Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)
	)
Rural Digital Opportunity Fund	) WC Docket No. 19-126
	)
Connect America Fund	) WC Docket No. 10-90

COMMENTS OF WTA – ADVOCATES FOR RURAL BROADBAND

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SUMMARY

WTA – Advocates for Rural Broadband ("WTA") views the proposed $20.4 billion Rural Digital Opportunity Fund ("RDOF") as an interesting potential approach to the problem of lagging broadband deployment in some rural price cap areas. However, the CAF Phase II Auction procedures that were previously employed in a reverse auction for areas with no existing high-speed broadband service must be revised substantially before they can be employed effectively, efficiently and equitably in areas that already have existing high-speed 10/1 Mbps broadband networks and customers. Where substantial numbers of existing broadband customers are present, the Commission must design reverse auction procedures to give priority to customer service and protection considerations over the goal of driving high-cost support disbursements down to the lowest possible level.

WTA proposes the grant of a substantial 25% RDOF bidding credit to existing Connect America Fund ("CAF") support recipients that have met their build-out requirements under the current support mechanism – in the present case, to CAF Phase II recipients who have met their 10/1 Mbps build-out obligations. This bidding credit increases the probability that existing broadband customers in RDOF areas can keep services and service providers that they like, and will not be required to purchase more expensive services or replace functional consumer premises equipment due to auction-required changes in service providers and/or technologies. This bidding credit also encourages existing CAF recipients to meet their current build-out requirements, and avoids potential problems with stranded investment, unpaid construction loans and unrecovered facility costs with respect to broadband infrastructure that was required to be deployed pursuant to the rules governing the previous CAF mechanism.

WTA proposes a number of changes to the CAF Phase II Auction weighting factors, the general purpose of which is to maintain and improve the quality of service expected by existing customers while discouraging low-ball bidding strategies that would reduce service quality and customer satisfaction. The proposed revised weightings include: (a) a weighting preference for an Evolving Baseline Tier that would require the baseline broadband speed to be increased significantly during the ten-year RDOF term (*e.g.*, 25/3 Mbps for first 5 years, then 50/6 Mbps for years 6 to 10); (b) a weighting preference for a Symmetric Tier (*e.g.*, 25/25 Mbps) that will increasingly be needed as applications requiring higher upstream speeds proliferate; (c) a separate weighting preference for monthly usage allowances, including a substantial preference for the unlimited monthly usage desired by many customers; (d) a weighting preference for localized maintenance capable of responding rapidly to trouble calls, especially those that require truck rolls; (e) a weighting preference for voice service that is integrated into and coordinated with local E-911 service; and (f) a weighting preference for a very low latency level (*e.g.*, 25 milliseconds).

WTA reiterates its support for the correction of RDOF and other location estimates that are recognized by virtually everyone to be inaccurate, but opposes *pro rata* support reductions when location estimates are reduced because the costs of building and operating broadband networks are predominately governed by the size and characteristics of the areas served and are impacted minimally by moderate fluctuations in the numbers of locations passed or served.

WTA opposes the 28-to-70% subscribership milestones proposed in the *NPRM* because they appear to be unreasonably high for the current rural broadband market, and are wholly outside the control of service providers. WTA is willing to work with the Commission to try to find more practicable and equitable solutions to the gaming tactics that the proposed milestones are intended to discourage.

Finally, WTA reiterates its long-standing support for measures the encourage greater deployment if broadband facilities and services on Tribal lands, including a 25% Tribal Broadband Factor to reduce RDOF funding benchmarks and a 25% RDOF bidding credit for those seeking to serve Tribal Lands.

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WTA – Advocates for Rural Broadband ("WTA")[1] hereby submits its comments with respect to the Commission's *Notice of Proposed Rulemaking*, FCC 19-77, released August 2, 2019 in the captioned proceeding ("*NPRM*"). These comments are filed in accordance with the schedule published in 84 Fed. Reg. 43543 (August 21, 2019).

WTA agrees that the Commission's top priority is closing the digital divide and that access to high-speed broadband services needs to continue to be expanded throughout rural America. It views the proposed $20.4 billion Rural Digital Opportunity Fund ("RDOF") as a potentially promising way to address the long-term problem of lagging broadband deployment in some rural price cap service areas. However, while the multi-round, descending clock, everyone-against-everyone Connect America Fund ("CAF") Phase II reverse auction conducted during 2018 may prove ultimately successful in bringing high-speed broadband services at low cost to some unserved areas and customers that never previously had access to them, its specific procedures are

[1] WTA is a national trade association representing more than 340 rural telecommunications providers that offer voice, broadband, and video-related services in rural America. WTA members are predominately rural local exchange carriers ("Rural LECs") that serve some of the most rugged, remote and/or sparsely populated areas of the United States. The primary service areas of WTA members are comprised of farming and ranching regions, isolated villages, mountain and desert communities, and Native American reservations. WTA members are providers of last resort to many remote areas and communities that are both very difficult and very expensive to serve.

not appropriate for the very different circumstances of areas that have existing high-speed broadband customers, services and networks. This is particularly true where existing customers have adapted their usage and equipment to their present broadband service providers and networks, and where such networks have been constructed with CAF support and pursuant to CAF build-out obligations. The situation is complicated even further where existing CAF recipients have not yet had time to fully repay their construction loans and/or recover their investment costs with respect to the broadband facilities they were required to deploy pursuant to such CAF build-out obligations. Hence, if the Commission determines to employ reverse auctions in areas having existing 10/1 Mbps or better high-speed broadband networks, it needs to modify its reverse auction process substantially before a version can be effectively, efficiently and equitably deployed to select the broadband providers and broadband services for large portions of rural America during the next decade and thereafter.

