TIMELINE

- December 14, 2018 Release of Request For Proposal to vendors and public notice in [local newspaper] and posted to the E-rate Productivity Center
- September 21, 2018: Questions must be submitted on or before this date to [email address]
- December 27, 2018: Answers to questions posted to the E-rate Productivity Center
- o January 25, 2018: RFP responses are due

SERVICE LOCATIONS

| Location | <u>Address</u> | Latitude-Longitude |
|-----------------------|---------------------|--------------------|
| Elko County Library- | 720 Court St, Elko, | 40.834930,- |
| Main Branch | NV 89801 | <u>115.761500</u> |
| | | |
| Battle Mountain | 625 South Broad St. | <u>40.638870,-</u> |
| Branch Library | Battle Mountain, NV | <u>116.939190</u> |
| | 89820 | |
| Wells Branch Library | 208 Baker Street, | 41.108420,- |
| | Wells, NV 89835 | <u>114.973740</u> |
| | | |
| West Wendover | 590 Camper Drive | 40.735800,- |
| Branch Library | West Wendover, NV | <u>114.065830</u> |
| | 89883 | |
| Service Provider | Service Provider's | |
| Interconnect Facility | Choice | |

SCOPE OF SERVICES

Section 1: Introduction

The Elko-Lander-Eureka County Library System hereafter referred to as the Applicant, is requesting proposals for Leased Lit Fiber (With Internet Access) or Internet Access and Transport Bundled (non-fiber) for a public libraries in Battle Mountain, Wells and West Wendover and Leased Lit fiber (With Internet Access) only for the library in Elko. Service is expected to originate at each library site be delivered to the service provider's choice of hub site. The new service is being planned to begin on July 1, 2019 which represents the expiration of the current leased transport and ISP service.

Section 2: Services

- 1. The Applicant is seeking bids for 2 alternative services.
 - The first alternative service is a fully managed, Leased Lit Fiber solution that includes ISP Service (Leased Lit Fiber With Internet Access). This can be bid for all sites.
 - b. The second alternative service is a fully managed, non-fiber service, designated by the service option Internet Access and Transport Bundled (Non-Fiber). This service can be delivered over microwave, other wireless technologies, coaxial cable, satellite or copper. The service must adhere to the same service standards outlined for the leased lit fiber service. This can be bid for the Battle Mountain,

Wells and West Wendover sites. The Elko Library will only accept bids for Leased Lit Fiber with Internet Access.

- 2. Network Design and Construction Routes
 - a. Respondents should clearly illustrate proposed network design and any new necessary construction routes for each site.
 - b. The Applicant is not advocating or mandating any preconceived network design or construction route and leaves this decision up to the vendor to present their best solution while recognizing the cited termination locations.
- 3. Special Construction
 - a. In E-rate terminology, **special construction** refers to the upfront, non-recurring costs associated with the installation of new fiber to or between eligible entities.
 - Special construction and service eligibility for reimbursement have changed starting funding year 2016. See the Federal Communications Commission E-rate modernization order 2 (WC Docket No. 13-184) (https://www.fcc.gov/document/fcc-releases-order-modernizing-e-rate-21st-century-connectivity) for more information.
 - Special construction charges eligible for Category One support consist of three components:
 - i. construction of network facilities
 - ii. design and engineering
 - iii. project management
 - c. If no new fiber is being installed, then any installation costs are considered standard **non-recurring costs (NRC).**
 - i. For leased lit fiber solutions requiring special construction, this means that the costs associated with building the fiber are considered special construction and the costs associated with the equipment required to activate the service are a standard NRC.
 - d. Special Construction Payment Plan Option
 - i. The Applicant requests that the respondents consider allowing Applicant to pay the non-discount share of special construction costs (portion of costs that are the responsibility of The Applicant) to be paid in equal annual installments over four years from Funding Year 2019 to Funding Year 2022 inclusive. Responses must include agreement or nonagreement of this request.
 - e. Excess fiber strands for special construction projects
 - i. To the extent that the winning service provider installs additional strands of fiber for future business ventures, the winning service provider assumes full responsibility to ensure those incremental costs are allocated out of the special construction charges to the district in accordance with FCC rules and orders.
 - ii. If, after the issuance of the FCDL, USAC or the FCC determines that the winning service provider did not cost allocate those charges associated with the additional strands, Applicant will not be responsible for reimbursing the winning vendor and the winning vendor will assume all responsibilities deemed ineligible by USAC.
 - iii. For examples of cost allocation, please see document in Appendix A as prepared by the State E-rate Coordinators' Alliance (SECA).

