

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Broadband Equity, Access, and Deployment (BEAD) Program: Selecting the Most Robust, Affordable, Scalable Technology

ACTION: Notice

SUMMARY:

The Infrastructure Investment and Jobs Act (Infrastructure Act), enacted in November 2021, includes funding for robust investment in American infrastructure projects. The Infrastructure Act includes the Broadband Equity, Access, and Deployment (BEAD) Program, which provides \$42.45 billion of funding to achieve reliable, affordable, and high-speed Internet coverage throughout the United States. *See* Infrastructure Investment and Jobs Act of 2021, Division F, Title I, Section 60102, Public Law 117-58, 135 Stat. 429 (Nov. 15, 2021). The U.S. Department of Commerce, in keeping with its mission to create the conditions for economic growth and opportunity for all communities, is ready to lead the building of equitable access to universal high-speed Internet coverage in the United States, in partnership with other agencies and Departments.

The National Telecommunications and Information Administration (NTIA), as the agency responsible for administering the BEAD Program, issues herein additional guidance to inform the subgrantee selection process. This Policy Notice elaborates on, but does not replace, the BEAD Eligible Entity (States, Territories, and the District of Columbia) requirements outlined in the BEAD Notice of Funding Opportunity (NOFO)¹ that each Eligible Entity must adhere to for the Assistant Secretary of Commerce for Communications and Information to approve its Initial Proposal and Final Proposal.²

Any Eligible Entity that received NTIA approval of Volume II of its BEAD Initial Proposal prior to the publication of this updated guidance and that wishes to modify its Volume II to reflect this updated guidance should contact its Federal Program Officer for direction.

Version Number: 1.0

Last Modified: June 26, 2024

¹ NTIA, Notice of Funding Opportunity, Broadband Equity, Access, and Deployment Program (2022). Capitalized terms not defined herein will be ascribed the definitions in the NOFO.

² This guidance document is intended to help BEAD Eligible Entities better understand the BEAD Program requirements set forth in the Infrastructure Act and the BEAD NOFO. This document does not and is not intended to supersede, modify, or otherwise alter applicable statutory or regulatory requirements, the terms and conditions of the award, or the specific requirements set forth in the BEAD NOFO. In all cases, statutory and regulatory mandates, the terms and conditions of the award, and the requirements set forth in the BEAD NOFO shall prevail over any inconsistencies contained in this document.

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1. Policy Notice Background & Purpose

The principal focus of the BEAD Program is to deploy broadband service to all unserved and underserved locations. To achieve this goal, the BEAD NOFO establishes a clear hierarchy for awarding Unserved and Underserved Service Projects:³ (1) Priority Broadband Projects (end-to-end fiber); (2) other Reliable Broadband Service projects; and then (3) Alternative Technology projects (where the cost to deploy Reliable Broadband Service is greater than the Extremely High Cost Per Location Threshold (EHCPLT)).⁴ Where the costs to deploy is greater than the EHCPLT, the BEAD NOFO directs Eligible Entities “to seek out the most robust, affordable, and scalable technologies achievable under the circumstances particular to that location.”⁵

The purpose of this Policy Notice is to provide Eligible Entities and prospective subgrantees with guidance on strategies to obtain bids for Priority Broadband Projects and Reliable Broadband Service projects that fall under the EHCPLT, and ways to seek out the most robust, affordable, and scalable solution for each location where the costs to deploy exceed the EHCPLT, all while ensuring coverage of all unserved and (where financially feasible) underserved locations.

2. Definitions

The following defined terms in the NOFO are particularly applicable to this Policy Notice:

- (a) Priority Broadband Project— “The term ‘Priority Broadband Project’ means a project that will provision service via end-to-end fiber-optic facilities to each end-user premises.”⁶
- (b) Reliable Broadband Service— “The term ‘Reliable Broadband Service’ means broadband service that the Broadband DATA Maps show is accessible to a location via: (i) fiber-optic technology; (ii) Cable Modem/ Hybrid fiber-coaxial (HFC) technology; (iii) digital subscriber line (DSL) technology; or (iv) terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum.”⁷

NTIA further defines the following term for the purposes of this Policy Notice:

- (a) Alternative Technologies— The term “Alternative Technologies” means any technology that does not qualify as Reliable Broadband Service, including Unlicensed Fixed Wireless (ULFW) and low-Earth orbit (LEO), that meets the BEAD Program’s minimum technical requirements of speeds of not less than 100 Mbps for downloads and 20 Mbps for uploads and latency less than or equal to 100 milliseconds.⁸

³ See BEAD NOFO at 36-39 and 41.

