

Request for Proposal – Data Network Infrastructure Equipment

Moorhead Area Public School District (“the District”) wishes to take advantage of E-Rate category 2 funding to provide upgraded core and edge switch port connectivity, updated network firewalls and uninterrupted power supplies for school building network data equipment. The RFP is divided into three different bids sections. Vendors may choose to submit a proposal for one, two or all three bid sections.

The deadline to receive written proposals must be received, by 3:00 pm on Friday, February 28, 2020 at:

**Moorhead Area Public School District
Attn: E-Rate Data Network Proposal
Technology Department
2410 14th St. S.
Moorhead , MN 56560**

The written copy **MUST BE RECEIVED** by the deadline. Postmark dates will not count toward date of receipt. Late submissions will not be accepted. An exact copy of the written proposal must also be emailed to: tehrfp@moorheadschoools.org prior to the submission deadline.

Service Provider Criteria and Contract Requirements

E-Rate Compliance: Respondent must assure that its response is in compliance with all current E-Rate program guidelines established by the Federal Communications Commission (FCC). Information regarding eligibility of goods and services, invoicing requirements, documentation requirements and other program rules are available from the SLD by calling Schools and Libraries Division (SLD) of the Universal Service Administration Corporation (USAC) at 1-888-203-8100 or see their website at www.sl.universalservice.org .

Eligibility of Goods and Services: Goods and services provided shall be clearly designated as “E-Rate Eligible”. Non Eligible goods and services shall be clearly called out as 100% non-eligible or shall be ‘cost-allocated’ to show the percentage of eligible costs per SLD guidelines.

E-Rate Funding Year Boundaries: The annual E-Rate Funding Year begins on July 1 and expires on June 30 of each fiscal year. of each fiscal year. Category Two components may be purchased and delivered on April 1st or after. The FCC contract ‘signing date’ must be March 27 by noon. Regardless of contract ‘signing date’, goods and services requested in this RFP shall be delivered no earlier than April 1, 2019. To assure that all charges are eligible for E-Rate funding, contract renewal and expiration dates shall coincide with the start/end dates of the E-Rate funding years.

SLD Invoicing: Respondents agree to conform to all E-Rate guidelines for the billing of discounts to the SLD. Billing method will be in SPI form (Service Provider Invoice): The Service Provider will only invoice the District for the cost percentage that applies to the District. The Service Provider will then invoice the SLD their percentage. Responder must also provide the name, title and telephone number for single point of contact for

E-Rate questions. The Service Provider must provide copies of all invoices submitted to SLD for Moorhead Area School District records.

SPIN Number: Respondents shall document the ability to participate in the E-Rate program by supplying their current SPIN (Service Provider Identification Number) as part of their proposal.

FCC Approval: All work is subject to approval of the project by the FCC under the E-Rate discount program. All projects are contingent on funding from this program.

FCC/SLD Auditability: The E-Rate program requires that all records be retained for at least ten years. Respondent hereby agrees to retain all books, records, and other documents relative to this contract for ten (10) years after the last date of service. The District, its authorized agents, and/or auditors reserves the right to perform or have performed an audit of the records of the contractor and therefore shall have full access to and the right to examine any of said materials within a reasonable period of time during said period.

Proposal Evaluation

It is anticipated that an award will be made to the provider(s) whose proposal(s) is/are determined to be in the best overall interest of Moorhead Area Public School District. The E-Rate program requires that price be the major factor, but not the only factor in awarding these proposals. The following criteria will be used in each of the three sections of the bid proposal to select and award a successful bidder(s).

- 30% Total Price and Cost Effectiveness of Solution
- 25% Meeting Overall Requirements
- 20% Compatibility with existing Moorhead Area Public Schools networking infrastructure.

NOTE: Exact match products will receive the higher evaluative score.

- 15% Regional Vendor – within 50 miles of Moorhead, MN
- 10% Vendor demonstrated ability to deliver solutions (Experience with Moorhead Area Schools or Similar sized K-12 References)

General Bidding Information

1. **Timelines:** It is the sole responsibility of the bidder to see that the proposal is received before the date and time listed. Postmarks will not be considered as an indication of successful submission.