Section 3: Solution Specifications

1. Leased Lit Fiber (with or without Internet Access)

Leased Lit Fiber (with or without Internet Access) is the E-rate Category 1 service option to choose when bidding a fiber connection from a school/non-instructional facility or a school

district hub to an Internet Access Point and the price of the fiber connection also includes Commodity Internet/Internet access. This is not a WAN connection, but a connection through which the school/non-Instructional facility gains access to the Commodity Internet. The Applicant in this RFP is bidding a Leased Lit Fiber with Internet Access Connection.

a. Applicant must have dedicated, symmetrical transport bandwidth of 100 Mbps and 200 Mbps between the designated endpoints for the Battle Mountain, Wells and West Wendover sites. This amount includes both transport and ISP capacity.

Applicant must have dedicated, symmetrical transport bandwidth of 100 Mbps, 500 Mbps and 1G between the designated endpoints for the Elko Library sites. This amount includes both transport and ISP capacity.

- b. Contract options are requested for 36 month, 60 month, 84 month terms of service.
- c. Each respondent is required to complete the attached pricing sheet with this RFP.
 - i. Special construction, monthly recurring cost, and any additional non-recurring costs are **required** to be broken out and listed separately.
 - ii. Respondents are free to propose alternate pricing terms provided they have also included pricing in the requested format.
 - iii. No increased pricing will be allowed during the term of the quoted special construction, NRC, and MRC rate in each pricing cell of the matrix.
- d. If an increase in bandwidth is requested during the contract period the contract does not renew.
- e. All solutions must adhere to the following Service Level Agreement (SLA) terms and the terms found in Section 4:
 - i. The provider will make all reasonable efforts to ensure 99.99% network availability of each circuit.
 - ii. .25% frame/packet loss commitment
 - iii. 45ms network latency commitment end to end
 - iv. 30ms network jitter commitment
 - v. There is no right of provider to limit or throttle the capacity of the circuit at any time for any reason
 - vi. Vendor stated commitment is to respond to any outage within two (2) hours and a four (4) hour restoration of service (see schedule of service credits below).

Service credits for a greater than 2-hour response will accumulate as follows:

| Length of Service Outage | Credit is the follow percentage of Monthly Fiber Maintenance Fee |
|--|--|
| Less than 2 hours | No Credit |
| Two (2) hours to four (4) hours | 5% |
| Greaterthanfour (4) hours and less than eight (8) hours | 10% |
| Greater than eight (8) hours and less than twelve (12) hours | 15% |

| Greaterthantwelve(12) hours and less than sixteen (16) hours | 20% |
|---|-----|
| Greaterthansixteen(16) hours and less than twenty-four (24) hours | 35% |
| Greater than twenty-four (24) hours | 50% |

Internet Access and Transport Bundled (Non-fiber) for the Battle Mountain, Wells and West Wendover Sites Only

Internet Access and Transport Bundled is the E-rate Category 1 service option to choose when bidding a non-fiber connection from a library/school/non-instructional facility or a school district hub to an Internet Access Point. The price of the connection also includes Commodity Internet/Internet access. The connection can be delivered over wireless, coax, satellite, copper or other technologies. This is not a WAN connection, but a connection through which the facility gains access to the Commodity Internet.