I.
Impact of Definition and Treatment of "Unserved" Areas Upon Existing Broadband Customers and Financial Arrangements

The RDOF will be, in substantial part, the successor to the CAF Phase II model-based support mechanism that provided high-cost support and 10/1 Mbps build-out obligations during the period from 2015 through 2020 to price cap carriers that elected to participate on a statewide basis. It will also include other price cap areas that were not eligible to elect CAF Phase II model-based support because they were already served by existing 10/1 Mbps broadband facilities, and price cap areas without significant broadband service where support was not awarded in the CAF

Phase II Auction.[2] Hence, many of the price cap areas contemplated to be included in RDOF reverse auctions already have substantial existing 10/1 Mbps broadband facilities and customers.

The *NPRM* proposes that $16 billion Phase I of the RDOF reverse auctions target census blocks that are "wholly unserved" – which it defines as areas that do not have broadband speeds of at least 25/3 Mbps. The $4.4 billion Phase II RDOF auction will then include census blocks that are "only partially served" with 25/3 Mbps service as well as those unawarded in Phase I. *NPRM* at ¶45.

There are very significant differences between an area that is "wholly unserved" because it has no high-speed broadband network or service or customers whatsoever, and one that has little or no 25/3 Mbps broadband service but has an existing broadband network that is presently providing 10/1 Mbps services to existing customers. While some applications require 25/3 Mbps speeds, many customers appear still to consider 10/1 Mbps service to be high-speed and to have difficulty determining whether their broadband service is operating at a 10/1 Mbps speed versus a 25/3 Mbps speed. Classifying an area served by a 10/1 Mbps network as "wholly unserved" and placing it in a descending clock, free-for-all RDOF reverse auction introduces several complications that can lead to customer disruptions and dissatisfaction as well as to reduced incentives for many existing and prospective participants in Commission high-cost support mechanisms to make long-term investments in broadband infrastructure.

First, if the current price cap CAF Phase II recipient that has deployed a 10/1 Mbps network loses future CAF support [and possibly also its eligible telecommunications carrier ("ETC") status] as the result of an RDOF reverse auction, what happens to the present broadband service

[2] The RDOF auctions may also include the Hawaiian Home Lands and some Rural LECs census blocks or service areas that Rural LECs decline to serve and hand back to the Commission for CAF support purposes. To the best WTA's information and belief, there are currently no census blocks or service areas in the latter category.

arrangements of its existing customers[3]? Are they satisfied with their present 10/1 Mbps service and service provider, and want to keep them for at least another few years? Do they want to pay more for 25/3 Mbps or faster services, and/or to use a different technology? Will they have to replace, upgrade or modify their still-functional customer premises equipment ("CPE") to use the contemplated new 25/3 Mbps or higher speed services and/or the new supported technology? Will they be willing to incur the time, effort, service disruptions, learning curve and cost to do so? From their long experience with rural customers, WTA members believe that auction-required cost increases are likely to be a significant factor here – both the higher monthly service rates for 25/3 Mbps or higher broadband speeds and the costs of replacing CPE in order to become compatible with the different equipment used by the new service providers and/or new technologies resulting from reverse auctions. WTA believes that most rural customers are willing to upgrade their service speeds and CPE when that is necessary to use new applications and services that they want. However, changes that they did not request but that require them to pay more for higher-speed services or to replace their still-serviceable CPE or to learn how to navigate a new service provider's network are likely to generate significant customer dissatisfaction as well as complaints to federal and state officials.

Second, what happens to the 10/1 Mbps network investments that have been made with CAF Phase II support and associated build-out obligations by large and mid-sized price cap carriers? Of particular concern are not only the potential stranding and waste of substantial Universal Service Fund ("USF") dollars but also potential defaults with respect to the unpaid

[3] The *NPRM* recognizes that the price cap carriers that accepted CAF Phase II model-based support undertook to serve nearly 7.3 million rural customers in 45 states and one territory, and that they had reported deploying 10/1 Mbps or better service to more than 6.4 million of such rural customers by December 31, 2018. *NPRM* at ¶8, n.11. These customer numbers do not include rural customers that have received or will receive 10/1 Mbps service during the last two years of the CAF Phase II term, nor rural customers in areas that were excluded from the CAF Phase II mechanism because they were located in areas that already had 10/1 Mbps service.

