NTCA THE RURAL BROADBAND ASSOCIATION

December 19, 2019

VIA ECFS

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

RE: *Rural Digital Opportunity Fund*, WC Docket No. 19-126

Dear Ms. Dortch:

On Tuesday, December 17, 2019, the undersigned on behalf of NTCA–The Rural Broadband Association ("NTCA"), met with Michael Janson, Nathan Eagan, and Jonathan McCormack of the Rural Broadband Auction Task Force; Trent Harkrader, Ryan Palmer, Alexander Minard, Ian Forbes, Lauren Garry, Katie King, and Heidi Lankau of the Wireline Competition Bureau; and Eliot Manner of the Office of Economics and Analytics to discuss matters in the above-referenced proceeding.

Reasonable Comparability. One of the core tenets of universal service as articulated by Congress is to ensure that services in rural and urban areas are reasonably comparable in quality and price. 47 U.S.C. § 254(b)(3). In planning for the Rural Digital Opportunity Fund ("RDOF") auction, this should mean that services delivered in high-cost areas leveraging RDOF funds will be reasonably comparable to those in urban areas now and over at least the term of support distribution, if not over the longer life of the supported network assets. NTCA emphasized in the meeting that universal service is not a one-time grant program, but rather a program statutorily charged to ensure *both* the availability *and* sustainability of services that are similar in price and quality both now and into the future in urban and rural areas alike. Thus, structuring the weights within the auction requires more "advance planning" than a simple focus on what might be comparable "here and now" – and more than a mere focus on "achieving," rather than "sustaining," connections.

With this as backdrop, NTCA expressed concern that the current weighting proposals for the RDOF will fall short of achieving reasonable comparability – immediately in some cases and over the longer term in other respects. NTCA therefore urged the Federal Communications Commission (the "Commission") to take stock of current marketplace data and reasonably foreseeable trends in broadband networking and usage in establishing tiers and corresponding weights for the RDOF auction. For example, NTCA observes that a "baseline" level of 25/3 Mbps with usage limits of 150 GB per month as proposed has already been surpassed in today's marketplace. *See* Comments of NTCA, WC Docket No. 19-126 (filed Sept. 20, 2019), at 4-5 (citations omitted) (noting usage limits already averaged nearly 275 GB several months ago and that nearly half of all subscribers are already provisioned for 100 Mbps). Although there is an understandable desire to ensure every customer receives at least something in terms of broadband access, NTCA observes that including lower-speed, higher-latency services in the auction might perversely lead to *more* customers obtaining *lesser* services due to the effects on bidding.

NTCA then discussed its proposals to ensure that the auction will promote achievement of the objective of reasonable comparability both now and a decade into the future when the RDOF support term expires. First, as a matter of "technological neutrality," NTCA noted that its RDOF weighting proposals maintain the same basic "spread" between tiers as that in the Connect America Fund Phase II auction. *See id*. at 7-13.

Tier	CAF Phase II Auction	NTCA RDOF Proposal	Difference
Minimum	65 (10/1)	75 (25/3)	+10
Baseline	45 (25/3)	60 (100/20)	+15
Above Baseline	15 (100/20)	30 (500/100)	+15
Gigabit	0 (1000/500)	15 (1000/500)	+15

Second, NTCA urged the Commission to recognize the substantial benefits conferred by services providing symmetrical upload and download speeds through a 15 point "Symmetrical Bonus." As indicated in NTCA's comments (*see id*. at 14-16), it is clear that users of all kinds are already finding increased relevance in upload capacity of broadband services – and in the wake of the launch of the Commission's "Precision Ag Task Force," it would seem discordant to neglect the significance of symmetrical speeds for applications with heavier upload demands like precision agriculture, distance learning, and telemedicine. Indeed, as Commissioner Carr recently highlighted in speaking at the Precision Ag Task Force's initial meeting, the congressional testimony of an agricultural researcher appointed by Chairman Pai to the task force summarizes quite well the "upload" challenges faced by precision agriculture applications:

> One day of hyperspectral imagery of every South Dakota crop acre with a coarse resolution of one pixel representing one square centimeter would yield a huge amount of data.
>
> To put the challenge into perspective, if the imagery was acquired when the sun was at the optimum angle between 10 a.m. and 2 p.m., it would take 1,500 high-speed fiber optic connections like the 100-gigabit connection SDSU has to move the images to computers for processing now.
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> Another way to look at it is, if agricultural researchers wanted to collect all the data possible from a single plant that would be 18.4 gigabytes per plant or 432 terabytes of data on the average field. The library of congress holds about 15 terabytes of data, so our average corn field holds over 28 times as much data to be processed in a growing season.

