Before the
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
U. S. DEPARTMENT OF COMMERCE
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

In the Matter of	)	
	)	
Infrastructure Investment and Jobs Act Implementation	**)**	Docket No. 220105-0002

COMMENTS
OF
WTA – ADVOCATES FOR RURAL BROADBAND

WTA - Advocates for Rural Broadband ("WTA") hereby submits its comments with respect to the Notice and Request for Comment from the National Telecommunications and Information Administration ("NTIA") that was published in 87 Fed. Reg. 1122 (January 10, 2022).

WTA is a national trade association that represents more than 360 rural local telecommunications carriers ("RLECs") that provide voice, broadband and other services to some of the most rural, remote, rugged, sparsely populated, and expensive-to-serve areas of the United States. WTA members have long constructed and operated voice and broadband networks – very often as providers of last resort – in high-cost farming, ranching, mining, mountain, forest and desert areas, as well as to Native American reservations and other Tribal Lands. The typical WTA member company serves fewer than 5,000 customers per service area and has fewer than 50 employees.

The focus of these comments is on NTIA's questions regarding the Broadband Equity, Access and Deployment ("BEAD") Program, the Low-Cost Broadband Service Option, and the Middle Mile Broadband Infrastructure ("MMBI") Grant Program.

BEAD Program

The $42.45 billion BEAD Program constitutes a singular and invaluable opportunity to make substantial progress in the construction of robust and scalable last-mile networks capable of meeting rapidly growing broadband service needs in many more of the nation's unserved and underserved areas. While the BEAD Program is not likely to make robust and scalable broadband networks and services ubiquitous (the current program was reduced in size and scope from a $80 billion proposal), it has the potential to make major strides toward closing the digital divide and universal access by all Americans to reliable, affordable, high-speed broadband services.

WTA believes that it is absolutely clear from the Infrastructure Investment and Jobs Act (also known as the Bipartisan Infrastructure Law or "BIL") that the BEAD Program is a broadband network infrastructure construction and upgrade program. It is intended to fund on a priority basis the construction or upgrade of robust and scalable broadband facilities in areas that lack at least 25/3 megabits per second ("Mbps") service, and then to fund on a secondary basis the construction or upgrade of robust and scalable broadband facilities in areas that lack at least 100/20 Mbps service. The deployment in unserved and underserved areas of high-quality and reliable broadband networks that can readily and economically be adapted to higher speeds and capacities as consumer broadband needs evolve is a prerequisite for the achievement of the broad range of universal service, affordability, health care, educational, employment, social and other goals.

However, like every opportunity, the realization of the BEAD Program's potential is not certain and requires, at minimum, careful and specific procedures and mechanisms that will ensure that BEAD funds will be used effectively and efficiently. These include accurate identification of the actual "unserved" and "underserved" areas eligible for grants; determination of the specific

broadband network features to be funded; and evaluation of the capabilities and reliability of the entities seeking to be entrusted with BEAD funds and service responsibilities.

Question 13: What guidance or requirements, if any, should NTIA consider with respect to network reliability and availability, cybersecurity, resiliency, latency, or other service quality features and metrics? What criteria should NTIA establish to assess grant recipients' plans to ensure that service providers maintain and/or exceed thresholds for reliability, quality of service, sustainability, upgradability and other required service characteristics?

Whereas BIL allocates $100 million to each state, NTIA is responsible for allocating the major portion of the $42.45 billion BEAD Program among the states and the eligible unserved and underserved areas in them. This approach would appear to be most effectively and efficiently implemented by having NTIA develop and implement basic requirements that give the states reasonable guidance with respect to certain critical matters that will significantly impact the effective, efficient and equitable distribution of BEAD Program grants. These critical issues include: (1) the identification of eligible unserved and underserved areas; (2) the evaluation and selection of the types of reliable, quality and upgradeable broadband network technologies that will be funded; and (3) the type of procedure to be used to evaluate and select the entities that will be entrusted with the long-term responsibilities to construct, operate, upgrade and otherwise sustain the broadband networks to be constructed with BEAD funds. Once NTIA establishes the basic rules and procedures, the states would then have the authority to implement and enforce them, including sufficient flexibility to respond to their particular broadband needs and circumstances.

Identification of Eligible Unserved and Underserved Areas

NTIA, in consultation with each state, should employ the statute-required Federal Communications Commission ("FCC") broadband mapping tools to identify what specific areas in each state: (a) are top priority unserved areas that lack at least 25/3 Mbps broadband service; or

(b) are secondary underserved areas than lack at least 100/20 Mbps broadband service. NTIA should be responsible for making sure that a sufficient portion of BEAD funds are allocated and available – both on a national and a statewide basis – for distribution as grants for unserved 25/3 Mbps areas before any BEAD funds are obligated for grants for underserved areas without 100/20 Mbps service.