portions of broadband construction loans and potential losses due to inability to recover the undepreciated costs of broadband infrastructure assets that are no longer supported. Most broadband infrastructure assets have useful lives (often 15-to-30 years) that extend far beyond the 6-to-10-year terms of CAF Phase II and other recent Commission high-cost support mechanisms, while many broadband infrastructure deployment projects have been financed in whole or part via construction loans with repayment terms exceeding 10 years (with 15 years being a common loan repayment term). If the Commission throws the service areas where these network investments were made into its RDOF auctions, what are likely to be the impacts upon unpaid broadband construction loans and unrecovered broadband facility costs? Will the need to repay outstanding loans and to recover undepreciated investment costs – most of which were incurred to comply with CAF Phase II service obligations -- make it unreasonably difficult or impossible for existing CAF Phase II recipients to compete in an RDOF reverse auction with unencumbered entities? Will the Commission modify its previous decision to limit transition periods for CAF Phase II recipients that do not win a subsequent reverse auction to one or two additional years, and instead provide transition periods long enough to permit carriers that made substantial broadband infrastructure investments in order to comply with their CAF Phase II build-out obligations to repay their loans and recover their costs?

These latter questions have implications that extend far beyond the finances and financial health of large and mid-sized price cap carriers. Rather, the treatment of price cap carriers and their lenders will have a substantial impact upon the incentives of the owners and directors of existing and potential future broadband service providers to invest in broadband infrastructure with useful lives and depreciation recovery periods longer than the support periods specified in Commission reverse auctions and high-cost support mechanisms, and of lenders to make infrastructure loans with repayment periods that extend beyond such support periods. How can the Commission equitably require service providers to meet build-out requirements when the investments necessary to do so entail loans that cannot be fully repaid and/or costs that cannot be fully recovered during the term of the Commission's support mechanism? Will unsatisfactory treatment of unpaid construction loans and undepreciated assets of existing price cap service providers preclude many future service providers even from clearing the initial hurdle of obtaining reasonable bank or vendor financing (or any third-party financing at all) for CAF-supported broadband investments?

A.
Proposed Solution: Substantial Bidding Credit for Existing CAF Recipients that Have Met Their Current Build-Out Obligations

In service areas where there are existing customers relying upon 10/1 Mbps services supported by CAF dollars, it is not feasible to allow a descending clock reverse auction mechanism to drive CAF support below the minimum level that any provider needs to serve the area, thereby depriving the area entirely of the CAF support needed for either 10/1 Mbps or 25/3 Mbps high-speed broadband service there. Likewise, it is also not feasible to allow a service provider with a proven record of deploying and providing the currently supported level of high-speed broadband service to existing customers to be underbid and replaced as the local CAF recipient by an entity willing to propose to accept a lesser amount of CAF support for the next-higher speed tier without clear evidence that the low bidder can or will furnish comparable service quality and reliability. These likely service disruptions are exacerbated when the low bidder uses a different technology and/or otherwise requires replacement or modification of functional existing CPE.

An effective way to address and at least significantly reduce consumer disruptions and dissatisfaction is to provide a 25 percent RDOF auction bidding credit to price cap carriers in those service areas where they satisfied their 10/1 build-out obligation under the CAF Phase II mechanism,[4] and in those service areas where they were not eligible for CAF Phase II support because they were already providing substantial 10/1 Mbps service. This bidding credit would still require qualifying price cap carriers to select and bid for the Baseline 25/3 Mbps or higher performance tier in the RDOF reverse auctions, and to comply with all associated build-out and other public service obligations if they succeed in making the ultimate winning RDOF bid for the service area. The advantage is that it would reward price cap carriers for meeting their build-out obligations under the immediately preceding CAF Phase II mechanism, and would increase the likelihood that existing customers can keep the current 10/1 Mbps services and equipment that they like, and gradually upgrade to 25/3 Mbps and faster services if and when it is desirable and convenient for them to do so.

The proposed bidding credit should be much easier to implement than changes or additions to service tiers.[5] It would give carriers that had complied with their existing 10/1 Mbps build-out obligations a substantial, but not insurmountable, advantage in the RDOF reverse auctions. In addition to increasing the likelihood that customers can keep 10/1 Mbps services, equipment and service providers that they like, it would give all existing CAF recipients greater incentives to meet their current build-out obligations and a better chance of receiving future CAF support during the remaining useful lives, cost recovery periods and loan repayment periods for the investments that they made to satisfy those build-out obligations. In contrast, in areas where a CAF Phase II support recipient fails to meet its 10/1 build-out obligations, it will not receive the proposed bidding credit.

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[4] WTA is aware that inaccurate estimates of the numbers of "locations" in many specific service areas can preclude a service provider from meeting its build-out obligations. This issue is addressed below.

[5] As WTA understands how the proposed 25% bidding credit would operate in a reverse auction, the qualifying entity that needs a minimum of $120,000 in monthly CAF support to serve the subject area would be able to place a bid of $100,000 per month for RDOF auction purposes. That bid would beat a competing bid of $110,000 per month that had no bid credit, but the victorious qualifying entity would actually receive $120,000 in monthly support for the area.

This can benefit new entrants and competitors because these are likely to be areas where customers are not happy with their existing broadband service, and where new entrants would have the best opportunity of signing up substantial numbers of broadband customers.

