Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Universal Service Reform – Mobility Fund	)	WT Docket No. 10-208
	)	
ETC Annual Reports and Certifications	)	WC Docket No. 14-58
	)	
Establishing Just and Reasonable Rates for	)	WC Docket No. 07-135
Local Exchange Carriers	)	
	)	
Developing a Unified Intercarrier	)	CC Docket No. 01-92
Compensation Regime	)	

REPLY COMMENTS of the RURAL WIRELESS CARRIERS

United States Cellular Corporation
NE Colorado Cellular, Inc., d/b/a Viaero Wireless
Cellular South Licenses, LLC d/b/a C Spire
Smith Bagley, Inc.
DOCOMO PACIFIC, Inc.
Union Wireless Company
Cellular Network Partnership, An Oklahoma Limited Partnership
Nex-Tech Wireless, LLC
Texas 10, LLC, d/b/a Cellular One
Central Louisiana Cellular, LLC, d/b/a Cellular One
Carolina West Wireless, Inc.
Cellcom Companies
PR Wireless, Inc., d/b/a Open Mobile

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SUMMARY

The robust record filed in response to the Commission's *Further Notice* proposing policies and rules for Mobility Fund Phase II, Connect America Fund Phase II, and related issues underscores the importance of the decisions the Commission will make in this proceeding. The Rural Wireless Carriers and other commenters urge the Commission to ensure that those decisions strengthen the operation of the Mobility Fund and also implement policies for CAF Phase II that make the disbursement and use of support more competitive and effective in bringing both fixed and mobile broadband services to rural America.

More fundamentally, the record reveals compelling reasons for the Commission to take a step back in order to evaluate the extent to which the decisions made in the *CAF Order* and the Commission's subsequent actions are working effectively to achieve the goals set in the *CAF Order*. The Commission should now take the opportunity to put a process in place that ensures that the Commission's budget decisions and its implementation of support mechanisms are undertaken based on input from stakeholders, hard facts, and sound policies.

A New Path for Achieving Universal Service Goals

Commenters focus attention on the fact that the Commission has made budget decisions that provide glaringly inadequate funding for mobile broadband deployment and operations. Furthermore, commenters stress that these decisions have been made without the Commission's having first determined how much universal service support would be needed to achieve a specified level of mobile broadband service in rural areas. The Commission should make budget decisions only after it has taken steps to assess the level of investment needed for mobile broadband deployment and operations in rural areas, and to estimate how much time will be needed to accomplish this deployment.

The Rural Wireless Carriers suggest in these Reply Comments that the Commission should relaunch its pursuit of the goals articulated in the *CAF Order* for mobile broadband deployment and operations in rural America by setting an objective for mobile broadband coverage and throughput, and creating a cost model to calculate the costs for achieving this objective. This approach will allow all stakeholders to address the current state of service in rural America, as well as how much universal service investment is needed to provide rural consumers with reasonably comparable service.

Mobility Fund Phase II

Cutting the Budget.—The Commission's proposal to downsize the Mobility Fund Phase II budget finds no support in the record. In fact, commenters suggest that the Phase II budget should be increased because the current budget is not sufficient to support the deployment of advanced mobile broadband services throughout unserved rural areas. One commenter observes that increasing the level of Phase II support would reflect the limited degree of mobile broadband deployment that currently exists in rural areas, as well as the increasingly essential nature of mobile broadband services.

Commenters agree with the Rural Wireless Carriers that marketplace developments cited by the Commission as a basis for its proposed budget cuts are either irrelevant or not reliable. One commenter points to a persistent "mobile broadband availability gap" between rural and urban areas that would be made worse if the Commission were to reduce the Mobility Fund Phase II budget.

The Rural Wireless Carriers' view that cutting the Phase II budget would deprive consumers and businesses in rural communities of the advantages and benefits of mobile broadband is endorsed by other commenters, who also point out that a budget reduction would ignore the growing demand for mobile broadband services. Commenters argue that the proposed budget reduction would contradict the commitment made by the Commission in the *CAF Order* to ensure that <u>*all*</u> consumers—including those in rural areas—receive the benefits provided by mobile broadband.

The record also supports the Rural Wireless Carriers' position that the Commission's concerns regarding the targeting of wireless competitive eligible telecommunications carriers' legacy high-cost support are misplaced and cannot serve as grounds for reducing the Mobility Fund Phase II budget. In addition, commenters agree with the Rural Carriers that there is no basis for the $400 million baseline the Commission would apparently use in calculating budget cuts, and that any such baseline should be set at a higher level.

Reallocating Support.—The Rural Wireless Carriers in their Comments argue against any reallocation of Mobility Fund Phase II support to other support mechanisms, and other commenters join in this opposition. One commenter suggests that, if the Commission uses a reverse auction mechanism to disburse Phase II support, it should conduct this auction first, and only then determine whether there are in fact surplus funds to be reallocated.

One-Time Support.—Other commenters join the Rural Wireless Carriers in opposing the Commission's suggestion that it could reduce the ongoing Mobility Fund Phase II budget, and then use a portion of the reductions for a one-time disbursement of support for mobile broadband deployment. Such an approach, one commenter explains, would result in a substantial loss of overall funding for mobile broadband, which would be problematic because of the need for ongoing support to maintain mobile broadband networks after their deployment.

Determining Existing Coverage.—The Rural Wireless Carriers argue that the Commission must be cautious not to declare that rural areas are covered by LTE service when they in fact are not, and other commenters agree that it is critical for the Commission to develop mechanisms to measure accurately the extent of 4G LTE broadband coverage. Commenters emphasize that the Commission currently does not have sufficient information to achieve the required degree of accuracy, and suggest various steps the Commission should take to ensure that the new FCC Form 477 reporting requirements correct this problem.

One commenter—AT&T—objects to the Commission's proposal to exclude from Mobility Fund Phase II eligibility only those areas in which 4G LTE service is being provided by AT&T or Verizon. The Rural Wireless Carriers suggest that, rather than further restricting eligible areas as suggested by AT&T, the Commission instead should address a more fundamental concern raised by the Rural Carriers and other commenters, namely, that the Commission currently is measuring mobile broadband coverage incorrectly, resulting in a substantial overstatement of mobile broadband availability in rural America.