- a. Applicant must have dedicated, symmetrical transport bandwidth of 100 Mbps and 200 Mbps between the designated endpoints. This amount includes both transport and ISP capacity.
- b. Contract options are requested for 36 month, 60 month, 84 month terms of service.
- c. Each respondent is required to complete the attached pricing sheet with this RFP.
 - i. Special construction, monthly recurring cost, and any additional non-recurring costs are **required** to be broken out and listed separately.
 - ii. Respondents are free to propose alternate pricing terms provided they have also included pricing in the requested format.
 - iii. No increased pricing will be allowed during the term of the quoted special construction, NRC, and MRC rate in each pricing cell of the matrix.
- d. If an increase in bandwidth is requested during the contract period the contract does not renew.
- e. All solutions must adhere to the following Service Level Agreement (SLA) terms and the terms found in Section 4:
 - i. The provider will make all reasonable efforts to ensure 99.99% network availability of each circuit.
 - ii. .25% frame/packet loss commitment
 - iii. 45ms network latency commitment end to end
 - iv. 30ms network jitter commitment
 - v. There is no right of provider to limit or throttle the capacity of the circuit at any time for any reason
 - vi. Vendor stated commitment is to respond to any outage within two (2) hours and a four (4) hour restoration of service (see schedule of service credits below).

Service credits for a greater than 2-hour response will accumulate as follows:

| Length of Service Outage | Credit is the follow | |
|--------------------------|-----------------------|--|
| | percentage of Monthly | |
| | Fiber Maintenance Fee | |

| Less than 2 hours | No Credit | |
|---|-----------|--|
| Two (2) hours to four (4) hours | 5% | |
| Greaterthanfour(4) hours and less than eight (8) hours | 10% | |
| Greater than eight (8) hours and less than twelve (12) hours | 15% | |
| Greaterthantwelve(12) hours and less than sixteen (16) hours | 20% | |
| Greaterthansixteen(16) hours and less than twenty-four (24) hours | 35% | |
| Greater than twenty-four (24) hours | 50% | |

Section 4: Service Level Agreement for Leased Lit Fiber and Internet Access and Transport Bundled (Non-Fiber)

For all proposals, the respondent must agree to the following service specifications:

- a. Network operations center: Solution will provide customer support functions including problem tracking, resolution and escalation support management on a 24x7x365 basis. Customer has the right and is encouraged to call concerning any problems that may arise relative to its connection with vendor provided services.
- b. Trouble reporting and response: Upon interruption, degradation or loss of service, Customer may contact Vendor by defined method with a response based on trouble level. Upon contact from the Customer, the Vendor support team will initiate an immediate response to resolve any Customer issue. Customer will receive rapid feedback on trouble resolution, including potential resolution time.
- c. Escalation: In the event that service has not been restored in a timely manner, or the Customer does not feel that adequate attention has been allocated, the Customer can escalate the trouble resolution by request. A list of escalation contacts will be provided when implementation schedule is completed.
- d. Resolution: The Customer will be notified immediately once the problem is resolved and will be asked for verbal closure of the incident.
- e. Trouble reporting, escalation and resolution: A detail trouble reporting, escalation and resolution plan will be provided to the district.
- f. Measurement: for leased lit fiber outage time starts from the time the Customer contacts vendor and identifies the problem. Credits for outages of shortage will be identified.
- g. Reports: Upon request, an incident report will be made available to the Customer within five (5) working days of resolution of the trouble.
- h. Link performance per segment: The service will maintain the proposed link performance throughout the term of the contract.
- i. Historical uptime: Provide aggregate uptime statistics for your proposed service in the geographic area encompassing Applicant.
- j. Service Outage Credits are listed in section 3.1.e.vi (for Leased Lit Fiber (with Internet Access) and 3.2.e.vi (for Internet Access and Transport Bundled (non-fiber).

Section 5: General Terms for All Proposals

- a. Failure to include any requested information noted as required by the respondent is grounds for disqualification.
- b. Description of Proposal
 - Applicant reserves the right to award each site individually.
 Service providers should quote prices that are not dependent on being awarded all bid sites. Each site should be priced individually.
 - ii. Respondent will provide a description of their proposal for all services and solutions.
 - iii. Description will include an overview of the proposal, any deviations from the requested architecture, design or requirements, assumptions made, and other detail Applicant may find useful or necessary (or could differentiate the solution from a competing proposal).

