

**U.S. Department of Commerce
National Telecommunications and Information Administration
Broadband Equity, Access, and Deployment (BEAD) Program:
Alternative Broadband Technology Policy Notice (v 1.0)**

**COMMENTS OF THE FIBER BROADBAND ASSOCIATION ON
PROPOSED BEAD ALTERNATIVE BROADBAND TECHNOLOGY GUIDANCE**

The Fiber Broadband Association¹ (“FBA”) submits these comments in response to the National Telecommunications and Information Administration’s (“NTIA’s”) proposed guidance for the Broadband Equity, Access, and Deployment (“BEAD”) Program “to inform the allocation of BEAD Program funds to projects utilizing an alternative technology that does not meet the BEAD Program’s definition of Reliable Broadband Service, but otherwise satisfies the program’s technical requirements.”² To date, NTIA has prioritized projects for the BEAD Program that will provide fiber-based connectivity after affirming that “only end-to-end fiber builds” would meet the stated objective of the Infrastructure Investment and Jobs Act (“IIJA”) of “ensur[ing] that the network built by the project can easily scale speeds over time to ... meet the evolving connectivity needs of households and businesses” and “support the deployment of 5G, successor wireless technologies, and other advanced services.”³ FBA strongly supports that

¹ The Fiber Broadband Association represents more than 500 service providers, manufacturers, industry experts, and deployment specialists dedicated to the advancement of fiber broadband deployment and the pursuit of a world where communications are limitless, advancing quality of life and digital equity anywhere and everywhere.

² See NTIA, “Proposed BEAD Alternative Broadband Technology Guidance,” (Aug. 26, 2024) (“Proposed Guidance”) available at <https://www.ntia.gov/sites/default/files/publications/bead-alternative-broadband-technology-policy-notice-for-public-comment-final.pdf>.

³ See NTIA, Notice of Funding Opportunity, Broadband Equity, Access, and Deployment Program, 42 (2022) (“BEAD NOFO”), *quoting* the Infrastructure Investment and Jobs

decision; fiber builds must continue to be the top priority for BEAD funding. Indeed, the BEAD Program should operate from the premise that if an eligible location is connected to an electrical service line, a fiber line could be deployed to that location for a reasonable cost.⁴ Accordingly, Eligible Entities must first examine all potential ways to award funds for fiber connectivity, including by leveraging other resources,⁵ and only when Reliable Broadband Service cannot be provided,⁶ fund connectivity via an Alternative Technology.

Toward this end, FBA herein submits comments on three issues related to the prospective availability of BEAD funds for Alternative Technologies. First, any guidance from NTIA on the utilization of BEAD funds for an Alternative Technology must adhere to the objective of prioritizing fiber connectivity and otherwise deploying reliable broadband access nationwide. Second, NTIA should make clear that Alternative Technologies are a last resort for BEAD funding. In particular, NTIA should require Eligible Entities to conduct sufficient due diligence with providers of fiber and other Reliable Broadband Service technologies (whether or not those

Act of 2021, Division F, Title I, Section 60102, Public Law 117-58, 135 Stat. 429 (November 15, 2021).

⁴ FBA expects all stakeholders will endeavor to ensure access to poles, rights-of-way, and other infrastructure is made available on a reasonable basis.

⁵ This approach is consistent with NTIA's recent Policy Notice. *See* NTIA, "Policy Notice: BEAD Selecting the Most Robust, Affordable, Scalable Technology", at 6-8 (June 26, 2024) available at https://broadbandusa.ntia.gov/sites/default/files/2024-06/BEAD_Selecting_Technology_Policy_Note_0.pdf. ("Selecting Technology Guidance").

⁶ As fiber remains the preferred technology with BEAD, Eligible Entities should continue to make all-fiber projects a priority amongst all other Reliable Broadband Service options. All-fiber networks are the best long-term investment for BEAD funding because of their high speed, low latency, near limitless capacity, security, sustainability, and high durability/reliability.

providers participated in the initial bidding process)⁷ to determine whether they can serve an eligible location before considering a proposal that would support connectivity through an Alternative Technology, which NTIA has already determined to be not reliable.⁸ Third, NTIA should reconsider whether Low Earth Orbit (“LEO”) satellite broadband is a viable Alternative Technology to offer the connectivity that the BEAD Program is intended to promote. Except in the case of eligible locations that are “off the grid,” LEOs will not provide a long-term connectivity solution – namely, one that will give residents and businesses in these locations the same fiber broadband critical infrastructure capabilities that will exist in virtually all other locations. In addition, NTIA’s proposed procurement of reserve network capacity from a LEO appears unworkable in practice given that LEO systems share capacity and make dynamic assignments and thus the proposal is likely to result in excess payments to LEO providers. In addition, the proposal does not appear consistent with the many requirements in the BEAD NOFO.