Once potential eligible unserved and underserved areas are identified, NTIA should set general criteria for determining the maximum size and scope of individual grant areas – for example, by county or census block group or maximum population size – so as to provide a fair and reasonable opportunity for large, mid-sized and small entities to participate in the BEAD Program. Within such general limits, NTIA and the states should allow BEAD grant applicants to design their own proposed service areas. A significant advantage of such a flexible, but limited, approach is that it would allow existing broadband service providers to extend their networks into adjacent unserved or underserved areas at relatively low incremental costs that would free up substantial BEAD dollars for use elsewhere by avoiding the far greater costs of constructing new stand-alone networks.

Once NTIA and each state finalizes the state's initial list of potential grant areas, the state list should be issued by NTIA and the state as a generally available public notice that initiates a 30-to-45-day challenge process. Interested parties would then be able: (1) to demonstrate that they currently provide reliable 25/3 Mbps or better service in listed "unserved" areas, or reliable 100/20 Mbps or better service in listed "underserved" areas (in which case, the area(s) will be removed from the eligible grant list if the interested party meets its burden of proving that it is providing such service); or (2) to show that they have a specific commitment for which they have already received some federal or state funding (see response to Q16) to construct or upgrade broadband

facilities to 25/3 Mbps or better service in listed "unserved" area(s) or to 100/20 Mbps or better service in listed "underserved" areas (in which case, the states will not accept BEAD applications for such areas unless the federal or state funding agency rules that the construction commitment is terminated and the project will not be completed). This challenge process is necessary to prevent BEAD funds from being wasted on the overbuilding of 25/3 Mbps or 100/20 Mbps broadband networks that can provide the same service, particularly broadband networks that have been (or are being) constructed or upgraded in significant part with federal or state funds.

Types of Networks to Be Funded

Buried fiber-to the-home ("FTTH") networks constitute the superior broadband network option from the standpoint of network reliability, availability, resiliency, service quality, upgradeability and sustainability. It is true that they are the most expensive broadband networks to construct initially, but their scalability, reliability and capacity will produce substantial offsetting economies in the long term. It is also true that fiber may not be financially feasible in some extreme instances (for example, a cost of a 50-mile buried fiber through rocky mountain terrain to serve a single isolated customer may never be justifiable or recoverable), but WTA members and other RLECs have proven that a substantial majority of households in rural high-cost areas can be served by fiber optic facilities.

The most significant advantage of FTTH is the scalability that makes it largely "future proof." Given that consumer demand for broadband speeds has gone, during a relatively short time, from kilobit levels to 4/1 Mbps to 10/1 Mbps to 25/3 Mbps to 100/20 Mbps and appears to be well on the way to 100 Mbps symmetrical and Gigabit speeds, it constitutes a huge asset for FTTH networks to be able to be upgraded by changing the electronics at each end of customer circuits rather than constructing and adding or modifying routes, trunks and drop lines or adding

and reconfiguring tower sites. This absence of need to make major investments in network reconfigurations also makes FTTH networks more sustainable in the long run.

Buried fiber networks also have very substantial reliability and resiliency advantages. Particularly in areas with poles and towers subject to damage from wind and ice storms and other severe conditions, buried fiber networks can normally remain operational when customers need service the most to understand, deal with and recover from storm damage and other emergencies.

Fiber optic networks also have substantial service quality and availability characteristics. For example, their high capacities enable them to provide high-speed service to all customers who wish to use the network at the same time, rather than becoming subject to congestion and slowed speeds if more than a handful of customers attempt simultaneous use. Fiber networks also are able to retain a generally constant service quality and are not liable to much more frequent service degradation due to weather conditions, foliage on local trees or line-of-sight issues.

For all of these reasons, NTIA should favor FTTH networks, particularly ones employing buried fiber, in its selection of the BEAD grant projects to be funded. Proposed FTTH and buried FTTH networks should receive a substantial preference in the system used by NTIA and the states to evaluate, rank and select BEAD grant proposals for funding.

