not be considered part of the RFP unless confirmed in writing. Any information provided by the vendor verbally will not be considered as part of that vendor's proposal until written confirmation is received by the District at the

address provided in this RFP.

- h. The vendor is required to review this document and to become familiar with the requirements necessary to make a complete proposal in compliance with local, state, and federal codes and the RFP specifications. Failure to review the provided information regarding this project will not relieve the vendor from submitting a complete and fully responsive proposal.
- i. Where specific manufacturers, their components, and/or materials are listed as part of the specified district infrastructure, the vendor solution must be fully operable with those components and materials.
- j. The District is not responsible for locating or securing any information that is not identified in the RFP and reasonably available to them. To ensure that sufficient information is available, the vendor must furnish as part of the proposal, all descriptive material necessary for the District to determine whether the response meets the requirement of the RFP and establish exactly what the vendor proposes to furnish as to supplies, materials, and services.
- k. Subcontractors working for the vendor must meet all the requirements of the RFP and any contract between the vendor and the subcontractor must include all contract terms agreed to between the District and the successful vendor.

1.5 Response Evaluation

It is important that vendors review this subsection to understand the RFP evaluation process.

A. **Vendor Qualification.** Vendors responding to the RFP must have the following minimum qualifications:

- The company or the subcontractors used must have a minimum of five years of experience in installing voice and voice systems or data switches being proposed.
- The company or subcontractors used must have successfully installed telephone and cabling systems and data switches of similar scope and size.
- The company or subcontractors used must have a service and support capability and be able to respond for warranty activities and, if selected, for extended maintenance services. For emergency services, vendor must be able to respond and if needed be on site within two hours.
- Manufacturer partners, distributors, and subcontractors responding to this RFP must be authorized by the manufacturer to sell and certified to support the systems being proposed. Failure to provide proof of such authorization on request would be grounds for disqualification at the District's discretion.

Vendor must include information that substantiates these qualifications as part of their response to the RFP.

B. **Proposed Solution Against the Requirements of the RFP.** Solutions not meeting the requirements stated in the RFP will be eliminated from further consideration at this stage in the review process.

C. **Feature Evaluation.** Vendor proposals will then be evaluated for the features and capabilities included in their solution, ease with which those features and capabilities can be used, administered, and maintained.

Support and Maintenance Capabilities. Vendors will be evaluated for their support and maintenance capabilities, including the following variables:

- Years of experience in providing data, voice, telephony, and unified messaging support

- Number of staff trained in technology being proposed
- Number of client references (of similar equipment and services – as proposed)
- Capability to respond quickly to service and support requests.
- Training capabilities and resources available.

D. **Cost.** One time and multi-year cost(s) will be used to evaluate the total cost of the system. For multi-year costs, the total net present value for the time period specified will be used to evaluate the total cost of the system. A 4% discount rate will be used for calculating net present value.

In developing their cost proposals, vendors must keep the following in mind:

- No adjustments will be allowed (including corrections) to the cost proposal after the submission deadline. Cost proposal must contain no corrections or erasures.

As part of the evaluation process, the District may invite selected vendors to make a presentation of their proposal. At its option, the District may request a best and final proposal from selected vendors.

E. The District will evaluate the above elements using the following weighted criteria.

Criteria	Weighted percentage
Costs - One time and annual maintenance and support for 7 years for voice and 5 years for data switches	60%
System Feature Capabilities and Ease of Use and Administration	20%
Vendor Experience, Support and Maintenance Offerings Capabilities and Customer References	20%

The District reserves the right to waive minor defects in a proposal during the evaluation process if it is deemed not to have any material effect on the final outcome.

The District will award the contract to the vendor with the best value and one meeting the proposal specifications.

1.6 Contract Terms and Conditions

1.6.1 Contractual Conditions. The following contractual conditions, in addition to system requirements and installation terms, shall be included in the contract entered into by the District and the successful vendor.

1.6.1.1 Number of Vendors. *The District may establish one or more contract with the successful vendors.* All materials and services proposed will be procured under these contracts. The vendor may have subcontractors. Any agreements between the vendor and subcontractors must not conflict with the terms of the agreement between the District and the vendor.

1.6.1.2 Laws of Minnesota and Effective Date: The contract between the District and the successful vendor shall be governed by the laws of the State of Minnesota. The contract shall be effective on the date it is approved and signed by the District.

1.6.1.3 *Risk of Loss or Damage:* The District shall be relieved from all risks of loss or damage to the materials during periods of transportation, installation, and during the entire time it is in possession of the successful vendor and until such time as unencumbered title for the system is vested in the District and it is in the exclusive possession of the District.

Should the system components be lost or damaged, under such circumstances, the District is relieved from the risk of loss or damage.

1.6.1.4 *Successful Vendor's Liability:* The successful vendor shall be liable for damages resulting from injury to a person and/or damage to the property of the District, employees of the District, or persons designated by the District for any purpose, prior to or subsequent to acceptance, delivery, installation, and use of the system or service either at the successful vendor's site or at the District, provided that the injury or damage was caused by the fault or negligence of the vendor.

The vendor agrees to at all times to protect, defend, indemnify, and save the District (including the District employees) from any and all claims and damages of every kind and nature made, rendered or incurred by or in behalf of every person or corporation whatsoever, including the parties hereto and their employees that may arise, occur, or grow out of any acts, actions, work, or other activity done by the said vendor, his employees, subcontractors, and the like, in the performance of this agreement.

1.6.1.5 *Assignment of Interest:* The successful vendor shall not assign any part of its interest in this agreement without prior written consent of the District or agents thereof.

1.6.1.6 *Permits:* The successful vendor shall be responsible for any and all permits required.

1.6.2 **Date of Acceptance.** The contract will be considered substantially complete under the following conditions:

- a. All of the work has been completed in accordance with the contract and specifications
- b. The system operates in conformance with manufacturer's published specifications
- c. Completion of 30 consecutive days of operation without major system problems or failure from when the system or service is turned over to the District for use. Failure within this period would re-start the 30-day period.

The vendor shall certify in writing to the District Project Manager (to be announced at the time of contract award) when the system or service is installed, operational in accordance with the specifications stated above, and ready for use. The District will start its acceptance testing. At the end of the acceptance period, upon the District's written acceptance, operations control becomes the responsibility of the District. This constitutes Date of Acceptance.

1.6.3 **Contract Duration Pricing.** During the contract term, the successful vendor must pass on to the District all discounts and price reductions made available to other customers using similar services. At no point will the vendor be allowed to raise cost above the stated contract price.

1.6.4 **Reimbursement of Liquidated Damages.** If the vendor fails to provide a complete and operational system by the specified or otherwise agreed-upon date of completion, the District will receive reimbursement for liquidated damages of \$500 per calendar day until such is provided.

- 1.6.5 Installation.** Prior to installation of equipment or service, approval of installation plan shall be obtained from the District Project Manager.
- 1.6.6 Status of Responses.** The District reserves the right to accept or reject any or all responses and waive formalities or irregularities in the process. A proposal once submitted shall be deemed final and binding on the vendor, and shall constitute an option with the District to enter into a contract upon the terms set forth in the RFP.
- 1.6.7 Incurring Costs.** The District is not liable for any costs incurred in replying to this RFP.
- 1.6.8 Permission to Proceed.** The vendor must obtain the District's written permission from Project Manager before proceeding with any work necessitating cutting through any part of any District building structure.
- 1.6.9 Performance and Payment Bond/Payment Schedule for Purchase Option.** Performance and Labor and Material Payment Bonds in the amount of the full Contract Sum will be required of the successful vendor if the District chooses the purchase option. Performance and Labor and Material Payment Bonds must be furnished within 10 days of awarding the contract. The successful vendor must comply with all Minnesota State requirements regarding bonding. Vendor will invoice the District for payment after installation. Payment will be subject to a 10% retainage.
- 1.6.10 Insurance.** The successful vendor must purchase and maintain insurance to protect the vendor from claims set forth in the following paragraphs that may result from the vendor's operations under the contract, whether the operations are by the vendor, by a subcontractor, or by anyone employed by either.
- The vendor shall be responsible for all losses that fall under any deductibles on required insurance coverage. If subcontractors are employed, the vendor shall procure and maintain any bodily injury and property damage liability insurance for and on behalf of the vendor for claims and damages resulting from acts of subcontractors in the same amounts as required for claims and damages resulting from acts of the vendor
- The vendor agrees to indemnify and render the District harmless from any and all claims, demands, damages, actions, or causes of action, to arise against the District by reason of the vendor's performance of the contract. The District shall be named as an additional insured on the required liability policy. Such insurance shall be acquired for and on behalf of the vendor in protecting the vendor from claims for damages for bodily injuries, including sickness or disease, death, and for care and loss of services, as well as from claims for property damages, including loss of use, which may arise from operations under the contract, whether such operations by the vendor or any directly or indirectly employed by the vendor. A vendor shall be required, as a minimum, to carry the following insurance coverage and types:
- a. *Commercial General Liability:* Coverage shall have minimum limits of \$1,000,000 each occurrence, and \$1,000,000 aggregate combined single limit for bodily injury liability and property damage liability. This shall include premises and operations, independent contractors, products and complete operations, contractual liability, and personal injury liability.

- b. *Business and Auto Liability:* Coverage shall have minimum limits of \$1,000,000 per accident for bodily injury liability and property damage liability. This shall include owned vehicles, hired and non-owned vehicles, and employee non-ownership.
- c. *Property Insurance:* Coverage shall be all risk and shall be in a broad form basis, including coverage for explosion, collapse, and damage in and around facilities. The coverage also must include offsite and in transit exposures.
- d. *Worker's Compensations:*

State:	Statutory
Applicable Federal:	Statutory
Employer's Liability:	\$100,000 per accident, \$500,000 Decease,
Policy Limit	\$100,000 Decease, Each Employee

1.6.11 Independent Contractors. The vendor and all his employees shall **not** be considered employees of the District while engaged in the performance of any work or services required herein, and shall be Independent Contractors. Any and all claims that may arise under the Workers Compensation Act of Minnesota on behalf of said employees, and any and all claims made by any third party as a consequence of any act of omission on the part of the work or service provided to be rendered herein, shall in no way be the obligation or responsibility of the District.

1.6.12 Other Required Contract Terms. The following other contract terms shall apply.

1.6.12.1 Hazard Communication Program: Prior to execution of an agreement, the vendor shall provide the Health and Safety Supervisor with a copy of its Written Hazard Communication Program as required by OSHA Standard 29 CFR 1200(e) through (g) for all hazardous components and materials used. At a minimum, this shall include Material Safety Data Sheets (MSDS) and warning labels affixed to hazardous substance containers used by the vendor.