2. **Questions Related to the RFP:** All requests for information related to this RFP must be made in writing via email to the techrfp@moorheadschoools.org address. All questions and answers will be posted publicly at <http://www.moorheadschoools.org/rfp>. All bidders will be responsible for checking this site for updated questions and answers during the bidding period. All questions must be submitted by 2:00 pm February 14, 2020. Questions will not be answered after the deadline.

3. **Hardcopy Required:** All proposals must be submitted in hardcopy in ink. No pencil marks or notations will be accepted.

4. **Costs:** All costs must be included in the bidder's proposal. Any expected shipping, handling and/or order processing costs must be included in the proposal.

5. **Taxes:** Moorhead Area Public Schools is exempt from sales taxes.

6. **Signatures:** Each proposal must be signed in the name of the bidder and must contain a written signature of the person authorized by the bidding enterprise to submit proposals on its behalf. A typed spelling of the signature and the position of the signer must be included with the signature.

7. **Withdrawals and Errors:** The bidder may withdraw any proposal between the submission date and the date and time of bid opening. The request for withdrawal must be made in writing and can be emailed to tehrfp@moorheadschoools.org. A bidder withdrawing a proposal will not be allowed to submit a new proposal. Proposals cannot be withdrawn after the March 2, 2020 12:00 noon opening date and time. Once opened, responding bidders will be responsible for any additional costs incurred due to pricing errors in the proposal if their bid is awarded a contract.

8. **Evidence of Responsibility:** Moorhead Area Public Schools reserves the right to request evidence from each respondent showing the bidder's financial, technical expertise, and staffing ability to fulfill the contract.

9. **Acceptance or Rejection of Proposals:** Moorhead Area Public School District reserves the right to reject any and all proposals, or any or all items of any proposal, or waive any irregularity of any proposal. The District reserves the right to reject a pricing proposal if E-Rate funding is not secured.

10. **Contract:** The awarded bidder will be required to enter into a written contract with Moorhead Area Public School District. These bid specifications and the bidder's proposal will be attached to, and become part of, the final contract documents.

11. **Award of Contract:** No purchase will be made without the approval of the Moorhead Area Public Schools Board of Education. A vendor acceptance letter will be sent via email to winning vendors. This letter will have relevant contingencies clauses included. It is anticipate all bid awards will be presented to the school board for approval at the March 23 meeting.

12. **Prevailing Law:** In the event of any conflicts or ambiguities between these specifications and state or federal laws, regulations, or rules, then the latter will prevail.

13. **Brands:** Moorhead Area Public School District has provided manufacturer preference but is willing to accept proposals featuring other equipment that is functionally equivalent. Functional equivalence must be proven through documentation provided by the bidder, and product sheets or links to online product sheets must be included in the bid response. When bidding an alternative, bidder must ensure that any additional components or licensing costs required to integrate into the existing Moorhead Area Public School District network are included in the bid. Additionally when bidding an alternative product comparable sized Minnesota School districts using the quoted "functional equivalent" equipment must be provided, in order to be considered for bid award.

14. **Federal and State Regulations:** The bidder's proposal and any contract entered into are subject to all applicable statutes of the United States or the State and all applicable regulations and orders of the Federal or State governments now in effect or which shall be in effect during the period of the contract.

15. **Delivery:** All items shall be delivered in quantities specified in the contract to the Moorhead Area Public Schools District Office, at 2410 14th St S, Moorhead, MN 56560. All items furnished will be subject to inspection and/or rejection by Moorhead Area Public School District for defects or non-compliance with the

specifications. Any costs associated with rejected items due to non-compliance, defect, or damage will be the responsibility of the seller. The seller warrants that all articles furnished shall be free from all defects of material and workmanship. Any shipping, handling or delivery charges must be detailed for equipment components.

16. **E-RATE Participation:** Moorhead Area Public School District is participating in the Federal Universal Service Discount program for schools and libraries (E- Rate), offered by the Federal Communications Commission (FCC), via the Schools and Libraries Division (SLD). The proposal and the contract negotiated implementing this proposal, are conditional and subject to full E- Rate funding by the SLD. The District reserves the right to cancel or in any manner reduce the scope of this procurement in the event the SLD does not completely approve the request for funding submitted referencing this proposal.