Phase-Down of Legacy Support.—The ground rules the Commission sets for the resumption of the phase-down of legacy support received by competitive ETCs are important because, as one commenter observes, the maintenance of this support during the transition to Mobility Fund Phase II will enable these carriers to continue providing services to their existing customers. Several approaches for managing the transition to Phase II, and the resumption of the legacy support phase-down, are advocated in the record. The Rural Wireless Carriers submit that any of the methods advanced by commenters would be effective in ensuring that carriers will be able to continue service to existing customers with their frozen legacy support until Phase II is implemented.

Other Mobility Fund Phase II Issues.—There is support in the record for the Rural Wireless Carriers' argument that the Commission should adopt its proposed 10-year term for Mobility

Fund Phase II support. In addition, several parties join the Rural Carriers in opposing the Commission's proposed switch from road miles to population as the measure for Phase II disbursements and for determining whether construction deadlines have been met, with one commenter observing that the proposal is unexplained and in conflict with the *CAF Order*.

Connect America Fund Phase II

Wireless Competitive ETC Eligibility.—There is widespread support in the record for the Rural Wireless Carriers' argument that the Commission should authorize wireless competitive ETCs to compete for CAF Phase II support. Commenters explain that there is no record support or other basis for categorically excluding *any* technology that meets the Commission's broadband performance requirements.

Commenters point to numerous benefits that will be derived from mobile broadband providers' participating in CAF Phase II. The record shows that the eligibility of mobile broadband technologies will bring much needed mobile broadband services to rural consumers and businesses, will make the CAF Phase II reverse auction process more competitive, will help to correct the funding disparities between wireline and mobile wireless broadband technologies in the Commission's universal service budget, will help to offset the fact that price cap carriers have historically concentrated their broadband deployment in urban areas, and generally will result in the more efficient and effective use of CAF Phase II support.

Proponents of keeping CAF Phase II support reserved only for wireline broadband providers argue that wireless broadband technologies should not be made eligible for funding because the services they provide are not functionally equivalent to wireline broadband services. The Rural Wireless Carriers, however, agree with the rejoinder in the record that it makes no sense to block wireless competitive ETCs from even competing for Phase II support based only on the opponents' claims regarding the absence of functional equivalency. A more equitable approach—and one that would enhance both consumer choice and the efficient use of Phase II funding—would be to permit wireless competitive ETCs to compete for Phase II support, and to receive such support based on their demonstration that they meet the performance standards for Phase II.

The 10 Mbps Speed Requirement.—Commenters agree with the Rural Wireless Carriers that, although wireless competitive ETCs should be required to meet CAF Phase II performance standards as a prerequisite to receiving Phase II support, these standards should be applied in a way that avoids the practical effect of freezing wireless carriers out of the competition for Phase II funding.

A case in point is the Commission's proposed 10 Mbps speed requirement for CAF Phase II. Commenters support the Rural Wireless Carriers' position that the proposed standard should be applied only to the extent that the availability of new spectrum and technology enables wireless carriers to acquire sufficient bandwidth to deploy networks meeting the speed requirement. A more restrictive, exclusionary approach would harm consumers by limiting participation in the Phase II bidding process, thereby increasing universal service costs. Commenters also point out that a flexible application of the 10 Mbps standard would not detract from the quality of the user experience because consumers would be receiving a wide array of unique mobile broadband features, functions, and capabilities.

Commenters advocating a more rigid application of the proposed 10 Mbps speed standard attempt to advance arguments—relating to facilitating the delivery of "substandard" service, the relationship between the Commission's universal service rules and its open Internet proposals, and reasonable service comparability requirements—that, for various reasons explained in these Reply Comments, are not persuasive and should be rejected by the Commission.

Other Performance Standards.—The Commission proposes that CAF Phase II support recipients must offer a service plan with an initial minimum usage allowance of 100 GB. The Rural Wireless Carriers join other commenters in arguing that this proposal is unworkable because usage requirements should be set at levels that do not categorically exclude spectrum-based services.

The Rural Carriers also support arguments in the record that favor adoption of tethering and multiple connection requirements as CAF Phase II performance standards. These requirements will help to ensure that funded networks provide consumers with high-quality broadband access regardless of the technology utilized by the networks. One commenter observes that more than 105 types of mobile broadband-connected devices that are available today, such as smartphones and tablets, have the capability to serve as wireless hotspots.

Service Area Eligibility.—The Commission should exclude from eligibility for model-based CAF Phase II funding any area that is served by an unsubsidized competitor that meets the Commission's current standards for the offer of model-based support to price cap carriers, regardless of the network technology used by that competitor.

Limiting the Use of Model-Based Funding.—There is support in the record for the Rural Wireless Carriers' proposal that incumbent price cap carriers exercising their right-of-first-refusal option to receive model-based CAF Phase II support should not be permitted to use this support to construct 4G LTE broadband networks. Commenters point out that the current approach enables price cap carriers receiving model-based support to game the system by deploying wireless technologies with lower costs than those predicted by the CAF model (which assumes the use of more expensive wireline technologies).

There is also record support for the Rural Wireless Carriers' suggestion that, if the Commission retains the right-of-first-refusal for incumbent price cap carriers, then, for the sake of fairness and consistency, wireless carriers should receive the same preference with respect to their legacy high-cost support.

Universal Service Contribution Reform

The Rural Wireless Carriers support the suggestion in the record that the Commission's focus on the CAF and Mobility Fund distribution mechanisms should share the spotlight with the urgent need for contribution reform. As commenters explain, the Commission's continuing failure to take any action on this long-pending issue has had detrimental reverberative effects on other Commission policies regarding universal service.

As one commenter explains, for example, the Commission's decision not to push forward with contribution reform has led to the adoption of less than effective distribution policies. Specifically, the Commission has responded to pressures to deal with the elevated contribution factor by imposing artificial limits on the support available to competitive carriers. Such budgetary decisions, and their harmful implications for rural consumers, can be avoided by fixing the contribution side of the universal service equation.

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I. INTRODUCTION AND OVERVIEW.