Procedures to Evaluate and Select BEAD Proposals for Funding

NTIA should require a Request for Proposals ("RFP") process rather than reverse auctions to ensure that BEAD dollars will be used to construct quality, scalable, reliable, affordable and sustainable broadband networks using proven available technology. NTIA's RFP approach should require BEAD grant applications to set forth in detail the equipment and steps that the applicant will employ to construct its proposed facilities and to commence service, the estimated cost of each step, and the annual quarter during which each step is scheduled to be completed. BEAD

grant applications should also be required to contain proposals regarding network reliability and availability, quality of service, latency, cybersecurity, resiliency with respect to potential outages, long-term sustainability, and upgradability. The technical proposals in each BEAD application should be specified in detail, accompanied by materials demonstrating the availability and characteristics of the equipment to be used and certified by a licensed Professional Engineer. Experience, service quality records and local orientation can be substantiated by letters and recommendations from local governments, businesses and customers. While NTIA would set the general requirements regarding the content of applications, the states should be able to request additional detail or information.

In contrast, reverse auctions are not a good or proven means of ensuring that BEAD-funded projects will maintain, much less exceed, thresholds for reliability, service quality, sustainability, upgradability and other required service characteristics of a robust, affordable and scalable broadband service. First, most states have not conducted reverse auctions and have little or no experience in developing and implementing the procedures and software to do so. Second, whereas the FCC has conducted two reverse auctions (the CAF Phase II Auction and the RDOF I Auction), the auction "winners" whose applications have been granted have not yet reached many of the intermediate performance milestones and end points that will indicate whether they will, in fact, be able to construct and deploy the broadband facilities and services they promised for the amounts of support for which they bid. Many observers and interested parties believe that some FCC reverse auction participants followed a strategy of placing unreasonably low bids in order to "win" certain auction areas and will consequently default prior to grant (which many have already done) or prove unable to meet their buildout and service obligations without waivers that will destroy the integrity of the auction by post-auction revisions of material support amounts and/or

service obligations. Third, whereas reverse auctions were initially advertised as a rapid way to get broadband projects approved and funded, that has not been the case as many applications of RDOF I auction winners remain pending over 14 months after that auction ended.

WTA understands that most BEAD grants will require the provision of 25 percent matching funds by the grant recipient. Except in cases of substantial hardship and other unique circumstances (for example on some Tribal lands and in some high-cost areas), WTA finds that matching funds are a good way to ensure that BEAD grant recipients have "skin in the game" that will encourage the long-term commitments that are necessary for sustainability and discourage applicants from seeking free money and a short-term opportunity for profit.

NTIA is ultimately responsible for the effective, efficient and equitable distribution of BEAD grants and should consequently establish general principles for state review of BEAD grant applications and specify the preferences or ranking system that should be used to select recipients. WTA proposes the following three primary standards for evaluation and selection of applicants:

1. Experience in constructing and operating broadband networks. This should be the primary and most heavily weighted factor used to select BEAD grant recipients that can be trusted to construct and operate high quality and reliable broadband networks and services. Experience with the successful construction and operation of quality broadband networks and services offers the best and most dependable proof that the promises in a grant application will actually be implemented. Applicants that have constructed and deployed broadband networks and that can demonstrate a good-to-excellent record of broadband service should be awarded very substantial preferences in the grant award process. Such an emphasis on experience does not exclude newcomers, but does put a very substantial burden of proof upon them to show that they can and

will implement their untested application promises and that critical BEAD dollars will not be wasted on abandoned, incomplete or sub-standard projects.

2. Local presence, particularly local ownership or long-term local management. Local presence and ownership ensure that the BEAD-funded facilities will be operated and sustained over the long term after the BEAD funds have all been received and expended. Nearly all WTA members are family-owned companies or cooperatives that have been building, operating and upgrading their voice and broadband networks for decades (often three or more generations of a family). Whereas some national and regional companies have paid little attention to rural service areas that generate immaterial portions of their revenues and profits, these smaller local entities have a proven record of lavishing attention and resources on similar rural areas because these areas constitute their primary or sole business. Experienced local owners, managers and key employees ensure that companies provide quality service and remain aware of and responsive to local service needs and problems. This local presence means that a BEAD project is almost certain to be a sustainable portion of an entity's long-term operation in an area and should be afforded a significant preference in the grant application evaluation process.

