

TIMELINE:

- February 15, 2018: Release of Request For Proposal to vendors and public
- March 15, 2018: RFP responses are due.

SCOPE OF SERVICES

The Tonopah Library District in Tonopah, Nevada was the third public library in Nevada. The library district is housed in one stone building was designed by John J. Hill and was completed in 1906. The Tonopah Library District is requesting proposals for one service option, leased lit fiber for delivery of bundled Internet Access and Transport to the Library Location.

The current Internet Access services over DSL at 5 mbps. Due to patron needs and in order to meet the bandwidth standards included by the FCC in the second E-rate modernization order, the library desires to upgrade these connections as follows:

Service is expected to be delivered to the location at 167 Central St, Tonopah, NV 89049 (38.067224, -117.231723)

The new service is being planned to begin on July 1, 2018 which represents the expiration of the current service. **All respondents must be capable of providing telecommunication services under the Universal Service Support Mechanism, be a registered vendor with USAC, and have a USAC issued 498 ID (formerly Service Provider Identification Number-SPIN).**

SPECIAL CONSTRUCTION

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. If no new fiber is being installed, then any installation costs are considered standard **non-recurring costs (NRC)**. Applicants may seek funding for special construction charges in connection with leased lit fiber, leased dark fiber, and self-provisioning. Special construction charges eligible for Category One support consist of three components:

1. construction of network facilities
2. design and engineering
3. project management

Note: The term "special construction" does not include network equipment necessary to light fiber, nor the services necessary to maintain the fiber. Charges for network equipment and fiber maintenance are eligible for Category One support as separate services, but not as special construction.

All options can include special construction or one-time E-rate eligible non-recurring costs as well as E-rate eligible recurring circuit costs. 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 library in accordance with FCC rules and orders. 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, Tonopah Public Library will not be responsible for reimbursing the winning vendor and the winning vendor will assume all responsibilities deemed ineligible by USAC. A sample cost allocation template for Service Providers special construction cost is included as Appendix C.

Based on the bids and both a short term and long-term cost effectiveness analysis, Tonopah Public Library will determine which of the solutions is acceptable.

Leased Lit Fiber Including Internet Access and Transport

Tonopah Public Library must have dedicated, symmetrical transport bandwidth of 100 Mbps, 500 Mbps and 1G with the Service Level Agreement (SLA) guarantees outlined below. Price quotes are requested for 36 month and 60 month terms of service (each priced with two optional 1-year renewals). Each respondent is required to complete the pricing matrix located in Appendix A of this RFP. If special construction is necessary, respondents are **required** to separate out pricing in Appendix B: Special Construction Pricing.

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. If an increase in bandwidth is requested during the contract period the contract does not renew. As bandwidth needs are steadily rising, respondents are free to bid higher tiers of bandwidth than what is requested to demonstrate their future scalability.

General Terms for All Proposals

Leased Lit Fiber Definition

A bundled broadband service including Internet Access that is delivered over a service provider or other third party owned network. The service is exclusively delivered over Fiber. The service is a fully managed service, with the service provider supplying the equipment, provisioning the bandwidth and providing technical support/management of the service.

Description of Proposal

Respondent will provide a description of their proposal for all services and solutions. Description will include an overview of the proposal, any deviations from the requested architecture, design or requirements, assumptions made, and other detail Tonopah Public Library may find useful or necessary (or could differentiate the solution from a competing proposal).

Service Level Agreement

Respondent will provide a proposed Service Level Agreement (SLA) with the RFP response. This SLA applies to both the point to point leased lit fiber service and the point to point transport only-no ISP service (which is provided over any type of infrastructure other than fiber including wireless, coax, copper, etc.). The proposal must include a description of the following services and how these services will be measured.

- Network Availability: the provider will make all reasonable efforts to ensure 99.99% network availability of each circuit.
- .25% frame/packet loss commitment
- 25ms network latency commitment
- 10ms network jitter commitment
- There is no right of provider to limit or throttle the capacity of the circuit at any time for any reason

In addition to the required services, the proposal may include but is not to be limited to the following services:

- 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.
- 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.
- 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.
- Resolution: The Customer will be notified immediately once the problem is resolved and will be asked for verbal closure of the incident.
- Trouble reporting, escalation and resolution: A detail trouble reporting, escalation and resolution plan will be provided to the library.
- Measurement: Vendor stated commitment is to respond to any outage within two (2) hours and a four (4) hour restoration of service. Time starts from the time the Customer contacts vendor and identifies the problem. Credits for outages of shortage will be identified.
- Reports: Upon request, an incident report will be made available to the Customer within five (5) working days of resolution of the trouble.
- Link performance per segment: The service will maintain the proposed link performance throughout the term of the contract.
- Historical uptime: Provide aggregate uptime statistics for your proposed service in the geographic area encompassing Tonopah Public Library .