The record now before the Commission in this proceeding is significant in two important respects. Commenters have raised fundamental issues regarding misguided policies and decisions that have compromised the universal service program transformed by the Commission in the *CAF Order*. The Rural Wireless Carriers begin these Reply Comments with an overview of these issues, offering the suggestion that this pending rulemaking provides an opportunity for the Commission

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[1] Northeast Communications of Wisconsin, Inc., and its wireless carrier affiliates Brown County MSA Cellular Limited Partnership, Nsighttel Wireless, LLC, Wausau Cellular Telephone Company, LP, Wisconsin RSA No. 4, LP, and Wisconsin RSA No. 10, LP, are collectively referred to as the "Cellcom Companies".

[2] *Connect America Fund*, WC Docket No. 10-90, *A National Broadband Plan for Our Future*, GN Docket No. 09-51, *Universal Service Reform–Mobility Fund*, WT Docket No. 10-208, *ETC Annual Reports and Certifications*, WC Docket No. 14-58, *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Docket No. 07-135, *Developing an Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Report and Order, Declaratory Ruling, Order, Memorandum Opinion and Order, Seventh Order on Reconsideration, and Further Notice of Proposed Rulemaking, 29 FCC Rcd 7051 (2014) ("*Further Notice*"). The due date for reply comments in response to the *Further Notice* is September 8, 2014. A motion to extend the deadline for reply comments to October 8, 2014, was denied by the Commission. *Connect America Fund*, *et al*., WC Docket No. 10-90, *et al*., Order, DA 14-1276 (WCB & WTB, Sept. 3, 2014). The *Further Notice* is among the most recent actions taken by the Commission to implement the universal service reforms adopted by the Commission in 2011. *Connect America Fund*, WC Docket No. 10-90, *A National Broadband Plan for Our Future*, GN Docket No. 09-51, *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Docket No. 07-135, *High-Cost Universal Service Support*, WC Docket No. 05-337, *Developing an Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, *Lifeline and Link-Up*, WC Docket No. 03-109, *Universal Service Reform–Mobility Fund*, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011) ("*CAF Order*"), *aff'd sub nom*. *In re FCC 11-161*,703 F.3d 1015 (10th Cir. May 23, 2014).

to work with the industry and other stakeholders to develop policies and actions to buttress the framework of its support mechanisms, making them both more equitable and more effective in bringing advanced broadband services to rural America.

In addition, commenters provide strong opposition to the Commission's proposal for reducing the Mobility Fund Phase II budget, emphasizing that such a step cannot be grounded in any empirical finding that the current budget is excessive, and demonstrating that there is a stronger case for increasing the Phase II budget. The record also provides considerable support for the Commission's adopting several policies that will ensure that CAF Phase II funding will operate effectively as a vehicle for ensuring that consumers in rural areas have access to both fixed and mobile broadband services.

A. New Approaches Are Needed To Realize the Goals Adopted by the Commission in the *CAF Order*.

The *CAF Order* adopted a performance goal "to ensure the universal availability of modern networks capable of delivering *mobile* broadband and voice service in areas where Americans live, work, or travel[,]"[3] but then failed to meet the congressional objective of creating competitively and technologically neutral mechanisms for providing support for the advancement of both fixed and mobile broadband in rural areas.[4]

[3] *CAF Order*, 26 FCC Rcd at 17682 (para. 53) (emphasis added).

[4] *See, e.g.*, RWC Comments at iii (noting that "Americans living in rural areas deserve to have access to advanced telecommunications and information services that are reasonably comparable in quality and price to those available in urban areas. That commitment is made in Section 254(b)(3) of the Communications Act of 1934, and to deliver any less relegates our rural citizens to second class status. The Commission appears to have lost sight of that statutorily mandated goal.").

This shortcoming is starkly reflected in the Commission's universal service budget.[5] The Commission "decided in the *CAF Order* to limit annual funding for Mobility Fund Phase II to $400 million, which amounts to approximately one-third of the funding available for mobile wireless deployment and operations in rural areas under the capped high-cost funding mechanism."[6] At that same time, and although it is by no means clear that wireline carriers need it, the Commission concluded that price cap carriers will receive $1.8 billion annually through the Connect America Fund ("CAF"), with an additional $2 billion available annually to rate-of-return wireline carriers, to deliver basic telephone service and broadband.[7]

In the case of rural rate-of-return telephone companies, the Commission is still developing a record to determine an appropriate level of support in future years. With respect to price cap carriers, the Commission provided additional support in CAF Phase I, based on evidence that some price cap areas are underserved with broadband.[8] In addition, the Commission created a cost model to determine how much support should be offered in CAF Phase II to achieve its broadband goals.[9] Use of a model has assisted the Commission in determining how big the job is, that is, how much universal service support is needed to achieve a specified level of service.

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[5] *See, e.g.*, C Spire Comments at 11 (pointing to a "gross imbalance between price cap funding and competitive funding").

[6] U.S. Cellular Comments, WC Docket No. 06-122, *et al*. (filed July 9, 2012) ("U.S. Cellular Contribution Reform Comments") at 3 (footnote omitted). U.S. Cellular noted that "$500 million per year is provided in support through the Mobility Fund, of which $100 million is earmarked for Tribal lands …." *Id*. at 3 n.8.

[7] *CAF Order*, 26 FCC Rcd at 17711 (para. 126).

[8] *See Additional $16.7 Million in Connect America Phase I Support Authorized*, WC Docket No. 10-90, Public Notice, 29 FCC Rcd 2824 (2014).

[9] *See CAF Order*, 26 FCC Rcd at 17728 (para. 167) (indicating that the Commission "will use a forward-looking cost model to determine, on a census block or smaller basis, areas that will be eligible for CAF Phase II support").

On the Mobility Fund side, virtually no similar work has been done by the Commission. More than four years ago, in the National Broadband Plan, the Commission examined where resources should be targeted to "universalize broadband"[10] across the country, and estimated that $24.3 billion in additional investment is needed to "fill the broadband availability gap."[11] This estimate of the broadband availability gap "was calculated based on the economics of terrestrial technologies[,]"[12] including both fixed and mobile broadband networks, but the Broadband Plan did not include a separate estimate of the level of investment needed to deliver mobile broadband services throughout rural America.[13]

Based on information and belief, it is the Rural Wireless Carriers' understanding that, since the publication of the Broadband Plan, the Commission has not engaged in any sustained effort to quantify how much universal service support would be needed to achieve a specified level of mobile broadband service in rural areas. That is, nobody really knows how much support is needed to deliver mobile broadband in rural areas at a level that is reasonably comparable to urban areas, which is the goal established in Section 254(b)(3) of the Communications Act of 1934 ("Act").[14]

Yet, notwithstanding the lack of any initiative to calculate a "mobile broadband availability gap," the Commission in the *CAF Order* settled on $500 million as the appropriate "budget" for mobile wireless, without carrying out any analysis to determine the level of investment needed to

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[10] FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN (2010) ("Broadband Plan") at 136, *accessed at* http://download.broadband.gov/plan/national-broadband-plan.pdf.

