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BEAD Program Technological Neutrality "Fix" Falls Short

by

Andrew Long *

I. Introduction and Summary

Late last month at [Fiber Connect 2024](#), the Fiber Broadband Association's annual conference, National Telecommunications and Information Administration (NTIA) Administrator Alan Davidson unexpectedly announced that forthcoming changes to Broadband Equity, Access, and Deployment (BEAD) Program guidance could expand the list of supported distribution platforms. To realize the policy goal of universal broadband access as quickly and efficiently as possible, every viable technology should have been eligible on equal footing for taxpayer-funded subsidies from Day One. Currently, however, federal broadband grant recipients are barred in all instances from utilizing unlicensed spectrum and satellites – but Administrator Davidson declared that, in the future, "[\[i\]n some circumstances states might even be able to use unlicensed wireless](#)" (and, according to at least one report, [satellites](#), as well) to connect those households still unserved.

This supposed change in course regarding the use of additional distribution platforms is welcome news – but only to a point. Bigger picture, the process still heavily favors fiber-based networks. Only where the cost to deploy fiber is "extremely" high might coaxial cable, licensed spectrum, and potentially now unlicensed spectrum and satellites be utilized – and, depending on individual

state and territory ("eligible entity") plan specifics, sometimes not even then. As such, this eleventh-hour announcement makes for a promising headline, but as a practical matter may be too little, too late to have a meaningful impact.

II. NTIA's Approach Has Led to Delays Both Procedural and Practical

The \$42.45 billion BEAD Program was created by the [Infrastructure Investment and Jobs Act](#) (IIJA), legislation signed into law nearly three years ago on November 15, 2021. As FCC Commissioner Brendan Carr recently wrote, however, to date "[not one person has been connected to the Internet with those dollars](#)." Some of that delay is attributable to the multitiered process set forth in the IIJA. Some can be chalked up to good old bureaucratic red tape. And some – perhaps the majority – can be traced to extraneous Biden Administration policy pursuits beyond what Congress almost certainly intended.

In a [June 2024 Perspectives from FSF Scholars](#), I identified a number of these policy roadblocks, which I labeled "devilish details," standing in the way of BEAD Program money actually connecting Americans to the Internet in a timely manner. One is NTIA's demonstrated intention to engage in rate setting despite the inclusion of the following unambiguous language in the IIJA prohibiting it from doing so: "[n]othing in this title may be construed to authorize the Assistant Secretary or the National Telecommunications and Information Administration to regulate the rates charged for broadband service."

The resulting delays can be substantial. In the case of [Virginia](#), a high-profile example where NTIA insisted that the plan specify "an exact price or formula" for the Commonwealth's low-cost service option, the impasse lasted for *305 days* before [NTIA at long last gave the green light](#) instead to a "[range of \\$30.00 to \\$75.00 ... based on an Office of Broadband survey conducted of a collection of state-funded Virginia internet service providers regarding the lowest cost plan pricing option that they offer in state funded broadband expansion award areas](#)" (emphasis added).

Admittedly, the pace at which NTIA is reviewing eligible entities' plans for distributing BEAD Program dollars to broadband providers has increased: with its approval of [Wisconsin's Initial Proposal](#) on August 6, 2024, the total reached 33 (out of 56). Perhaps that's in response to criticisms from the likes of Commissioner Carr, noted above, along with a marked increase in congressional oversight, particularly regarding attempts to regulate rates "[counter to Congressional intent and in violation of the law](#)."

Even with more timely sign offs, however, NTIA's extreme bias toward fiber-based networks – perhaps the most pernicious "devilish detail" – will drag out the process. Simply put, fiber often costs significantly more – and takes much longer to deploy – than other distribution technologies. This is particularly true in rural, low-population-density areas where subsidies are essential to render network construction economically viable in the face of rocky, mountainous, and otherwise challenging terrain. Moreover, fiber buildouts typically occur in rights of way to which access can be costly and administratively burdensome.

According to a January 2023 [white paper](#) prepared by MIT's William Lehr and commissioned by WISPA – *Broadband Without Boundaries*:

The reason prioritizing FTTP over alternative technologies for delivering broadband to unserved locations results in delays may be traced to the differences in deploying wired versus wireless broadband.... It takes time to build out wired infrastructure and such deployments incur substantial up-front costs associated with deploying the wires and supporting infrastructure (poles, conduit, trenching, etc.).... In contrast, wireless networks can be deployed quickly and scale with the growth in the subscriber base, thereby reducing the up-front and financing costs of deploying services.

Referencing the real-world experience of Litchfield, Maine, Mr. Lehr concludes that while "it cannot be known ...how much longer [locations] may be required to wait ... before they can enjoy the benefits of [fiber-based] broadband service, ... the wait time can be *significantly longer* than for fixed wireless" (emphasis added).

III. NTIA Guidelines and Eligible Entity Plans Would Still Tilt Toward Fiber

Against this factual and political backdrop, NTIA Administrator Davidson's announcement that unlicensed wireless and satellites could become eligible for BEAD Program funding makes sense. For the reasons set forth below, however, I'm not sure it makes much of a difference.

