



Advocates for Rural Broadband

David Shipley
President

Kelly Worthington
Executive Vice President

July 16, 2021

FILED VIA <https://www.regulations.gov>

Office of Undersecretary of Domestic Finance
Department of Treasury
1500 Pennsylvania Avenue NW
Washington, DC 20220

**RE: Coronavirus State and Local Fiscal Recovery Funds
Interim Final Rule Comments**

Dear Sir or Madam:

WTA – Advocates for Rural Broadband (“WTA”) is a national trade association that represents more than 360 small rural telecommunications carriers (“RLECs”) that provide voice, broadband and other services to some of the most rural, remote and hard-to-serve communities in the country. They are the providers of last resort to many farming, ranching, mining, mountain, forest, and desert communities, as well as to Native American reservations and other Tribal lands.

WTA is herein responding to the Department of Treasury’s (“the Department’s”) questions regarding Broadband Infrastructure (questions 22 through 26).

As the Department may be well aware, the terrain and climate variations, long distances, and low population densities of rural areas render them difficult, expensive and often unprofitable to serve. Nonetheless, with the assistance of federal and state universal service programs and other federal grant and loan programs, WTA members and other RLECs were successful in enabling virtually all households throughout the United States to have access to voice service by the early 1990s. Since that time, WTA members and other RLECs have been working hard and investing their own funds as well as governmental (predominately federal) universal service support, grants, and loans to extend and upgrade the broadband facilities and services available to their rural customers and service areas.

RLEC broadband upgrades are generally accomplished by extending fiber optic trunks further and further into the original copper voice service networks with the ultimate goal being the replacement of the interim hybrid fiber-copper networks with fiber-to-the-home (“FTTH”), fiber-to-the-curb (“FTTC”) or fiber-to-the-neighborhood networks capable of satisfying customers as they demand higher and higher broadband speeds. It is generally more economical and efficient to upgrade a network by extending existing fiber optic facilities further and further in stages toward the ultimate FTTH goal. This approach can more flexibly target existing and immediate future needs, spread out private and government investment expenditures, and minimize the potential for abandoned plant, stranded investment and defaults on government and private loans.

The ultimate goal is a FTTH broadband network that reaches the vast majority (at least 95 percent to 98 percent) of the nation's households (a small number of very remote households may be technically or economically unfeasible to reach by fiber). The COVID-19 pandemic has demonstrated the need for high-speed broadband service on both a downstream and upstream basis to enable work, commerce, schooling and medical consultations from home. Even prior to COVID-19, minimum broadband speed standards had increased rapidly from kilobit levels to 25 Megabits per second downstream and 3 Megabits upstream (25/3 Mbps) levels and beyond. There is no indication that broadband capacity demands are slowing. In fact, it is virtually certain that emerging applications such as precision agriculture, telehealth, and unforeseen future applications will continue to push "minimum" broadband speeds higher and higher.

FTTH is, by far, the superior technology for addressing communication needs in a world of increasing broadband capacity needs. First and foremost, FTTH is scalable; once the FTTH network is constructed, it can be upgraded to higher and higher speeds by replacing the electronics at the carrier and customer ends of the line. This entails some cost for the installation of the upgraded electronics at customer homes, but it is far less expensive and time-consuming than redesigning existing networks and constructing new towers. FTTH is also a very high quality and reliable technology that is not adversely impacted by atmospheric conditions, foliage during warm weather months, line-of-sight problems, or undue congestion when many customers along a route need to use their service at the same time. Moreover, fiber optic networks furnish essential backhaul transport services for both mobile and fixed wireless systems.

The most efficient and economical path to a scalable and future-proof FTTH network that can keep pace with growing broadband service demands is to continue extending fiber optic trunks and customer drops further and further into existing broadband networks. The Department should begin by focusing upon broadband networks that have not yet achieved 25/3 Mbps service for significant numbers of their customers. By defining "unserved areas" for purposes of the subject Interim Rules as areas that lack wireline connection capable of reliably delivering access to 25/3 Mbps service, the Department can and should make such areas the primary initial focus of its American Rescue Plan ("ARP") broadband funding. Then, continuing along an incremental upgrade strategy to get to FTTH, the Department should define "underserved areas" as those with access to broadband services within the 25/3 Mbps to 100/20 Mbps speed range and provide ARP funding for the upgrades necessary to extend fiber closer and closer to the homes in such areas in order to provide them with access to 100 Mbps symmetrical and higher broadband speeds.

Question 22: What are the advantages and disadvantages of setting minimum symmetrical download and upload speeds of 100 Mbps? What other minimum standards would be appropriate and why?

A 100 Mbps symmetrical service is an excellent high-speed broadband service that will accommodate many existing and readily foreseeable customer needs. Some WTA member companies have the FTTH and middle mile facilities capable of providing 100 Mbps symmetrical service today. Others will need substantial fiber-optic extensions further into their networks as well as middle mile upgrades.

100 Mbps symmetrical service is a worthy aspect of the ultimate goal of a near-ubiquitous FTTH network. Currently billions of dollars of private investment, federal and state universal service support, and Rural Utilities Service ("RUS") grants and loans are being expended to upgrade networks

to provide 25/3 Mbps broadband services. The Department's ARP program should complement these existing and newly-created investment programs by providing funding first for "unserved" areas that still lack reliable, wireline 25/3 Mbps service. Once those unserved areas are identified and funded, the focus should be on helping providers with rural networks offering service between 25/3 Mbps and 100/20 Mbps upgrade to 100 Mbps symmetrical and higher speed FTTH services as broadband demands increase.