[11] *Id*. The Commission noted that "it is unlikely that private investment alone will fill the broadband availability gap." *Id*.

[12] *Id*. at 137.

[13] One study has estimated that between $7.8 billion and $21 billion of initial investment would be needed to provide universal access to mobile broadband services, depending on the level of coverage sought. See Section II.A.1.e., *infra*.

[14] 47 U.S.C. § 254(b)(3).

finish the job. What is missing from the Commission's universal service calculus, even today, is an assessment of how much investment is needed for mobile broadband deployment and operations in rural areas, how much time the Commission estimates will be needed to accomplish this deployment, and *then*, how much funding must be budgeted per year to achieve this deployment.

One way to fulfill the goals enacted by Congress in Section 254 of the Act is to set an objective for mobile broadband coverage and throughput, and then create a cost model that yields a cost for achieving the objective. The Rural Wireless Carriers favor this approach because it allows all stakeholders to reach agreement on the current state of service in rural America, along with how much universal service investment is needed to provide rural consumers with reasonably comparable service.[15]

A Mobility Fund Phase II cost model should be combined with a right of first refusal for wireless carriers receiving legacy support.[16] This approach should be acceptable, since the same option is available to price cap carriers as part of the CAF Phase II support mechanism, and it also

[15] U.S. Cellular has advocated the use of a cost model for the disbursement of Mobility Fund Phase II support and has explained that:

> reverse auctions are intended to drive down support to the lowest levels possible, risking results that would be detrimental to rural consumers. It makes more sense—and it would better serve rural consumers—to disburse support in a manner that ensures it will be used *efficiently*, since this avoids the risk that low-bid reverse auction winners will be left with insufficient support to accomplish the Commission's mobile broadband deployment objectives.

U.S. Cellular Comments, WC Docket No. 10-90, *et al*. (filed Jan. 18, 2012) ("U.S. Cellular 2012 Comments") at 14 (emphasis in original). U.S. Cellular has demonstrated that a cost model would ensure the efficient use of Phase II support, and has enumerated several other advantages of using a cost model. *See id*. at 15-17.

[16] See Section III.C., *infra*.

leverages the substantial existing investments made by wireless carriers participating in the Universal Service Fund ("USF") over many years, minimizing situations where existing carriers are forced to decommission cell sites or exit markets altogether.

If a carrier declines to exercise the right of first refusal, then the Commission should use a reverse auction, with a reserve price matching the cost model offering, to provide support in rural areas. This mechanism will increase transparency and accountability, and will help to focus the Commission on the size of the job going forward. In addition, once a model is created, it will be possible to update it periodically with data needed to assess rural needs for future broadband technologies.[17]

Finally, the Rural Wireless Carriers reiterate their strong opposition to the Commission's being tentatively willing (in proposing cuts to the Mobility Fund Phase II budget) to accept unsupported assertions from the two biggest carriers—AT&T and Verizon—that at least 95 percent of rural Americans have access to mobile broadband, as well as claims from "some sources" that nearly 99.5 percent of the U.S. population today is covered by some form of mobile broadband technology.[18]

Most problematic is the fact that "access" is not defined by the Commission, thus allowing the largest carriers to create the impression that 99.5 percent of the area where rural Americans live, work, and travel is covered by high-quality mobile broadband. Of course, nobody is saying

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[17] *See* U.S. Cellular 2012 Comments at 16 (explaining that "[a] cost model can be adjusted to address changing circumstances. If carriers do not enter a particular eligible service area, the model can be adjusted upward. On the other hand, if there is evidence that support levels are too high, the model can be adjusted downward.").

[18] *Further Notice*, 29 FCC Rcd at 7127 (para. 238). *See* RWC Comments at 12-13. Other commenters share the Rural Carriers' concern. See Section II.A.1.a., *infra*.

exactly that, nor could they, because in many rural areas high-quality service barely covers towns and interstate highways.

For example, a recent news report regarding wireless coverage in rural Loudoun County, Virginia, which is just 30 miles from the White House and includes Dulles Airport, provides a case study of the problems associated with achieving sufficient wireless broadband coverage in rural areas. The report notes that, "in western Loudoun, … finding a single bar on a cell phone or getting any wireless data connectivity whatsoever can be exasperating[,]"[19] and cites a study finding that "[o]nly a quarter of western Loudoun is adequately covered by even one cell carrier …. The county's major commuter corridors, including Route 7, have spotty coverage. It is both a public safety and economic development issue."[20]

The news report points out that "the county needs 14-28 new cell towers to fill the cell gaps, at a cost of up to $10 million for the towers alone, not including the fiber and wireless infrastructure, RF equipment and power[,]"[21] and that "[f]or wireless Internet service, as an alternative to [fixed] broadband, the county would need 36-59 new towers, depending on their height, at a capital investment of up to $5 million for the poles only."[22]

The Rural Wireless Carriers are devoted to addressing these types of coverage issues and improving service in rural America. Data that U.S. Cellular[23] and other Rural Carriers develop

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[19] "Where the Wireless Isn't: Western Loudoun's Coverage Gaps Detailed, and What To Do About Them," WASH. BUS. J. (Sept. 3, 2014), *accessed at* http://wtop.com/?nid=893&sid=3694049.

[20] *Id*. The news article indicates that Verizon and Comcast have not "demonstrated an interest in dragging [fixed] broadband [facilities] farther into rural, or hilly, Loudoun." *Id*.

[21] *Id*.

[22] *Id*.

[23] U.S. Cellular intends to submit additional information to the Commission later this month in support of the proposition that there are significant areas of rural America that lack sufficient mobile broadband coverage.

every day regarding the competitive landscape confirms the obvious: that there remain substantial rural areas that lack coverage, are underserved, and where high-quality service, which people can rely upon for vital needs, is unavailable. The Commission should categorically reject any notion that 99.5 percent of rural Americans have access to high-quality mobile broadband where they live, work, and travel.

