



Connect Illinois Round 4
Broadband Equity, Access, and Deployment (BEAD) Program – Benefit of the Bargain Round

Guidance for Low-Earth Orbit (LEO) Satellite Applicants
Project Cost Template & Budget Narrative

Background

The Illinois Office of Broadband (IOB) requires all BEAD applicants to complete the Project Cost Template. The template assists with several objectives, including: a) allows the IOB to evaluate the budget for comprehensiveness and cost effectiveness; b) establishes the particular cost items funded by the grant versus the match; c) fosters transparency and stewardship of how public funds are being spent.

The LEO applicant must still complete the Project Cost Template for the application to be considered complete for review.

This template requires the quantity and cost for all inputs across major categories, including: Design/Engineering, Permitting, Infrastructure Acquisition, Construction - Network Deployment, Network Equipment, Subscriber Activations, Miscellaneous, and Contingencies.

Unique Aspects of a Capital Budget for LEO Projects

The IOB also recognizes that a LEO constellation involves a global network of satellites, earth stations, and backhaul links. These components may not be specific to a state's targeted broadband serviceable locations (BSLs). Moreover, any prior and/or future funding of the constellation aims to achieve global scale. The requested public funding aims to reserve capacity dedicated to specific BEAD-eligible locations that benefit from having a guaranteed performance level of service.

In addition, there are location-specific items such as the customer premise equipment and installation, the costs of which are incurred at the time the customer subscribes to service.

Part 1: Project Cost Template

With consideration to the above, below are suggestions for capturing key Cost Items and itemizing them on the standard **Project Cost Template**:

- Network Capacity: The unit cost should reflect the cost of the reserved bandwidth for the targeted BEAD-eligible locations (e.g., Mbps/user). The quantity should reflect the forecasted "participation" or "take" rate, or percentage of targeted BEAD-eligible locations for which the resident or business subscribes to the LEO-offered broadband.
 - *Suggested Category*: Infrastructure Acquisition
- User Terminals (Hardware): The unit cost should reflect the cost of the user terminal (UT). The quantity should reflect the number of BEAD-eligible locations that subscribe to the satellite-based service. As you itemize costs, please include details about the UT – e.g., model number, vendor, type (flat panel), etc. Please explain how many UT models will be available for this program.
 - *Suggested Category*: Network Deployment or Subscriber Activations
- Installation: The unit cost should reflect the expense of a single installation. The quantity should reflect the "participation" or "take" rate of targeted BEAD-eligible locations.
 - *Suggested Category*: Network Deployment or Subscriber Activations



- Other: Any other cost items should reflect costs either specific to the Illinois BEAD Program, or allocated to the Illinois BEAD program based on a reasonable approach. Please incorporate these costs in other Categories in the dropdown of the Project Cost Template.

In the Project Cost Template, please also complete the Capital Investment Schedule for the extended performance period as noted in the BEAD Restructuring Policy Notice. There is a **separate tab** with fields for the extended period.

Part 2: Budget Narrative

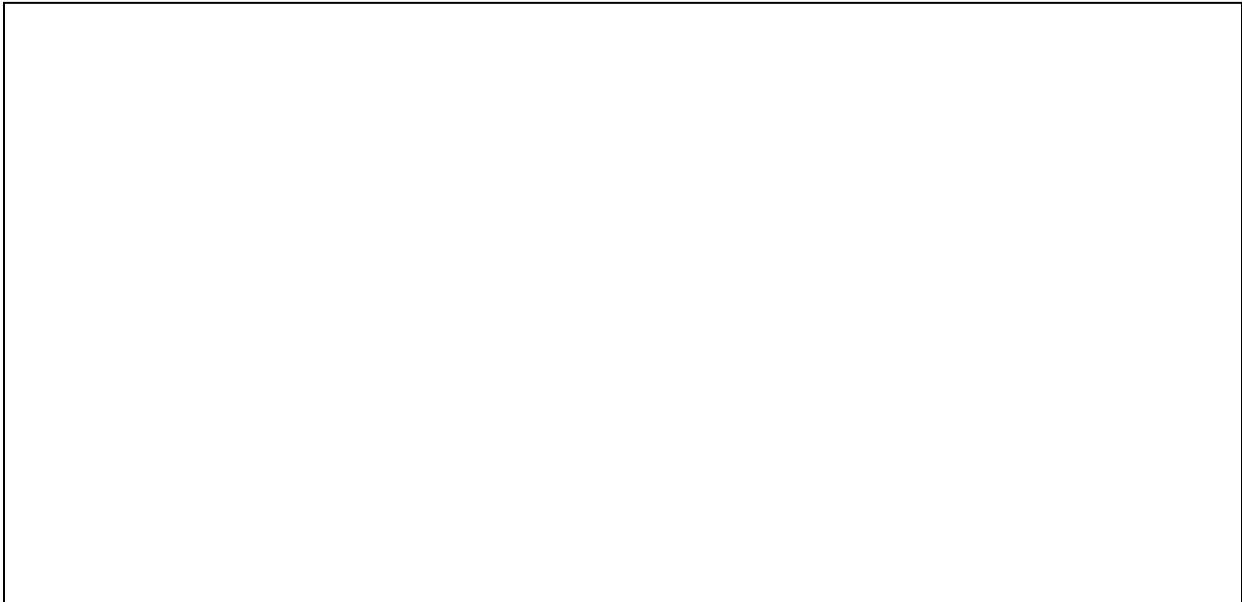
Along with completing and submitting the standard Project Cost Template, the LEO applicant must upload a document with responses to the following **budget narrative questions**, broken out using the following five sections and labeled as such.