II.
The CAF Phase II Auction Bid Weighting Methodology Should Be Modified Due to Different Circumstances of RDOF Auctions

WTA is aware that the Commission considers the CAF Phase II Auction to have been a success that is scheduled to provide $1.488 billion in universal service support over ten years to build high-speed broadband service to over 700,000 households and small businesses in 45 states, with 99.75 percent of locations scheduled to receive 25/3 Mbps service and more than half receiving at least 100/20 Mbps service. *NPRM* at ¶2. The CAF Phase II Auction was certainly successful in coming within the budget set by the Commission by eliminating enough eligible census block groups and by inducing enough bidders to accept high-cost support for other census block groups that was lower than the reserve prices set by the Connect America Cost Model ("CAM"). However, it will not be clear until completion of the applicable six-year build-out period and beyond whether the winning CAF Phase II Auction bidders were able to deploy and operate the broadband facilities and services that they promised with the amounts of CAF support that they agreed to accept. All we know so far is that approximately 30-to-40 "winning bidders" appear to have defaulted during the Long Form application period before any deployment was required or support distributed.[6]

[6] See, e.g., Public Notice (*Connect America Fund Phase II Auction Support for 822 Winning Bids Ready to Be Authorized; Bid Defaults Determined*), AU Docket No. 17-182 and WC Docket No. 10-90, DA 19-248, released April 3, 2019 (Attachment B: Bids in Default); Public Notice (*Connect America Fund Phase II Auction Support for 611 Winning Bids Ready to Be Authorized*), AU Docket No. 17-182 and WC Docket No. 10-90, DA 19-535, released June 7, 2019 (Attachment B: Bids in Default); and Public Notice (*Connect America Fund Phase II Auction Support for 1,122 Winning Bids Ready to Be Authorized*), AU Docket No. 17-182 and WC Docket No. 10-90, DA 19-685, released July 22, 2019 (Attachment B: Bids in Default).

Regardless of the extent to which the CAF Phase II Auction ultimately satisfies its promise, it will have a positive impact because it will bring some broadband service to at least some of the estimated 700,000 locations that did not previously have any access at all to high-speed broadband service. However, as discussed above, the situation differs materially with respect to the proposed RDOF reverse auction because many of the customers residing in the areas to be included in that auction have existing 10/1 Mbps broadband service arrangements, and may not want them to be disrupted, degenerated, increased in price or terminated if their existing service providers suffer loss of their CAF support in the auction.

Where existing 10/1 Mbps broadband customers and service arrangements are present, the Commission needs to recognize this critically important fact and to construct the weighting factors that establish the RDOF reverse auction playing field in such manner that consumer service and protection considerations count more -- hopefully, much more -- than the goal of driving CAF disbursements down to the lowest level possible. The core problem is that the "free-for-all, everyone-against-everyone" multi-round, descending clock procedures used in the CAF Phase II Auction unduly favor promises of low-cost, short-term solutions in lower cost service areas. The descending clock feature does not simply determine which of two or more bidders is willing to serve a particular area with the lowest amount of support, but rather keeps on lowering the available support for all areas until the aggregate support for all of the service areas remaining in the auction drops below the target overall budget. Along the way, some service areas with existing 10/1 Mbps broadband service that could be served with X dollars of support will not receive further bids and drop out of the auction when the descending clock price drops below X dollars.

A

Proposal: Weighting Preference for an Additional and More Flexible Evolving Baseline Tier

The multi-round, descending clock CAF Phase II auction procedures appear to have encouraged some bidders to make lower and lower bids that entailed the reduction of their facilities and costs as much as possible. This can take a number of forms, including hanging cable on poles rather than burying it, constructing the minimum possible number of towers, or using the facilities, personnel and resources of electric power companies[7] and other businesses as much as possible. The flaw in this approach is that the short-cuts employed for short-term advantage in an auction are likely to result in either outmoded, unreliable service during the proposed 10-year RDOF term or higher costs in the long run if, as expected, broadband speed and capacity demands continue to increase and require further speed upgrades. Given that the broadband speed supported by the CAF has increased from 4/1 Mbps in 2011 through 10/1 Mbps to 25/3 Mbps today, that is far more than a theoretical concern.

WTA proposes that the Commission encourage longer-term broadband service planning and preparation and discourage short-term minimalist bidding tactics by inserting a new evolving two-speed performance tier between the Baseline Tier and the Above Baseline Tier. For example, it can add an Evolving Baseline Tier having a target speed of 25/3 Mbps during Years 1 to 5, and a target speed of 50/6 Mbps during Years 6 to 10 as an additional bidding option, and give it a significantly more advantageous weight than the Baseline Tier option.[8] The objective of this or a similar approach is to give a substantial RDOF weighting preference to bidders that recognize that

[7] The Commission has traditionally taken a very hard line against cross-subsidization of competitive services by monopoly or dominant telecommunications service providers. WTA, to date, has not seen any substantial Commission inquiries into the extent to which electric power companies may be using their existing, often market-dominant, power networks, conduits, poles, service trucks and staffs to cross-subsidize their broadband services and service proposals.