1.6.12.2 Indemnifications: Any and all claims that arise or may arise against the vendor or its agents, servants, or employees as a consequence of any act or omission on the part of the vendor or its agents, servants, or employees while engaged in the performance of this contract shall in no way be the obligation or responsibility of the District. The vendor shall indemnify, hold harmless, and defend the District and its employees against any and all liability, loss, costs, damages, expenses, claims, or actions, including attorney fees that the District and its employees may hereafter sustain, incur, or be required to pay, arising out of or by reason of any act or omission of the vendor or its agents, servants, or employees, in execution, performance, or failure to adequately perform the vendor's obligations pursuant to this contract. The District shall also be indemnified for any attorney's fees it incurs to enforce this indemnification provision or any other indemnification provision in the contract.

1.6.12.3 Default:

- a. *Force Majeure:* Neither party shall be held responsible for delay, nor 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, or Epidemic
- * Strikes

- * Wars
- * Acts of God
- * Unusually severe weather
- * Acts of public authorities
- * Delays or defaults caused by public carriers

Provided the defaulting party gives notice as soon as possible to the other party regarding the inability to perform.

- b. *Inability to Perform:* The vendor shall make every reasonable effort to maintain staff, facilities, and equipment to deliver the system or service purchased by the District. The vendor shall immediately notify the District in writing whenever it is unable to, or reasonably believes it is going to be unable to, provide the agreed-upon quality and quantity of services. Upon such notification, the District shall determine whether such inability requires a modification or cancellation of the contract.
- c. *Duties to Mitigate:* Both parties shall use their best efforts to mitigate any damages that might be suffered by reason of any event giving rise to remedy hereunder.

1.6.12.4 *Nondiscrimination:* During the performance of this contract, the vendor shall not unlawfully discriminate against any employee or applicant for employment because of race, color, creed, religion, gender, national origin, sexual orientation, disability, age, marital status, or public assistance status. The vendor will take affirmative action to ensure that applicants are employed and that employees are treated equally during employment, without unlawful discrimination because of their race, color, creed, religion, gender, national origin, disability, age, marital status, sexual orientation, or public assistance status. The vendor shall also comply with any applicable federal or state laws regarding nondiscrimination. The following list includes, but is not meant to limit, laws that may be applicable:

- * Minnesota Statute Ch. 363
- * The Equal Employment Opportunity Act of 1972
- * Executive Order 11246
- * The Rehabilitation Act of 1973
- * The Age Discrimination in Employment Act of 1967
- * The Equal Pay Act of 1963
- * Minnesota Statute 181.59
- * The Job Training Partnership Act of 1982

1.6.12.5 *Access to Records/Audit:* Vendor's books, records, documents, and accounting procedures and practices relevant to the contract are subject to examination by the District and either the Legislative or State Auditor, as authorized by Minnesota Statute 16B.06, subd. 4. Such data are also subject to review by the Comptroller General of the United States, or a duly authorized representative, if federal funds are used for any work under the contract. The vendor agrees to maintain such data for a period of 3 years from the date services or payment was last provided or made, or longer if any audit in progress requires a longer retention period.

1.6.12.6 *Safety:* The vendor will comply with all State and Federal laws as they relate to employee safety, i.e., AHERA, OSHA, Confined Space Entry, Employee Right to Know, Respiratory Protection, NESHAP, Lock-Out Tag-Out, etc.

1.6.12.7 Tobacco: No person may smoke or use a tobacco product (1) in any building or upon any grounds owned or leased and occupied by the District, or (2) in any location or facility during any school or the District -sponsored educational program, activity, or event, regardless of the location of such activity or event. The term "smoke" shall include smoking a cigarette, cigar, or pipe, or carrying a lighted cigarette, cigar, or pipe. The term "use a tobacco product" shall include chewing of tobacco or snuff or the consumption of any other tobacco product.

1.6.12.8 Infringement on Adjoining Property: The vendor is to exercise care to ensure that infringements on adjoining property is avoided in the process of work under the contract. Any damage resulting from infringement on adjoining property must be made good immediately by the vendor responsible at the vendor's expense.

The vendor is obliged to replace, restore, or rearrange, in a manner satisfactory to the District, any components of lawns, streets, pavements, curbs, sidewalks, or boulevards such as lamp posts, poles, conduits, wires, hydrants, underground mains of other property owners, etc., which have been removed, displaced, disturbed, or interfered with as the result of work under the contract. Should the vendor cause damages to any other work or person employed in the work, the vendor agrees, upon due notice, to settle with such person by agreement or arbitration, if such person will settle. The vendor agrees to defend any suits at the vendor's expense and pay all costs arising there from without any cost to the District.

1.6.12.9 Temporary Facilities: If needed, the vendor will be required to maintain its' own storage area on the site. Storage space within the building will not be provided.

1.6.12.10 Utility Clearances: For projects involving excavation, trenching, borings, etc., the vendor is required to contact Gopher State One-Call, Inc., for location of underground telephone, electrical lines, water, sewer, or natural gas lines, and prior to digging.

1.6.12.11 Use of the District Facilities: Means of ingress or egress in the District buildings or offices shall not be blocked for any reason or hamper the normal operation of the building in any way unless permission is first obtained from the District. The vendor shall phase the work to ensure minimal disruption to the buildings' operations. Work involving significant amounts of noise, construction debris, etc., shall be performed while classes are not in progress. These times vary by site and should be negotiated in advance with the District Project Manager.

The vendor's materials, tools, supplies, or debris shall not be stored or allowed to accumulate in occupied areas (corridors, classrooms, office areas, etc.). The District assumes no liability or responsibility whatsoever for any damage, destruction, theft, or other acts that may occur to the vendor's materials.

The vendor must propose to the District a definite schedule so the District can arrange for appropriate staffing. Any changes to the schedule must be approved by the District and submitted by the vendor no less than 24 hours before the anticipated change.

1.6.12.12 Cleanup: The vendor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the contract before final inspection. Surplus materials and all cabling components shall be promptly removed from the site upon

completion of the work. In case of undue delay or dispute, the District may remove rubbish, materials, and cabling components, and charge the cost to the vendor, with such action permissible by the District Project Manager 48 hours after a written notice has been transmitted to the vendor. Prior to final acceptance, the vendor shall restore all areas affected by the work to their original state of cleanliness and repair all damage done to the premises, including the grounds, by the vendor's workmen and equipment.

1.6.12.13 *Special Controls:* The building, project site, and adjoining property must be protected by the vendor from objectionable dust and wind-blown debris. In addition, necessary controls shall be provided to prevent pollution of the air by odors or particulate matter. Reasonable precautions must be exercised to prevent vandalism and to safeguard the public at the existing building.

1.6.12.13 *Security:* The vendor and any subcontractors of the vendors shall comply with District policy for security and security identification (e.g. security badge, etc.) requirements.

SECTION II – VOICE SYSTEM AND NETWORK SERVICES REQUIREMENTS

2.0 Voice System Requirements

The Fridley School District is seeking voice, and optional components for existing District buildings. The systems must have the sophistication and capacity to meet current needs and accommodate future growth.

The current system voice and voice mail system is from Mitel. A Mitel 3300 LX is installed at the high school, a Mitel 3340 mxe is installed at each of the elementary buildings and a Teleworker is installed at Transition. The District currently has approximately 100 IP handsets.

The District currently uses Microsoft Exchange for email.

The District is looking at a voice over IP (VoIP) configuration option.

1. Configuration A – VoIP System: Replace existing analog and digital voice environment with a digital VoIP system also referred to as IP Telephony system. This configuration would need to support a minimal number of analog lines for fax and local business lines.

The term VoIP handsets and IP handsets in this RFP refers to the same item.

In addition to the voice system, the District is requesting vendors to respond to a number of components. These include:

- Voice mail system – to be located at the District hub.
- Integration of voice mail to email system also referred to as unified messaging
- Centralized Call Accounting System
- E911 capability

Vendors must respond to all of the optional components

In addition to the above, the District is looking for the following alternate.

Alternate 1 – Five year financing lease rate should the District choose to lease the system.

Alternate 2 - Hosted voice solution - The District will consider a hosted voice solution that meets the requirements of the voice system specification provided in this section. Vendors proposing hosted solution must be certified under E-Rate to provide this service.

Vendors may choose to respond to Alternate 2 only.

The rest of this section identifies specific requirements. Requirements are marked as either mandatory (M) or desirable (D). Vendors must be able to meet the mandatory requirements and indicate in the affirmative that they comply with the requirement. Vendors able to provide desirable features should indicate how the feature is activated or implemented. If the cost of the desired feature is not included in the proposal vendors should identify the cost separately and indicate if the cost is a one-time cost and whether it is on a per user basis or system level

cost. Vendors should provide answers to specific questions identified and respond to request for description. Lack of a response to a question or additional information request may impact the evaluation of the vendor's proposal.

2.1 System Design (M)

The District is requesting vendors to propose a hub and spoke design, where the High School will act as a hub. Individual spoke locations will be connected to the hub system over Ethernet connection using the District's fiber network. The hub will act as the focal point and connect to the public switched telephone network (PSTN) via multiple T1 (PRI) interfaces or SIP trunks. The hub will also host the centralized voice mail system.

Each of the remote locations as well as the hub site will be connected to the PSTN via analog lines to provide minimal access to the outside world under wide area network failure conditions.

2.2 System Capacity (M)

Equipment proposed must accommodate the user and network capacity for each of the buildings as listed in Appendix A for Configuration A.

2.3 Remote System Configuration (M)

In addition to supporting the user and network capacity identified in Appendix A, each of the remote systems proposed must allow for growth and must be configured to support the following:

Items	Qty
1. UPS Power	One hour
2. Attendant Console w/Directory Access	1
3. Ethernet Connection for wide area connectivity	1
4. Power fail transfer switching (for power failure)	# of analog ports as listed in Appendix A
5. Analog CO trunk port to access existing paging system and outside lines for fax, meters, fire alarms	# of analog ports as listed in Appendix A
6. Administration terminal/printer (See Note below)	1

Note: Vendors may propose alternate solution that accomplishes the requirements to print system information and accommodate the need to print information in the event the system is not accessible via a local area network.

2.4 Hub System Configuration (M)

In addition to supporting the user and network capacity identified in Appendices A and B, the hub system proposed must be configured to support the following:

Items	Qty
1. UPS Power	Two hour
2. PC based Operator Console w/Directory Access	1
3. T1 PRI ports with CSUs for PSTN connections	2 – PRI ports
4. Ethernet Connection for wide area connectivity	Sufficient to support connectivity to remote systems as specified.
5. Support Multiple Recorded Announcements	5 minutes
6. Power fail transfer switching (for power failure)	# of analog ports as listed in Appendix A

7. Music on hold	5 minutes
9. Analog CO trunk (loop start) for Paging system and analog ports for fax, meters, fire alarms	# of analog ports as listed in Appendix A
10. System Administration Package – Graphical Interface	1

2.5 Remote System Redundancy (M)

Under wide area failure conditions when the remote systems are disconnected from the hub system, it should continue to function and provide local switching as well as handle incoming, outgoing, and 911 calls using the T1 PRI, SIP, local analog trunks. Vendors should list what capabilities will not be available at the remote sites in the event of a wide area network failure.