A Symmetrical Bonus should therefore be of the highest priority in defining network performance expectations for providers receiving RDOF support.

Third, NTCA discussed the need for more forward-looking usage limitations than those proposed to date. Certainly, a 150 GB usage limit appears astonishingly low in the face of current usage levels that average nearly 275 GB per month as noted above. Even at higher tiers, however, a 2 TB usage limit will likely seem confining by the end of the RDOF support term in the face of marketplace data indicating that usage limits have been increasing at a pace of greater than 20% per year. NTCA therefore continues to urge the adoption of usage limits that will enable better use of broadband services a decade from now, starting at 3 TB for the lowest capacity tier and increasing to 5 TB for higher speed services. *Id*. at 7, 9-10.

Fourth, NTCA notes and supports the innovative prospect of structuring the auction in a manner that would award funds based upon the best level of service proposed for a given area at the clearing round. Reply Comments of NTCA, WC Docket No. 19-126 (filed Oct. 21, 2019), at 5. This would allow the Commission to "buy the best networks" for the available budget, and mitigate to some degree concerns that have caused various parties to suggest disparate weights for differing tiers. Such an approach would deliver "the biggest bang for the buck" by ensuring that *all* of the locations proposed to be served in the auction as of the clearing round get the best possible service. NTCA therefore encourages the Commission to structure the auction in such a manner, especially if it adopts weighting that chills or even precludes Gigabit tier bids after the clearing round.

Accountability. NTCA next discussed what steps the Commission should take to ensure greater accountability in the use of RDOF distributions, observing that failures in the auction would represent losses "twice over" – once in the form of auction funds that could have gone to deploying better broadband, and then again in the form of consumers whose expectations for broadband access anytime soon would now be dashed.

First, the Commission should require more detailed propagation maps and plans indicating network coverage capabilities in the short-form application, and these filings should meet baseline technical standards and well-defined engineering assumptions with respect to claimed coverage in the area purported to be served (such as those now being developed in the context of the Commission's data collection proceedings). To be clear, these filings must strike a balance recognizing that plans may change as the auction evolves and more detailed site inspections are conducted prior to actual deployment, but something more than a recitation of potential spectrum bands that might be used or basic claims about DSL coverage is needed to allow the Commission to vet whether a provider truly recognizes the challenges of serving a given area and has a fundamental sense of how to architect a network to serve that area at the pledged levels of performance. Alternatively, and at a minimum, the Commission should require in the short-form application an explicit identification of the precise spectrum bands a provider plans to use to deliver services at the promised levels and the "pathway" the provider has to obtain such spectrum if it does not hold that spectrum already – this will allow the Commission to determine if the provider in fact has a reasonable plan to acquire spectrum that will be capable of performing at the levels claimed by the provider, and the Commission certainly should not stake hundreds of millions of dollars of support on promises dependent upon a provider winning *both* in the RDOF auction *and* a subsequent spectrum auction.

<u>Second</u>, NTCA reiterated its support for the application of *reasonable* subscription milestones to RDOF recipients. *See id*. at 26-30. For purposes of clarification, NTCA believes that the high subscription level identified by the Commission in its initial proposals is unrealistic and fails to recognize that the RDOF recipient will, in many cases, be a new entrant in the areas won in the auction. At the same time, reasonable subscription objectives applied only later in the distribution term (*e.g.*, 35% subscribership after six years) will help to ensure that winning bidders (who will in effect become the new "providers of last resort" in wide swaths of rural America) have incentives to promote as much customer use of the funded networks as possible, rather than perhaps treating subscription as a means of managing network performance levels. Put another way, networks are built not for the mere sake of meeting deployment goals, but rather for the purpose of actually connecting as many Americans as possible to one another – and the Commission's program requirements should somehow reflect this purpose.