[8] WTA will propose below a somewhat broader range of bidding weights for the performance tiers in the RDOF auctions.

broadband speeds and services are likely to continue to evolve, and that propose a network that is more scalable and more economically able to deliver higher broadband speeds during the ten-year RDOF term if such higher speeds are needed by consumers to make use of new applications and services. The presently proposed Baseline Tier will remain available, but will have a weighting disadvantage with respect to the new Evolving Baseline Tier because the latter should provide greater flexibility and upgrade potential at a more economical longer-term cost than many of the typically more short term and "bare-bones" Baseline Tier bidding strategies.

B
Proposal: Weighting Preference for A Symmetric Tier

During the contemplated ten-year RDOF term, there are also very likely to be substantial increases in consumer demand for higher upload speeds for emerging applications such as remote medical procedures and testing, farm auctions, home monitoring, video and the Internet of Things. These and other potential developments entail the upstream transmission of a much larger volume of high definition video and other critical data. In recognition of the likely major increases in upstream bandwidth requirements for emerging services, the Commission should add at least one symmetrical performance tier as a RDOF bidding option and give it a weight that affords a reasonable preference to bidders that commit to its provision.

WTA proposes that the Commission initially add a single Symmetric Tier with a required speed of 25/25 Mbps, and give it a substantially more advantageous weight than the Baseline Tier. Whereas some networks may be capable – now or in the near future – of providing symmetric service at all speeds,[9] a single 25/25 Mbps offering may be sufficient at this time to recognize and

[9] WTA notes that an Evolving Baseline Tier and a Symmetric Tier are not mutually exclusive, and could both be offered by some service providers. Similarly, some service providers can deploy networks capable of offering symmetric upstream and downstream speeds on all tiers. An alternative approach would be to treat symmetric upstream and downstream speeds as a separate category like Latency (and like WTA proposes for Monthly Usage

support what appears to be a substantial demand for increased upstream bandwidth that is virtually certain to become widespread during the ten-year term of the RDOF.

C
Proposal: Separate Weighting Preference for Monthly Usage Allowances

Many WTA members have experienced significant resistance by their broadband customers to any kind of monthly usage allowance and the associated assessment of additional charges for exceeding that allowance. As a result, many WTA members have found that they are able to increase significantly the satisfaction of their customers and encourage increased broadband adoption by offering service tiers with no monthly usage limits.

Whereas the initially proposed 150 Gigabit and 2 Terabyte monthly usage limits appear to be tied somewhat to U.S. median monthly usage, that means that a significant number of customers – possibly as many as half -- will be subject to such monthly limits and additional charges when they are exceeded. It is reasonable for some service providers to impose a monthly usage limit, and to assess additional charges for usage exceeding those limits. However, a carrier that offers unlimited usage to its customers is providing them with a higher quality and more popular service that significantly increases their satisfaction, and should be rewarded with a weighting advantage in the RDOF reverse auctions for doing so.

WTA proposes that Monthly Usage Allowance should be considered and weighted separately in the RDOF auction in a manner similar to Latency rather than being included as an element of each proposed performance tier. In addition to the 150 Gigabit and 2 Terabyte categories, there should also be an "Unlimited Monthly Usage" category that is afforded a reasonable weighting advantage over the other two usage categories.

Allowances and Prompt Localized Maintenance) and provide a weighting advantage for Symmetric Service that can be added to a bidder's Performance Tier weight.

D
Proposal: Weighting Preference for Prompt Localized Maintenance

Customers require not only access to particular broadband speeds but also reliable and continuous broadband service. A Gigabit speed broadband service sounds great on paper, but is not very useful to actual customers if their network or in-home facilities are frequently down or unreliable, and they cannot get a competent maintenance technician to come to their residence to investigate and repair their service problem for days or weeks at a time. Hence, it is important for the RDOF reverse auction process to consider and provide a weighting preference for bidders that commit to establish a dedicated localized maintenance operation that is capable of improving the quality, reliability and continuity of customer service by responding rapidly to trouble calls.

In the Rural LEC business, it is common for at least the primary central office in a study area to have a substantial local technical staff capable of installing and maintaining switches, servers, interoffice lines, local loops and customer interfaces and equipment. Except in cases of major storms and natural disasters (when their staffs work around the clock to restore service), most Rural LECs generally strive to restore customer service within 24-to-30 hours after receiving a trouble call.

Ideally, an RDOF bidder could be required to establish a local maintenance facility within the service area for which it is bidding. However, such local facilities may be impracticable and excessively expensive in many of the more remote census block groups and other outlying areas that will be included in the RDOF auctions. What the Commission should try to distinguish, and reward via a weighting preference, is the situation where a bidder will commit to establish a dedicated, localized maintenance operation that is close enough to an auctioned service area to be able to respond to most trouble calls via a truck roll to the customer's location within 24-to-30 hours versus the situation where a bidder has no localized maintenance operation but instead relies upon third-party contractors or a distant staff that may not be able to dispatch a technician and truck to respond to trouble calls for days or weeks.