C. Timeline

- i. For each response, respondents must include a timeline for all bringing all sites online.
- ii. Proposals requiring little to no special construction should be able to bring all sites online by the July 1 start of the funding year.
- iii. For solutions requiring special construction, a schedule of bringing sites online should be included with an explanation of how this timeline shifts if the date of the E-rate funding commitment shifts.

d. Demarcation

- i. All solutions must terminate service or infrastructure in the demarcation point at each address specified in the pricing sheet.
- ii. Solutions bringing service to the property line but not to the demarcation point are not acceptable.
- iii. Respondent must specify specific demarcation setup included in base fees, e.g. wall mounted CPE and CAT6a handoff, rack mount patch panel, etc.

e. Network Diagram

i. For each response, respondents must include a network diagram displaying the paths to be used to serve each endpoint.

f. References

- i. For each response, respondent must provide 3 references from current or recent customers (preferably K-12) with projects equivalent to the size of Applicant.
- ii. If respondent responds to more than one option (e.g. leased lit fiber service), provide 3 references for each.

g. E-rate Program Integrity Assurance (PIA) Review

- If their solution is chosen, respondents are required to promptly provide Applicant with any information being requested as part of PIA review.
- Vendors may assist applicants with preparing funding requests or responding to PIA questions and may speak directly with PIA reviewers
- iii. For all responses that include special construction, the respondent agrees to, by submitting its bid to produce all construction labor, construction materials and other cost information requested during PIA review.

- h. Required Notice to Proceed and Funding Availability
 - i. Applicant will follow the purchasing policies of The Applicant Board of Directors and requirements and procedures of the FCC's E-rate program as administered by the Universal Service Administrative Company to be eligible for all available funding.
 - ii. The implementation of any associated contracts resulting from this competitive bid process will be dependent on the district's' issuance of a written Notice to Proceed.
 - iii. E-rate funding notification alone will not signify Notice to Proceed. The district will have the right to allow the contract to expire without implementation if appropriate funding (including any state matching funds for special construction projects) does not come available.

Section 6: Evaluation Criteria

Leased Lit Fiber (with Internet Access) and Internet Access and Transport Bundled (Non-Fiber)

| % Weight | Criteria | |
|----------|---|--|
| 35% | E-rate eligible recurring and one-time circuit costs ¹ | |
| 15% | Complete bid submission | |
| 10% | Ability to support requirements of this RFP ³ | |
| 25% | Proposed contract terms and conditions ⁴ | |
| 5% | E-rate ineligible recurring or one-time costs ⁵ | |
| 10% | Provider references ⁶ | |

2. Criteria Explanation

- E-rate eligible costs: the total cost of ownership for the eligible components of the proposed service. Total cost of ownership takes into account all one-time and recurring costs. Note that E-rate eligible costs refers to the pre-discount cost of the solution, not the post-discount portion of costs that are the responsibility of The Applicant. This criterion must be the highest weighted per E-rate program rules.
- 2. Complete bid submission: Bids concisely address Applicant's requirements, as set forth in the RFP, and do not contain a significant amount of corporate boilerplate marketing information
- 3. Ability to support requirements of this RFP: proposed solution clearly meets Applicant's requirements and needs
- 4. Proposed contract terms and conditions: Proposed contract has flexibility and terms desired by Applicant
- 5. E-rate ineligible costs: Any costs of the proposed service that are not eligible for E-rate funding. This does not refer to the post-discount portion of eligible costs that are the responsibility of The Applicant .
- 6. Provider references: response included K12 references that were similar in size and scope
- 7. Compatibility with existing network infrastructure: proposed equipment is easily compatible with the existing equipment used by The Applicant .

E-rate Special Construction Excess Strands - Cost Allocation Scenarios

Funding Year 2018

Prepared by the <u>State E-rate Coordinators' Alliance</u> October 23, 2017

I. LEASED LIT FIBER AND LEASED DARK FIBER

A. Excess Strands for Applicant's Future Use

If the service provider installs additional strands for The Applicant's exclusive future use in a leased dark fiber or leased lit fiber special construction project, and if The Applicant can show documentation that buying a cable containing the number of strands placed in the fiber system for The Applicant's future use is more cost effective then buying a fiber cable with the number of strands The Applicant plans to place into service the first year, no cost allocation of the excess strands is required and no other special construction charges would need to be cost allocated.