3. Existing broadband facilities, particularly facilities previously constructed in whole or part with federal and/or state dollars. Efficient and effective use of BEAD dollars means that they should not be used to overbuild broadband facilities that were previously deployed in whole or major part with federal or state dollars. For example, an entity may not yet be able to provide 25/3 Mbps or 100/20 Mbps services throughout an area, but may have constructed miles of fiber optic broadband trunks within portions of its network in order to provide higher speed services to close-in customers and to enable more remote customers to access 4/1 Mbps or 10/1 Mbps services. Rather than being overbuilt and superseded, these existing fiber trunks can readily and

economically be extended further and further into "unserved" or "underserved" rural areas in order to provide 100/20 Mbps or higher-speed services at a much lower cost than would be required to serve such areas with entirely new trunk facilities. Companies with broadband facilities in place that can be used to construct a BEAD-funded network at substantially lower cost should receive a significant preference in the grant evaluation process.

States should be required to employ these and other NTIA evaluation and preference standards and they should conduct the actual evaluation process for both non-competing and competing applications. As an example, NTIA could require the states to employ scoring criteria such as the following material decision factors:

> Applicant has at least three years of experience in constructing, upgrading and operating one or more high-speed broadband networks: 40 points
> Additional 10 points if applicant constructed or operated a FTTH broadband network
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> Applicant proposes FTTH or other readily scalable network: 40 points
> Additional 20 points if applicant proposes buried FTTH network
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> Applicant has existing broadband facilities that can reduce the cost of constructing a stand-alone broadband network by at least 25%: 10 points
> By at least 50%: an additional 10 points
> By at least 75%: an additional 20 points
>
> Applicant is locally owned or managed: 20 points

A certain level of reporting is necessary for NTIA and the states to monitor the progress of the BEAD program and to ensure that BEAD funds are being used in a timely manner and for their intended purposes. At the same time, reporting obligations and costs should be limited so as not to strain the administrative resources of NTIA and the states and to preserve as much as possible of the net proceeds of the BEAD grants for actual broadband construction. One way to accomplish these goals would be to tie each BEAD grant recipient's required reports directly to the

construction, costs and schedule set forth in its granted BEAD application. An alternative would be to follow the Department of Agriculture's Rural Utilities Service ("RUS") grant-loan reporting and monitoring requirements such as work order tracking, fund request draws and close-out procedures.

As to frequency of reporting, for the first two years after receipt of a grant, a BEAD recipient could be required to report semi-annually on its construction progress and compliance with its proposed construction schedule, as well as the nature and amount of its expenditures of grant monies during the period. Semi-annual reports during these first two years would give NTIA and the states early warning of and the opportunity to promptly address potential problems – both those resulting from circumstances beyond the reasonable control of grant recipients and those resulting from errors or shortcomings of grant recipients or their proposals. After the first two years, the reporting obligations of grant recipients could be reduced to annual progress reports until their proposed broadband construction is completed and their proposed broadband service is commenced.

Question 14: What criteria should NTIA require states to consider to ensure that projects will provide sustainable service, will best serve unserved and underserved communities, will provide accessible and affordable broadband in historically disconnected communities, and will benefit from ongoing investment from the network provider over time?

As stated above, the best evidence that a project will provide sustainable and quality service are the duration and type of actual experience that the BEAD grant applicant has had in the construction and operation of voice and broadband facilities and services in historically disconnected communities. WTA members and other RLECs have served for decades remote, rugged, sparsely populated and generally high-cost/low-revenue rural areas that the Bell System and other larger carriers found economically unattractive to serve. RLECs first enabled the United

States to achieve near-ubiquitous voice service and, since the 1990s, have been investing in and upgrading and expanding their networks to deploy higher speed broadband services to more of their customers and remote locations. These decades of proven service and investment in historically disconnected areas demonstrate that RLEC applicants can and will provide sustainable service and ongoing investment that will best serve unserved and underserved areas and that they will continue to provide accessible and affordable broadband services in historically disconnected areas. The proposed substantial preferences for BEAD grant applicants with direct experience in constructing and operating broadband networks, as well as the proposed preferences for local presence and existing broadband facilities, constitute an excellent way to ensure that projects achieve the four stated goals.

Question 15: What sort of speeds, throughput, latencies, or other metrics will be required to fully connect all Americans to meaningful use over the next five, ten, and twenty years? How can existing infrastructure be leveraged to facilitate and amplify these benefits?

In little more than fifteen years, consumer demand for broadband speeds has gone from kilobit levels to 4/1 Mbps to 10/1 Mbps to 25/3 Mbps to 100/20 Mbps and appears to be well on the way to 100 Mbps symmetrical and Gigabit speeds. Given this recent history, it is hard to predict if or when broadband speed demands will level off or whether they will continue to grow at the recent precipitous pace.