17. **SPIN:** Each vendor providing services to Moorhead Area Public School District, as part of the E-Rate program, must have a Service Provider Identification Number (SPIN). Vendor is responsible to apply to and receive from the Schools and Libraries Division a valid SPIN. SLD can be reached online at <http://www.usac.org/sl/providers/>

BID SECTION 1: Network Infrastructure

Current Network Equipment

Moorhead Area Public Schools wired network is currently made up of Cisco core and access switches. Our network topology is hub-and-spoke with each building (or spoke) having its own core switch which connects back to the Moorhead High School (hub) core switch. Spoke core switches and the hub core switch are connected by single mode leased dark fiber in a 20G Etherchannel configuration. Our single 1Gbps fiber WAN connection is located at Moorhead High School. External traffic is routed through our appliance content filter to our Cisco edge switch where it then traverses our Cisco high availability ASA pair to the outside network. Core switches utilize EIGRP to negotiate routing throughout our contiguous network. The network within each building is distributed by OM3 multimode fiber with 10G uplinks, or 20G etherchannels where possible, from the access switches to the core switch.

In the network bid package, the RFP will replace existing end-of-life Cisco Catalyst 2960S 48-port switches, 1G uplink Cisco Catalyst 2960X 48-port switches, and the approaching end-of-life Cisco Catalyst 3750X stacks. Cisco 48-port copper switches with PoE+/UPoE and 10G uplink ports/modules are included in the RFP. Our existing firewalls have a maximum rated throughput of 1Gbps which hamstrings our ability to increase our WAN bandwidth. Our aging core at Horizon Middle School is fully saturated with no room for expansion to create more ideal network paths. All required software licensing and support costs for 5 years must be included within the vendor's RFP submission. No additional licensing or software upgrades can be required after bid award unless provided at no cost by the vendor. All current Cisco switches deployed across the school district are running the LAN based version of the operating system.

Scope of Work

All equipment will be configured and installed by Moorhead Area Public School District Technology staff. Bidders may add line(s) to the Equipment Spreadsheet offering a per hour rate for configuration and/or installation assistance. In addition, bidders should include a summary page listing company information, primary contact and a project bid total.

Core Switch Equipment Requirements

- 24x 1G/10G/25G SFP28 ports and 4x 40G/100G QSFP uplink ports
- Layer 2, Routed Access (RIP, EIGRP Stub, OSPF – Up to 1000 routes), PBR, PIM Stub Multicast (up to 1000 routes), PVLAN, VRRP, PBR, CDP, QoS, FHS, 802.1x, Macsec-128, CoPP, SXP, IP SLA Responder, SSO
- Must have 40G/100G uplinks and 1G/10G/25G downlinks
- Must support dual redundant power supplies and each switch should have one additional redundant power supply
- All switches defined in this section of the requirements must be the same series/product family and 100% compatible data stacking with each other
- Must support Virtual StackWise stacking
- Must support flexible netflow
- Must include 2-post mounting hardware
- Must include any necessary licensing for operating the equipment at the Network Advantage level (defined at <https://goo.gl/7WbPQJ>) with at least a 5 year term
- Lifetime next-business-day (NBD) hardware replacement for switches

- Scoring preference may be given for switches with higher warranty, enhanced feature set or replacement levels
- All equipment must be new and from an authorized reseller of the manufacturers product for which they are quoting. No refurbished or “grey-market” gear will be accepted

Network Switch Equipment Requirements

- 48x 1G RJ-45 ports with PoE+ and 36x 2.5G & 12x mGig RJ-45 ports with UPoE
- Layer 2, Routed Access (RIP, EIGRP Stub, OSPF – Up to 1000 routes), PBR, PIM Stub Multicast (up to 1000 routes)), PVLAN, VRRP, PBR, CDP, QoS, FHS, 802.1x, Macsec-128, CoPP, SXP, IP SLA Responder, SSO
- PoE+ switches must have at least an 715W AC power supply, with at least 437W of available PoE power
- UPoE switches must have at least an 1100W AC power supply, with at least 490W of available PoE power
- Must have modular uplinks and uplink modules must support at least 10G per port
- UPoE switches must have at least 12x mGig downlink ports and all other downlink ports should be at least 2.5G
- Must support dual redundant power supplies
- All switches defined in this section of the requirements must be the same series/product family and 100% compatible power and data stacking with each other
- Must support StackWise with up to 8 members per stack and stacking bandwidth of at least 480 Gbps
- Must support StackPower for redundant/shared power stacking
- Must support flexible netflow
- Must include 2-post mounting hardware
- Must include any necessary licensing for operating the equipment at the Network Advantage level (defined at <https://goo.gl/7WbPQJ>) with at least a 5 year term
- Lifetime next-business-day (NBD) hardware replacement for switches
- Scoring preference may be given for switches with higher warranty, enhanced feature set or replacement levels
- All equipment must be new and from an authorized reseller of the manufacturers product for which they are quoting. No refurbished or “grey-market” gear will be accepted