B. Commenters Oppose Mobility Fund Phase II Budget Cuts and Support Opening Up the CAF Phase II Reverse Auction to Wireless Technologies.

In addition to the overarching issues discussed in the previous section, two additional sets of issues affecting mobile wireless broadband providers emerge from the record compiled in response to the *Further Notice*: Should the Commission make any adjustments to the Mobility Fund Phase II budget? And what policies and rules should the Commission adopt governing CAF Phase II funding eligibility and the use of CAF Phase II support?

Mobility Fund Phase II Budget.—The Commission's inexplicable proposal to cut the already undersized Mobility Fund Phase II budget has received a predictable reception: strong opposition.[24] Commenters confirm the Rural Wireless Carriers' view that the Commission has failed to articulate any credible basis for reducing the Phase II budget,[25] pointing out that the marketplace developments cited by the Commission are either irrelevant or unsupported,[26] and that the Commission's concern that legacy funding to smaller and regional wireless carriers "is not well-targeted"[27] has no bearing on setting the Phase II budget.[28]

[24] *See* Competitive Carriers Association ("CCA") Comments at 5; CTIA–The Wireless Association® ("CTIA") Comments at 6.

[25] *See* C Spire Comments at 6; CTIA Comments at 6.

[26] *See* CCA Comments at 6-7.

[27] *Further Notice*, 29 FCC Rcd at 7129 (para. 243).

[28] *See* Blooston Rural Wireless Carriers ("Blooston") Comments at 7.

The record also reflects the fact that, although the basis for the budget-cutting proposal is obscure, the consequences of a budget reduction are very clear. Commenters agree that downsizing the Mobility Fund budget, which was already trimmed by the compromises leading to the budget actions taken in the *CAF Order*,[29] would have dire consequences for consumers and businesses in rural areas.[30] The deployment of mobile broadband networks would be scaled back and delayed, depriving rural America of the many capabilities and benefits of mobile broadband that are now available in urban areas across the country.[31]

Commenters also recognize that the Commission's proposal to reduce the Mobility Fund Phase II budget is only the latest manifestation of a larger dilemma affecting the Commission's transformed universal service program.[32] The Commission decided in the *CAF Order* to "establish, … for the first time, a firm and comprehensive budget for the high-cost programs"[33] within the USF, "[i]mportantly … ensur[ing] that individual consumers will not pay more in contributions due to the reforms" adopted by the Commission.[34]

But this decision to cap the budget and keep costs down is not a victimless policy. Rural America pays the price. Running reverse auctions that are designed to parcel out a limited amount of funding to the lowest bidders, and that consequently virtually guarantee that higher-cost areas will be left with no universal support, is not a prescription for making "available … to *all* the

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[29] *See* CTIA Comments at 6.

[30] *See* C Spire Comments at 2; CCA Comments at 11, 13, 14; CTIA Comments at 5; Deere & Company ("Deere") Comments at 7

[31] *See* Blooston Comments at 6-7; C Spire Comments at 8; Cordova Wireless Communications, LLC ("Cordova") Comments at 3.

[32] *See* CCA Comments at 4.

[33] *CAF Order*, 26 FCC Rcd at 17672 (para. 18).

[34] *Id*. at 17711 (para. 124).

people of the United States … a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges."[35] Making it more difficult for rural communities to access advanced broadband services affects local economies, public safety, agricultural production, education, health care—and also risks contributing to a growing divide between rural and urban America that has consequences for the whole country, not just for citizens and businesses in rural communities.

The record points toward a solution to this dilemma created by the Commission's policy choices in the *CAF Order*. The Commission should give priority to fixing the budget.[36] With specific reference to Mobility Fund Phase II, commenters make the case that the budget should be increased, not "adjusted downward," as the Commission proposes.[37]

More generally, commenters suggest that the Commission should pay attention to the elephant in the room: Contribution reform has been tabled for the last 13 years, with the Commission having been unable to arrive at any decisions to revamp the universal service program's contribution mechanisms.[38]

Fortunately, the Commission recently took a step in the right direction by referring contribution reform issues to the Federal-State Joint Board on Universal Service ("Joint Board"), with a request for recommendations by April of next year. The Commission could receive from the Joint Board the same recommendation it received from the State Members of the Joint Board more than

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[35] Section 1 of the Act, 47 U.S.C. § 151 (emphasis added), *quoted in CAF Order*, 26 FCC Rcd at 17667 (para. 2).

[36] *See* Concerned Rural ILECs Comments at 11.

[37] *See* C Spire Comments at 6; CCA Comments at 5.

[38] *See* CCA Comments at 25; Rural Independent Competitive Alliance ("RICA") Comments at 6.

three years ago: expand the contribution base to include various types of broadband services.[39] The Commission's acting favorably and expeditiously on such a recommendation will be an important step toward fixing the budget problems that currently are undermining the effectiveness of the Commission's universal service mechanisms.

Equitable Rules for CAF Phase II Funding.—CAF Phase II funding is a chief exhibit demonstrating that the policies and rules adopted in the *CAF Order* have treated mobile broadband as the forgotten stepchild of the Commission's universal service program.

The disproportionate amount budgeted for CAF Phase II ($1.8 billion annually, compared to $500 million annually for Mobility Phase II, $100 million of which is set aside for Tribal lands) lacks any credible basis, and ignores the imbalance between allocated support and contribution obligations. Mobile wireless carriers account for 44 percent of universal service contribution obligations ($29.6 billion in annual revenues subject to contributions[40]), compared to 22 percent for incumbent local exchange carriers ("LECs"). **Thus, wireless carriers pay double the amount paid by incumbent LECs into the universal service support mechanisms, while being allocated about one-tenth of the $4.5 billion annual budget.**[41]

In addition, funding disbursed during the first five years of the CAF Phase II program is locked up for incumbent price cap carriers that exercise their exclusive option pursuant to the right of first refusal and state-level commitment mechanism, while no similar option has been proposed for Mobility Fund Phase II.

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[39] See Section IV.A., *infra*.

[40] *See* RWC Comments at 32.