Under these circumstances, the most sensible and economical BEAD Program approach is to focus funding upon scalable broadband networks that can readily be adapted with minimal modification and little or no new construction to provide higher and higher broadband speeds as needs and applications evolve. And the incontrovertible fact is that FTTH networks comprise the premier scalable broadband networks. The key is that once fiber optic cables are buried or hung on poles to reach a customer location, broadband speeds can be increased by upgrading the

electronics at the service provider and customer ends of the fiber circuit. The fiber line stays as is, and no expensive reconfigurations of the network between the service provider and the customer are necessary. A scalable fiber optic network should ultimately be able to provide at least 1 Gigabit symmetrical speeds and is consequently "future proof" for a planning horizon of at least the next 20 years.

Many WTA members and other RLECs have existing fiber optic trunks that can be extended further into their service areas to achieve higher broadband speeds (and ultimately FTTH service) to more and more of their customers. In addition, existing fiber optic networks can be readily extended into adjacent unserved or underserved areas at a fraction of the cost of building new stand-alone network to serve such areas. Hence, the extension of existing broadband networks as part of BEAD grant projects will significantly decrease the construction time periods and grant amounts necessary to achieve BEAD goals in many unserved and underserved areas. This is a reason why NTIA should require the states to grant significant preferences for existing, usable broadband facilities in their evaluation of BEAD grant applications.

WTA is not asserting that NTIA and the states should reject other technologies or make BEAD grants solely to buried and aerial FTTH projects. Rather, WTA is noting that FTTH is the most scalable and economic technology and, hence, the technology best able to respond quickly, flexibly and inexpensively to the ongoing trend of rapidly increasing broadband speed demands. As such, FTTH has a significant advantage over fixed wireless networks that are likely to require additional towers and network reconfigurations as broadband speeds, usage and customer adoption increase (not to mention foliage and weather issues and the need for fiber-optic backhaul). Fixed wireless and satellite services may be viable complementary services in very remote areas where FTTH construction is currently too expensive and where the small numbers of customers would

not produce significant congestion that would degrade service. Mobile broadband services are likewise complementary services (many customers subscribe to both fixed and mobile broadband services) that depend, in significant part, upon substantial portions of their broadband data traffic being carried by fixed broadband services or off-loaded to WiFi systems using fiber-optic backhaul.

Question 16: How should NTIA treat prior buildout commitments that are not reflected in updated FCC maps because the projects themselves are not yet complete?

NTIA should tentatively honor all existing federal and state buildout commitments even if they are not reflected in updated FCC broadband maps because the projects are not yet complete. That is, where an entity is obligated to construct 25/3 Mbps and/or 100/20 Mbps or better facilities as a condition of its actual receipt of federal or state loans, grants or universal service support [for example, FCC Alternative Connect America Cost Model ("ACAM") I or II support, FCC Connect America Fund – Broadband Loop Support ("CAF-BLS"), FCC Connect America Fund Phase II Auction Support, FCC Rural Digital Opportunity Fund ("RDOF") Auction I Support, RUS ReConnect Program grant-loans, and state programs], NTIA and the state should work with other state and federal agencies to allow that entity the ability to upgrade or improve its network using BEAD or other federal loan or grant applications, and refrain from accepting or approving BEAD grant applications by unrelated entities. This will conserve BEAD funds and avoid the creation of duplicate broadband network facilities: (a) where a network is in the process of construction and is likely to be completed before the BEAD-funded facilities are deployed; or (b) where the BEAD service goals can be achieved using a complementary federal program. The most responsible course of action is to make sure that the limited resources designated by Congress for BEAD are coordinated with the funding allocated by other state and federal programs so that each of these

programs work in a complementary and coordinated manner toward reaching the goal of creating a ubiquitous and sustainable rural broadband network in unserved areas.

There is substantial uncertainty regarding whether the FCC will ever grant the applications of some potential "winners" of the RDOF I Auction whose FCC Long-Form applications remain pending over 14 months after the auction ended. Where an entity has received an FCC grant of its RDOF I auction application, it is entitled to receive RDOF support and is considered to have a firm commitment to undertake and complete its buildout obligations. Hence, its RDOF I service areas should be treated in the same manner as the pending build-out obligations in the preceding paragraph. However, where an entity has not received an FCC grant of its RDOF I Long-Form application by the time that NTIA and the states accept BEAD grant applications, the areas subject to the still-pending RDOF application can reasonably be deemed to be unserved or underserved and thus eligible for BEAD grants.