Firewall Equipment Requirements

- Bundle including two discrete chassis/appliances for active/standby high availability and accompanying subscriptions/licensing
- 12x 1G RJ-45 ports and 4x 1G SFP ports
- Must support at least 3 Gbps firewall + inspection throughput
- Must support 17K new connections per second
- Must include 2-post mounting hardware
- Must include any necessary licensing of subscriptions for the appliance to operate
- All equipment must be new and from an authorized reseller of the manufacturers product for which they are quoting. No refurbished or “grey-market” gear will be accepted

Bid prices must remain firm for a duration of 12 months after the initial purchase, with the exception of price decreases. A vendor must bid a quote price for all listed items. Vendors are not allowed to only bid on specific line items in this section of the proposal.

It is understood that new technologies or improved or enhanced products may become available that supersede existing products in both price and performance after a bid award. No change in the products and/or services specified in the signed contracts resulting from awards of this RFP will be allowed without prior written consent and approval from Moorhead Area Public School District after being provided with an explanation of the benefits of such a change, and this change cannot result in increased costs.

Network Infrastructure Equipment to Bid:

Part Number	Quantity	Description	Unit Cost	Total Cost
Cisco Switches, Stacking Cables, Network/Power Modules and SFP's				
C9300-48UXM-EDU	13	Cisco Switch 48P(36x 2.5G & 12x mGig); UPoE		
C9300-48P-EDU	13	Cisco Switch 48P; PoE+		
C9300-NM-8X	10	Cisco Network Module; 8P SFP+(10G)		
STACK-T1-50CM=	10	Cisco StackWise Cable; 50CM		
STACK-T1-1M=	10	Cisco StackWise Cable; 1M		
CAB-SPWR-30CM=	11	Cisco Power Stack Cable; 30CM		
CAB-SPWR-150CM=	11	Cisco Power Stack Cable; 150CM		
PWR-C1-1100WAC	16	Cisco Power Supply; 1100W AC		
C3850-NM-4-10	1	Cisco Network Module; 4P SFP+(10G)		
SFP-10G-SR-S	4	Cisco SFP+ Module; 10G; SR; LC		
Cisco Core Switch, Network/Power Modules and SFP's				
C9500-24Y4C-EDU	2	Cisco Switch 24P SFP28(1/10/25G); 4P QSFP+ (40/100G)		
PWR-C4-950WAC-R	2	Cisco Power Supply; 950W AC		
QSFP-100G-CU1M=	2	Cisco QSFP Module; 100G; Copper Direct-Attach Cable		
Cisco Firewall				
FPR2120-FTD-HA-BUN	1	Cisco Firepower 2120 High Availability Bundle		
		TOTAL COST NETWORK INFRASTRUCTURE:		

BID SECTION 2: Wireless Network Infrastructure

Current Equipment

Moorhead Area Public Schools wireless network currently consists of Fortinet (previously Meru) wireless controllers and access points. There is a mix of 802.11ac generations throughout the district, with some buildings on wave 1 while others are on wave 2. Wireless controllers are located at our Moorhead High School core where access points are provisioned to controllers based on their generation. Controllers are in pairs operating in a N+1 failover configuring. All access points are powered over ethernet with wave 1 requiring 802.3af and wave 2 requiring 802.3at.

In the wireless bid package, the goal of the RFP is to ensure that the quality of our wireless network is consistent across each building. As more portable computing devices are added to our WIFI network the strain and requirements of the wireless network infrastructure is greater than ever. The access points in this bid will provide more network throughput in select areas.

Scope of Work

All equipment will be configured and installed by Moorhead Area Public School District Technology staff. Bidders may add line(s) to the Equipment Spreadsheet offering a per hour rate for configuration and/or installation assistance. In addition, bidders should include a summary page listing company information, primary contact and a project bid total.