[41] *See CAF Order*, 26 FCC Rcd at 17711 (para. 125) (indicating that the overall high-cost program budget is set at "no more than $4.5 billion").

Commenters encourage the Commission to make decisions in this rulemaking regarding CAF Phase II that will begin to reset the balance for wireline and wireless broadband support. Instead of continuing the risk that mobile wireless broadband providers will fall completely off the playing field, the Commission should act to level the field. Commenters suggest several steps the Commission should take to ensure that CAF Phase II support is disbursed equitably and used effectively.

First, mobile broadband providers should be made eligible to participate in the competitive bidding process that will award support not claimed by the incumbent price cap beneficiaries of the right-of-first-refusal mechanism.[42] Providing this eligibility to mobile wireless broadband providers will make the reverse auction process more competitive,[43] will benefit rural consumers and businesses by facilitating the deployment and operation of mobile broadband networks throughout rural America, and will help to rectify the gross funding disparities reflected in the current budget.

Second, in order to effectuate the eligibility of mobile broadband service providers for the receipt of CAF Phase II support, the Commission should design performance standards that do not stack the deck against these providers, with the practical effect of excluding them from participation in the Phase II reverse auction. Commenters stress the fact that the proposed 10 Mbps speed requirement, the proposed 100 GB minimum usage allowance, and other Phase II public interest

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[42] *See* ADTRAN, Inc. ("ADTRAN"), Comments at 13; Deere Comments at 6; National Rural Electric Cooperative Association ("NRECA") Comments at 7.

[43] *See* C Spire Comments at 13; CTIA Comments at 2; Midwest Energy Cooperative ("Midwest Energy") Comments at 6.

obligations should be applied in a manner that does not preclude mobile broadband providers from competing for Phase II funding.[44]

Third, the Commission should adopt fair, technology-neutral rules for determining the eligibility of areas for model-based CAF Phase II support.[45] To guard against overbuilding by price cap carriers, there is record support for the Commission's determining that the presence of an unsubsidized competitor providing broadband service in a given area, regardless of the technology used by the competitor, will bar incumbent price cap carriers from receiving model-based CAF Phase II support for that area.[46]

And, *fourth*, the record suggests that the Commission should determine that price cap incumbents are prohibited from using model-based CAF Phase II support to deploy 4G LTE mobile wireless broadband networks.[47] Given the prospect that mobile wireless broadband networks can be deployed with less investment capital than the amounts needed to deploy fiber-based and other wireline broadband networks, commenters argue that it makes little sense to create a windfall for price cap incumbents by allowing them to receive funding determined by a wireline-based cost model, and then to use this funding to deploy less expensive mobile wireless broadband networks.

II. MOBILITY FUND PHASE II.

There is strong opposition in the record to any reduction or reallocation of the Mobility Fund Phase II budget, with commenters suggesting instead that the Phase II budget should be

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[44] *See* CCA Comments at 21; CTIA Comments at 3, 4; DISH Network L.L.C. & Hughes Network Systems, LLC (collectively, "Satellite Broadband Providers") Comments at 3, 4.

[45] *See* ADTRAN Comments at 15; CCA Comments at 19-20; General Communication, Inc. ("GCI"), Comments at 12; National Cable & Telecommunications Association ("NCTA") Comments at 6-7, 10; RICA Comments at 4.

[46] *See* NCTA Comments at 6-7.

[47] *See* CCA Comments at 18.

increased. Numerous parties also agree with the Rural Wireless Carriers that the effective use of Phase II funding depends in part upon the Commission's ability to determine accurately those areas that actually have access to 4G LTE broadband services.

Commenters also agree that the rules the Commission adopts for resumption of the phase-out of legacy high-cost support must avoid any risk that consumers will lose access to mobile services. In addition, there is strong support for a 10-year service term for Phase II support, and for continuing to use road miles as the basis for disbursing Phase II support and determining whether build-out obligations have been met.

A. The Commission's Proposals for Cutting and Reallocating the Phase II Budget Are Strongly Opposed in the Record.

The Commission in the *Further Notice* proposed to "adjust downward" the Mobility Fund Phase II budget[48] and to reallocate Phase II funding to other universal service support mechanisms,[49] and the Commission sought comment on whether to use a portion of the reduced Phase II budget to provide one-time support to extend mobile LTE services.[50] These various propositions for cutting and repurposing the Phase II budget have been greeted by strong opposition and virtually no support in the record.

1. The Commission's Budget-Cutting Proposal Finds No Support.

The Commission's threadbare justification for its proposal to downsize the Mobility Fund Phase II budget, as well as its misplaced concerns regarding the targeting of current support to smaller and regional wireless carriers,[51] are thoroughly rebutted in the record, and commenters

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[48] *Further Notice*, 29 FCC Rcd at 2179 (para. 243).

[49] *Id*. at 2180 (para. 246).

[50] *Id*. at 2180 (para. 247).

[51] *Id*. at 2179 (para. 243).

also confirm the Rural Wireless Carriers' assessment that cutting the Phase II budget would cause real harm to rural Americans. In fact, the record provides a strong counterpoint to the Commission's budget-cutting proposal, with several commenters suggesting that the Phase II budget actually should be increased.

a. Marketplace Developments Cited by the Commission Provide No Basis for Reductions in the Phase II Budget.

The Rural Wireless Carriers demonstrate in their Comments that the Commission's reliance on "marketplace developments"[52] as a basis for downsizing the Mobility Fund Phase II budget amounts to a house of cards that lacks any credible factual foundation.[53] Other commenters agree.

CCA explains that "the factual premise underlying the FNPRM's proposals—namely, that virtually all U.S. households already have access to mobile broadband service—is plainly false[,]"[54] and CTIA demonstrates that "[t]his NPRM presents no reliable data to second guess the precise amount of support that will be necessary to ensure ubiquitous access to mobile broadband. Thus, there is no factual basis to reduce the Mobility Fund Phase II budget."[55] CCA also indicates that the Commission's reliance on the *Sixteenth Wireless Competition Report*[56] is misplaced because "the *Sixteenth Report* explicitly counted networks using '3G' standards and technologies …

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[52] *Id*. at 7127 (para. 239).

[53] *See* RWC Comments at 10-15.

[54] CCA Comments at 5.

[55] CTIA Comments at 6.