Timeline

For each response, respondents must include a timeline for all bringing all sites online and an explanation of how much they are able to adhere to Tonopah Public Library ' specified timeline. Respondents with existing infrastructure in the area should be able to bring all sites online by the July 1 start of the funding year.

Demarcation

All solutions must terminate service or infrastructure in the demarcation point at the addresses specified in this RFP. Solutions bringing service to the property line but not to the demarcation point are not acceptable. Respondent must specify specific demarcation setup included in base fees, e.g. wall mounted CPE and CAT6a handoff.

Network Diagram

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

References

For each response, respondent must provide 3 references from current or recent customers (preferably K-12) with projects equivalent to the size of Tonopah Public Library .

Special Construction Information for Form 471 and PIA Review

All E-rate applications including special construction are subject to detailed questioning during PIA review where the cost of proposed special construction will be reviewed based on the cost of historical fiber builds in the region. Additionally, certain information on necessary special construction is needed to accurately fill out the Form 471. Respondents are **required** to fill out the table in Appendix B. Additionally, respondents are encouraged (but not required) to submit the additional information described in Appendix B that will likely be requested during PIA review. If respondents do not submit this additional information with their bid, and their solution is chosen, they must be prepared to promptly provide that information and any additional information not described in this RFP when requested. Please note that vendors may assist applicants with preparing funding requests or responding to PIA questions and may speak directly with PIA reviewers.

Required Notice to Proceed and Funding Availability

Tonopah will follow procedures of the FCC's E-rate program as administered by the Universal Service Administrative Company to be eligible for all available funding. The implementation of any associated contracts resulting from this competitive bid process will be dependent on the library's issuance of a written Notice to Proceed. E-rate funding notification alone will not signify Notice to Proceed. The library will have the right to allow the contract to expire without implementation if appropriate funding does not come available.

Additionally, any projects requiring **special construction** are also contingent on issuance of funds from the State of Nevada. The library will have the right to allow the contract to expire without implementation if this specific funding does not come available.

E-rate Modernization Order Note

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.

RFP Scoring Rubric

% Weight	Criteria
30%	E-rate eligible recurring and one-time circuit costs
20%	Ability to support requirements as laid out in the RFP
10%	Proposed contract terms and conditions
10%	Service Reliability
10%	E-rate ineligible recurring or one-time costs
10%	Demonstrated scalability of technology through pricing for higher tiered bandwidths
10%	Provider references

Appendix A: MRC/NRC Cost Tables-Leased Lit Fiber

Location	Bandwidth	Eligible Monthly Recurring Cost		Ineligible monthly recurring cost	Eligible install/non-recurring cost	Ineligible install/non-recurring cost
		3-year contract (2 optional 1-year renewals)	5-year contract (2 optional 1-year renewals)			
Tonopah Library District 167 Central St, Tonopah, NV 89049 Latitude/Longitude 38.067224, -117.231723	100 Mbps					
Tonopah Library District 167 Central St, Tonopah, NV 89049 Latitude/Longitude 38.067224, -117.231723	500 Mbps					
Tonopah Library District 167 Central St, Tonopah, NV 89049 Latitude/Longitude 38.067224, -117.231723	1G					

Appendix B: Special Construction Pricing for leased lit fiber

Required with all bid submissions that include special construction

Location	Strand Count	Segment Mileage	Total Segment Cost	Eligible Cost	Ineligible Cost

Total project mileage and costs					

Information that can be included now, but will be requested at a later date for chosen solution:

- Special construction cost breakout worksheet
- Route map of all build segments in kmz format
- Explanation of alternative routes that were explored and why the chosen route is the most cost-effective
- Explanation of special materials and procedures required that may have increased construction costs, such as:
 - Historical preservation or environmental issues
 - Bridge, waterway, railway, or highway crossings
 - Galvanized conduit
 - Directional boring through hard rock or under a paved surface
 - An excessive number of handholes, marker posts, or other OSP materials
 - Expensive pole attachment fees or make ready costs

Appendix C: Cost allocation example for Service Providers desiring to place strands beyond the applicant need into the leased lit fiber service.

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 Handhole (40,000 lb rated) \$2695 per unit Fiber Marker \$30 per unit	1.5" conduit required \$2.35 per foot Handhole (40,000 lb rated) \$2695 per unit Fiber marker \$30 per unit	40 cents per foot No cost difference for handhole 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