⁴ *Id.*

⁵ See *id.* at 39.

⁶ See BEAD NOFO at 14.

⁷ See *id.* at 15. These correspond to the FCC broadband technology codes 10, 40, 50, 71 and 72, respectively.

⁸ NTIA recognizes that the same broadband technology can yield very different performance consistency and reliability depending on the operational practices of network operators but follow the BEAD NOFO in grouping technologies. Below, NTIA provides guidance meant to maximize the performance, consistency, scalability, and reliability of these Alternative Technologies so that they can approximate the characteristics of well-run Reliable Broadband Service technologies as closely as possible.

3. Selecting the Most Robust, Affordable, and Scalable Technology

As Eligible Entities conduct their subgrantee selection processes, they must seek the highest-priority technology feasible at each location. In making a determination about whether to approve a Final Proposal, the Assistant Secretary will evaluate whether the Eligible Entity has chosen subgrantees consistent with these principles in the overall evaluation of whether the Final Proposal (1) complies with Section 60102(f) of the Infrastructure Act; (2) is in the public interest; and (3) effectuates the purposes of the Infrastructure Act.⁹

To this end, Eligible Entities should incorporate the following practices into their subgrantee selection process and utilize these strategies for areas that do not receive proposals. While not every strategy below may be possible in each circumstance, Eligible Entities are strongly encouraged to incorporate as many as necessary to be prepared to demonstrate compliance with the priorities established in the BEAD NOFO during monitoring and within the Final Proposal. Failure to do so may risk denial of the Eligible Entity's Final Proposal. While Eligible Entities have considerable discretion in conducting the Subgrantee Selection Process, the Assistant Secretary will not approve a Final Proposal that is inconsistent with the BEAD NOFO and Section 60102(f) of the Infrastructure Act.

Eligible Entities must adhere to the process included in their approved Initial Proposal. To the extent that the Eligible Entity needs to make corrections to its process to conform to this guidance, adjust based on unanticipated circumstances, or to achieve universal coverage, the Eligible Entity should contact their Federal Program Officer and must receive approval from NTIA.

3.1 Strategies in Designing Subgrantee Selection

A. Broaden the Pool of Applicants

The BEAD NOFO recognizes that competition among Internet Service Providers (ISPs) of all types in subgrantee selection processes will likely yield Eligible Entities more affordable, high-quality options for broadband service from which to choose.¹⁰ To this end, Eligible Entities should actively encourage all ISPs, regardless of technology, to participate as early as possible in the subgrantee selection process. The broad participation that results from such encouragement will create competitive pressures that maximize the impact of BEAD Program funds. For instance, applicants submitting Priority Broadband Project proposals will have an interest in developing cost-efficient budgets to ensure their proposals remain below the Extremely High Cost Per Location Threshold (EHCPLT) (and thus maintain their priority status) and are competitive with other Priority Broadband Project proposals. Likewise, applicants submitting Reliable Broadband Service proposals will also face competitive pressures to remain below the EHCPLT and from other Reliable Broadband Service proposals. In project areas that exceed the EHCPLT, applicants proposing Reliable Broadband Service proposals will face competitive

⁹ See *id.* at 49.

¹⁰ BEAD NOFO at 50.

pressure from Alternative Technology proposals, as well as from Priority Broadband Project and Reliable Broadband Service proposals that exceed the EHCPLT, both of which Eligible Entities are permitted to select, and which may be a particularly attractive option in scenarios in which the cost of an Alternative Technology proposal is similar to the Reliable Broadband Service proposal. Finally, applicants submitting Alternative Technology proposals will face competitive pressures from other Alternative Technology proposals, and Priority Broadband Projects or Reliable Broadband Service Projects that exceed the EHCPLT, for the reasons previously discussed.