Hence, WTA proposes that the Commission add an RDOF weighting factor for Prompt Localized Maintenance and consider it similarly to the way that it treats Latency. Such a Prompt Localized Maintenance factor would provide a weighting preference to bidders that commit to have a "localized" maintenance facility that is located sufficiently close to the auction area to be able to respond, when on-site service is required, via a truck roll to a customer's location within 24-to-30 hours after a trouble call is placed.[10] Such "localized" maintenance facility should employ a broadband maintenance staff of sufficient size to be capable of providing maintenance service within the subject auction area on a priority basis.

This weighting preference can be sought in a Short Form by indicating that it is requested and by providing the address of the proposed maintenance facility, the distances from the facility to the closest and farthest points in the service area being bid upon, whether the maintenance facility is owned by the bidder or a third party, and the number of broadband technicians stationed at the facility. Where the maintenance facility is owned by an unrelated third party, the Long Form should include a requirement for submission of a contract between the bidder and the maintenance facility owner demonstrating the latter's ability and willingness to provide network and customer maintenance services within the subject RDOF service area on a priority basis that includes 24-to-30 hour responses via truck rolls when on-site maintenance and repairs are needed.

[10] Obviously, some trouble calls can be resolved remotely without a truck roll. But RDOF bidders should receive a preference if they commit to Prompt Localized Maintenance for the many problems that require on-site visits. An appropriate quality maintenance standard would be a call-back by a technician within 8 hours after a trouble call to try to determine the nature of the problem and whether it can be resolved remotely, and a truck roll that arrives at the customer location within 24-to-30 hours after a trouble call if the problem could not be diagnosed or resolved remotely.

E
Proposal: Weighting Preference for Voice Service With E-911 Capabilities

WTA understands that all CAF recipients are required to provide voice and broadband services. However, there are substantial differences between the many competitive national and regional Voice over Internet Protocol ("VoIP") services that ride as an application over broadband networks and locally oriented and managed voice services [whether Time Division Multiplexed ("TDM") or VoIP] that are well integrated into and coordinated with local E-911 systems and first responders.

Particularly in light of the long distances and remote locations that characterize rural areas, time is of the essence in reaching police, fire and ambulance agencies in the event of emergencies. Minutes, and even seconds, count when rural customers need to reach the appropriate E-911 answering point in order to summon assistance.

Therefore, WTA proposes that another separate and substantial weighting preference be established for bidders that commit to establish a voice service (TDM or VoIP) in each service area that is integrated into and coordinated with the local E-911 system for that service area. By avoiding delays in reaching the appropriate E-911 Public Safety Answering Point ("PSAP") and minimizing mistakes in sending calls to the wrong E-911 facility, this weighting preference will enhance not only consumer service but also general public safety.

This weighting preference can be sought in a Short Form by indicating that it is requested and by providing the name and address of the applicable PSAP with which E-911 arrangements have been made, and substantiated in the Long Form by submitting a contract or letter from the appropriate E-911 authority describing and verifying the arrangement.

F
Proposal: Additional Very Low Latency Level

WTA understands that technical advances are improving the latency characteristics of broadband services. While 100 millisecond latency is acceptable for many uses, lower latencies can significantly improve the clarity and definition of voice and especially video messages and services that are becoming an increasingly large and important element of broadband traffic. Therefore, WTA proposes that the Commission add a Lower Latency category of 25 milliseconds to its Latency weighting factor to encourage bidders to improve the latency of their networks and reward those who commit to do so.

G
Summary of Weighting Changes

To summarize, WTA proposes the following revised RDOF weighting scheme:

Performance Tiers

Performance Tier	Speed	Weight
Baseline	25/3 Mbps	100
Evolving Baseline	25/3 Mbps (Years 1-5), then 50/6 Mbps (Years 6-10)	60
Symmetric	25/25 Mbps	50
Above Baseline	100/20 Mbps	25
Gigabit	1 Gbps/500 Mbps	0

Latency

Level	Requirement	Weight
Lower Latency	25 ms	0
Low Latency	100 ms	20
High Latency	750 ms	60

Monthly Usage Allowance

Category	Amount	Weight
Lower Level	150 GB	50
Middle Level	2 TB	25
Higher Level	Unlimited	0

Prompt Localized Maintenance

Category	Commitment	Weight
Localized	Proximate facility; 24-30-hour truck roll	0
Non-Localized	None	40

Voice Service With E-911 Capabilities

Category	Commitment	Weight
Local	E-911 Integration and Coordination	0
Non-Local	None	40

Note in addition that WTA proposes a 25 percent RDOF auction bidding credit for entities that have satisfied their build-out obligations under the immediately preceding CAF support mechanism – in this case, price cap carriers in those service areas where they have satisfied their 10/1 build-out obligation under the CAF Phase II mechanism, and in those service areas where they were not eligible for CAF Phase II support because they were already providing substantial 10/1 Mbps service. In addition, as discussed below and consistent with its advocacy on numerous prior occasions for incentives to improve broadband service on Tribal Lands, WTA supports a 25 percent Tribal bidding credit to provide additional incentives for RDOF auction participants to bid on and serve census blocks that are part of Tribal Lands.