Question 23: Would setting such a minimum be impractical for particular types of projects? If so, where and on what basis should these projects be identified? How could such a standard be set while also taking into account the practicality of using this standard in particular types of projects? In addition to topography, geography and financial factors, what other constraints, if any, are relevant to considering whether an investment is impractical?

Topography, geography, and financial limitations may make it exceedingly expensive or otherwise impracticable to deploy FTTH in a small number of very remote or excessively rugged rural locations. WTA believes that this entails a relatively small number of locations (likely about two to five percent at the most). It is for such locations that a secondary buildout speed standard will need to be used, such as 100/20 Mbps.

Question 24: What are the advantages and disadvantages of setting a minimum level of service at 100 Mbps download and 20 Mbps upload in projects where it is impracticable to set minimum symmetrical download and upload speeds of 100 Mbps? What other minimum standards would be appropriate and why?

As stated above, there are certain locations that are just too remote to achieve a FTTH or 100 Mbps symmetrical connection with the limited funds available. A 100/20 Mbps service tier is a good intermediate broadband service target for those areas. This speed standard will require existing broadband providers to push fiber further into their networks, and this speed standard is achievable for those providers that opt for fixed wireless technology. For many RLECs, upgrading to 100/20 Mbps will require significant costly increases in middle mile capacity.

Note, however, that a 100/20 Mbps service tier should be a buildout goal to prevent areas from becoming underserved and not the standard for determining whether areas are unserved. The lack of 100/20 service should not open up an area for the ARP funding of new broadband networks that will overbuild an existing network constructed with federal and/or state support. Rather, ARP funding should be devoted to upgrading existing networks to the 100/20 Mbps standard in those areas where 100 Mbps symmetrical speeds or FTTH is impractical.

Question 25: What are the advantages and disadvantages of focusing these investments on those without access to a wireline connection that reliably delivers 25 Mbps download by 3 Mbps upload? Would another threshold be appropriate and why?

25/3 Mbps is the Federal Communication Commission's current standard for broadband service. The 25/3 Mbps standard should be the Department's criterion for determining whether an area is "unserved." Areas lacking this level of service are the neediest and least likely to be served without federal intervention and investment, so the initial focus of the Interim Final Rule should be to provide the funding necessary to enable providers to deploy more fiber in areas lacking 25/3 Mbps.

The disadvantage of solely focusing on areas lacking 25/3 Mbps is that there are rural areas today in which a provider is delivering 25/3 Mbps service but the service falls short of the 100/20 Mbps or 100 Mbps symmetrical speeds that are becoming more necessary. There is the potential for these areas to be left behind, which is why the Department should set an “underserved” definition different from the “unserved” definition. “Underserved” should be defined as those areas lacking a connection reliably delivering 100/20 Mbps but having a connection delivering more than 25/3 Mbps. In these situations, funding should be directed to existing broadband networks to encourage them to extend their fiber trunks and upgrade their speeds to at least 100/20 Mbps, but ideally 100 Mbps symmetrical.

Question 26: What are the advantages and disadvantages of setting any particular threshold for identifying unserved or underserved areas, minimum speed standards or scalability minimum? Are there other standards that should be set (e.g., latency)? If so, why and how? How can such threshold standards, or minimum be set in a way that balances the public’s interest in making sure that reliable broadband services meeting the daily needs of all Americans are available throughout the country with the providing recipients flexibility to meet the varied needs of their communities?

The goal of the ARP programs should be to make quality, reliable and affordable broadband service available on a scalable and future-proof basis as soon as practicable to most or all households. The COVID-19 pandemic has demonstrated the importance and necessity of the sufficient broadband service that has alleviated what could have been major economic, educational and healthcare dislocations and tragedies.

FTTH technology has proven to be the highest quality, largest capacity, most readily scalable and economically efficient, and most reliable means of providing broadband service in a market characterized by increasing demands for higher and higher speeds. In addition to providing last mile service to households and middle mile connections for retail service providers, fiber optic facilities are essential for the carriage of most mobile and fixed wireless traffic to and from radio towers.

To date, broadband speed standards have proven to be the most efficient way to identify areas that are unserved or underserved and need additional funding for broadband extensions and upgrades. Speed standards are flexible enough to reflect the rapidly changing nature of broadband service needs and customer demands. Whereas scalability is critical to the efficient and economic design of broadband networks in a time of rapidly changing future needs, speed standards provide the most timely and flexible indications of such changing needs. Hence, broadband speed standards provide a reasonably accurate and expeditious way for the Department to determine areas that need the ARP broadband support that it has available to distribute and to evaluate the nature and amount of support that it should distribute to such areas.

WTA reiterates its proposal that the Department define “unserved areas” for purposes of the subject Interim Final Rule as those areas that lack access to reliably delivered wireline 25/3 Mbps broadband service, which should be the initial focus of ARP broadband funding. The Department should define “underserved areas” as those that have current access to broadband services within the 25/3 Mbps to 100/20 Mbps range. These areas should be the focus of remaining ARP broadband funding. In both instances, the extension of fiber optic facilities in existing scalable broadband networks built with government support is the most efficient and economical way to reach the desired higher and higher broadband speeds.

Respectfully submitted,
WTA – Advocates for Rural Broadband

/s/ Derrick B. Owens
Derrick B. Owens
Senior Vice President of Government
and Industry Affairs
400 Seventh Street, NW, Suite 406
Washington, DC 20004
Telephone: 202-548-0202
Email: derrick@w-t-a.org

/s/ Gerard J. Duffy
Gerard J. Duffy, Regulatory Counsel
Boston, Mordkofsky, Dickens, Duffy &
Prendergast, LLP
2120 L Street, NW, Suite 300
Washington, DC 20037
Telephone: (202) 828-5528
Email: gjd@bloostonlaw.com