B. Structure Funding as Fixed Amount Subgrants

To encourage broad participation among ISPs, Eligible Entities should consider issuing fixed amount subgrants where permitted. NTIA issued guidance in December 2023 providing Eligible Entities flexibility to issue fixed amount subgrants where the major purpose of the subgrant is a broadband infrastructure project.¹¹ Among other advantages, the use of fixed amount subgrants may reduce administrative costs for participating ISPs. The ability to structure BEAD subgrants as fixed-amount subgrants may thus be a key tool for Eligible Entities in fostering greater ISP participation in their programs. Eligible Entities interested in issuing fixed amount subgrants should carefully review NTIA's Policy Notice: Tailoring the Application of the Uniform Guidance to the BEAD Program.¹²

C. Aggregate Locations into Optimal Project Areas

The BEAD NOFO permits Eligible Entities wide discretion in defining project areas.¹³ Among other options, Eligible Entities can solicit proposals from prospective subgrantees at an existing, defined geographic level (e.g., per census block basis, per-town, per-county) or solicit proposals for project areas that the Eligible Entity defines.¹⁴ NTIA encourages Eligible Entities to explore ways to bundle or aggregate harder-to-serve locations into project areas with more economically desirable locations. This can increase the overall percentage of locations that will receive coverage from Priority Broadband Projects and Reliable Broadband Service. States should also consider how aggregation of the highest cost locations may affect project economics in designing optimized projected areas.

D. Consider High-Cost Designations When Establishing Project Areas

In the Bipartisan Infrastructure Law, Congress provided an exception to the BEAD Program's 25% match requirement for subgrants supporting the deployment of broadband networks in high-

¹¹ See NTIA, Policy Notice: Tailoring the Application of the Uniform Guidance to the BEAD Program (December 26, 2023), [Tailoring the Application of the Uniform Guidance to the BEAD Program \(ntia.gov\)](https://www.ntia.gov/publications/policy-notice-tailoring-the-application-of-the-uniform-guidance-to-the-bead-program). Under federal grants regulations, fixed amount awards generally cannot be used in programs that require mandatory cost sharing or match, nor may pass-through entities (such as Eligible Entities in the case of BEAD) issue fixed amount subgrants in excess of the Simplified Acquisition Threshold, which is \$250,000. See 2 CFR 200.201(b)(2); 2 CFR 200.333.

¹² Id.

¹³ See BEAD NOFO at 38.

¹⁴ Id.

cost areas.¹⁵ In turn, NTIA has defined high-cost areas as census block groups that meet NTIA’s “high-cost” definition and contain at least 80% unserved locations.¹⁶

As Eligible Entities define project areas, they should consider the relationship between their project areas and the high-cost areas in their jurisdiction. Given the costs of deployment in high-cost areas, Eligible Entities may choose to make high-cost areas separate project areas to allow BEAD to fund 100 percent of the project. It is permissible for project areas to include both high-cost and non-high-cost areas, but the non-high-cost areas in these instances will still carry a 25 percent match requirement, which will affect the calculations made by potential subgrantees considering bids.

E. Utilize the Extremely High Cost Per Location Threshold

The BEAD NOFO requires each Eligible Entity to establish its EHCPLT in a manner that maximizes the use of the best available technology while ensuring that the BEAD Program can meet its primary purpose of serving all unserved and underserved locations.¹⁷ Eligible Entities are required to provide the threshold or a detailed process for identifying the threshold in the Initial Proposal.¹⁸ Eligible Entities should be thoughtful in establishing and using their EHCPLT.

3.2 Strategies When No Proposals Are Received

A. Subdivide Project Areas in Later Rounds

Eligible Entities that require applicants to provide service to all unserved and underserved locations within a designated project area (e.g., census areas) should consider mechanisms for later application rounds. For instance, Eligible Entities could consider subdividing a larger project area or encouraging consortium bids to allow applicants to serve most of the project area with Reliable Broadband Service while using Alternative Technologies for a small fraction of the locations where project areas include difficult to serve areas. In providing this flexibility, Eligible Entities should ensure Reliable Broadband Service coverage to the greatest number of locations.

B. Engage Directly with Providers

Eligible Entities should take advantage of the flexibility provided in the BEAD NOFO to engage directly with prospective providers to address circumstances in which an Eligible Entity receives

¹⁵ See 47 USC § 1702(h)(3)(A)(i).