[56] *Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, including Commercial Mobile Services*, WT Docket No. 11-186, Sixteenth Report, 28 FCC Rcd 3700 (2013) ("*Sixteenth Wireless Competition Report*" or "*Sixteenth Report*").

that would be *un*likely to meet [the Commission's Mobility Fund Phase II broadband performance] requirements."[57]

Moreover, "the *Sixteenth Report* makes no attempt to evaluate the extent to which consumers in rural and other high-cost areas of the country (as compared to urban areas) have access to mobile broadband services."[58] CCA explains that the problem with the *Sixteenth Report* is that it "provides only a nationwide analysis focused on service to *urban* areas, which cover more than 80 percent of the U.S. population and which large mobile providers continue to target, thereby obscuring the fact that many rural areas lack access to reasonably comparable mobile broadband services."[59]

Another important consideration overlooked by the Commission's budget-cutting proposal is that, as CCA notes, "millions of Americans still lack access to essential mobile broadband services."[60] The Rural Wireless Carriers agree with CCA's argument that "[t]his persistent 'mobile broadband availability gap' is cause for significant concern; simply stated, the Commission will be unable to achieve its universal service objectives unless this gap is closed—and closed

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[57] CCA Comments at 6 (emphasis in original). CCA also points out that the Commission has acknowledged that the data cited in the *Sixteenth Wireless Competition Report* is questionable:

> Among the specific limitations the Commission identifies are that the underlying methodology: (i) relies on self-reporting and fails to utilize any independent assessment of coverage areas); (ii) does not account for the fact that each wireless service provider uses a different standard for determining "coverage;" and (iii) does not expressly account for factors such as signal strength, bit rate, or in-building coverage.

Id. at 7.

[58] *Id*.

[59] *Id*. (emphasis in original).

[60] *Id*. at 14.

quickly."[61] CCA concludes that "the FNPRM's proposal to *reduce* the already limited funding made available to mobile providers is therefore both confounding and disconcerting."[62]

A further problem with the Commission's proposal to reduce the size of the Mobility Fund Phase II budget is that it would undo a budgetary balancing act that was played out in the *CAF Order* and that has already put wireless competitive eligible telecommunications carriers ("ETCs") at a disadvantage. As CTIA explains, "[t]he respective budgets adopted in the [*CAF*] *Order* for support for price cap and rate-of-return incumbent local exchange carriers and the Mobility Fund represented a compromise under which wireless carriers already made major concessions, losing over 75 percent of the support they received before reform."[63]

The Rural Wireless Carriers agree with C Spire's observation that, until the Commission's FCC Form 477 data collection process begins to collect more accurate data, which is analyzed and made available for public inspection, "there is no basis whatsoever to reduce or reassign Mobility Fund Phase II support."[64] The Commission—which did not even specify in the *Further Notice* the size of the budget reductions it is proposing[65]—simply has not constructed any credible ground-work upon which to rest a decision to cut the Phase II budget.

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[61] *Id*.

[62] *Id*. (emphasis in original).

[63] CTIA Comments at 6. CTIA also observes that "participants in [the] Mobility Fund Phase I [reverse auction] may have bid based on the Commission's assurance that a $500 million Mobility Fund Phase II would follow, incorporating this assumption into their bidding strategies. The Commission should not upset this expectation of future support." *Id*.

[64] C Spire Comments at 6.

[65] RWC Comments at 4.

b. Cutting the Phase II Budget Would Have a Negative Impact on Consumers in Rural America, Depriving Them of the Manifold Benefits of Mobile Broadband.

Numerous parties agree with the Rural Wireless Carriers that cutting the Mobility Fund Phase II budget would have a direct, negative impact on consumers in rural areas, would ignore the growing demand for mobile broadband services, and would also contradict the Commission's own acknowledgment that its universal service mechanisms still have more ground to cover in enabling the deployment of advanced mobile broadband networks throughout rural America.[66]

CTIA indicates that the implication of the proposal in the *Further Notice* to cut the Mobility Fund Phase II budget is that the Commission is backing away from the commitment made in the *CAF Order* to "ensur[e] that ***all*** consumers—including those in rural, insular and high-cost areas—receive the benefits of mobility."[67]

Cutting the Mobility Fund Phase II budget would make it much more difficult for mobile broadband providers to expand their networks into areas that currently are unserved or under-served, and this increased difficulty would compromise the Commission's commitment to ensure the availability of mobile broadband for all consumers. Deere explains, for example, that, "[w]hile rural fixed broadband expansion brings many benefits to rural communities, there remains a significant lack of cellular coverage creating a host of unserved and underserved areas. Additional wireless facilities are needed in America's rural areas to enable broadband services."[68]

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[66] *See id*. at 5-6.

[67] CTIA Comments at 5 (footnote omitted) (emphasis added).

[68] Deere Comments at 7. Deere further indicates that:

> Today, many of Deere's customers are challenged with a lack of adequate cellular coverage in the fields where agricultural equipment operates. Deere's JDLink™ data service, for example, currently relies on the cellular telephone network to transmit telemetric machine operation data. The lack of coverage needed for these solutions to transmit telemetric data

C Spire points out that "[c]utting support to wireless carriers, at a time when the demand for 4G LTE services, improved coverage, public safety, and economic development in rural areas are all soaring, is counterproductive[,]"[69] and CCA explains that "the importance of mobile broadband services will become more pronounced over time—such that the public interest harms resulting from the misallocation of funding (overwhelmingly favoring fixed services in a manner that is increasingly at odds with consumer preferences) will continue to grow."[70]

Parties also agree with the Rural Wireless Carriers that the Commission, in weighing the merits of its proposal to cut the Mobility Fund Phase II budget, should not lose sight of the varied and important benefits that mobile broadband deployment brings to rural America. CTIA sums up the importance of these benefits:

> [C]onsumers are placing enormous and ever-increasing value on wireless and mobility—the benefits of which are perhaps most pronounced in rural areas where distance creates unique challenges for family life, economic development, public safety and health. Indeed, fixed services cannot provide the many benefits that mobility can bring to consumers who live, work or travel in remote and unserved areas.[71]

> from the machines is already a concern, but the shortfall in coverage will only become more problematic as data volumes increase.

Id. at 3.