2.6 Overall System Capabilities and Components (M)

The voice communications system (VCS) proposed must provide the following:

- At a minimum support the features listed in Table 2-1 in addition to that listed in this RFP.
- System inter-connection using high-speed wide area network 10/100 Mbps, or faster, Ethernet interface(s).
- Centralized voice mail/auto-attendant and unified/integrated messaging system. The unified messaging system must integrate with Microsoft Exchange 2010 or Google Mail.
- Removable back up storage and media for voice and voice mail system to enable restoration of configuration and voice mail data in the event of a failure of the storage media.
- Support LDAP/Active Directory and electronically exchange (import/export) user information
- One centralized call accounting system.
- Automated alarm notification to and remote access from vendors support center and District Technology Services.

2.7 Voice Mail and Auto-Attendant (M)

Vendors must include a voice mail and auto-attendant system for use by all the sites. The system will be installed at the hub. The voice mail system must:

- Support at a minimum the features listed in Table 2-2.
- Be configured with minimum of 16 ports, 500 mailboxes and minimum of 2000 hours of storage.
- All of the ports must be usable for voice mail and auto-attendant features.
- Work as a fully integrated part of the voice system

The voice mail system must provide an administration capability that allows an authorized administrator(s) to add, change, delete users and their profiles, access usage statistics, and determine last time a user has accessed his/her voice mailbox, the number of messages (read/unread).

2.8 Unified Messaging (M/D)

Vendors must include unified messaging system. The system proposed must integrate with Microsoft Exchange 2010 e-mail system or Google Mail. Unified messaging should include:

- a. Notification of voice mail via the e-mail system (required), with option to listen to message via desktop speakers or phone (required).
- b. Notification of e-mail via a voice terminal as an option (desirable)
- c. Text to speech conversion of e-mail as an option (desirable)
- d. Speech to text conversion of voicemail to e-mail as an option (desirable)
- e. Integration of fax server. (desirable)
- f. Storage of voice mail should be on the voice mail server and should not be on the email server.

Vendors should describe if the voice mail/unified messaging system supports both PC and Apple desktops and whether voice messages can be accessed via a Web interface.

2.9 Call Accounting System (M)

A centralized call accounting system and capability must be included. The system/capability need to be installed at the hub. At a minimum, the following capabilities should be available:

- a. Capacity to handle a minimum of 100,000 call records.
- b. Costing of calls using tariff information, or the District specified costing information.
- c. Generate multi-level (minimum 3) organizational summary reports.
- d. User defined exception reports (e.g. short or long calls, calls to specific numbers, system/trunk usage by time of day, day of the week, etc.).
- e. Accessible remotely over a local or wide area network connection by authorized users.
- f. Store historical data - minimum of one year.

The system proposed must be able to route call records to the centralized storage location even when long distance calls are routed through a remote site. The vendor should include all the necessary hardware/software and services (e.g. server or workstation, installation, training, software setup, etc.) as part of their proposal. The vendor must state the hourly charge for producing any changes to the Call Accounting System after acceptance of the system.

(Note: If third party product is proposed, vendor must agree to provide support for up to seven years.)

Table 2-1 Voice System Features

Note: All of the features listed are required unless specifically stated as desirable.

Voice Terminal Features

1. Desk/wall mounts analog/IP phones with message waiting light.
2. Choice of IP phones – minimum of three models for IP phones with variable features, including line capacity, buttons, integrated display and speakers. IP phones should have 10/100 switch port with gigabit port being desirable.
3. Call transfer
4. Call transfer to voice mail without ring
5. Call hold
6. Call forwarding (busy, no answer, all calls)
7. Split Call forwarding by source (Forward calls originating: within site, within District sites, from outside the District)
8. Allow users to call forward their calls remotely (Describe how this would work)
9. Conferencing (3 party)
10. Call waiting indication
11. Distinctive ringing – internal, external calls
12. Call pickup – groups, directed.
13. Boss pickup - where all phones in a pickup group (e.g. Help Desk) rings and any one of which can answer the call.
14. Last number redial
15. Hands free answer back
16. Do not disturb – option that can be initiated at any time, even during ‘ring’ (desirable)
17. Message waiting indication (lamp, stutter tone)
18. Speed dialing
19. Selectable ring tone and volume control
20. Call Park
21. Automatic Call Back
22. Caller ID block (desirable)
23. Headset support. Wireless capability (e.g. Bluetooth) is desirable.

System Features

1. Centralized or distributed direct inward dialing
2. Caller ID (incoming and outgoing – see further description in this section)
3. Four digit dialing
4. Multiple attendant consoles
5. Integration with voice mail and unified messaging to system supporting Novell, Microsoft Exchange, or Google Mail.
6. Call detail record generation and collection
7. Music on hold, playback/announcement device – available network wide
8. Night answer (fixed and flexible)
9. Power fail transfer
10. 911 identification (meet applicable regulations)
11. Networking with transparent feature operation
12. Automatic route selection
13. Multi-level call restriction (class of services)

Table 2-1 Voice System Features (continued)

14. Audio Conferencing (5 or more parties)
15. Call recording - record voice conversation using a feature button – across the network.
16. Hunt groups (consecutive/nonconsecutive hunts)
17. Basic automatic call distribution (ACD) to support small (up to 10 agent) call center applications.
18. Call Tracing – Record caller ID/Calling Name information to trace calls for public safety purposes.
19. Ability to interface to Ground and Loop Start trunks, T1 and PRI trunks.
20. Remote access and monitoring (with password security)
21. Administrative capabilities (adds, moves, changes, monitor usage by time of day)
22. FAX machine/modem support by each system and across the network.
23. Busy lamp field (BLF) and direct station select (DSS) on attendant console
24. IP Ethernet interface for connections to stations and trunks
25. Centralized or distributed access to long distance facilities
26. Account code authorization for long distance calling
27. Four digit to seven or ten digit translation for use during wide area network failure condition
28. Interface to external paging system
29. Internal page capabilities using handsets with speaker phones allowing for different groupings or zones.

Table 2-2 Voice Mail and Auto-Attendant Features

Note: All of the features listed are required unless specifically stated as desirable.

Voice Mail

1. Multiple means for notifying voice mail users (i.e., stutter tone, display a message, light a lamp, e-mail; but must include message lamp or message display)
2. Allow recording of multiple personal greetings locally or remotely (busy, no answer, internal, external calls, temporary)
3. Allow bypassing of greeting by caller.
4. Allow transfer to another extension or the receptionist
5. Allow transfer by using letters of a name (directory services)
6. Record Caller ID, date and time of as part of voice mail header information.
7. Allow users to access the voice mail remotely with a password
8. Place outgoing call (pager, cell phone) for urgent messages
9. Operate as a bulletin board by playing a message without taking messages
10. Allow private and system distribution lists with capability to create/edit list via computer
11. Allow sending a single message to multiple users specified at the time of message creation (broadcast, users not in a distribution list) - should be easy to specify and use
12. Allow multiple mailboxes to be assigned to a single voice terminal; callers should be able to select a specific mailbox (i.e., message with menu - dial 1 for ..., 2 for ..., etc.) to leave a message (separate passwords must be available for each mailbox assigned)
13. Allow for remote mailboxes for users not on the system, with security features to restrict those users from accessing outgoing carrier (either local and/or long distance) facilities
14. Allow delivery of voice message at a future time.
15. Present urgent messages first when reviewing voice mail.
16. Allow user to bypass messages (skip) and leave it as unread.
17. Allow sender to send confidential message such that it cannot be forwarded by the recipient. (Desirable)
18. Collect system operation and usage statistics and provide standard reports
19. Allow customer to administer/access the system for maintenance
20. Allow downloading of usage data in a comma or tab-delimited text file

Auto-Attendant

1. Be capable of handling multiple decision trees (i.e., the first decision tree would be in front of the attendant console; subsequent decision trees would be in front of various departments or agent split groups).
2. Be capable of a minimum of four to six menu choices, including an escape to a human operator or direct dialing of an extension number. The system must allow the caller to dial their choice at any time during the message.
3. Allow caller to select a destination caller by entering first or last name through the dial keypad.
4. The system must allow the caller to dial their choice at any time during the message (barge in capability).
5. Be capable of providing time-of-day scheduling to route all callers to an after-hours message (i.e., "Thank you for calling Our hours are from 8:00 a.m. until 5:00 p.m. Please call between those hours. If this is an emergency please hang up and call.....").

Table 2-2 Voice Mail and Auto-Attendant Features

6. Be able to support multiple auto-attendant groups such that calls queued by the ACD can be directed to specific groups after a set amount of time has expired.
7. Allow for custom menus against individual voice mail box. For example allow teachers to record a homework announcement that parents can access by calling the teacher's voice mail and pressing a menu item (e.g. 1)
8. Provide a bulletin board (listen only mailbox) capability.
9. Support mail boxes that allow question/answer capability – ability to capture respondents touchtone answers.
10. Allow voice mail boxes to be linked based on menu selection.
11. Allow voice mail to be automatically copied to another specified voice mail boxes.

2.10 Caller-ID Capabilities (M/D)

The District is interested in a number of Caller-ID related features.

- a. Caller ID and name should be displayed for incoming calls originating inside and outside the district. (M)
- b. The system should be configurable to block (with a message) or redirect to an alternate destination any incoming calls if no Caller ID information is available on the call. (D)
- c. For outgoing calls the system should be configurable to send caller id information of the station originating the call, the main number of the school building from which the call is originated or the main number of the school district. (M)

2.11 Record-a-Call (D)

The District is interested in the ability to record-a-call using a feature button to enable real time capture of voice conversation to assist in tracking of hostile or undesirable calls. This ability should be available for designated users at each site across the network. Vendors should identify if they can provide this feature and the cost for providing this feature. If the cost is user license based, vendors should provide for costs that would accommodate at least five users at each remote site and ten users at the high school site.

2.12 Mobile Phone Integration (D)

The District is interested in the ability to integrate mobile cellular devices with the voice system. This integration is described as the ability to ring the voice system extension with the associated mobile device, any other telephone number. An incoming call will simultaneously ring both the voice system extension and the associated device. The answering device would establish a voice path and the other device would cease to ring. The system should extend a range of common features to the associated device and provide integrated mobile and desktop experience by enabling seamlessly switching communications from one device to another. The system should have the ability to program time of day via a web interface to enable and disable this integration capability. Additionally, the integration feature should allow display of caller ID of the District extension when dialing from the mobile device for calls.

Vendors should list the mobile devices (manufacturer, carrier, model, etc.) that the system supports. Cost for this feature (system level and any user licenses) should be provided.

2.13 Microsoft Application Integration (D)

The District is interested in the ability to integrate with Microsoft Unified Communication System, Microsoft Exchange, and Microsoft Lync. Please include information on product integration features and vendor experience in implementing and supporting this capability. Cost associated with this capability should be separately identified.

2.14 Multi-Site Presence (D)

Given the multi building environment, there are users who have offices in multiple locations. These users would like the ability for their phones to ring at the site they plan to be at any particular day without having the need to have multiple phone numbers. Vendors are asked to indicate if they can meet this requirement and describe how this feature would operate. Identify any cost associated with this feature.

