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**NTIA's BEAD Program Needs Revisions to Succeed**

by

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**I. Introduction and Summary**

Last May, the National Telecommunications and Information Administration (NTIA) issued its [Notice of Funding Opportunity \(NOFO\)](#) for the \$42.5 billion Broadband Equity, Access, and Deployment (BEAD) program. Between BEAD and \$65 billion coming from the American Rescue Plan Act of 2021 (ARPA), over \$100 billion will be disbursed by the federal government to states to support broadband deployment and investment. While some of these funds are intended to help the adoption of broadband by households with access, the large majority are being directed at deployment to currently unserved and underserved locations.

The amount to be spent relative to the number of new broadband adopters gained will be huge. Given the tremendous size of the new spending tranche, it is crucial that the objective should be, by the end of these programs, that the “unserved” problem is finally and completely addressed. Unfortunately, reading the NOFO for BEAD suggests that much of the BEAD money will be wasted on policy objectives unrelated to the reduction of the digital

divide. The money will be spent, but areas without adequate broadband access will very likely remain.

The most problematic aspects of the NOFO relate primarily to the selection criteria to be utilized, the priority given fiber over all other technologies, and the extraneous policy objectives embedded in the subgrantee requirements. With regard to the subgrantee requirements, extraneous mandates such as the "Buy American," "Affordability," and "No Data Caps" will lead to suboptimal use of the BEAD funds, significantly reducing the ability of the BEAD program to accomplish its stated objective. Enormous sums will be spent in the BEAD (and ARPA) programs, but absent changes in the NOFO directions, conflicting policy objectives, along with limited guidance to states on appropriate metrics, will mean that even after \$100 billion has been spent, areas without broadband access likely will remain. If so, the primary objective of the spending programs will not have been met.

## **II. Selection Criteria**

The distraction of the NOFO from its stated primary objective is immediately obvious in the selection criteria set forth that entities (states and territories, hereafter referred to as states) must use when choosing subgrantees. The NOFO defines a "priority" broadband project as any end-to-end fiber proposal that satisfies all "subgrantee requirements." The subgrantee requirements themselves distract from the primary objective and will be discussed later. Here I focus on the hierarchy of the NOFO selection criteria.

If only one priority (i.e., end-to-end fiber) project is proposed, the NOFO states that it should be chosen above all other proposals unless the state specifically asks NTIA for a waiver to be allowed to not accept it. If more than one priority project is proposed or if no priority project is proposed, then the state must place three-quarters or more of the selection criteria on primary criteria and one-quarter or less on secondary criteria. Primary criteria include minimizing BEAD outlay, the affordability of proposed service for the middle class, and fair labor practices. Secondary criteria include the speed of deployment, and – if there is no priority, i.e., end-to-end fiber, proposal – the speed/technical quality of the proposed project. Given the goal of increasing deployment, the fact that the speed of deployment and the speed/quality of the proposed project (if not a priority project) are *at most* worth one-quarter of the overall selection criteria is disconcerting.

## **III. Technological Non-Neutrality**

This selection criteria gives fiber priority above all other technologies despite the fact that for many rural areas this is not the ideal technology to guarantee access to all households and businesses. There are other technologies such as fixed wireless and low earth orbiting (LEO) satellites currently capable of providing high speed, low latency service. These can likely be deployed more quickly and with lower cost, especially in rural areas with difficult geographic terrain.

Fiber is being pushed by the government as being future proof. Nothing is future proof. Fiber, like all infrastructure, needs to be replaced after a certain period. More importantly, without knowing the future it is impossible to predict that one current technology will be the best technology available in the future. Schumpeterian creative destruction occurs in all industries. The replacement of landline telephony by voice over internet protocol (VOIP) and mobile telephony is a prime example.

In evaluating project proposals, states should instead target the performance of a broadband service, not its technology type. To improve comparability between proposals, states should predefine both geographic areas for subgrantees to bid upon, as well as, speed, latency, reliability, and build out requirements. But any technology able to meet those requirements should be considered on an equal footing and chosen based on both cost and speed of deployment.

#### **IV. Subgrantee Requirements**

In addition to the odd hierarchy stipulated in the NOFO selection criteria, there are five policy objectives which distract from and will constrain states' ability to guarantee that all unserved areas will definitely be served and that all underserved areas will gain sufficient investment by the end of this massive spending program.

##### *A. Buy American*

All iron, steel, manufacturing products and construction materials used by subgrantees must be produced in the U.S. unless the quality or quantity available is insufficient or if doing so pushes costs more than 25% higher. Higher costs will reduce the amount of deployment that can be achieved for a given amount of funding. Additionally, given current supply chain issues, trying to restrict procurement to a single country, even if domestic, will generally slow deployment.