I. ACCESS TO FIBER AND OTHER RELIABLE BROADBAND INTERNET IS A CORE TENET OF THE BEAD PROGRAM

When Congress appropriated \$42.45 billion for the BEAD Program, it was clear that this was a once-in-a-generation investment intended to close the digital divide and give all Americans the opportunity for “full participation in modern life in the United States.”⁹ To implement this objective, NTIA determined in the BEAD NOFO that “end-to-end fiber

⁷ See Selecting Technology Guidance at 6-7.

⁸ Proposed Guidance at 5.

⁹ IIJA, Section 60101(1).

networks” would be designated as Priority Broadband Projects because they provide the critical broadband infrastructure that “can be updated by replacing equipment attached to the ends of the fiber-optic facilities, allowing for quick and relatively inexpensive network scaling as compared to other technologies ... [and] new fiber deployments will facilitate the deployment and growth of 5G and other advanced wireless services, which rely extensively on fiber for essential backhaul.”¹⁰ The BEAD NOFO appropriately prioritizes these “gold standard” fiber deployments when they are below the Extremely High Cost Per Location Threshold (“EHCT”) and still enables Eligible Entities to select fiber projects above the EHCT.¹¹

As NTIA now works to develop guidance for Eligible Entities to consider proposals to fund deployments that would provide services through an Alternative Technology, it must ensure that the above principles remain paramount.¹² In its Proposed Guidance, NTIA acknowledges that there are inherent “service limitations that led to the omission of these technologies from the definition of Reliable Broadband Service.”¹³ In other words, these technologies are not reliable.

¹⁰ BEAD NOFO at 42. NTIA then concluded that service not offered over an end-to-end fiber network could nevertheless be a Reliable Broadband Service eligible for BEAD funding if it met the following criteria: “(1) a fixed broadband service that (2) is available with a high degree of certainty, (3) both at present and for the foreseeable future.” NTIA has explained that in addition to fiber-to-the-home networks, cable modem/hybrid fiber-coaxial technology, digital subscriber line (DSL) technology, and terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum are considered Reliable Broadband Services that are eligible for BEAD funding.

¹¹ Selecting Technology Guidance at 4-5.

¹² NTIA should permit Eligible Entities to bifurcate the final award process to allow Priority Broadband and other Reliable Broadband Service projects to be approved and funded for locations where there is no EHCT issue, even if Eligible Entities are still working to implement the new Alternative Technology guidance.

¹³ Proposed Guidance at 7.

And while FBA appreciates that “connecting everyone in America [to broadband] will require a variety of technologies,”¹⁴ NTIA should refrain wherever possible from funding the deployment of connectivity whose reliability and performance are limited. That would neither serve consumers at eligible locations nor their communities, and it would not be consistent with the long-term objectives for the BEAD Program.

II. NTIA’S GUIDANCE SHOULD MAKE CLEAR THAT ELIGIBLE ENTITIES MUST EXHAUST ALL AVENUES TO PROVIDE FIBER AND THEN OTHER RELIABLE TECHNOLOGIES BEFORE TURNING TO FUND ALTERNATIVE TECHNOLOGIES.

In the Proposed Guidance, NTIA states that there may be a circumstance where “no prospective subgrantee has submitted an offer to deploy Reliable Broadband Service or project areas for which prospective subgrantees have submitted proposals to deploy Reliable Broadband Service only at subsidy amounts that exceed the [EHCT].”¹⁵ In such cases, NTIA proposes that “Eligible Entities may consider Alternative Technologies to fulfill their BEAD Program obligations.”¹⁶ The Proposed Guidance states that when considering Alternative Technology proposals, Eligible Entities are required to adhere to the guidelines in the BEAD NOFO and NTIA’s Selecting Technology Guidance. However, even with those baseline requirements, FBA submits that there are a number of prerequisites that NTIA should incorporate into its guidance to ensure that Eligible Entities sufficiently consider fiber and other Reliable Broadband Service

¹⁴ See Evan Feinman, BEAD Program Director, “Choosing the right mix of technologies to achieve Internet for All,” NTIA Blog (Aug. 26, 2024).