¹⁶ See NTIA, BEAD Allocation Methodology, <https://www.internetforall.gov/program/broadband-equity-access-and-deployment-bead-program/bead-allocation-methodology#:~:text=Explanation,for%20all%20such%20unserved%20areas>. The BEAD NOFO defines “high-cost areas” as “unserved area[s] in which the cost of building out broadband service is higher, as compared with the average cost of building out broadband service in unserved areas in the United States (as determined by the Assistant Secretary, in consultation with the Commission), incorporating factors that include— (I) the remote location of the area; (II) the lack of population density of the area; (III) the unique topography of the area; (IV) a high rate of poverty in the area; or (V) any other factor identified by the Assistant Secretary, in consultation with the Commission, that contributes to the higher cost of deploying broadband service in the area.

¹⁷ See BEAD NOFO at 31.

¹⁸ See *id.* at 31.

no proposals during the application or bidding process to serve a location or group of locations.¹⁹ In these circumstances, the BEAD NOFO requires Eligible Entities to work to ensure that its approach is as transparent as possible.²⁰ Transparent approaches include contacting all traditional and non-traditional service providers²¹ serving the State or Territory, or, for larger States and Territories, at least all service providers active in the regions of the State or Territory where locations failed to attract proposals. Moreover, it would not be transparent for an Eligible Entity to engage with providers that previously had not had an opportunity to bid for the locations in question. For example, if bids for Alternative Technology services were not allowed in previous rounds of applications, it would not be transparent for the Eligible Entity to directly engage with providers regarding proposals to serve the remaining locations with Alternative Technology. Rather, the Eligible Entity would only be allowed to engage with providers that were eligible to participate in rounds of funding already conducted, and then only for the purposes of discussing the deployment of technologies for which bids were previously solicited. If the Eligible Entity wishes to engage directly with providers of Alternative Technology about the deployment of services supported by Alternative Technology, it must hold a competitive opportunity for Alternative Technology services before engaging with specific providers of Alternative Technologies.²² Additionally, the Eligible Entity should also consider inducements, such as providing state or territory funding toward the match requirement, as part of these engagements.

Eligible Entities are reminded that they “must establish fair, open, and competitive processes for selecting subgrantees.”²³ Also, “[i]n establishing a fair, open, equitable, and competitive selection process, each Eligible Entity must ensure that adequate safeguards are in place to protect the integrity of the competition, including safeguards against collusion, bias, conflicts of interest, arbitrary decisions, and other factors that could undermine confidence in the process.”²⁴ For example, any match waivers, project area modifications, and project area bundling must be made available to all eligible applicants on fair and non-discriminatory terms.

C. Leverage Additional Resources

A successful project in the hardest to serve areas may require match or other financial support from other funding sources besides subgrantees and federal grants, and Eligible Entities are encouraged to engage with other potential sources of funding to accomplish universal coverage. The addition of one-time capital grants from local or tribal funds, corporate social responsibility efforts, or philanthropic entities can be critical tools to bolster the economics of projects. These additional funders may be favorably inclined to contribute to these efforts when their

¹⁹ *See id.* at 38.

²⁰ *Id.*

²¹ For states that conduct a qualification process, Eligible Entities may limit any engagement to qualified providers.

²² This is consistent with Last-Mile Broadband Deployment Project Principle 9, which allows Eligible Entities to engage with existing providers and prospective subgrantees “[i]f, after soliciting proposals, they receive no proposals to serve a location or group of locations that are unserved, underserved, or a combination unserved and underserved.” *See id.* at 38.

²³ *See id.* at 35.

²⁴ *Ibid.*

contribution closes a fiscal gap to make the project possible. Eligible Entities should also utilize state or territorial funding where available.

D. Identify Cause of Lack of Proposals

If the application or bidding processes fail to produce proposals, Eligible Entities should solicit input from potential applicants to determine potential barriers to participation and how to mitigate those barriers. Eligible Entities are encouraged to be proactive and creative in finding ways to bring service to the hardest-to-reach areas consistent with the running of a fair, open, and competitive process.