##### *B. Use union labor or have a pre-hire collective bargaining labor agreement*

It is not at all clear that most labor required for deployment is unionized. Given labor shortages, especially in fields required for broadband deployment, such a requirement – whether to hire unionized labor or to have a pre-hire collective bargaining agreement – imposes both higher costs and, most importantly, in the current labor environment, greater delays in deployment.

##### *C. “Affordability” for middle-class families*

Subgrantees must offer “reasonable” prices to “middle-class” families. While the NOFO does not specify what a “reasonable” price is or what defines a family as middle class, it is essentially suggesting that states could use the selection process to introduce direct rate regulation.

*D. No data caps or “unjust or unreasonable network management practices”*

Subgrantees may not impose data caps or have “unjust or unreasonable” network management practices. This requirement suggests that the selection process should be used to reintroduce aspects of previous net neutrality restrictions that, in effect, amount to indirect rate regulation.

*E. Encourage waiving existing state laws restricting government and/or cooperative provision of broadband services*

Eighteen states have laws prohibiting broadband provision by municipalities and/or cooperatives. These laws reflect three anti-competitive concerns: regulatory conflict of interest for municipal ISP providers, insulation from market pressures,<sup>1</sup> and exemption from pole attachment rate regulation in cases where the municipal/cooperative ISP also provides electric and/or telephone service and therefore owns utility poles. These concerns are supported by Tianjiu Zuo and Michelle Connolly’s recently released paper, “[Impact of Municipal and Cooperative Internet Provision on Broadband Entry and Competition](#)” (2022). Looking at within census block variation over time from 2015 to 2020, Mr. Zuo and I find evidence that potential ISPs do not consider competition from municipal and cooperative ISPs to be the same as that from private ISPs. Specifically, they find, all else equal, that relative to a private ISP incumbent, the presence of a municipal or cooperative ISP incumbent lowers the likelihood of further ISP entry into a census block.

Overall, these additional policy objectives cover issues related to trade policy, labor policy, rate regulation, net neutrality, and government competition with the private sector. The Tinbergen Rule argues that to achieve  $n$  independent policy objectives, one needs at least  $n$  independent policy instruments. NTIA’s NOFO is attempting to use a single instrument to target at least seven objectives (deployment, fiber first, buy American, support unionized labor, rate regulation, net neutrality, and support government and cooperative provision of broadband services). By definition, this will lead to suboptimal use of BEAD funds in its stated objectives of promoting broadband equity, access, and deployment.

Finally, the NOFO officially prioritizes unserved locations, then underserved locations, then community anchor institutions (CAI). However, a state may seek proposals for all three at the same time, and if the state “certifies that it will ensure coverage of all unserved locations” it may then award funds for underserved locations. If the state certifies that it will ensure coverage of underserved locations, then it may award funds for community anchor institutions (not currently receiving 1 Gbps symmetric upload and download speeds and latency of 100 milliseconds or less).<sup>2</sup> Allowing for contemporaneous disbursement of BEAD funds for unserved and underserved (if the state certifies that it has a plan to guarantee coverage of all unserved locations) allows for faster action in underserved areas relative to sequential

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<sup>1</sup> Municipalities can ultimately rely on tax revenue to support their ISPs if not earning enough revenue to cover costs. Similarly, municipal and cooperative ISPs that are also utilities can use revenue from their utilities to support their broadband service if it is not earning enough revenue to cover its costs. In both situations, market forces that would lead a private ISP to exit the market may not push a municipal or a cooperative ISP to exit the market.

<sup>2</sup> See BEAD NOFO at 37.

funding. However, it also means that if subgrantees chosen to deploy in unserved areas fail, a state may have already disbursed all its BEAD funds for projects in underserved areas and have nothing left to go back and re-attempt deployment in the unserved area(s).

In general, there seems to be an implicit policy objective in both BEAD and ARPA of wanting to increase competition in currently served areas by encouraging further entry, even if inefficient entry.<sup>3</sup> Despite the enormous sums being spent in BEAD (and ARPA), conflicting policy objectives along with limited guidance to states on appropriate metrics will mean that even after \$100 billion has been spent, areas without broadband access likely will remain.

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<sup>3</sup> This was particularly clear for ARPA after the Treasury Final Rule stated that recipients are not bound by prior definitions of unserved and underserved areas and can instead self-identify (using any available data) a “need for additional broadband infrastructure investment, which would include but not be limited to a lack of broadband service reliably delivering certain speeds.” Final Rule at 296, 338.