Curiously, one party objects to this proposal based upon the argument that "broadband adoption" is not a statutory mandate. *See Ex Parte* Letter from Louis Peraertz, Vice President of Policy, WISPA, to Marlene H. Dortch, Secretary, Commission, WC Docket No. 19-126 (filed Dec. 17, 2019), at 4. This assertion is at once jarring and telling, indicating that some see "reasonable comparability" and consumer use as an afterthought in obtaining broadband network deployment dollars. Fortunately, the statute makes clear that the consumer experience was indeed something about which Congress cared deeply, in the form of a mandate as described earlier in this letter that services be reasonably comparable in rural and urban areas alike – had Congress been concerned only with basic availability and not consumer use as well, the notion of "reasonable comparability" would have been unnecessary. Thus, the arguments of those that assert a subscription metric is unnecessary because Congress did not care about adoption in crafting a universal service regime ring hollow. Beyond any mandate of course, as a matter of public policy, the Commission should certainly expect more from recipients of universal service support than just building a network and hoping consumers show up.

WISPA also appears to misunderstand NTCA's subscription proposal, claiming that consumers using 10/1 Mbps broadband would not be counted in the subscription metric. *Id*. NTCA, however, never suggested that the metric be tied to any specific level of broadband; to the contrary, as NTCA has noted in other contexts, consumers should not be compelled to upgrade to specific broadband tiers by federal fiat if they are satisfied at their current levels. *See* Comments of NTCA, WC Docket 11-42, 09-197 & 10-90 (filed July 31, 2019), at 2-4 (noting that Lifeline rule changes should drive the offering of better services to consumers, but should not force existing customers to upgrade services if they do not desire to do so). Of course, marketplace experience over time indicates that consumers will migrate to higher speed services, but particularly in areas where broadband has been lacking to date, this will be an evolutionary process. Thus, to the extent clarification is required, NTCA believes that compliance with the subscription metric should be measured based upon adoption of *any level of broadband* by a consumer as reported on Form 477 or a successor form, rather than by reference specifically to a given tier. In other words, the goal should be to motivate providers to drive as many consumers as possible to make some increasing use of networks supported by federal funds, but not necessarily "compel" individual customers to take service at any specific level.

Transitions. Finally, NTCA discussed the significance of reasonable transitions between universal service support mechanisms. As one pertinent example, NTCA cited the example of a provider receiving Connect America Fund support that had deployed fiber-to-the-premise connectivity to each of its locations in a given area and was capable of delivering speeds of at least 100 Mbps (if not multiple times that) to every such location. On its face, this area would appear ineligible for the RDOF auction because it shows as "served" – yet it may very much still need ongoing support to maintain the network and keep services (and rates) "reasonably comparable" to those in urban areas. It Is worth recalling that universal service is an ongoing concept that surpasses mere deployment alone; put another way, universal service is as much about "keeping broadband out there" as it is about "getting broadband out there."

Allowing universal service support to lapse altogether in such an area would be a perverse result indeed, effectively *punishing* carriers for using a fixed amount of support to exceed prior buildout obligations. It would also create odd incentives, encouraging recipients of support to do little more than the bare amount necessary to comply with buildout obligations in order to avoid the potential for losing *all* support in an area later. Indeed, this could have a chilling effect in the RDOF auction itself, deterring bids in the Gigabit tier for fear that "the reward" in deploying such a network would be a total "shutdown" of support for the area where such a network was constructed at the end of the term – whereas if the provider had built a less capable network during the RDOF term, it could have a chance to "rebid" in ten years and secure another decade of support to upgrade. This "rebuild it every ten years" approach is a far less efficient result for both consumers and for the universal service system itself than building a robust network the first time around and providing some level of ongoing support thereafter for operations, maintenance, and the repayment of loans.

Consistent with prior comments, NTCA therefore encouraged the Commission to provide ongoing support for operating expenses and depreciation where an operator has deployed network capabilities in excess of prior buildout obligations. *See id*. at 34-35. NTCA also encourages the Commission to consider how such an approach could be integrated into the RDOF auction to avoid rewarding "incremental" network builds and chilling Gigabit tier bids. Such a policy would provide appropriate incentives for carriers to do more with the same amount of support and deliver better, more lasting broadband to rural consumers and businesses.

Thank you for your attention to this correspondence. Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter is being filed via ECFS.

Sincerely,

/s/ *Michael R. Romano*
Michael R. Romano
Senior Vice President –
Industry Affairs & Business Development
NTCA–The Rural Broadband Association

cc: Michael Janson
Nathan Eagan
Jonathan McCormack
Trent Harkrader
Ryan Palmer
Alexander Minard
Ian Forbes
Lauren Garry
Katie King
Heidi Lankau
Eliot Manner