

## SCOPE OF SERVICES

**Proposals must be received in the District Office, 150 E Main St., PO Box 300, Wendell, ID 83355 by 2:00 pm Wednesday, January 15, 2020. Proposals may be submitted in person, via US Mail or by email to [cicase@wendellschools.org](mailto:cicase@wendellschools.org). Bids will be opened Wednesday, January 15, 2020 at 2:15.**

### **Section 1: Introduction**

Wendell School District 232, hereafter referred to as Applicant, is requesting proposals for leased lit fiber and leased dark fiber services for delivery of wide area network (WAN) services to the district. Leased dark fiber requests includes options for a traditional lease and a long-term indefeasible right to use (IRU). Service is expected to originate at the district hub site and be delivered to the eligible service locations. All locations, with addresses and demarcation points, are listed in the attached pricing sheet. The new service is being planned to begin on July 1, 2020 which represents the expiration of the current leased WAN service.

### **Section 2: Service Requests**

1. Applicant is seeking bids for 3 services. Respondents may bid one, all, or any combination of options. See Section 3 for requirements of each solution.
  - a. The first service is a fully managed, leased lit fiber solution.
  - b. The second service is a leased dark fiber solution with multiple contract options:
    - i. A traditional, year to year lease that is billed monthly and includes fiber maintenance as part of this monthly recurring cost.
    - ii. A long-term IRU agreement with one-time IRU fees paid up-front and fiber maintenance as a separate service. **The IRU agreement between Applicant and the fiber lessor will include terms outlining survivability of the IRU in case the lessor is acquired, insolvent, or experiences any change in ownership.**
  - c. The third service is for Category 1 network equipment to place any leased dark fiber solutions into service.
2. Network Design and Construction Routes
  - a. Applicant will consider traditional network designs (such as hub and spoke) or alternative proposals. The applicant's stated decision criteria (outlined in the RFP) will be used to determine if an award is made as-a-result of this RFP. The applicant has, in accordance with E-rate guidelines, rated cost of service as the highest weighted factor in its decision criteria.
  - b. Due to current and future bandwidth needs, respondents are encouraged to provide dedicated infrastructure to Applicant. Designs are encouraged to utilize the private fiber approach, where there exists no other aggregation or third-party equipment on fiber strands between sites and modulating equipment at each site is dedicated to Applicant and not shared in any way with other customers. If this is not possible, then designs should limit the use of shared infrastructure as much as possible.
  - c. Respondents should clearly illustrate proposed network design and construction routes.
  - d. 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.
    - 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.
  - ii. For leased dark fiber solutions, equipment required by the Applicant to light the fiber are not considered special construction.
- 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 2020 to Funding Year 2023 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

#### 1. Leased Lit Fiber

- a. Applicant must have dedicated, symmetrical transport bandwidth of 1Gbps between the designated endpoints.
- b. The solution must be scalable to 10Gbps with pricing intervals at 2, 5, and 10Gbps.
- c. Contract options are requested for 12 month, 36 month and 60 month terms of service.
- d. 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.
- e. If an increase in bandwidth is requested during the contract period the contract does not renew.

- f. 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. 10ms round trip network latency commitment
  - iv. 4ms 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.
- 2. Leased Dark Fiber
  - a. Applicant must have four (4) strands (2 pair) of singlemode fiber from the hub to each eligible entity location.
  - b. Respondents are free to bid one or both contract options. It is not required to bid both.
  - c. Traditional leases
    - i. Contract options are requested for 36 month, 60 month, and 120 month terms of service.
    - ii. Each respondent is required to complete the attached pricing sheet with this RFP.
      - 1. Special construction and monthly recurring cost are **required** to be broken out and listed separately.
      - 2. Respondents are free to propose alternate pricing terms provided they have also included pricing in the requested format.
      - 3. No increased pricing will be allowed during the term of the quoted special construction and MRC rate in each pricing cell of the matrix.
      - 4. Traditional leases require fiber maintenance as part of the MRC.
  - d. IRU
    - i. A 20 year agreement is requested.
    - ii. Each respondent is required to complete the attached pricing sheet with this RFP.
      - 1. Special construction, IRU fee, and monthly recurring cost for maintenance are **required** to be broken out and listed separately.
      - 2. Respondents are free to propose alternate pricing terms provided they have also included pricing in the requested format.
      - 3. No increased pricing will be allowed during the term of the quoted special construction, IRU fee, and MRC rate in each pricing cell of the matrix.
      - 4. If special construction is required, Applicant expects significant reductions from prevailing market rates for the IRU fee and annual maintenance charges on all newly built segments.
      - 5. Fiber maintenance should be quoted as a separate from the IRU fee.
        - a. The fiber owner (not the district) must claim responsibility for repairs in the event of a catastrophic cut or relocate.
        - b. Describe the process for relocates including assumption of costs.
        - c. If maintenance cannot be quoted for entire time span of the IRU, please include alternate time span quote as well as explanation for the shorter time span.