If the service provider installs excess strands for The Applicant's exclusive future use in a leased dark fiber or leased lit fiber special construction project where the excess strands will remain dormant until they are lit for The Applicant in the future, and if The Applicant cannot show that it is not more cost effective than buying the exact number of fiber strands being lit in the first year, The Applicant must cost allocate the costs associated with the excess strands only. No other special construction charges would need to be cost allocated.

B. Excess Strands for Service Provider's Future Use

For lit services special construction and leased dark fiber special construction, if the service provider wishes to place extra strands in the build for its own use, the E-rate applicant must cost allocate the cost of the service provider-owned extra strands, as well as all incremental costs of those extra strands from the special construction E-rate funding request. It is not a pro-rata share, but an incremental cost calculation that must be backed by detailed documentation.

COST-ALLOCATION: FIBER EXAMPLES

 Example 1: Leased lit fiber or leased dark fiber provider installs 12-strands in fiber run to a large school district hub and wants to add 36 additional strands for its own ineligible use, resulting in additional labor costs (e.g., splicing) and plant costs (e.g., larger termination boards, additional handholes).

Result: Cost of 36 additional fiber strands and all associated incremental increases in costs (e.g., the additional labor/outside plant costs) above what would be incurred if only the 12-strands of fiber were installed must be allocated out of the applicant's special construction funding request.

© 2017 Universal Service Administrative Co

26

Applicant's should seek documentation from the provider which outlines the added incremental costs attributable to designing, managing and constructing a fiber system with a 48-strand cable instead of a 12-strand cable. Such costs should include (but are not limited to):

- Splice Labor. If any fibers over The Applicant's fibers are spliced, the labor for these additional splices must be cost allocated.
- Splice Enclosures are placed to protect splices. If any fibers over The Applicant
 's fibers are spliced and require an enclosure, the enclosures for these additional
 splices must be cost allocated.
- Fiber Installation Labor. This represents the incremental cost of pulling a larger cable through the buried conduit.
- Structured materials installation. This represents the additional cost of burying a larger conduit to support the additional fibers.

Note that the costs associated with installing a larger cable strand than what is required by The Applicant are ineligible and the service provider should not include such costs in their special construction billing to The Applicant but should be prepared to show

evidence during PIA review that it did not charge The Applicant for these incremental costs.

Figure 1: Here is a table outlining some possible incremental costs:

| Item | 12 Strand cable construction | 48 strand cable construction | Cost Allocation Amount that service provider should remove from the special construction request |
|---|--|--|--|
| Fiber Cable | 38 cents per foot | \$1.04 per foot | 66 cents per foot |
| Design and Engineering | \$2.12 per foot | \$2.42 per foot | 30 cents per foot to depict additional splices at A and Z locations |
| Project Management | \$1.18 per foot | \$1.18 per foot | 0 |
| Splice labor* | \$11.00 per splice | \$11.00 per splice | \$11 per splice over 12 splices at any splice site |
| Splice enclosures** | \$205 per enclosure | \$205 per enclosure | \$205 per enclosure for every enclosure over 12 |
| Fiber Patch Panel | \$71.43 per panel | \$218.60 per panel | \$147.17 per panel |
| Conduit and other structured materials | 1.25" conduit required \$1.95 per foot | 1.5" conduit required \$2.35 per foot | 40 cents per foot |
| | Handhole (40,000 lb rated) \$2695 per unit | Handhole (40,000 lb rated) \$2695 per unit | No cost difference for handhole |
| | Fiber Marker \$30 per unit | Fiber marker \$30 per unit | No cost difference per marker |
| Fiber Installation Labor *** | 25 cents per foot | 28 cents per foot | 3 cents per foot |
| Structured Materials Installation (conduit, markers, handholes)**** | \$2.85 per foot | \$3.10 per foot | 25 cents per foot |
| Markers | Place every 500' | Place every 500' | No cost difference |
| Handholes | Place every 1000' | Place every 1000' | No cost difference |