- **1) System Capacity Reservation:** Please provide a detailed narrative to describe the cost factors for reserving capacity for the targeted broadband serviceable locations. The response should include a comprehensive response to the following questions:
 - a. What is the wholesale cost for dedicated bandwidth – e.g., \$X/Mbps per user(s)?
 - b. What factors determine this cost?
 - c. Is this wholesale cost uniform across different states' BEAD programs? If not, what are the factors that contribute to the variance?
 - d. What oversubscription ratio is applied in developing the wholesale cost, and how does this ratio still enable a guaranteed level of performance?
 - *Oversubscription Ratio: This is defined as the total bandwidth sold relative to the total bandwidth available for the targeted unserved and underserved locations*
 - e. Does the capacity reservation assume that customers for the targeted BEAD-eligible locations uniformly subscribe to a single speed tier, or a weighted average of multiple tiers?
 - f. Will an eligible customer be allowed to subscribe to a speed tier greater than the highest download and upload speed listed in the application? If so, how will the allocated grant amount for that specific BEAD-eligible location be considered to lower the customer's cost?
 - g. Is the proposed wholesale cost for the capacity reservation contingent upon a volume of BEAD users?



- **2) Customer Premise Equipment (CPE):** Please provide a detailed narrative to describe the costs for the user terminal and its setup. The response should include a comprehensive response to the following questions:
 - a. What is the per-unit cost for a single user terminal (UT)?
 - b. What are the per-unit costs for any other accessories, including:
 - Wiring for a single installation
 - Wi-Fi router for a single installation
 - Other CPE components
 - c. Are the costs for user terminals, wiring, Wi-Fi routers, and any other CPE equipment uniform across different states' BEAD programs? If not, what factors contribute to the variance?
 - d. How does the cost vary if customers for the BEAD-eligible locations order a higher-end UT model during the performance period?
 - e. Is the proposed cost for the UT equipment contingent upon the number of BEAD users? If yes, please explain that contingency and the resulting cost if fewer users subscribe.

- **3) Installation:** Please provide a detailed narrative to describe the costs for customer installation. The response should include a comprehensive response to the following questions:
 - a. What is the cost of installing the user terminal?
 - b. What factors determine this cost? (e.g., labor cost per hour, number of hours)
 - Does the cost vary based on type of installation placement? (e.g., rooftop versus ground-based)



- **4) New Network Elements to Support Capacity Reservation for Illinois:** Please explain if the budget involves deploying any new network elements to specifically support Illinois's targeted BEAD-eligible locations, including:
 - a. What additional network elements – including satellites, earth stations, or incremental backhaul capacity – are required before the close-out period, or during the performance period, to support the bandwidth needs of BEAD-funded locations in Illinois?



- **5) Other Categories:** If the LEO applicant is requesting funding for other cost categories in the Project Cost Template, please share further details and rationale.
 - a. Design/Engineering
 - b. Permitting
 - c. Infrastructure Acquisition
 - d. Construction - Network Deployment
 - e. Network Equipment
 - f. Subscriber Activations
 - g. Miscellaneous
 - h. Contingencies