2.15 Hub System Redundancy (D)

The hub system proposed must be configurable to provide redundancy for common memory and processor with automatic switchover under failure conditions. Cost for this option should be included separately in the cost section of the proposal.

2.16 Integrated Directory (M)

An integrated directory capability should be available. It should allow for initial load of the system electronically from files created from existing District databases. The system should allow authorized updating of the directory electronically - using a web browser or similar interface(s.). The directory should be accessible from the attendant and department administrative console(s).

Please indicate if the voice system can interact in real time with LDAP/Active Directory to manage user accounts and security for all users. For example, if a user is disabled in Active Directory the voice system be able to disable user's extension and voice mail system.

2.17 Automatic Call Distribution (D)

Basic ACD software should be included as part of the system. The software should allow queuing of calls, music on hold, call retrieval, and routing of calls based on different parameters (e.g. time in queue, time of day, destination called, etc.). Vendors should describe statistics and usage reporting capabilities available with their basic ACD software. The system should include a minimum of 10 agent licenses to be used across multiple groups. The system should allow the ability to implement ACD groups at multiple sites – hub and remotes.

2.18 Call Statistics (M)

The proposed solution must provide call statistics for the operator console and ACD group or a selected set of incoming numbers. Statistics should be available on demand and at a minimum include:

- a. Number of calls received by hour and total calls received.
- b. Number of calls abandoned by hour and total.
- c. Number and length of times all trunks are busy – to determine if additional trunks are needed.

2.19 Alarm Notification & Remote Diagnostics and Administration (M/D)

The proposed solution must include hardware and software to:

- a. Allow alarm notification to the vendor's service center. (M)
- b. Notify District authorized staff via email. (M)
- c. Enable authorized vendor staff to perform remote diagnostics and administration. (D)
- d. Annual maintenance cost must include use of the automated alarm notification capability to the vendors network operations center. (M)

2.20 911/E-911 (M)

The voice systems proposed,

- a. Must meet State and Federal regulatory requirement for E-911/911 and deliver address and calling number information to emergency notification systems. Vendors must be aware of State of Minnesota legislation regarding 911 and E-911 and propose solutions that comply with it. Any tasks that the District needs to perform must be clearly identified. (M)
- b. Must be able to send the similar notification information in real time (when 911 call is originated) to a pre-determined location or device (e.g. printer, monitor, pager, voice mail, operator, etc.) for use by District safety/security personnel in a real time. This feature should not require that the user place the phone on-hook. Cost for this feature should be identified separately if it is not part of the basic system capability. (M)
- c. Must be able to support Enhanced 911 capability which allows identification of the individual location (e.g. building and room) from which the call originated. (M)

Vendors should clearly identify if third party service is proposed for this capability, identify any cost, responsibilities of the District and vendor support. In the absence of this information the District will assume that the system has this capability with the vendor providing support.

Vendors should also identify clearly if the District needs to keep a separate database in addition to information that is kept by the proposed voice system.

2.21 Multi-Tenant Capability (D)

The voice system and voice mail should be able to support multi-tenant capability such that it can be partitioned to provide customized service to different sets of users. These should include:

- a. Voice system and voice features
- b. Voice mail
- c. Local exchange/long distance facilities
- d. Administration

Cost for multi-tenant capability if not part of the base system must be included in the cost section.

2.22 Dialing Plan (M)

The voice solution must,

- a. Allow four digit station to station dialing. (M)
- b. Allow use of "9" for local calling. (M)
- c. Allow use of 9+1" for long distance calling. (M)
- d. Allow "911" and "9911" as dialed digits for 911/E-911. (M)
- e. Allowing use of internal 4 digit extension plan and routing of calls based on that plan.(M)

2.23 Single Number Follow Me Service (D)

Certain users have a need for a single number follow me service. Single number service for this requirement is described as a capability of the voice system to allow a user to call forward their phone to a user specified ten digit number. When the feature is activated, the call to the phone is immediately routed to the ten digit number and if the call is not answered after a certain number of rings, the flow of the call reverts to the normal coverage

(e.g. another number, voice mail, etc.)

2.24 Desktop Client Software (D)

The District is interested in any desktop client software that the vendor may have that enhances user use of the voice system and unified messaging services. Indicate whether desktop clients are available for Windows and Apple OS environment. Please provide a description of the desktop client software available. Please include any cost information for the software should the District choose to implement it.

2.25 Customer Administered Changes (M/D)

The voice solution should,

- a. Allow authorized District staff to administer station and voice mail box feature changes and effect adds, moves, and changes through an online user interface. (M)
- b. Allow authorized staff to administer ACD call groups and user configurable parameters. (M)
- c. Provide a user interface that is Web based or has an easy to use graphical user interface (M).
- d. Allow a single interface/system to effect changes across multiple components – e.g. voice system, voice mail, etc. (D)
- e. Allow these changes through a web interface. (D)

2.26 Authorization Code (M)

The District requires that the system:

- a. Be able to support authorization codes (minimum of 4,000 codes per system) for long distance calling. Please note that this capability does not imply or require that the vendor provide long distance service.
- b. Allow authorized District staff to administer (assign, activate, de-activate) the authorization codes.

Vendors should describe the maximum number of codes that can be supported, the minimum and maximum length of codes allowed, and how codes can be generated and loaded.

2.27 Local Mobility (M)

The system should provide an option for local wireless connection to handsets. The District is interested in providing mobility within an open office or workstation area to certain users. Describe any limitations on the use of such handsets.

Vendors should indicate whether the wireless capability proposed uses 900 MHz spectrum or 2.4 GHz spectrum. Vendors should include pricing for **components** needed to provide the above wireless capabilities.

2.28 802.11 Wireless Mobility (D)

The District is interested in providing wireless (802.11 a/g/n/ac) mobility to its users. Please indicate whether your system provides this capability. Indicate the types of wireless devices you can support and describe if any software application is needed and any cost (e.g. app cost, additional license cost).

2.29 ADA Compliance (M)

The system proposed must be compliant with ADA requirements. It must support TTY communications.

2.30 Operator Console Call Flow (M)

The District requires that the voice system include the following capabilities:

- a. Under operator busy condition, calls could be routed (M)
 - i. to a queue with music on hold or District recorded announcements,
 - ii. to an alternate coverage point including a second operator console,
 - iii. to the voice mail auto-attendant with call transfer using directory search by name or extension
 - iv. to a voice mail
- b. Be able to support more than one console with the ability to send calls to the second console using user set criteria. These include: (M)
 - i. Equal distribution
 - ii. Call overflow from the primary console
 - iii. Call coverage when primary console is turned off (or logged out).

Note: The District has only requested a single operator console. The above requirements apply should the District choose to deploy a second console.

2.31 Cabling (M)

The District plans to use the existing cabling infrastructure which is a minimum of Cat 5. Vendors are encouraged to participate in site surveys to better understand the current wiring infrastructure.

To determine the scope of the effort, vendors will need to conduct a site survey. Vendors can attend site visits to survey the existing cabling and distribution closets. Vendors must include necessary materials and labor to test and interconnect the cabling to their proposed systems.

The District will be responsible for Category 5 or better cabling for IP handsets – that is, from the workstation data jack to patch port in the wiring closet. Patch cables and any other cabling or terminations needed in the wiring closets will be the responsibility of the vendor and should be included in the proposed cost.

2.32 Grounding (M)

Vendors must properly ground their system to avoid system impact due to lightning hit. Appropriate grounding requirement should be identified and verified during installation. If the District needs to provide the proper grounding, vendors should clearly identify the requirements that are understandable to the District. With proper grounding, vendors should not identify lightning as a source for equipment failure.

2.33 Implementation Services - Installation and Warranty (M)

Implementation services should include:

- a. Development of a project plan for implementation, testing, training and cutover including regular meeting to coordinate activities and review project status.
- b. Installation of all hardware/software. Installation of the voice systems must include site surveys, voice terminal reviews, testing of all phones for dial-tone, coordination with local exchange carriers for synchronized cutover of service if number portability is required, and coordination with long distance carrier.
- c. Any network infrastructure readiness review or testing needed prior to installation and any District hardware/software and configuration requirements should be identified.
- d. Developing with the District on suggested methods for converting existing telephone users to the new system. Conversion from existing service may require cutover and testing during off hours and weekend. Off hour labor must be included in the cost proposal.
- e. Assist the District in disposing of existing voice equipment.
- f. Voice system implementation will need to be coordinated with the data switch implementation and deployment of handsets would need to follow deployment of data switches.

The following documents should be provided after implementation.

- a. User and administration manuals – both paper and electronic. (M)
- b. Equipment specifications. (M)
- c. Data from any published vendor performed tests and test results on proposed hardware/software. (M)
- d. Cable records as installed and/or tagged. (M)
- e. Electronic cross-reference list of MAC addresses mapped to physical locations for IP devices. (M)
- e. Any test scripts used and test results. (M)
- g. A spreadsheet of information for E-911 that can be used to upload data for PS/ALI database. (M)

All equipment proposed and cabling work shall be:

- a. Warranted for one year. (M)
- b. Warranty shall cover both material and labor, and begin after system acceptance. (M)

2.34 Cutover (M)

The District plans to use existing DID numbers. Vendors should be aware of this and propose a cutover plan that minimizes disruption to users using the current system. Include in the cutover plan how the vendors propose to coordinate T1/PRI and DID number cutover with the T1 carriers. Any cost to be incurred for off-hour programming or cutover activity should be included as part of the proposal cost.

To assist in number transition, the District may choose to continue to use some existing DID numbers. These existing DID numbers will be assigned to voice terminals with new numbers also. Vendors should confirm that the system can be programmed to allow multiple DID umbers (existing and new) on designated voice terminals.

2.35 Training (M/D)

The vendor must:

- a. Include instruction and training for the staff to support the operation of the installed systems. (M)

- b. Provide comprehensive, institution-specific user and attendant training. The vendor must include training materials for each user (acquired phone set), plus one hundred (100) extra training packages. User sessions are expected to include detailed visual and written instructions and hands on feature demonstration and use. The District shall be given permission to reprint and distribute training packages to its users. (M)
- c. Include a minimum of 40 hours of training for staff responsible for adds, moves, and changes and any other voice system tools necessary to support the system.
- d. The vendor must utilize District facilities - or other appropriate facilities (agreeable to the District) - for all training sessions. (M)
- e. A training video for the Districts use by future users is desirable. (D)
- f. Electronic copies of essential training materials are desirable. (D)
- g. The District may want to maintain the system and would like vendors to include a list of training classes that the District technician would need to attend including pre-requisites and cost information. (M)
- h. Vendors must provide additional training for those who are unavailable during initial training period, based upon a mutually agreeable training schedule. (M)
- i. Provide training on a periodic basis (quarterly or semi-annually) for new users if desired. (M).