¹⁵ Proposed Guidance at 6.

¹⁶ *Id.*

proposals before accepting an Alternative Technology proposal. We urge that NTIA add the following parameters to its Proposed Guidance:

- Before determining whether the eligible locations in question are already being “served” by an Alternative Technology,¹⁷ Eligible Entities should engage with first fiber and then other Reliable Broadband Service providers that submitted applications and give them a right of first refusal to expand their existing or proposed project area to other eligible locations at a reasonable cost, even if it exceeds the EHCT. On this point, NTIA should bear in mind that although Eligible Entities are permitted to establish their own project area sizes, when these project areas are large and contain higher cost locations, they are more likely to have an average cost of deployment that exceeds the EHCT. By disaggregating these large areas, many locations will have costs below the EHCT and can readily be connected with fiber.¹⁸
- After giving applicants an opportunity to select to serve additional eligible locations, Eligible Entities should determine whether any existing provider of Reliable Broadband Service, regardless of whether they applied for support, would deploy service for a reasonable cost to any eligible location that is in a previously defined project area where the average cost of deployment exceeds the EHCT.¹⁹
- In seeking to connect any remaining (unselected) eligible locations with fiber or other reliable technologies, Eligible Entities should reach out to other government agencies

¹⁷ The Proposed Guidance would require that “before selecting Alternative Technology subgrantees, Eligible Entities must determine whether the project areas in question are subject to an enforceable commitment, with ongoing network performance monitoring, to provide Alternative Technology service that meets the BEAD performance requirements, ... or are already served with Alternative Technologies that meet the BEAD performance requirements.” Proposed Guidance at 6.

We note that Eligible Entities are required to award BEAD subgrants for Priority Broadband or Reliable Broadband Service projects to locations that currently are only served by unreliable technologies, even if those technologies meet NTIA’s definition of an Alternative Technology. *See* BEAD NOFO at 28 (“locations served exclusively by satellite, services using entirely unlicensed spectrum, or a technology not specified by the [FCC] for purposes of the Broadband DATA Maps, do not meet the criteria for Reliable Broadband Service and so will be considered ‘unserved.’”).

¹⁸ *See* Selecting Technology Guidance at 6.

¹⁹ This is aligned with NTIA’s view in the Selecting Technology Guidance that “Eligible Entities should take advantage of the flexibility provided in the BEAD NOFO to engage directly with prospective service providers to address circumstances in which an Eligible Entity receives no proposals during the application or bidding process to serve a location or group of locations.” Selecting Technology Guidance at 6-7.

to determine whether they are able to provide additional support to reach these locations.

- If, after completing its required due diligence (including the steps outlined above),²⁰ an Eligible Entity wishes to award funding to an Alternative Technology subgrantee, NTIA should set forth additional specifications for such awards. For instance, when evaluating Alternative Technology types, Eligible Entities should give priority to Alternative Technologies that will bring fiber infrastructure as close to the end-user as possible. In addition, NTIA should not waive any of the requirements in the BEAD NOFO. For example, Alternative Technology providers must be required to adhere to the BEAD Program’s performance standards, including the requirement to “perform speed and latency tests from the customer premises of an active subscriber to a remote test server at an end-point.”²¹ The “unique nature” of a particular Alternative Technology²² should not be used as pretext to deviate from these standards.

III. NTIA SHOULD RECONSIDER WHETHER LEO SATELLITE BROADBAND IS A VIABLE ALTERNATIVE TECHNOLOGY FOR THE BEAD PROGRAM

The Proposed Guidance includes LEO satellite broadband in NTIA’s definition of Alternative Technologies that may be eligible for BEAD subgrant awards.²³ However, LEO satellite broadband, apart from being a nascent and not reliable technology,²⁴ is not well-aligned

²⁰ To expedite service to eligible locations, Eligible Entities should finalize awards for fiber and other reliable technologies even while they are considering awarding support to providers using Alternative Technologies.

²¹ BEAD NOFO at 64.

²² See Proposed Guidance at 11.