III.
RDOF Implementation Proposals

WTA does not have comments or alternative proposals at this time with respect to many of the *NPRM*'s implementation proposals such as those regarding minimum bidding units and reserve prices. Its remaining comments herein relate to: (1) the correction of inaccurate location estimates for build-out compliance and support calculation purposes; (2) the infeasibility of the *NPRM's* proposed subscribership milestones; and (3) support for benchmark adjustments and bidding preferences to encourage bidders to deploy improved broadband facilities and services on Tribal lands.

A
WTA Supports Correction of Inaccurate Estimates of Location Numbers But Opposes *Pro Rata* RDOF Support Reductions Due to Network-Centric Costs

A substantial issue with respect to both past and future broadband build-out obligations is the fact recognized by the Commission that "there may be some disparity between the number of locations specified by the CAM and the 'facts on the ground.'" *NPRM* at ¶30. Although the price cap carriers may not have reported significant location disparities in their statewide service areas, this may be due to averaging effects and significant location disparities may arise when statewide service areas are disaggregated into multiple separate census blocks and/or census block groups. Hence, there may be substantial disparities with respect to numbers of locations in a significant number of the census blocks or census block groups that are included in the RDOF auctions. And where significant disparities are found between model-estimated and actual locations, build-out obligations must be revised in order to fairly and accurately determine past and future compliance, but support should not be reduced on a *pro rata* basis due to the ways that rural broadband networks are constructed and operated.

The majority of the costs incurred to construct, maintain and operate rural broadband networks – at least those of WTA members and other Rural LECs -- are fixed, network-centric costs, and are not significantly affected by moderate fluctuations in the numbers of customers or locations served. For example, a 35-mile broadband network trunk in a buried conduit along a rural road will be subject to virtually the same costs whether it passes 15, 25 or 35 residential locations, or whether it was designed to serve up to 35 residential customers and only 17 households actually subscribe. Similarly, a 20-mile branch facility intended to serve an off-road rural development comprised of a cluster of homes will cost virtually the same to construct and operate whether the cluster contains 10, 20 or 30 homes, or whether 50 percent, 75 percent or 95 percent of those homes actually subscribe to service. Likewise, a Rural LEC is likely to operate with administrative and maintenance staffs of the same size and comparable salary cost whether it serves 500, 1,000 or 2,000 locations, and will generally increase or decrease the size of its administrative and technical staffs only when it experiences very significant increases or decreases in the numbers of customers and locations it serves. Obviously, these network cost characteristics are not true at the extremes – a company that found that it had 100 locations instead of 1,000 would expect to have reduced construction and operating costs - but this situation is unlikely to occur in the RDOF context where CAM location estimates are likely to be inaccurate but not by several multiples.

Correction of over-estimates of funded locations is necessary to provide accurate data regarding broadband availability and adoption, and to allow the Commission and support recipients to monitor completion and satisfaction of broadband build-out obligations. However, given the predominance of basic and unchanging network costs, reductions of inaccurate over-estimates of funded locations to their accurate actual levels should not be accompanied by *pro rata* reductions of support. This would be disastrous for CAF recipients because the typically moderate reductions in the numbers of locations passed along a network route do virtually nothing to reduce the costs of deploying, maintaining and operating their networks. An accompanying *pro rata* reduction of CAF support would cut significantly into the funds needed to repay network construction loans, and to maintain and operate the underlying network as a whole. Even the threat of such *pro rata* reductions would undermine the predictability of stable and sufficient support that was the key to RDOF bidding and the willingness of bidders and lenders to embark upon substantial investments in broadband networks.

WTA proposes that RDOF recipients not be penalized in any manner – either pursuant to claw-back penalties or to *pro rata* or other reductions of their specified RDOF support – in connection with the correction of erroneous or out-of-date estimates of funded locations to reflect the accurate and actual number of locations in the recipient's funded service area. Instead, the Commission should declare that it will accept, consider and grant appropriate petitions for RDOF location adjustments, but that there will be no penalties or RDOF support reductions as long as petitioning recipients demonstrate that they have deployed networks capable of serving at least 95 percent of the actual numbers of locations in their funded service areas blocks and have submitted accurate calculations showing the actual numbers of locations in such funded service areas.

B
WTA Opposes Proposed Unduly High Subscribership Milestones

WTA members and other Rural LECs have a long and proven record of serving the households and businesses within their rural study areas. During the telephone era, Rural LECs frequently provided voice service to virtually all of the households within their service areas, and most have subsequently been leaders in the deployment of broadband facilities and services in rural America.

WTA is aware that most of its members are currently working hard to deploy higher and higher speed broadband facilities and services throughout their study areas, and knows of no member that would not like to serve all or virtually all of the locations that its network passes. However, this goal has heretofore not been achievable and does not appear to be achievable within the foreseeable future. No matter how much Rural LECs extend the reach, speed and quality of their broadband networks and no matter how frequently and persuasively they advertise their broadband services, many potential customers will not take service for a variety of reasons. As the rural adage goes, "you can lead a horse to water, but you can't make it drink." No matter what they may do to deploy, operate and advertise their broadband services, WTA members do not believe that they have significant control over the adoption rates for their broadband services.