2.36 Software and Data Backup (M)

Vendors must include as part of their maintenance proposal periodic backup (minimum quarterly) and offsite storage at their support center of all operating software and configuration and user data for all of the components under maintenance (e.g. voice system, voice mail, call accounting system, etc.). In the event of a disaster, vendors should be able to reload the off-site data to get impacted systems operational.

2.37 Maintenance (M)

Vendors must provide maintenance for all system components including items sourced from third parties. The following must be provided:

- a. Standard maintenance for all system components proposed (labor and parts) during business hours (Monday-Friday, 8 am - 5 pm). (M)
- b. Two hour emergency service must be available 24 hours a day, seven days a week as part of the standard maintenance. The District will determine what constitutes emergency service. (M)
- c. The vendor and the equipment manufacturer must agree to support the system proposed for at least seven years from the date of acceptance. (M)
- d. ***Maintenance must include automated reporting of alarms to the vendors support center by the voice system(s), corrective actions initiated by the vendor including notification to the District of the problems, and must not require the District to coordinate problem resolution for components (including those sourced from third parties). (M) Vendors should note that this is the current level of support that the District has and requires for the new system. Vendors not including this service may be eliminated from consideration at District's discretion.***

Vendors must provide a seven year maintenance cost matrix for the equipment proposed. Cost information provided must reflect the following:

- a. Fixed maintenance cost assuming initial configurations over 7 year duration for telephony systems and other components as specified. Maintenance cost provided should not assume that the District will

- sign a seven year contract. (M)
- b. Any software upgrade required for maintenance purposes.
- c. Cost to back-up software, configuration and user data and store it off-site with the ability to reload the data in the time of need after a component failure.
- d. The District plans to spare handsets for maintenance purposes. However, in the event the District chooses to have the phones maintained by the vendor, the cost sheet for each phone is requested in the annual maintenance cost for phones.

Pricing should be quoted as a separate line item with the understanding that the District would have the right to cancel maintenance on an annual basis if it determines to be in its best interest.

2.38 Problem Management and Support (M)

Vendors must:

- a. Provide a 24x7 problem reporting number (M)
- b. Initiate corrective actions based on alarms received with notification to the District. (M)
- c. Respond to critical problems (as defined by the District) within two hours. (M)
- d. Provide status of problem resolution periodically until problem is resolved. (M)
- e. Provide a monthly report of problems and meet with District staff periodically (e.g. monthly or quarterly) to review service levels and address issues. (M)

Vendors should provide as part of their response, a description of their problem diagnosis/resolution process including escalation procedures.

The District is interested in tools available to monitor network performance and diagnose problems in an IP environment. For example, how could the District diagnose dropped calls, choppy audio, network tolerance out of specifications (e.g. jitter, delay). Vendors should describe what is available to the District and how the vendor can assist in assisting with such problems.

2.39 Support Information (M)

Vendors must provide the following support information in the RFP response. Failure to provide requested information will impact the evaluation of the vendor's proposal response.

- a. Description of the provisions of the warranty.
- b. Resources available to restore service promptly if the proposed system is damaged by a disaster such as fire, flood, etc.
- c. The number of service personnel (on vendor's payroll) trained to maintain the proposed system within two hour driving distance of the District buildings.
- d. The address of the local service center(s).
- e. The length of years the vendor has had maintenance capability at this location.
- f. Expected and guaranteed response time for routine and emergency service.
- g. Describe what failure condition(s) qualify for emergency service.
- h. Lead time required for moves, changes, additions, and deletions should the District request the vendor to perform it.
- i. List of any third parties (name, city) available for maintaining the systems proposed.

2.40 Implementation Schedule and Project Plan (M)

The Districts planned implementation is as follows:

- a. Contract signed by last part of March 2014.
- b. All buildings installed and cutover by end of July, 2014.

Vendors must confirm that they can meet the planned cut-over date. Cutover should be planned to occur over off hours.

Before implementation can begin, the vendor must provide a detailed schedule of implementation for review and approval by the District Project Manager and/or Consultant. The project plan must include the following items:

- Site surveys, equipment room and cable specification and readiness
- Final design of system
- Equipment order and delivery
- Voice terminal reviews including class of service assignment
- Equipment and voice terminal installation
- PSTN and wide area network facilities order and installation
- Test plan development and pre-cutover testing
 - Training (user, support staff)
 - Cutover
 - Post-Cutover review and clean-up
 - Acceptance

Vendors must provide a project plan identifying major tasks with appropriate start and completion dates and responsible entity. Any task not specifically stated to be District's responsibility, will be considered to be the vendors responsibility.

Prior to the start of equipment installation, the vendor must provide a comprehensive test plan that covers pre-cutover, cutover and post-cutover activities. Test procedures must comply with manufacturer's standards for each component tested. During installation, the vendor shall perform all tests necessary to insure that the equipment being installed is ready for cut-over. The results of these tests must meet manufacturer's published performance specifications. All service features shall be tested and demonstrated if requested. Vendors must include a sample project plan as part of their response.

2.41 Client References, Site Visits, Equipment Demonstration (M)

Vendors must provide a minimum of three client references that have implemented similar equipment and services proposed. One of the references must be in the State of Minnesota. Client references must include the following:

- a. Name, Organization, Address, Telephone Number, E-Mail Address
- b. Manufacturer and model number of systems installed at client referenced
- c. Date of installation/cut-over

A small team of the District staff may want to visit one, or more of the clients.

Vendors must be able to demonstrate, if requested, major components of their proposal (e.g. operator console, voice mail with unified messaging, multiple handsets, etc.)

The District evaluation team will make all reasonable attempts to reach the specified references. In the event references do not call back, the evaluation process will consider it a no reference.

2.42 Manufacturer and Subcontractor Relationship (M)

Vendors must include their relationship (i.e., distributor, branch, partner, etc.) with the manufacturer for all the components being proposed. Vendors must specify if any portion of the work is to be subcontracted and the name of the subcontractor must be provided. In any event, the vendor shall remain fully responsible to the District for performance of all items under the contract.

2.43 Product Migration Strategy (M)

Vendors must provide a concise explanation of the product migration strategy that will be employed (including no cost upgrade) to ensure that the District will not buy and install a system in 2011 that will be made obsolete by the introduction of a new generation of equipment in the next twelve to eighteen months.

2.44 Customer Provided Equipment (M)

Vendors must clearly identify any equipment including model and software version number that it expects the District to provide to make the overall system operational. These include routers, wide area network components, PCs, etc.

2.45 Product Literature (M)

Vendors must include as part of their response product literature that describes the products and provides sufficient information about all of the capabilities provided including any integration and management related capabilities.

2.46 Space and Environmental Requirements Information (M)

Vendors must provide the following information for the systems (voice system, voice mail, other) proposed:

- a. Space requirement
- b. Electrical Requirement
- c. Cooling Requirements (Heat dissipation – BTUs/hr)

2.47 Assistance to Port Numbers (M)

The District is planning to keep the same number blocks and may obtain additional numbers. Vendors should include in their response any cost for testing and transitioning existing facilities and numbers with minimal or no disruption during the transition. Vendors will need to interface with existing carriers.

2.48 Security (M)

Vendors shall include in their proposal description of security features available that assures the district that the

voice system can be secured from threats associated with an IP infrastructure. Vendors should describe if VLANs are used to secure the voice network and what flexibility is available in deploying VLANs - for example, can the District choose to deploy a single District wide voice VLAN or separate voice VLANs for each building?

2.49 LAN Infrastructure Requirements for Voice Systems (M)

Vendors shall include in their proposal any requirements of the LAN infrastructure. These include number of Ethernet ports required to connect their systems, any quality of service requirements, IP address assignment, etc.

2.50 Interconnection between IP phones and Desktop Workstation (M)

For IP handsets, vendors shall include in their proposal a description of how IP phones and desktop workstations are interconnected. The IP phone must operate as a two-port switch in full duplex mode with the desktop workstation port operating at 1000 mbps.

2.51 Interconnection between IP phones and Gigabit Desktop Workstation (M)

The District has data switches that can support gigabit ports (1000 mbps). Please describe what is needed to allow the IP handsets to support gigabit ports. Include the cost for gigabit port support.

2.52 Standards Based Discovery Protocol (D)

It is desirable that standards based discovery protocol (e.g. LLDP-MED) be supported on VoIP handsets and voice equipment. Vendors in their proposal should indicate whether their VoIP handset and voice equipment currently support this protocol, and if not, will there be an upgrade available to support this feature, and if so, when might this be available and would there be additional cost.

2.53 Operation in a VMware Virtual Machine Environment (D)

The District may consider implementation of vendor voice system in a VMware virtual environment. Please respond to the following;

- a. Does your voice system (including voice mail, and management applications) operate as a virtual machine in a VMware environment?
- b. If so, is it certified by VMware?
- c. If so, is it certified and implemented to work with all of monitoring, backup, and recovery tools?
- d. Please provide server and operating environment specifications needed for the virtual machines.
- e. Other than server and VMware operating environment cost, if there is any additional cost for your applications to operate in a virtual environment, please provide that cost.

While the District may consider a virtual environment for voice system, vendors should propose their solution based on server equipment provided by the vendors. Vendors are asked to provide a deduct for servers in the event the District chooses to deploy in a VMWare environment.

2.54 Voice Quality Assurance and Testing Capabilities (M)

Given that the voice system will be operating in an IP environment, it is important that the system have capabilities to assess performance over this network. As such, please respond to the following:

- a. Does your system collect any performance related statistics? If so, what statistics are collected?
- b. Does the IP voice terminal have capabilities to test voice quality with the voice server?
- c. How is voice quality measured and reported? (Mean Opinion Score – MOS or something similar) - please describe.

2.55 Other Desirable Capabilities (D)

Vendors are encouraged to describe other desirable capabilities available within their system such as integration of video conferencing, call control and personal communications software for workstations to enhance productivity, integrated paging features, audio/web conferencing, etc. Vendors should note if these capabilities are available as a no cost option or require purchase of additional hardware, software or licenses.

2.56 School District Focused Applications (D)

Vendors are encouraged to list applications that are developed by their partners and third parties that are relevant in K-12 educational environment.

2.57 Additional Benefits (D)

Vendors in their proposal may include any additional benefits that they choose to provide the District at no cost as part of their proposal. The District would consider this during proposal evaluation.

2.58 Alternates (D)

Alternate 1 - The District is looking for the option to lease the system over 60 months. Vendors are asked to provide two types of lease factor – Capital Lease (\$1 buyout at the end of lease period) and Fair Market Value Lease.

Alternate 2 - The District is interested in looking at a Hosted VoIP solution assuming that such a solution will meet the requirements as listed in this RFP. Vendors interested in proposing a hosted solution should address the following.

- a. Indicate if all of the capabilities listed in the RFP for the VoIP system can be met. If not, identify those features that cannot be addressed.
- b. Identify onetime cost and recurring cost -use Appendix A for handset and trunk counts.
- c. Describe how the district could administer the systems.
- d. Describe cost for adding additional voice station and/or feature .
- e. In Table 4-D provide the different handsets that can be used with the hosted solution along with all the items requested in Table 4-D.