- e. The provider will make all reasonable efforts to ensure 99.99% network availability of all leased fiber strands.
- f. All leased dark fiber solutions are subject to the following terms and the terms found in Section 4:
  - i. Respondent shall maintain the applicable fiber seven days per week, twenty-four hours per day.
  - ii. In the case that maintenance is subcontracted out to a 3<sup>rd</sup> party, the respondent must hold and manage the subcontract and is ultimately responsible for the SLA.
  - iii. It is assumed that the dark fiber network is part of a more comprehensive fiber infrastructure of the service provider. The respondent will include only the portion of maintenance that is required to support the Applicant fiber segments versus overall network maintenance.
  - iv. Vendor stated commitment is to respond to any outage within two (2) hours and thereafter proceed to correct the malfunction with reasonable diligence.
  - v. The respondent should include an overview of maintenance practices including:
    - 1. Routine maintenance and inspection
    - 2. Scheduled maintenance windows and scheduling practices for planned outages
    - 3. Marker and handhole inspection and repair
    - 4. Handling of unscheduled outages and customer problem reports
    - 5. What service level agreement is included and what alternative service levels may be available at additional cost
    - 6. What agreements are in place with applicable utilities and utility contractors for emergency restoration
    - 7. Repair of fiber breaks and mean time to repair
    - 8. Replacement of damaged fiber and fiber that no longer meets specifications
    - 9. Post repair testing
    - 10. Policies for customer notification regarding maintenance
    - 11. Process for changing procedures, including customer notification practices
    - 12. Process for moves, adds, and changes
    - 13. Process for responding to locate requests

### 3. Category 1 Network Equipment

- a. Applicant requires network equipment with installation and configuration to place circuits into service at 10Gbps once leased dark fiber is available.
- b. Network equipment should be HP or equivalent and must include all necessary licenses and/or software.
  - i. Any proposals for equivalent equipment must include an explanation outlining how the proposed equipment offers the same functionality as the example make and model.
- c. Proposals should include an explanation of whether or not the proposed equipment supports higher bandwidths for future scalability and the ease of upgrading (e.g. a new SFP versus a new line card)
- d. Each respondent is required to complete the attached pricing sheet with this RFP. If any part of the equipment cost is ineligible for Category 1 funding, this must be identified. Respondents must clarify equipment eligibility with USAC before submitting proposals.
- e. Network equipment may be bid as a stand-alone service by anyone, even if they

are not bidding on any fiber service.

#### **Section 4: Service Level Agreement**

1. 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.
2. 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.
3. 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.
4. Resolution: The Customer will be notified immediately once the problem is resolved and will be asked for verbal closure of the incident.
5. Trouble reporting, escalation and resolution: A detailed trouble reporting, escalation and resolution plan will be provided to the district.
6. Measurement: Time starts from the time the Customer contacts vendor and identifies the problem. Credits for outages of a certain duration or longer will be identified.
7. Reports: Upon request, an incident report will be made available to the Customer within five (5) working days of resolution of the trouble.
8. Link performance per segment: The service will maintain the proposed link performance throughout the term of the contract.
9. Historical uptime: Provide aggregate uptime statistics for your proposed service in the geographic area encompassing Applicant.

