

HUMBOLDT COUNTY LIBRARY SYSTEM

FY2023 LEASED LIT FIBER

TIMELINE

- September 21, 2022: Release of Request for Proposal
- October 12, 2022: Virtual Bidder workshop (included in the State Facilities RFP) ([Zoom Link](#))
- October 14, 2022 (1-2PM PT): Virtual Technical Assistance Workshop-- NV Energy to discuss terms of the potential use of NV Energy facilities in proposed solutions ([Zoom Link](#))
- October 19, 2022: Deadline for questions regarding RFP: highspeedNV@gov.nv.gov
- November 1, 2022, 2022: Answers to RFP questions posted by OSIT
- December 19, 2022: All RFP responses due at 5 PM PT: highspeedNV@gov.nv.gov

SERVICE LOCATIONS

Location	Address	Longitude/Latitude
Humboldt County NOC	25 W Fifth Street Winnemucca, NV 89445	40.9719001, -117.7330026
Winnemucca Branch Library	85 E. 5 th Street, Winnemucca, NV 89445	40.97286851, -117.732259
McDermitt Branch Library	135 Oregon Road, McDermitt, NV 89421	41.994860, -117.712130
Denio Branch Library	240 Pueblo Blvd, Denio, NV 89404	41.99295735, -118.63497

SCOPE OF SERVICES

Section 1: Introduction

The Humboldt County Library System, hereafter referred to as the Applicant, is requesting proposals for Leased Lit Fiber with Internet Access for the 3 public libraries in the County. The new service is being planned to begin on July 1, 2023, however with the extensive fiber construction that will likely be allowed, the Applicant will work with the service provider to determine a realistic service commencement date.

Section 2: Services

The Applicant is seeking bids for a fiber-based transport service. The Winnemucca Branch is seeking a leased lit fiber transport-only circuit from the library to the Humboldt County NOC, 25 W. Fifth Street, Winnemucca, NV 89445, and leased lit fiber with Internet access delivered to the County NOC. For the Denio and McDermitt Branch Libraries, service is for leased lit fiber with bundled internet access that is expected to originate at each library site and be delivered to the service provider's choice of hub site.

1. The Applicant is seeking bids for a fiber based bundled service. The desired service is a fully managed, leased lit fiber solution that includes ISP Service (Leased Lit Fiber with Internet Access).

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2. In accordance with guidance from USAC, the library's intent is not to limit responses to only "lit fiber" and that "lit fiber" in this, and all related RFP documents should be understood to represent all methods of delivery that are equivalent to lit fiber quality and reliability and meets the SLAs detailed in this RFP.
3. Network Design and Construction Routes
 - a. Respondents should clearly illustrate proposed network design and any new necessary construction routes.
 - 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.
4. 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.
 - i. 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.
 - b. 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 2023 to Funding Year 2026 inclusive. Responses must include agreement or non-agreement 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

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

This is a connection through which the library 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 with the following scalable bandwidth options:
 - i. Winnemucca Branch: 750 Mbps, 1 Gbps, and 2 Gbps between the designated endpoints. This amount includes both transport and ISP capacity.
 - ii. Denio and McDermitt Branches: 100 Mbps, 250Mbps and 500 Mbps between the designated endpoints.
 - b. Contract options are requested for 36-month, 60-month, and 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. Bidders are requested to provide BOTH a business class SLA, as described below, AND non-SLA, residential class service to compare pricing.
 - f. Proposed business class service 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. 25ms network latency commitment for the transport portion of the circuit
 - 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%
Greater than four (4) hours and less than eight (8) hours	10%
Greater than eight (8) hours and less than twelve (12) hours	15%

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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 with Internet access

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)).

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
 - i. Respondent will provide a description of their proposal for all services and solutions.
 - ii. The respondent should confirm that the circuit is fiber end to end from the ISP in their proposal. Hybrid solutions combining wireless links with fiber in the last mile will not be accepted.

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- 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 the site online.
 - ii. Proposals requiring little to no special construction should be able to bring the site online by the July 1 start of the funding year.
 - iii. For solutions requiring special construction, a schedule of bringing the site 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
- i. If their solution is chosen, respondents are required to promptly provide Applicant with any information being requested as part of PIA review.
 - ii. 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's governing Board or County Commissioners 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.

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- 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

1. Leased Lit Fiber (with Internet Access)

% Weight	Criteria
35%	E-rate eligible recurring and one-time circuit costs¹
15%	Complete bid submission
20%	Ability to support requirements of this RFP ³
15%	Proposed contract terms and conditions ⁴
5%	E-rate ineligible recurring or one-time costs ⁵
10%	Provider references ⁶

2. Criteria Explanation

1. 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 Library references that were similar in size and scope

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Appendix A

E-rate Special Construction Excess Strands - Cost Allocation Scenarios Funding Year 2022

Prepared by the [State E-rate Coordinators' Alliance](#)
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 than 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

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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.

Example 1 from Funding Year 2018 USAC Fiber Training Slides applies:

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.

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Applicants 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):

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- 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

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	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