First, it is not at all clear to me that whatever changes NTIA makes to the NOFO guidelines at this late stage will have much impact on eligible entities' Initial Proposals. More than half already have been okayed and are thus "final" – and those still under consideration were drafted in accordance with the current guidelines. As a practical matter, will eligible entities go to the trouble of revising and resubmitting their plans? Moreover, [according to reporting](#), if and when NTIA does propose revisions there will be an opportunity for public comment. As such, and despite NTIA Administrator Davidson's suggestion that we "standby" for proposed revisions, given the administrative hurdles involved, it may be too late for those changes to amount to much.

Second, even if the guidelines are revised to render unlicensed spectrum and satellites eligible, that eligibility still would be limited to areas where the cost to build out fiber is extremely high. As a refresher, the [BEAD Program Notice of Funding Opportunity](#) (NOFO) (1) defines "Priority Broadband Projects" as "those that use end-to-end fiber-optic architecture," (2) excludes entirely from eligibility projects that rely upon satellites or unlicensed spectrum, and (3) limits the use of any other "alternative technology meeting the BEAD Program's technical requirements" – today think cable broadband or licensed wireless, which by the way [added nearly 1 million subscribers during the second quarter of this year](#) (subscription required) – to those scenarios where the price tag exceeds an eligible entity's definition of an "Extremely High Cost Per Location Threshold" (EHCPLT). Time to deployment, incidentally, does not factor into the decision at all.

Third, and as I highlighted in the "[devilish details](#)" *Perspectives* previously referenced, some of those plans already approved treat NTIA's definition of "Priority Broadband Projects" merely as

a starting point. Colorado's Initial Proposal, for example, explicitly states that "[\[c\]ertain fiber-to-the-home \(FTTH\) proposals may still be selected even if their cost exceeds the final EHCPLT value](#)" (emphasis added). Consequently, even if NTIA revises its guidance to allow the use of unlicensed wireless and satellites when fiber exceeds the EHCPLT, eligible entities seemingly will have little incentive to promote – or even permit – the use of non-fiber alternatives that use taxpayer dollars more efficiently and can be deployed more quickly.

IV. Conclusion

I and other Free State Foundation scholars long have argued that NTIA should take steps to align its BEAD Program guidelines with the concept of technological neutrality. (For reference, please peruse the *Further Readings* section immediately below.) Cable, licensed wireless, unlicensed wireless, satellites, and – certainly – fiber all have an important part to play in connecting every location in America to viable broadband in a cost-effective manner.

However, NTIA's biased guidelines and the skewed economic incentives of eligible entities flush with federal subsidies all but guarantee a fiber-at-any-cost approach that could drag out actual construction for years and, at the end of the day, leave some locations still unserved. The recent announcement by NTIA Administrator Davidson regarding the possible use of unlicensed spectrum and satellites may seem like a step in the right direction, but given that the prioritization of fiber-based projects in all but the most expensive scenarios would continue, it likely falls short of meaningful movement toward closing remaining gaps in deployment.

As Louis Peraertz, WISPA – *Broadband Without Boundaries* VP of Policy, wrote in a [statement](#) responding to this news, "BEAD can only succeed if unlicensed technology can be deployed – not only in extremely high-cost per location threshold areas, but elsewhere where it makes sense."

* Andrew Long is a Senior Fellow of the Free State Foundation, an independent, nonpartisan free market-oriented think tank located in Rockville, Maryland. The views expressed in this *Perspectives* do not necessarily reflect the views of others on the staff of the Free State Foundation or those affiliated with it.

Further Readings

Andrew Long, "[House Commerce, Commissioner Carr Target BEAD Program](#)," *FSF Blog* (July 11, 2024).

Andrew Long, "[The Fate of the BEAD Program Rests on 'Devilish Details'](#)," *Perspectives from FSF Scholars*, Vol. 19, No. 20 (June 10, 2024).

Andrew Long, "[Virginia Flags NTIA's Impermissible Pressure to Regulate Broadband Rates](#)," *Perspectives from FSF Scholars*, Vol. 19, No. 6 (February 15, 2024).

Andrew Long, "[Senator Thune Spearheads Call to Revise BEAD Program Rules](#)," *FSF Blog* (April 20, 2023).

Andrew Long, "[New Report Puts a \\$60B Price Tag on NTIA's Fiber-Broadband Bias](#)," *FSF Blog* (February 10, 2023).

Andrew Long, "[Senators Urge NTIA to Acknowledge Role of Broadband via Unlicensed Spectrum](#)," *FSF Blog* (December 1, 2022).

Michelle P. Connolly, "[NTIA's BEAD Program Needs Revisions to Succeed](#)," *Perspectives from FSF Scholars*, Vol. 17, No. 50 (October 3, 2022).

Seth L. Cooper, "[Senators Urge Fixes to NTIA's NOFO for Broadband Subsidies](#)," *FSF Blog* (August 25, 2022).

Andrew Long, "[Future Guidance Can Fix NTIA's Flawed 'Fiber-First' Approach](#)," *Perspectives from FSF Scholars*, Vol. 17, No. 27 (May 24, 2022).