In some cases, locations receive no offers because providers consider them to be unserviceable due to lack demand for service; for example, the location is misclassified in the Broadband Serviceable Location Fabric, or the nature of the property prevents access (e.g., a military base). In this situation, Eligible Entities should collect evidence of the reason the location does not constitute a broadband-serviceable location (BSL), submit a location challenge with the FCC, and provide the evidence to NTIA in the submission of its Final Proposal.²⁵

Other cases may present barriers such as permitting, right-of-way, or make-ready concerns. Eligible Entities should consider whether there are any actions that can be taken to remove barriers to ensure coverage to all unserved and underserved locations. This could include leveraging strategies identified in the Eligible Entity's Initial Proposal in its plan to address deployment barriers. Outreach to the entities that control rights-of-way and utility poles or other decision-makers regarding barriers to deployment can often remove these barriers.

E. Request a Match Waiver Where Special Circumstance Exists and Where a Waiver Would Serve the Public Interest and Effectuate the Purposes of the BEAD Program

The Bipartisan Infrastructure Law authorizes Eligible Entities to ask the Assistant Secretary to reduce or waive the match requirement.²⁶ Waivers may be granted when special circumstances exist to justify the waiver and the requested waiver will serve the public interest and effectuate the purposes of the BEAD Program.²⁷ Special circumstances may include when an Eligible Entity has attempted to secure proposals to build out to specific locations with the full match requirement but has been unsuccessful, especially when the Eligible Entity has also explored other sources of matching funds, such as state, local, or philanthropic funding. Eligible Entities are strongly encouraged to explore all permissible sources of match funding prior to requesting a waiver.²⁸ Requests for a match waiver must include evidence of the special circumstance(s), such as efforts to secure the required match funding from providers or alternative match funding sources and/or the unfavorable economic conditions of building and operating a network in the project area. For example, the Eligible Entity may provide evidence of unsuccessful funding

²⁵ NTIA will issue further guidance in addressing locations with no demand for broadband service.

²⁶ See BEAD NOFO at 22.

²⁷ *Ibid.* Also see Waiver Guidance (Guidance for BEAD Program Eligible Entities) at 4-5.

²⁸ According to the BEAD NOFO, “[a] matching contribution may be provided by the subgrantee, an Eligible Entity, a unit of local government, a utility company, a cooperative, a nonprofit or philanthropic organization, a for profit company, regional planning or governmental organization, a federal regional commission or authority, or any combination thereof.” See *id.* at 20.

rounds and an economic analysis demonstrating that the overall net present value (NPV) of the project area remains negative even if 75 percent of the capital cost is subsidized.

Eligible Entities may solicit bids or applications that do not meet the match requirement as long as potential subgrantees are made aware that NTIA, at its sole discretion, may choose to deny a full or partial waiver of the match requirement, in which case the bid or application must be revised.

F. Request Technical Assistance from NTIA

Eligible Entities should avail themselves of NTIA's technical assistance, particularly if they are receiving no offers of Reliable Broadband Service. NTIA will work with Eligible Entities in implementing the strategies included in this section and other tactics to accomplish the objectives of the BEAD Program.

3.3 Documentation of Efforts

To ensure that the goals of the BEAD Program are achieved, NTIA will monitor the progress of subgrantee selection throughout the process and request information – during monitoring and as a part of the Final Proposal – that demonstrates compliance with the priorities established in the BEAD NOFO. To prepare for this, Eligible Entities should document the strategies undertaken above and justifications for the determinations made.²⁹ Eligible Entities should also be prepared to explain how the subgrantee selections are consistent with the BEAD NOFO priorities.

Where Eligible Entities intend to award BEAD funds to Alternative Technologies, they must demonstrate that no Reliable Broadband Service was deployable for less than the EHCPLT. In order to make this demonstration, Eligible Entities should leverage multiple strategies, including many of those described herein, to ensure the best technology determination is made. Failure to use multiple strategies may result in a determination that the Eligible Entity has not demonstrated that no Reliable Broadband Service was deployable for less than the EHCPLT and a rejection of the Eligible Entity's Final Proposal.

²⁹ See Section 1 of this Policy Notice.

4. Policy Notice Change Log

This appendix tracks changes to the BEAD Program: Selecting the Most Robust, Affordable, Scalable Technology Policy Notice.

Version Number	Page Number	Date of Change (mm/dd/yyyy)	Location of Change	Description of Change
1				