With respect to BEAD applicants that currently receive high-cost universal service support from the FCC (ACAM or CAF-BLS support), WTA urges NTIA to adopt and implement policies similar to those employed by the RUS for its ReConnect Program. Specifically, RUS offers and provides ReConnect funding for areas receiving FCC high-cost support because FCC high-cost support encompasses both operating expenses and capital expenses, while ReConnect (like BEAD) funds only capital expenses. At the same time, RUS requires ReConnect applicants to explain why RUS should provide additional funding – for example, by committing to an accelerated deployment schedule. An even better example in the BEAD situation is that FCC high-cost support recipients providing 10/1 Mbps or 4/1 Mbps service are plainly eligible to apply for and receive BEAD grants to construct higher speed networks in their "unserved" areas, whereas those providing 25/3 Mbps service are eligible to apply for and receive BEAD grants to construct 100/20

Mbps or better networks in their "underserved" areas. In all such situations, applying the RUS rules would require grants be used only for complementary purposes and not duplicative ones. RUS implements and monitors this by mandating the keeping of separate accounts to track the sources and uses of each funding source in order to support required certifications by its ReConnect grantees that ReConnect and FCC high-cost support did not pay for the same labor or materials used to deploy broadband to specific locations or to procure the same units of network equipment. NTIA could implement similar rules for BEAD grantees that are currently receiving FCC high-cost support for the same area.

Q17: **What factors other than an area's remoteness, population density, topography and poverty rate should NTIA consider in determining what constitutes a "high cost" area?**

The stated factors generally determine whether an entity's "cost per subscriber" to provide service is significantly higher than the national average cost per subscriber. The only additional factor that has a comparable impact upon cost per subscriber is climate. An area with frequent tornados, snow and ice storms, and hurricanes may have maintenance and recovery costs that increase its costs per subscriber well above the national average. In addition, northern areas with long winters and frozen ground have short construction seasons that can increase cost per subscriber well above the national average.

Q18: What additional uses, if any, should NTIA deem eligible for BEAD funding?

Construction of robust, sustainable and scalable broadband networks in unserved and underserved areas constitutes the critical core of the BEAD Program. Without ready access to such broadband networks, none of the other broadband adoption, community anchor institution and multi-family residential building service goals are likely to be attainable. And whereas $42.45 billion is a lot of money, it may not be enough to close the digital divide and ensure that all

Americans have access to reliable, affordable, high-speed broadband. After all, the initial size of the program was about $80 billion.

With these circumstances in mind, WTA strongly urges NTIA to focus upon the stated BEAD Program goals, especially the grants for high-speed broadband network construction in areas lacking access to broadband at 25/3 Mbps speeds and then focusing on areas lacking 100/20 Mbps. Until these statutory priorities are accomplished, there is no need to divert attention and resources to additional uses.

Q20: When formulating state broadband plans, what state agencies or stakeholder groups should be considered in the development of those plans?

State telephone and telecommunications company associations should definitely be included among those participating in the development of state broadband plans. These state associations have many members with direct and substantial experience in the construction, upgrade and operation of high-speed broadband networks that serve high-cost areas.

Q21: How can NTIA ensure that states/territories consult with Tribal governments about how best to meet Tribal members' needs when providing funding for broadband service to unserved and underserved locations on Tribal lands within state jurisdictions?

A number of WTA member companies serve Native American reservations and other Tribal lands. Some companies are even tribally-owned and operated. NTIA should encourage states, when consulting with Tribal governments, to make use of the expertise of existing Tribally-affiliated broadband providers and other providers that serve Tribal lands. The possibility of partnerships between Tribal communities and local broadband providers, facilitated by states, provides an excellent opportunity to extend service to these neglected areas. WTA and its members stand ready to help Tribal governments and the people they serve evaluate their options

for obtaining BEAD funds to extend and upgrade broadband service to unserved and underserved locations on Tribal lands.

Low-Cost Broadband Service Option

The main question with respect to the low-cost broadband service option required by the BIL statute is how it will operate in conjunction with the FCC's Lifeline and Affordable Connectivity Program ("ACP") discounts. Given that eligible recipients already receive a $9.25 per month Lifeline discount (up to $34.25 per month on Tribal lands) and a $30 per month ACP discount ($75 per month on Tribal lands), how should BEAD grant recipients design and update their low-cost broadband service option? This task is further complicated by the fact that ACP discounts can be applied by customers to any offered broadband service tier of their choice.

Q22: What factors should qualify an individual household for a low-cost broadband service option?