#### **Section 5: General Terms for All Proposals**

1. **Failure to include any requested information noted as required by the respondent is grounds for disqualification.**
2. Description of Proposal
  - a. Respondent's proposal should include all sites for the option bid. If the respondent bids leased dark fiber or leased lit fiber – all sites must be included in the bid. Failure to include all sites in a bid option could be considered ground for disqualification.
  - b. Respondent will provide a description of their proposal for all services and solutions.
  - c. 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).
3. Timeline
  - a. For each response, respondents must include a timeline for bringing all sites online.
  - b. Proposals requiring little to no special construction should be able to bring all sites online by the July 1 start of the funding year.
  - c. For solutions requiring special construction, a schedule of bringing sites online must be included with an explanation of how this timeline shifts if the date of the E-rate funding commitment shifts.
4. Demarcation
  - a. All solutions must terminate service or infrastructure in the demarcation point at

- each address specified in the pricing sheet.
  - b. Solutions bringing service to the property line but not to the demarcation point are not acceptable.
  - c. Respondent must specify specific demarcation setup included in base fees, e.g. wall mounted CPE and CAT6a handoff, rack mount patch panel, etc.
- 5. Network Diagram
  - a. For each response, respondents must include a network diagram displaying the paths to be used to serve each endpoint.
  - b. Diagrams must show if circuits are routed through any aggregation hubs, equipment, or third-party facilities between hub site and each endpoint.
- 6. References
  - a. For each response, respondent must provide 3 references from current or recent customers (preferably K-12) with projects equivalent to the size of Applicant.
  - b. If respondent responds to more than one option (e.g. leased lit fiber service as well as leased dark fiber), provide 3 references for each.
- 7. E-rate Program Integrity Assurance (PIA) Review
  - a. If their solution is chosen, respondents are required to promptly provide Applicant with any information being requested as part of PIA review.
  - b. Vendors may assist applicants with preparing funding requests or responding to PIA questions and may speak directly with PIA reviewers.
  - c. For all responses that include special construction, the respondent agrees to, by submitting its bid, produce all construction labor, construction materials and other cost information requested during PIA review.
  - d. **All responses must agree, in writing, to this section with a yes or no answer. Answering no or failure to answer at all is grounds for disqualification.**
- 8. Required Notice to Proceed and Funding Availability
  - a. Applicant will follow the purchasing policies of the Applicant Board 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.
  - b. 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.
  - c. 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 and Leased Dark Fiber

<b>% Weight</b>	<b>Criteria</b>
30%	<b>E-rate eligible recurring and one-time circuit costs<sup>1</sup></b>
10%	Complete bid submission <sup>2</sup>
10%	Ability to support requirements of this RFP <sup>3</sup>
5%	Proposed contract terms and conditions <sup>4</sup>
10%	Service reliability and dedicated infrastructure <sup>5</sup>
5%	E-rate ineligible recurring or one-time costs <sup>6</sup>
10%	Provider references <sup>7</sup>
20%	Support availability <sup>9</sup>

### 2. Category 1 Network Equipment

<b>% Weight</b>	<b>Criteria</b>
50%	<b>E-rate eligible costs<sup>1</sup></b>
10%	E-rate ineligible costs <sup>6</sup>
40%	Compatibility with existing network infrastructure <sup>8</sup>

### 3. 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. Service reliability and dedicated infrastructure: Solution provides dedicated infrastructure for Applicant's service with no shared equipment or routing of traffic through aggregation hubs.
6. 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.
7. Provider references: response included K12 references that were similar in size and scope
8. Compatibility with existing network infrastructure: proposed equipment is easily compatible with the existing equipment used by the Applicant.
9. Support availability: support and maintenance available within a short period of time for on-site needs

**E-rate Special Construction  
Excess Strands - Cost Allocation Scenarios  
Funding Year 2018**

Prepared by the [State E-rate Coordinators' Alliance](#)  
October 23, 2017

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**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 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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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:**

<b>Item</b>	<b>12 Strand cable construction</b>	<b>48 strand cable construction</b>	<b>Cost Allocation Amount that service provider should remove from the special construction request</b>
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