Vendors choosing not to respond to any of the Alternates should clearly indicate a no response.

SECTION III – LOCAL AREA NETWORK (DATA SWITCHES) REQUIREMENTS

3.0 Data Switch Requirements

The District is looking to replace all of its existing data switches with replacement equipment from one of the following five manufacturers.

- a. Cisco
- b. Extreme
- c. Brocade
- d. HP
- e. Juniper

Currently the District has switches from Cisco and HP. Appendix B lists Cisco and HP equipment that the District currently has. Vendors responding to this section are asked to provide credit for the existing Cisco and HP equipment against their new equipment being proposed. If such a credit is offered, the value of the credit should be clearly identified.

The District is also requesting that vendor provide a sixty month lease factor should the District choose to lease the equipment.

Special Note: Vendors responding with re-use of existing equipment must meet the following requirements:

1. Existing PoE equipment must be upgraded to the latest version of software and must provide the same level of extended warranty (e.g. life time warranty where applicable) as new equipment.
2. Existing equipment must meet all of the requirements listed in this RFP. Cost for any hardware upgrades (e.g. 10G port card etc.) if required must be included.
3. Must be supported for at least five years.

The District is **not considering** a mixed vendor environment for data switches. Equipment proposed must be from the same manufacturer.

The rest of this section identifies specific requirements. Requirements are marked as either mandatory (M) or desirable (D). Vendors must be able to meet the mandatory requirements and indicate in the affirmative that they comply with the requirement. Vendors able to provide desirable features should indicate how the feature is activated or implemented. If the cost of the desired feature is not included in the proposal vendors should identify the cost separately and indicate if the cost is a one- time cost or whether it is on a per user basis or system level cost. Vendors should provide answers to specific questions identified and respond to request for description. Lack of a response to a question or additional information request may impact the evaluation of the vendor's proposal.

3.1 Data Switch Categories and Configurations (M)

Appendix C lists the number of access ports that the District requests vendors to propose. Appendix C provides a detailed breakdown of switch ports deployment by building and by wiring closet within each building.

For design and procurement purposes the District has categorized the data switches into three types of switches as follows:

- a) Access Switches: These are Layer 2 switches that directly connect to VoIP phones, IP workstations, wireless access points, IP cameras, etc. and to aggregation switches via uplinks. These switches are deployed in intermediate distribution closets (IDF), main distribution closets (MDF), and computer labs or office/classrooms. The following lists the hardware configuration for access switches:
 1. Vendors must provide access switches that are AC powered and fit in an industry standard 19" rack. (M)
 2. These may be stackable or chassis based switches. (M)
 3. All access switches must support 10/100/1000 mbps port speed and be able to connect uplink at a minimum gigabit speed. (M)
 4. Vendors providing stackable switches must provide 48 port switches except for when a lower density switch is needed to complete the port count requested for a particular wiring closet. Access switches (or a stack if multiple switches are needed) must be addressable with a single IP address. Appropriate number of stacking cables to support the number of switches in a wiring closet should be included. (M)
 5. For switches to be deployed in a classroom/office environment where there may not be fiber cabling vendors must provide switches that are configurable to use its 100 mbps ports as uplinks to connect to an access or aggregation switch in the IDF or the MDF.
 6. All access switches must have a minimum of two gigabit ports that are capable of taking copper and single mode and multi-mode fiber SFPs.(M)
 7. The backplane capacity of the access switches and the stacking cable must be such that it is not oversubscribed when all of the ports in a stack are simultaneously active at 100 mbps. (M).
 8. Vendors should include PoE+ (IEEE 802.3at) for all of the ports. (M)
- b) Aggregation/Access Switches: These are Layer 2/3 switches that connect to access switches via gigabit fiber links. These switches are deployed in an MDF and provide local routing, if needed, as well as connect to the wide area network (WAN) to the core switches. Aggregation switches may also support access ports. Aggregation switches may also aggregate a number of WAN links to a core switch. The following lists the hardware configuration for aggregation switches:
 1. Vendors must provide aggregate switches that are AC powered and in an industry standard 19" rack. (M).
 2. These may be a standalone or chassis based switches. (M)
 3. If an aggregation switch supports access ports than all it should meet the requirements identified for access switches above.
 4. Vendors must provide an appropriate number of Ethernet switches to support the number of gigabit ports specified in Appendix C to connect to access switches and WAN links. If multiple aggregation switches are needed to accommodate the number of ports specified, the additional ports needed to interconnect the aggregation switches must be included. (M)
 5. If supported, stacking of aggregation switches addressable with a single IP address is desirable. If stacking is proposed, appropriate number of stacking cables should be included. (M)
 6. Vendors must provide an appropriate number of one gigabit and ten gigabit ports as specified in Appendix C. (M)
 7. Aggregation switches may also provide core switch functionalities - see below. (D)

- c) Core/Aggregation Switches: These are high performance switches that maybe standalone or chassis based and support a number of features. Core switches connect to aggregation switches via one and ten gigabit ports, provide local 10/100/1000 Ethernet ports for local connectivity to end user devices and servers, provide special functionality (e.g. security, flow monitoring) through special purpose hardware/software. Aggregation switches may also provide core switch functionalities.
1. Vendors must provide switches that are AC powered and have dual power supplies and have redundancy - either by having redundant components or duplicating the hardware possibly in a stacking arrangement. (M)
 2. Vendors must provide an appropriate number of one gigabit and ten gigabit ports as specified in Appendix C. (M)
 3. Vendors must provide appropriate number of 100/1000 copper ports as specified in Appendix C to support local devices and server connectivity. If server ports are provided using separate switches, the Core Switch should provide 10G ports to connect to the server switches. Vendors may choose to propose a data center caliber switch to meet this requirement. Please see Appendix C for details.
 4. The functionality of core switches and aggregation switches and access switches may be combined (or provided by a single platform) at the Education Services Center. If a core/aggregation switch supports access ports than all it should meet the requirements identified for access switches above.

3.2 Data Switch Requirements (M/D)

The following requirements are identified for the data switches. Unless listed as desirable, all items are required.

- a) All switches must support prioritization and VLANs in compliance with 802.1p and 802.1q and allow prioritization of voice, data, and video traffic. A minimum of four priority queues must be supported.
- b) All switches must support multiple VLANs on an Ethernet port (e.g. to support VoIP phone and workstations).
- c) All switches must support RMON and SNMP statistics collection with histories, alarm and event notifications
- d) All switches must allow mirroring of traffic on any port for analysis by an RMON probe or a “sniffer”.
- e) All switches must support link aggregation (in compliance with 802.3ad) of multiple gigabit links. Vendors should indicate the maximum number of gigabit links that can be aggregated.
- f) All switch components must be UL and FCC approved and certified.
- g) All switches must support rapidly converging Spanning Tree protocol and prevent against looping.
- h) All switches must support multi-casting. Switches supporting Layer 3 routing protocol should support PIM-SM and PIM-DM. Layer 2 switches should have IGMP snooping capability that would allow directly connected devices to participate in multi-casting. In the near term multi-casting is most likely to be used in imaging and video distribution.
- i) Core and aggregation switches must support Layer 3 routing protocol including OSPF. They must also support basic access list or firewall configurations between VLANs.
- j) Software proposed for all switches must be the latest version.
- k) All switches must support security features to allow secure access and as well protect switches from potential attack (e.g. 802.1x, RADIUS, MAC based security, etc.). Vendors should list all of the security features available in the switches being proposed.
- l) Core switches must be able to support ingress and egress based rate limiting (1 mbps increment)
- m) All switches must be able (or be upgradeable) to support IPv6 protocol.

- n) It is highly desirable that all switches support LLDP and LLDP-MED so that switches can dynamically discover capabilities of attached devices and, if desired, configure a switch port based on discovered information. (D)
- o) All switches should be manageable via a Command Line Interface (CLI) and should allow stacking of commands by allowing pasting of multiple commands through the CLI interface.
- p) All switches should be manageable via a GUI interface as well as from a single centralized management platform.
- q) All switches must be able to collect traffic measurement and accounting data and forward it to a management server. Vendors should describe the capabilities of the switches to provide this function. Include in the description any additional components needed to report on the traffic statistics collected. (M)
- r) All switches must be able to support appropriate DHCP option at the building level to enable IP devices (particularly VoIP devices) to request and IP address from a pool.
- s) The District desires a network design in which any Ethernet port in the district can be assigned to any VLAN quickly and easily. This is usually done for trouble shooting purposes. The proposed switches should be inclined to such a design without introducing significant downside issues like unneeded network traffic. (D)
- t) VLAN creation/removal should be managed on all district switches from a primary switch or management interface, not managed from each individual switch.

3.3 Redundancy (M/D)

The District requires automated redundancy for the Core switch – redundancy is defined as the ability of a redundant switch having critical components (e.g. supervisor, power supply, etc.) to be duplicated so that operation continues under failure of a critical component without requiring any manual intervention. This can be provided by supplying duplicate components (in a chassis based system) or can be accomplished with a dual switch arrangement – as long as there is no manual intervention required.

In addition to the redundancy requirement for the Core switch at the hub, the District is interested in understanding what redundancy capabilities are available for the aggregation switches.

3.4 Network Management Tool (M)

Vendors should include in their proposal network management hardware and software that would enable monitoring and management of the data switches from a central site. Access to the tool should be available to authorized users from any point on the network. The user interface and the commands used to configure, administer and manage the switches should be consistent and across all switches.

Vendors should describe the capabilities of the solution being proposed.

3.5 Power Consumption and Heat Dissipation (M)

The District is energy use conscious. As part of its evaluation process it would consider looking at the energy efficiency of the proposed solution. To enable it to understand energy use, vendors are requested to provide the following information for each of the buildings and wiring closet assuming that 80% of the ports are in use. Assume normal work hours to be between 7 am and 5 pm during weekdays.

- d. Kilowatts per hour.

- e. BTUs per hour generated.

Please do not refer the District to product specification literature. The District would like vendors to use Table 4-L to provide this information.

3.6 UPS (M)

Vendors should include in their response UPS (rack mount) as specified in Appendix C. UPS should be sized to support 80% of the ports identified in a wiring closet for 30-45 minutes hour. Additionally, a management card should be priced separately that would allow a central monitoring capability. Hardware/software needed for the central monitoring station should be included.

3.7 Fiber and Copper Patch Cables (M)

Vendors should provide all fiber (multi-mode and single-mode) patch cables needed to interconnect access, aggregation, and core switches to the in-building multi-mode fiber and inter-building single mode fiber. Patch cables should be 3 meters long (or appropriate length) and the connector types should be compatible with the SFPs provided and the patch panels at the District which are SC connectors. Patch cables needed to connect end user devices to access switches shall be re-used.

3.8 Implementation Services (M)

As part of their response, vendors should include design and implementation services.