Wireless Access Point Equipment Requirements

- 802.11ax/WiFi 6
- 802.3at/PoE+
- 4x4 MIMO
- Multigigabit with uplink speeds of 2.5 Gbps
- 2.4 Ghz and 5 Ghz or Dual 5Ghz mode
- Must be compatible with FortiWLC-500D wireless controller
- Must include mounting hardware for walls and ceilings
- All equipment must be new and from an authorized reseller of the manufacturers product for which they are quoting. No refurbished or "grey-market" gear will be accepted

Bid prices must remain firm for a duration of 12 months after the initial purchase, with the exception of price decreases. A vendor must bid a quote price for all listed items. Vendors are not allowed to only bid on specific line items in this section of the proposal.

It is understood that new technologies or improved or enhanced products may become available that supersede existing products in both price and performance after a bid award. No change in the products and/or services specified in the signed contracts resulting from awards of this RFP will be allowed without prior written consent and approval from Moorhead Area Public School District after being provided with an explanation of the benefits of such a change, and this change cannot result in increased costs.

Wireless Network Infrastructure Equipment to Bid:

Part Number	Quantity	Description	Unit Cost	Total Cost
Fortinet Wireless Access Point				
FAP-U431F	36	Fortinet Access Point; Internal Antenna		
FAP-U433F	28	Fortinet Access Point; External Antenna		
	TOTAL COST WIRELESS NETWORK:			

BID SECTION 3: Uninterrupted Power Supply (UPS) Equipment

Current Equipment

Moorhead Area Public Schools utilizes double conversion uninterrupted power supply (UPS) units in data closets throughout the district. This is to ensure that all connected equipment is getting clean and consistent power, devices are protected against power surges, and that there is battery power for all critical equipment. The capacity of each UPS reflects the amount of power required for the equipment in that data closet. Closets with critical infrastructure will have redundant UPS units to power equipment that support two or more power supplies.

In the UPS bid package, the goal of the RFP is to ensure that our aging, end of life and/or failing fleet of UPS battery backups are replaced with new hardware.

Scope of Work

All equipment will be configured and installed by Moorhead Area Public School District Technology staff. Bidders may add line(s) to the Equipment Spreadsheet offering a per hour rate for configuration and/or installation assistance. In addition, bidders should include a summary page listing company information, primary contact and a project bid total.

Uninterrupted Power Supply (UPS) Equipment Requirements

- Larger capacity units should have a capacity of at least 6,000VA, be at most 8 rack units tall, and have a NEMA L6-30P plug for input.
- Smaller capacity units should have a capacity of at least 3,000VA, be at most 2 rack units tall, and have a NEMA L5-30P plug for input.
- Must come with an RMCARD205 remote network management card pre-installed
- Must be double conversion (online)
- Must be sine wave (not simulated) on battery output.
- Must have an input power factor of at least 0.99
- Must have an output power factor of at least 0.9
- Must have at least six 120V NEMA 5-20R outputs
- Must include mounting hardware
- All equipment must be new and from an authorized reseller of the manufacturer's product for which they are quoting. No refurbished or "grey-market" gear will be accepted

Bid prices must remain firm for a duration of 12 months after the initial purchase, with the exception of price decreases. A vendor must bid a quote price for all listed items. Vendors are not allowed to only bid on specific line items in this section of the proposal.

It is understood that new technologies or improved or enhanced products may become available that supersede existing products in both price and performance after a bid award. No change in the products and/or services specified in the signed contracts resulting from awards of this RFP will be allowed without prior written

consent and approval from Moorhead Area Public School District after being provided with an explanation of the benefits of such a change, and this change cannot result in increased costs.

Uninterrupted Power Supply (UPS) Equipment to Bid:

Part Number	Quantity	Description	Unit Cost	Total Cost
CyberPower Uninterrupted Power Supply Equipment				
OL6KRTF	6	CyberPower UPS 6KVA/5.4KW		
ENVIROSENSOR	19	CyberPower REMOTE TEMP/HUMIDITY MONITOR FOR RMCARD205		
OL3000RTXL2UN	13	CyberPower UPS 3000VA/2700W		
		TOTAL COST UPS EQUIPMENT:		