WTA members are particularly concerned with the *NPRM*'s suggested subscribership milestones of 28% in year 3, then up 14 percent per year to 70% through year 6. *NPRM* at ¶41. WTA believes that it is unlikely that most rural broadband service providers would be able to achieve a broadband adoption rate of 50% or more at this time - even in areas where they have virtually no competition.

Hence, whereas WTA agrees that the Commission needs to take steps to discourage some bidders from gaming RDOF auctions by placing lowball bids for minimal network facilities and then "achieving" the required broadband speeds by minimizing customers and usage, the specific subscribership milestones proposed would penalize too many innocent entities to be practicable and equitable. WTA is willing to work with the Commission to fashion effective measures to discourage and minimize gaming in RDOF and other CAF auctions, but does not believe that a 70% subscribership milestone is one of them.

C
WTA Supports Additional Provisions to Encourage Bidding and Broadband Deployment on Tribal Lands

WTA has several members that serve Tribal areas, and is fully aware that it is very difficult and expensive to construct, maintain and operate broadband networks on Tribal lands. More important, there are substantial unmet needs for broadband services and upgrades in many Tribal areas.

In particular, as it has done previously, WTA agrees that the Commission should implement the same Tribal Broadband Factor for the RDOF mechanisms that it established for model-based support, thereby reducing the $52.50 benchmark by 25% to $39.38 per month. WTA also again supports the grant of a 25% Tribal bidding credit to create incentives for entities to bid for support to deploy much-needed broadband facilities and services on the Tribal lands included in the RDOF mechanisms.

IV
Conclusion

WTA views the proposed $20.4 billion RDOF as an interesting potential approach to the problem of lagging broadband deployment in some rural price cap areas. However, the CAF Phase II Auction procedures that were previously employed in a reverse auction for areas with no existing high-speed broadband service must be revised substantially before they can be employed effectively, efficiently and equitably in areas that already have existing high-speed 10/1 Mbps broadband networks and customers. Where substantial numbers of existing broadband customers are present, the Commission must design reverse auction procedures to give priority to customer service and protection considerations over the goal of driving high-cost support disbursements down to the lowest possible level.

WTA proposes the grant of a substantial 25% RDOF bidding credit to existing CAF support recipients that have met their build-out requirements under the current support mechanism – in the present case, to CAF Phase II recipients who have met their 10/1 Mbps build-out obligations. This bidding credit increases the probability that existing broadband customers in RDOF areas can keep services and service providers that they like, and will not be required to purchase more expensive services or replace functional consumer premises equipment due to auction-required changes in service providers and/or technologies. This bidding credit also encourages existing CAF recipients to meet their current build-out requirements, and avoids potential problems with stranded investment, unpaid construction loans and unrecovered facility costs with respect to broadband infrastructure that was required to be deployed pursuant to the rules governing the previous CAF mechanism.

WTA proposes a number of changes to the CAF Phase II Auction weighting factors, the general purpose of which is to maintain and improve the quality of service expected by existing customers while discouraging low-ball bidding strategies that would reduce service quality and customer satisfaction. The proposed revised weightings include: (a) a weighting preference for an Evolving Baseline Tier that would require the baseline broadband speed to be increased significantly during the ten-year RDOF term (*e.g.*, 25/3 Mbps for first 5 years, then 50/6 Mbps for years 6 to 10); (b) a weighting preference for a Symmetric Tier (*e.g.*, 25/25 Mbps) that will increasingly be needed as applications requiring higher upstream speeds proliferate; (c) a separate weighting preference for monthly usage allowances, including a substantial preference for the unlimited monthly usage desired by many customers; (d) a weighting preference for localized maintenance capable of responding rapidly to trouble calls, especially those that require truck rolls;

(e) a weighting preference for voice service that is integrated into and coordinated with local E-911 service; and (f) a weighting preference for a very low latency level (*e.g.*, 25 ms).

WTA reiterates its support for the correction of RDOF and other location estimates that are recognized by virtually everyone to be inaccurate, but opposes *pro rata* support reductions when location estimates are reduced because the costs of building and operating broadband networks are predominately governed by the size and characteristics of the areas served and are impacted minimally by moderate fluctuations in the numbers of locations passed or served.

WTA opposes the 28-to-70% subscribership milestones proposed in the *NPRM* because they appear to be unreasonably high for the current rural broadband market, and are wholly outside the control of service providers. WTA is willing to work with the Commission to try to find more practicable and equitable solutions to the gaming tactics that the proposed milestones are intended to discourage.

Finally, WTA reiterates its long-standing support for measures the encourage greater deployment if broadband facilities and services on Tribal lands, including a 25% Tribal Broadband Factor to reduce RDOF funding benchmarks and a 25% RDOF bidding credit for those seeking to serve Tribal Lands.

Respectfully submitted,
WTA – ADVOCATES FOR RURAL BROADBAND

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