- a) Upon contract award, meet with District staff and develop a network design (including VLAN design), configuration, and implementation plan. As part of this effort, the vendor may have to coordinate their activities with the voice vendor if the District does not award both the contracts to a single vendor.
- b) The District plans to re-use existing racks and cabinets and as such services must include removing of existing equipment, boxing it, and moving it to a central location.
- c) Document and review with District staff individual building and network design configurations including IP addressing, equipment and patch cable types and quantities, and cutover plans.
- d) Install, configure, and test the centralized management platform hardware and software.
- e) Install, configure, and test switch equipment according to an agreed upon schedule. Removal and installation activities is most likely to occur off hours and over the weekends, and as such, vendors should consider this in developing their costs. It is desirable that equipment be delivered to the vendor directly and that software configuration and unit testing be done on vendor's premises. Please indicate if this is feasible. Any cost associated with this should be identified.
- f) Coordinate cutover and testing of internet connections with District's service providers.
- g) Provide training (vendor should allocate minimum of sixteen clock hours on site training) to transfer knowledge of the overall network and switch configurations as implemented, network management tools, backup procedures, and review of documentation provided.
- h) Provide a set of three documentation packages that include diagrams of LAN and WAN as implemented, configurations of switch ports and VLANs (e.g. in a spreadsheet format), narrative of network management tools and scripts implemented, training materials, and standard set of documentation for each model of equipment installed.

3.9 Equipment and Software Warranty and Support (M)

Vendors must, at a minimum, include:

- a) Three year of hardware warranty and software upgrade and support from the date of acceptance.
- b) Provide trouble reporting number 24 hours x 7 days.
- c) Two hour response for emergency service request and four hour response for non-service emergency request.

3.10 Client References, Site Visits, Equipment Demonstration (M)

Vendors must provide a minimum of three client references that have implemented similar equipment and services proposed. One of the references must be in the State of Minnesota. Client references must include the following:

- a. Name, Organization, Address, Telephone Number, E-Mail Address
- b. Manufacturer and model number of systems installed at client referenced
- c. Date of installation/cut-over

A small team of the District staff may want to visit one, or more of the clients.

Vendors must be able to demonstrate, if requested, major components of their proposal (e.g. switches, management tools, etc.)

The District evaluation team will make all reasonable attempts to reach the specified references. In the event references do not call back, the evaluation process will consider it a no reference.

3.11 Manufacturer and Subcontractor Relationship (M)

Vendors must include their relationship (i.e., distributor, branch, partner, etc.) with the manufacturer for all of the components being proposed. Vendors must specify if any portion of the work is to be subcontracted, and the name of the subcontractor must be provided. In any event, the vendor shall remain fully responsible to the District for performance of all items under the contract.

3.12 Customer Provided Resources (M)

Vendors must clearly identify any equipment and resources it expects the District to provide during implementation to make the overall system operational.

3.13 Product Literature (M)

Vendors must include as part of their response product literature that describes the products and provides sufficient information about all of the capabilities provided.

3.14 Space and Environmental Requirements Information (M)

Vendors must provide the following information for the switches proposed:

- a. Space requirement
- b. Electrical Requirement
- c. Cooling Requirements (Heat dissipation – BTUs/hr)

3.15 Returned Equipment Credit and Additional Benefits (D)

Vendors in their cost proposal may include any credits for returning current data equipment and additional benefits that they choose to provide the District at no cost as part of their proposal. The District would consider this during proposal evaluation.

3.16 Unit Cost (M)

Vendors in their cost proposal as asked to include unit cost for a 24 port and a 48 port access switch. The District may need to increase (or reduce) the port counts in a wiring closet based on the number of wireless access points is supported out of a particular wiring closet.

SECTION IV – PROPOSAL COST

4.0 Cost Sheets

Vendors are requested to use Tables 4-A through 4-K to complete their proposal cost. Any assumption in developing costs should be clearly documented. Vendors should note that the District is sales tax exempt.

4.1 Table 4-A – Voice Hub Site Cost

Vendors should use Table 4-A to provide one-time cost for voice system hardware/software for hub location. Unified messaging cost on a per user basis should be provided separately as indicated. This table should include cost for all IP licenses including handset licenses to support the count specified in Appendix A. Table 4-A should not include any cost for handset hardware. Detailed equipment breakdown must be attached to Table 4-A.

4.2 Table 4-B – Remote Site Cost

Vendors should use Table 4-B to provide one-time cost for hardware/software for remote location voice systems. Table 4-B should not include any cost for handset hardware. Detailed equipment breakdown must be attached to Table 4-B.

4.3 Table 4-C– Annual Maintenance Cost

Vendors should use Table 4-C to provide the seven year maintenance cost for voice systems. Year 1 should be covered under warranty and should not have any maintenance cost. If standard warranty for the equipment proposed is less than one year, then the difference in cost to extend warranty to complete the first year should be included in the Year 1 row. A blank in Year 1 row would be considered as warranty for the first year is included in the purchase cost.

Note: The annual maintenance cost must include the cost for 24x7 alarm monitoring and response to service affecting alarms and must also include cost for software upgrades.

4.4 Table 4-D – Voice Handset Cost

Table 4-D should be used to provide IP voice handset cost including maintenance cost after the first year warranty.

4.5 Table 4-E – Cabling Cost

Vendors should use Table 4-E to provide any one time cost for cabling for voice system.

4.6 Table 4-F – Other Optional Items

Vendors should use Table 4-F to provide cost for the following items and any additional components offered and not listed in the Tables 4-A through 54E. Where applicable, annual maintenance cost should be provided.

- a. Wireless capability.

- b. Desktop Client Software
- c. Operation in a VMware virtual environment.
- d. 802.11 Wireless Capability
- e. Others as Appropriate

Vendors are asked to clearly describe their software licensing structure so that the District clearly understands one-time cost for software and annual licensing cost. The description should clearly delineate user based licensing (named and simultaneous) and system licensing. Licensing cost incurred for additional capabilities (either per user or system) should also be described.

4.7 Table 4-G – Lease Factor for Voice Equipment

Please provide monthly lease cost factor for fair market value and \$1 buy-out option for voice equipment in Table 4-G. Assume a 60 month lease term. Any assumption should be clearly stated.

4.8 Table 4-H – Hosted VoIP Cost

Vendors should use this table to provide cost for the hosting solution. Any network cost to provide connectivity from the hub site should be included.

4.9 Table 4-I – Data Switches

Vendors should use Table 4 -I to provide cost for data switches, network management, one time installation cost, training and extended warranty. Extended warranty should include software update and any hardware replacement (if not covered by lifetime warranty). Ten to fourteen days hardware replacement cycle is acceptable. Extended warranty cost is being requested for five year term for both 8x5 technical assistance center support and 24x7 technical assistance support.

4.10 Table 4-J – UPS

Vendors should use Table 4-J to provide one-time cost for UPS with management card.

4.11 Table 4-K – Lease Factor for Data Equipment

Vendors should use Table 4-K to provide monthly lease factor for data equipment. The factor when multiplied by the amount financed provides the monthly payment amount for a sixty month lease. Lease factor for two types of lease are being requested – Capital Lease (\$1 buyout), Fair Market Value Lease. Any assumptions underlying the lease should be clearly identified. Vendors choosing not to respond should clearly indicate a no bid.

APPENDIX A – LIST OF BUILDINGS AND STATION AND NETWORK CAPACITY NEEDS FOR CONFIGURATIONS A

Building/Address	Digital IP Station Ports	Analog Station Ports	# of concurrent IP trunk sessions	Analog Ports for Business lines/trunks & Power Fail
	Column A	Column B	Column C	Column D
Configuration A - VoIP				
High School/Middle School/District Office/FCC	376	16	See Note 1	8
Stevenson Elementary	72	8	16	4
Hayes Elementary	80	8	12	4
Transition	4	1	16	1

Notes:

1. The number of IP trunks is the sum total of the trunks from the remote sites.
2. The count of the digital station ports may vary and as such vendors are asked to provide a deduct cost of 50 licenses in Table 4-A

APPENDIX B – EXISTING DATA SWITCHES

Equipment Type	Quantity
Cisco 2950 – 24 port	6
Cisco 3560G – 48 port	3
HP 3500yl - 24 port	11
HP 3500yl - 48 port	5
HP 2610 - 24 port	1
HP - 2610 - 48 port	1
HP 2650 - 48 port	4
HP 2910al - 48 port	2
HP 2512 -12 port	1
HP 2626 -24 port	2
HP 5406zl - 192 ports	1
HP 5406zl-120 ports	1
HP 5412zl - 96 ports	1
HP 5412zl - 144 ports	2
HP 5412zl - 240 ports	1

APPENDIX C – DATA SWITCHES

Buildings/Wiring Closet	UPS Needed?	# of access ports needed 10/100/1000 w/PoE+ (See Note 1)	Gigabit ports to connect to uplink switch (multi-mode)	Gigabit ports to connect to Downlink switch (multi-mode)	WAN Connectivity	
					Gigabit ports to connect to High School Hub	10 Gigabit ports to connect to ESC
HIGH SCHOOL #143						
MDF	Yes	144	--	14	5	5
For Servers (See Note 1)	Yes	24 gigabit ports	--			(See Note 1)
Closet 2 #108	Yes	240	3			
Closet 3 #103	Yes	48	1			
Closet 4 #115	Yes	48	1			
Closet 5 #172E Media	Yes	48	1			
Closet 6 #165	Yes	48	1			
Closet 7 #139	Yes	96	1			
Closet 8 #156A	Yes	48	1			
Closet 9 #126A Auditorium	Yes	24	1			
Closet 10 #100D Concession	Yes	24	1			
Closet 11 #172 Lab	Yes	96	1			
Closet 12 #163B	Yes	24	1			
Closet 13 #140A	Yes	48	1			
MIDDLE SCHOOL						
MDF	Yes	96	--	8	2	1
Closet 2 Health	Yes	48	1			
Closet 3 T1 Woods	Yes	48	1			
Closet 4 Main Office	Yes	96	1			
Closet 5 Lab 1 M9	Yes	48	1			
Closet 6 Lab 2 M9	Yes	48	1			
Closet 7 CAD T5	Yes	48	1			
Closet 8 Lab 163	Yes	48	1			

Closet 9 Lab T3	Yes	96	1			
FAMILY/& COMMUNITY CENTER						
MDF	Yes	216	--	--	1	1
HAYES ELEMENTARY						
MDF	Yes	144	--	3	1	1
Closet 2 Main Office	Yes	96	1			
Closet 3 Media Lab 1 & Lab 2	Yes	48	1			
Closet 4 - 4 th Grade	Yes	48	1			
STEVENSON ELEMENTARY						
MDF	Yes	120	--	4	1	1
Closet 2 Custodian	Yes	72	1			
Closet 3 Main Office	Yes	72	1			
Closet 4 MC Lab	Yes	48	1			
Closet 5 - 4 th Grade	Yes	48	1			
TOTAL		2434	29	29	10	9
OTHER		QUANTITY				
Multi-mode SFPs for connectivity within buildings (including spares)		68				
WAN Connectivity						
Single-mode gigabit SFP including spares – 10km		6				
10 gigabit single-mode SFP – 10 km		10				
Server to Core Switch Connectivity						
1 gigabit multi-mode-mode SFP to connect server port to Core switch		8				
Two Fiber Patch Cable (3 meters – See Note 5)						

Multi-mode	68				
Single mode	16				

Note(s)

1. The District is looking for one 24 gigabit port server switch with a 10G port to enable it to connect to the Core switch. Matching Core switch 10G port should be included. This is in addition to the 10G ports needed for Wide area network connectivity. Vendors may choose to provide a data center caliber switch that support the port and capacity requirements. Servers will connect to the switch port using copper cabling.
3. One gigabit link is designed for each 96 ports or fraction thereof between wiring closets and MDF within a building. There are some instances where fiber is not available between the wiring closet in which case either copper cabling will be used or the District may choose to install fiber.
4. Multi-mode gigabit SFPs are to connect intermediate wiring closet switches stack to the MDF. Single mode gigabit SFPs are for wide area connectivity.
5. The District would consider third party SFPs as long as it is supported by the vendor equipment.
6. The specific type of connectors at each end at implementation time. Assume LC at one end and SC at other end for costing purposes.