The FCC has established procedures and criteria for the determination and re-certification of the eligibility of customers for its low-income Lifeline program and ACP mechanism. To the extent that service providers and low-income customers have gone to the effort to make the necessary Lifeline and ACP filings and are familiar with them, it makes little sense to complicate and confuse matters by developing and implementing new and different state "low-cost broadband option" eligibility and certification procedures and filings. It would be much more efficient and effective for NTIA to permit states to use Lifeline and/or ACP eligibility to determine eligibility for their "Low-Cost Broadband Service Options" without the need for additional state eligibility filings, determinations and re-certifications.

Q23: What factors should NTIA and the states consider in designing "low-cost broadband service option" requirements?

Design of a "low-cost broadband service option" entails the following two basic questions: (1) what level or tier of broadband speed and service must be provided; and (2) at what price must it be offered to eligible customers or households? It also involves consideration of the impact of the FCC's Lifeline and ACP discounts and what type of low-cost service options are needed to address shortcomings of those programs and to further increase broadband adoption.

During a time of rapidly changing broadband needs and uses, rapidly increasing broadband speeds, volatile wage and price inflation, supply chain and other economic and technological uncertainties – not to mention differences in service and economic conditions in different portions of the nation and even in different portions of states – it is likely to be extremely difficult for NTIA or the states to establish and monitor broadband service tier and price levels for a "low-cost broadband service" in an accurate and stable manner. Perhaps the best solution under these circumstances is to allow each BEAD grant recipient to develop and operate its own "low-cost broadband service option" that is responsive to existing and changing local conditions. Individual service providers will be in position to know much earlier and more accurately than NTIA or the states when the speed and/or rate for their existing low-cost option is outmoded and how the option needs to be modified to remain responsive to local needs. NTIA and the states can allow grantees flexibility to use and modify reasonable low-cost service options and intervene only when they receive multiple credible complaints that a grantee is not providing a *bona fide* low-cost broadband service option.

Middle Mile Broadband Infrastructure Grant Program

The $1 billion MMBI Grant Program will help further advance broadband reliability, affordability and service quality goals by giving small and mid-sized broadband service providers in the Lower 48 states[1] lacking existing statewide or regional fiber transport networks the opportunity to obtain state-of-the-art, high-capacity middle mile routes to the Internet and to gain greater control over one of their major cost and service quality barriers.

Q32: How should NTIA target Middle Mile Broadband Infrastructure ("MMBI") Grant Program investments to areas where middle mile service is non-existent or relatively expensive (for example, due to lack of competition)?

WTA knows of no member company in the Lower 48 states that presently has no access whatsoever to any middle mile facility or facilities that can take the broadband traffic of its customers to and from the Internet. Rather, the problem for some WTA members and other RLECs is that they have only a single middle mile option – in many cases, an unrelated larger carrier that has little or no interest or incentive to upgrade its aging rural middle mile facilities to increase the speed and capacity they can provide. In other instances, WTA members and other RLECs serve areas that are located 50-to-100 miles or more from the nearest Internet access point and are paying very substantial middle mile transport charges to get their burgeoning customer traffic to and from the Internet – expenses that they have difficulty recovering without raising their monthly Internet access rates to levels that many customers cannot afford. Yet other WTA members and other RLECs are concerned by indications that some larger carriers are planning to require small

[1] WTA recognizes that Alaskan broadband service providers have major problems with middle mile service availability, quality and cost and have long been forced to rely significantly upon satellite middle mile service. Given that substantial reduction of Alaska middle mile issues could exhaust most or all of the MMBI fund, WTA has focused herein on MMBI funding for the Lower 48 states in the hope that Congress, NTIA, the FCC and/or the Alaska state government can develop a middle mile solution suitable for the unique circumstances faced by Alaskan broadband service providers. Department of Commerce Secretary Raimondo stated during a Senate Commerce-Justice-State Appropriations subcommittee hearing on February 1, 2022, that Alaskan companies may be able to obtain and use BEAD grants for middle mile projects.

broadband providers to deliver and receive their Internet access traffic at a very limited number of distant locations in major metropolitan areas.

In some states, WTA members and other RLECs have been successful in joining together to construct and operate statewide or regional fiber rings or fiber transport networks. These joint ventures give their small and mid-sized members a substantial voice in the determination of middle mile routes, connection points, capacities and upgrades. They also minimize many pricing issues, as members not only have some input into the determination of their middle mile service rates but also receive subsequent profit distributions if the assessed middle mile charges generate more revenue than is needed to maintain and operate the transport network.