²³ *Id.* at 5.

²⁴ For example, research by consulting firm Cartesian that was commissioned by FBA and NTCA in 2021 suggested that LEO provider Starlink likely would have been unable to meet program obligations for the Rural Digital Opportunity Fund. See Ex Parte Letter from Shirley Bloomfield, CEO, NTCA-The Rural Broadband Association, and Gary Bolton, President and CEO, Fiber Broadband Association, to the Hon. Jessica Rosenworcel, Acting Chairwoman, FCC, WC Docket Nos. 19-126 and 20-34 (Feb. 8, 2021) available at <https://www.fcc.gov/ecfs/search/search-filings/filing/10208168836021>. Ultimately, the FCC denied Starlink’s application for RDOF support. In that proceeding, the Wireline Competition Bureau aptly observed the importance of “avoiding subsidizing risky proposals that promise faster speeds than they can deliver, and/or propose deployment plans that are not realistic or that are predicated on aggressive assumptions

with the objectives of the BEAD Program to connect consumers at eligible locations with infrastructure available throughout the rest of the country. To begin with, connecting an eligible location to a LEO in effect is a technology dead-end. There is no pathway to eventual connectivity with fiber or another reliable technology. This is especially troubling for consumers at eligible locations that have electric connectivity, where we should presume that fiber connectivity is feasible.

Further, LEO systems have features, including mobile satellites that share capacity and spectrum and that cover other areas of the globe, that do not align well, if at all, with the NOFO.²⁵ These unique features of LEOs present major challenges in awarding funds as evidenced, in part, by the fact that in NTIA’s Proposed Guidance, there is an entire – and somewhat “Rube Goldberg-like” – section dedicated to “Additional Flexibility for Subgrants for Last-Mile LEO Deployments” which, among other things, states that Eligible Entities could “use BEAD funds for the reservation of network capacity”²⁶ and “shall reimburse recipients of LEO Capacity Subgrants only for the amount of capacity actually used, such as by reimbursing based on the number of actual subscribers to the broadband service in the project area in a period of

and predictions.” See FCC Public Notice, “Rural Digital Opportunity Fund Support for 80 Winning Bidders Ready to be Authorized; Bid Defaults Announced,” AU Docket No. 20-34 et al. (Aug. 10, 2022). The Bureau’s decision was upheld by the full FCC in December 2023. See *In the Matter of Application for Review of Starlink Services, LLC* (File No. 0009395128), WC Docket No. 19-126 et al., Order on Review, FCC 23-105 (rel. Dec. 12, 2023). NTIA should heed this logic, which is equally applicable for the BEAD Program.

²⁵ While LEOs provide widespread coverage, the benefits are broad and lack the precision required to effectively close the digital divide domestically.

²⁶ Proposed Guidance at 12-14.

time (e.g., month or year) multiplied by the per BSL cost of capacity.”²⁷ At the end of the day, the Proposed Guidance’s capacity and reimbursement regime is almost certain to be infeasible because LEO systems share spectrum and capacity and any cost allocation mechanism is bound to be arbitrary and one-sided, resulting in excessive profits for the LEO provider. Further, the proposed regime is anything but an investment in deploying infrastructure and long-term connectivity.²⁸

Accordingly, FBA urges NTIA to reconsider its proposal and hold the line on not including unreliable broadband technologies such as LEOs in the BEAD Program; to the extent NTIA retains LEO satellite broadband on its list of acceptable Alternative Technologies for the BEAD Program, it should be viewed as the last available option for connecting a particular location as there is no planned funding to upgrade these locations to “reliable broadband” at a later date.

²⁷ *Id.* at 14.

²⁸ The only investment to obtain LEO service is procurement of a satellite terminal. For the BEAD program, there should be no need to invest in gateway earth stations or middle-mile facilities.

CONCLUSION

FBA appreciates the opportunity to submit these comments on the Proposed Guidance. We look forward to continuing to work with NTIA to ensure the success of the BEAD Program and to develop policies that further investment in fiber to promote broadband availability nationwide.

Respectfully Submitted,

A handwritten signature in black ink, reading "Gary Bolton", with a long horizontal flourish extending to the right.

Gary Bolton
President and CEO
Fiber Broadband Association
3050 K Street, Suite 400
Washington, DC 20037
(202) 524-9550

September 10, 2024