TABLE 4-A: ONE TIME VOICE SYSTEM HARDWARE/SOFTWARE COST FOR THE HUB LOCATION

Note: If cost for any of the items is included with other components, please indicate that.

Items	Configuration A
1. Voice System (hardware/software)	
2. Voice-Mail/Auto-Attendant	
3. Unified Messaging	
4. Call Accounting	
5. Integrated Directory	
6. Basic ACD	
7. Training	
Sub-Total	
8. Voice Component Installation	
Voice System	
Voice Mail/Auto-Attendant	
Unified Messaging	
Call Accounting	
Other (Please list)	
Sub-Total	
9. Performance Bond	
10. Other (Please list)	
Sub-Total	
Column Total	
11. Number of Licenses included for handsets	
12. Number of Licenses units included for handsets (See Note 3)	
13. Provide a deduct for 50 handset licenses (See Appendix A Note)	

Notes:

7. ***Do not include cost for handsets in this table***
8. Cost for all licenses including those needed for handsets identified in Appendix A should be included in this table.
9. If the vendor proposal requires multiple licenses for different types of handsets, they should identify how many license units have been included in the above cost table.
4. Provide list of equipment breakdown as an attachment to this table.

Unified Messaging Cost

One Time License Cost For Unified Messaging	Cost per User
100 users	
250 users	
500 users	
1000 users	
District-wide	

TABLE 4-B – ONE TIME VOICE SYSTEM HARDWARE/SOFTWARE COST FOR REMOTE SITES

Building	CONFIGURATION A		
	Hardware/ Software	Installation	Total
High School/Middle School/District Office/FCC			
Stevenson Elementary			
Hayes Elementary			
Transition			
Total			
1. Number of Licenses included for handsets			
2. Number of Licenses units included for handsets (See Note 3)			

Notes:

- 1. Do not include cost for handsets in this table.**
2. Cost for all licenses including those needed for handsets identified in Appendix A should be included in this table.
3. Provide list of equipment breakdown for each site as an attachment to this table.
4. If the vendor proposal requires multiple licenses for different types of handsets, they should identify how many license units have been included in the above cost table.
5. If cost for any of the items is included with other components, please indicate that.

TABLE 4-C – ANNUAL MAINTENANCE/ SUPPORT COSTS FOR VOICE COMPONENTS

Note: If cost for any of the items is included with other components, please indicate that.

	Configuration A
HUB LOCATION	
1. Voice System	
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Sub-Total	
2. Voice Mail	
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Sub-Total	
3. Other (List)	
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Sub-Total	
REMOTES	
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Sub-Total	
TOTAL	

Note: Cost should include 24x7 alarm monitoring and response to service affecting problems and software upgrades.

TABLE 4-D – IP HANDSET COSTS

Items	Phone Type A	Phone Type B	Phone Type C	Phone Type D	Soft Phone
1. IP phone model #					
2. # of fixed feature buttons					
3. # of soft keys					
4. Display?					
5. Integrated Speaker Phone?					
6. Headset Capable?					
7. Need Local Power?					
8. Maximum # of function modules available					
9. Does the IP Phone support a PC at 100 mbps? (See Note)					
10. Adapter to connect to local analog line if supported.					
11. adapter or upgrade cost for gigabit port					
12. Other (Please list)					
13.					
i. Proposal Unit Price (Pre-Cut Price)					
ii. Proposal Unit Cost (Post-Cut Price)					
iii. Installation Cost					
iv. Local Power Supply Cost					
v. License Unit Cost (Pre-Cut) – See Note					
vi. License Unit Cost (Post-Cut) – See Note					
vii. Number of License Units – See Note					
viii. Annual maintenance cost after first year warranty.					

Provide cost of basic analog phone with message waiting light here: _____

Note(s):

- Answer? Items with ‘Yes/No’ responses
- Model number for each proposed IP phone must be included.
- Assume Type A to be lowest cost and Type D to be the higher cost model.
- For evaluation purposes the District will develop a mix of IP phones to be deployed. All of the IP phones in the mix will need to support a 100 mbps Pc.
- License Unit Cost – Vendors are asked to provide Pre-cut license unit price for use to determine adds/deletes of IP licenses for counts that is different than Appendix A prior to implementation. Post-cut license unit price should reflect cost for an IP license to add a IP handset after agreed upon grace period after implementation.
- **Please note that some vendor solutions may require multiple license units for a specific phone type. If that is the case please make sure that you provide the number of license units that are needed for that phone (Item vii). If it is blank and one unit will be assumed.**

TABLE 4-E – VOICE SYSTEM CABLING COSTS

Buildings	Configuration A
High School/Middle School/District Office/FCC	
Stevenson Elementary	
Hayes Elementary	
Transition	
Total	

TABLE 4-F – OPTIONAL ITEM COSTS

1. Wireless Component Costs (Provide unit pricing)

2. Desktop Software Client – If there are different tiers of licensing, please show the cost and feature capabilities clearly.

3. Operation in a VMware Virtual Environment

4. 802.11 Wireless Capability

5. Please provide deduct for servers in the event the District chooses to deploy the voice system and its components under VMWare.

6. Other Items

TABLE 4-G – Monthly Lease Factor For Voice Equipment (Alternate 1)

Lease Type	Monthly Lease Factor
1. Capital Lease (\$1 buyout)	
2. Fair Market Value Lease	

Notes:

1. Provide monthly lease factor when multiplied by the amount financed provides the monthly payment amount for a sixty month lease.
2. List any assumptions that govern the lease.

TABLE 4-H – VoIP Hosting Cost (Alternate 2)

Items	One time	Quantity	Unit Monthly Cost	Monthly Extended Cost
1. Installation				
1. Hardware (list)				
See Note 1 Below				
2. User - Base				
3. User - with Voice Mail				
5. User - with Unified Messaging				
6. User - with Mobility				
7. User - Premium (e.g. Receptionist)				
8. User Handset (See Note 2)				
9. Additional Cost Features				
10. Network Cost from hub site				
11. Other (Please list)				

Notes

1. If there are varying levels of user cost based on feature set, please provide this.
2. Handset cost for users should be provided in Table 4-D.

TABLE 4-I – DATA SWITCHES COST

Part#	Description	Qty	Unit Cost	Extended Cost	Five Year Extended Warranty 8x5 support	Five Year Extended Warranty 24x7 support
	Access Switches w/PoE +					
	Aggregation Switches w/PoE+					
	Core Switches					
	24 port 100/1000 Server Switch					
	UPS (please list if different models)					
	Other Components (please list)					
	SFPs					
	Multi-Mode					
	Single Mode gigabit – 10 km					
	10 gigabit – 10 km					
	Patch Cables					
	Fiber – Multi-mode					
	Fiber – Single-mode					
	Implementation Services					
	Credit for Existing Equipment					
	Upgrade cost for re-use of Existing Equipment (See Note 2)					
	Total					
	Access switch -24 port w/PoE+	1				
	Access switch - 48 port w/PoE+	1				
	Unit cost for 10G multi-mode SFP	1				

Notes:

1. Please provide a detailed equipment list with part numbers.
2. If any equipment re-use is proposed please identify which equipment is being proposed for re-use. Please note that equipment proposed for the solution (new and re-use) must be from the same manufacturer.

TABLE 4-J – UPS COST

Building/Closet	Model#	Quantity	Unit Cost	Extended Cost	5 year Warranty
TOTAL					

TABLE 4-K – Monthly Lease Factor For Data Equipment (Alternate 1)

Lease Type	Monthly Lease Factor
1. Capital Lease (\$1 buyout)	
2. Fair Market Value Lease	

Notes:

1. Provide monthly lease factor when multiplied by the amount financed provides the monthly payment amount for a sixty month lease.
2. List any assumptions that govern the lease.

TABLE 4-L – POWER CONSUMPTION AND HEAT DISSIPATION

[illegible]

ATTACHMENT A - AFFIDAVIT OF NON-COLLUSION FORM**FRIDLEY SCHOOL DISTRICT**

I hereby swear (or affirm) under the penalty of perjury:

1. That I am the responder (if responder is an individual), partner in the responder (if the responder is a partnership), or an officer or employee of the responding corporation having authority to sign on its behalf (if the responder is a corporation);
2. That the attached response or responses have been arrived at by the responder independently, and have been submitted without collusion with, and without any agreement, understanding, or planned common source of action with, any other vendor of materials, supplies, equipment, or services described in the invitation to respond designed to limit independent response or competition;
3. That the contents of the response or responses have not been communicated by the responder or its employees or agents to any person not an employee or agent of the responder of its surety on any bond furnished with the response or responses, and will not be communicated to any such person prior to the official review of the response or responses; and
4. That I have fully informed myself regarding the accuracy of the statements made in this affidavit:

SUBMITTED BY:

Firm Name _____

Signature _____

Title _____

Address _____

Telephone _____

Date _____

Subscribed and sworn to before me

This _____ day of _____ 2014

Notary Public _____

Commission Expires _____

**ATTACHMENT B - STATEMENT OF AFFIRMATIVE ACTION FOR EQUAL OPPORTUNITY
EMPLOYMENT****FRIDLEY SCHOOL DISTRICT**

Being a duly authorized agent of the firm, I do hereby certify that _____ is actively participating in an affirmative action program. No person, on the basis of race, color, creed, religion, national origin, sex, age, marital status, or status with regard to public assistance, is excluded from full employment rights or otherwise subjected to discrimination under any program, service, or activity under the provisions of any and all applicable Federal and State laws against discrimination, including Civil Rights Act of 1964 and Minnesota Statute 363.

It is also agreed that, upon request, Fridley School District will be furnished all necessary information and reports to support compliance with such laws.

Signed _____

Typed Name _____

Firm _____

Address _____

City, State, Zip _____

Subscribed and sworn to before me

This _____ day of _____ 2014

My commission expires _____