

**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 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:

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

II. SELF-PROVISIONED (APPLICANT-OWNED) FIBER:

There are different cost allocation rules that apply, depending on whether fiber is only being purchased and used by:

- A) A single, eligible entity (school or library)
- B) A consortium of all eligible entities
- C) A consortium of eligible and ineligible "NON-public sector, municipal entities"
- D) A consortium of eligible and ineligible "public sector, municipal entities"

A) Single, Eligible School or Library

1. If the applicant installs the exact number of fiber strands that they will light in the first year, and no extra fibers are installed, all fiber strands and special construction charges are eligible and no cost allocation is required.
2. If the applicant installs more fiber strands than it will light in the first year, E-rate will pay for the number of strands being lit in the first year, but not the additional strands. No cost allocation is required for the special construction charges. E-rate applicants can only receive E-rate funding for self-provisioned fibers that are lit within the funding year. If they request excess strands that will remain dormant until the applicant lights the excess strands for their exclusive future use, then they would need to cost allocate the cost of the unlit strands in the applicable funding year.

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 for excess strands by the applicant is required.

Example 2 from the Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- **Example 2:** School district seeks to install 48 strands of fiber in a self-provisioned network, only plans to light 12 strands within the FY. The remaining 36 strands will be reserved for the applicant's exclusive future use.

Result: Applicant must allocate the cost of the excess fiber strands out of the funding request, but no portion of the remaining special construction costs.

Item	12 Strand Cable	48 Strand Cable	Cost Allocation Amount that applicant should remove from the one-time special construction reimbursement request
Fiber Cable	\$.38 per foot	\$1.04 per foot	\$.66 per foot

B) Consortium Comprised of All E-rate Eligible Entities

As with Example 2, all fiber (lit and unlit in the first year) must be dedicated to only eligible entities only and the cost of strands not lit in the first year must be cost allocated.

C) Consortium of Eligible and Ineligible Entities (NON-public sector, municipal)

If the eligible entity purchases and installs fiber for the usage of the eligible entities and the ineligible (non-public sector) entities, the funding request will be denied. E-rate funded self-provisioned fiber is exclusive owned by the E-rate applicant consortium and is for the exclusive use of the E-rate eligible applicant.

In this case, Example 3 from the Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- Example 3:** School district seeks to install 48 strands of fiber in a self-provisioned network that will be used by the school district, the State Department of Social Services, and a non-profit organization.

Result: Funding request denied. Self-provisioned networks must be owned by eligible schools and libraries, which may not resell E-rate-supported services and products.

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D) Consortium of Eligible Entities and Ineligible “Public Sector, Municipal Entities”

For a self-provisioning consortium that includes a public-sector partner, the special construction cost-allocation rules are the same as the Leased Lit Fiber services with special construction or Leased Dark Fiber services with special construction. The cost of the ineligible fibers must be deducted from the funding request, but only the incremental costs related to labor, materials, engineering, project management, and design must be cost allocated.

For the purposes of E-rate, “public sector partner” is defined as health care providers and public sector (governmental) entities, including, but not limited to state colleges and universities, state educational broadcasters, counties and municipalities.

For this type of consortium, Example 4 from the Funding Year 2018 USAC Fiber Training Slides applies:

COST-ALLOCATION: FIBER EXAMPLES

- **Example 4:** The applicant is an E-rate consortium comprised of schools and municipal entities. It seeks to self-provision a network that will be owned entirely by the schools, but will also be used by the municipal entities.

Result: The cost of all fiber strands used by the municipal entities must be allocated out of the funding request, as well as any additional special construction costs incurred because of the installation of those fiber strands (e.g., any increased labor charges, increased plant costs, 100% of the costs of any laterals built to the municipal entities).

Note: The eligible applicant should be prepared to show evidence during PIA review that it has deducted all incremental costs associated with design, engineering, project management, construction, procurement of fiber and procurement of structured materials of the larger strand cable when compared to the costs associated with design, engineering, project management, construction, procurement of fiber and procurement of structured materials of the fiber strand cable only used by the eligible applicant.