NTIA could build on the successes of these joint ventures by encouraging MMBI grant applicants to form private industry consortia of small and mid-sized broadband service providers in states that do not currently have shared statewide or regional middle mile transport networks. RLECs generally serve non-overlapping local exchange areas, so they have been able to form and operate joint endeavors such as fiber rings and transport networks without running afoul of antitrust laws. Formation and operation of a general statewide private consortium would be somewhat more difficult if participating providers were competing with one another for broadband customers. Nonetheless, it could be accomplished if the focus were entirely upon the general and non-competitive transport of middle mile traffic and strictly prohibited any discussion among competing consortium members of retail service pricing or division of markets. If antitrust pitfalls could be avoided, the cooperative construction and operation of a statewide middle mile network by a consortia of small and mid-sized broadband service providers would go a long way toward reducing the middle mile access, quality and cost problems that currently plague all such providers.

Q33: How should NTIA implement statutory requirements (including improving affordability, redundancy and resiliency in existing markets; leveraging existing rights-of-way, assets and infrastructure; and facilitating the development of carrier-neutral interconnection points) in prioritizing middle-mile grant applications?

The statutory requirements are all significant considerations for evaluating MMBI grant applications. The initial prioritization should be states that are served by multiple small and mid-sized broadband service providers and that do not presently have a statewide or regional fiber ring or fiber transport network that connects most or all of such service providers and delivers their broadband traffic to and from the Internet. Within such states, fiber rings constitute the most effective way to achieve redundancy and resiliency, for they allow traffic to be transported in the opposite direction during those inevitable instances when a line cut or congestion at some point along the route blocks or disrupts traffic flow. And given the potential benefits of private industry consortia discussed above, WTA suggests that NTIA give multiple applicants seeking MMBI grants to serve the same territory within a state a fixed period (for example, 30 or 45 days) to determine whether they can agree to join together with a common proposal. In any event, whether evaluating competing MMBI grant applications within a state or comparing and prioritizing MMBI grant applications among various states, NTIA should encourage the leveraging of existing rights-of-way, assets and infrastructure because that reduces construction costs and frees up more MMBI funds for additional middle mile projects. Given that MMBI-funded middle mile networks will be constructed with federal money, they should be required to interconnect with unrelated broadband service providers in a carrier-neutral manner at any technically feasible point. Finally, whereas NTIA and the states are not well-equipped to monitor and regulate the transport rates charged by MMBI-funded middle mile networks, they can advance the goal of affordability by requiring the owners and operators of MMBI networks to price their transport services in a non-discriminatory manner by charging unrelated service providers the same rates as the owners.

Q34: Should NTIA regulate the placement of splice points or impose other requirements regarding the location(s) at which MMBI grantees must allow interconnection by other providers.

As indicated in response to Q33 above, MMBI grantees should be required –as a condition of grant and receipt of federal funding –to allow unrelated service providers to interconnect at any technically feasible point. The FCC has employed this standard with respect to the interconnection of telecommunications networks, and the industry is familiar with it.

Q35: How can the MMBI program leverage existing infrastructure and capabilities?

WTA understands that there are substantial unused dark fiber facilities in some areas and that some of their owners have been unwilling to sell or lease such dark fiber. WTA does not know how much eminent domain authority NTIA or various states have or would need to free up unused dark fiber where it exists. For the time being, NTIA should encourage MMBI grant applicants to make use of as much existing infrastructure and capabilities as possible to reduce their construction costs and grant needs and should award significant preferences to applications that make significant use of existing facilities and capabilities.

Q36: What scalability requirements, if any, should NTIA place on MMBI grant recipients?

Just as with last mile facilities, fiber optic lines are the best and most scalable alternative for middle mile networks. Given the burgeoning growth of broadband traffic as well as broadband speeds, the most scalable, efficient, economic and effective way to construct middle mile networks during the foreseeable future is to build them with fiber optic lines, often multiple fiber lines, in conduits or rings. It is far more efficient to add or upgrade electronics at certain points along a middle mile route than to hang or bury tens or hundreds of miles of new lines or to construct or upgrade multiple microwave towers.

Respectfully submitted,
WTA – ADVOCATES FOR RURAL BROADBAND

/s/ Derrick B. Owens
Senior Vice President of Government
and Industry Affairs
/s/ Eric Keber
Vice President of Government Affairs
400 Seventh Street, NW, Suite 406
Washington, DC 20004
(202) 548-0202

/s/ Gerard J. Duffy, Regulatory Counsel
Blooston, Mordkofsky, Dickens, Duffy &
Prendergast, LLP
2120 L Street, NW, Suite 300
Washington, DC 20037
(202) 659-0830

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