[69] C Spire Comments at 2. *See* Meredith Attwell Baker, President and CEO, CTIA, "Building Our Mobile Life," Congress Blog, THE HILL (Aug. 26, 2014), *accessed at* http://thehill.com/blogs/congress-blog/216010-building-our-mobile-life?utm_campaign=congressblog&utm_source=twitterfeed&utm_medium=twitter (discussing the escalating demand for mobile broadband, and noting that, "[i]n 2013, U.S. wireless providers handled more than 3.2 trillion megabytes of data, a 120 percent increase from 2012 alone. With the Internet of Things, wearables and the skyrocketing use of mobile video, the future growth trend lines are staggering.").

[70] CCA Comments at 13. *See id*. at 11 (indicating that "numerous studies confirm that mobile broadband services are becoming increasingly essential to consumers, such that consumers often choose to access the Internet using their mobile devices even where faster fixed alternatives are available").

[71] CTIA Comments at 2-3.

CCA catalogues the benefits provided to consumers by mobile broadband in various fields,[72] and C Spire describes a real-world example of the role that mobile broadband is playing in telemedicine.[73]

In addition, Deere provides evidence of the importance of mobile broadband to business operations in rural areas, explaining that "more and more farmers are demanding capability for machine-to-machine communications from the field that make possible significant improvements in real-time productivity and cost management."[74] Deere observes that "enabling farmers to utilize machine-to-machine data fully requires significant improved communications capacity and access to high speed mobile broadband."[75]

The record is replete with discussions of the adverse effects that Mobility Fund Phase II budget cuts would have on rural Americans. Cordova, for example, cautions against "an arbitrary cut in mobile funding at this time[, since] cutting support to small, rural carriers that, unlike large carriers, cannot internally subsidize their high-cost areas, does not make sense."[76] The Rural Wireless Carriers agree with Cordova's argument that "the Commission must take the time to assess how much actual funding is necessary to achieve [the] goal"[77] of preserving and advancing mobile

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[72] CCA Comments at 12-13. In their Comments, the Rural Wireless Carriers emphasize the public safety, health care, and educational benefits provided by mobile broadband services. RWC Comments at 7-10.

[73] C Spire Comments at 7-8 (footnotes omitted) (indicating that "C Spire recently joined in forming a telehealth program in partnership with the University of Mississippi Medical Center … and other health care organizations. Using C Spire's wireless network, the program will enable patients in the Mississippi Delta to have timely access to clinical service providers remotely from their homes. Patients will have Internet-capable tablets that will allow them to provide critical information to clinicians, who can use that information to adjust medical care or schedule calls or video chats as needed.").

[74] Deere Comments at 2-3.

[75] *Id*. at 3.

[76] Cordova Comments at 3.

[77] *Id*.

service in high-cost areas. It is disconcerting that, instead, the Commission is proposing to forge ahead with arbitrary cuts to the Phase II budget.

The proposed budget reductions are made even more problematic by the fact that, as commenters point out, Mobility Fund Phase II support is needed for both the deployment and maintenance of mobile broadband networks.[78] Blooston explains that, "[i]n some areas where there is already wireless service but it is less than 4G LTE, carriers may already have significant infrastructure in place to support a less expensive network upgrade[,]"[79] but that, "in other areas where there is currently no wireless service, or where a service provider does not have existing facilities, Phase II funding will be needed for construction and ongoing support of new facilities."[80]

C Spire also points to the fact that Mobility Fund Phase II support is needed for both deployment and ongoing operations. "Once facilities are constructed in rural and high-cost areas, there must be sufficient support for carriers to maintain and operate those facilities. Any further reduction could well result in carriers decommissioning existing facilities—thereby *reducing* mobile broadband services in some rural areas."[81] C Spire reasonably concludes that "[i]t will not

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[78] *See* RWC Comments at 27.

[79] Blooston Comments at 6.

[80] *Id*. at 6-7. Blooston also explains that:

> rural build out and operation can be tremendously expensive. As the Connected Nation Policy Brief on Mobility Fund Phase I auction results points out, … "[t]he average bid per road mile across all winning bids was $3,593 per road mile." … One only has to look as far as the BTOP program, with numerous projects in the $20-50 million range (and some much higher still), to see examples of the tremendous cost of rural network buildout.

Id. at 7 (internal citation omitted). The Rural Wireless Carriers agree with Blooston's conclusion that, "[g]iven the demonstrated costs of building and maintaining wireless networks in rural areas, the Commission should avoid any reduction in the amount of funding available for Mobility Fund Phase II." *Id*.

[81] C Spire Comments at 8 (emphasis in original).

serve the public interest to have carriers decommission some of the very same facilities that these carriers were initially able to deploy because of the availability of USF support."[82]

Finally, the record also makes it evident that the proposed Mobility Fund Phase II budget cuts have disturbing policy implications. The Rural Associations, for example, express concern that the Commission's proposals in the *Further Notice* to repurpose the Mobility Fund II budget for one-time support for the deployment of mobile LTE to eligible unserved areas reflect a troubling willingness to "focus exclusively or predominantly on supporting capital investment to the near or total exclusion of any analysis of whether services will be 'reasonably comparable' in price and quality over the life of the supported network."[83]

The Rural Wireless Carriers respectfully urge the Commission to take notice of this implication of its budget-cutting proposal highlighted by the Rural Associations, as well as the consequences that such budget reductions would have for consumers and businesses in rural America.

c. The Commission's Concerns Regarding the Targeting of Legacy Funding Are Misplaced and Do Not Justify a Reduction in Phase II Support.

In addition to relying on its misguided survey of marketplace developments as a basis for its proposed reduction of the Mobility Fund Phase II budget,[84] the Commission claims that current high-cost funding to smaller and regional wireless carriers "is not well-targeted,"[85] and attempts

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[82] *Id*.

[83] NTCA–The Rural Broadband Association, WTA–Advocates for Rural Broadband, Eastern Rural Telecom Association, and National Exchange Carrier Association, Inc. (collectively, "Rural Associations") Comments at 61 n.133. *See* CCA Comments at 15 (footnote omitted) (arguing that "[r]educed funding … would fail to ensure that rural consumers can obtain the same high-quality broadband services that are available to urban consumers, … in direct contravention of the reasonable comparability principle in Section 254(b)(3) [of the Act]").

[84] See Section II.A.1.a., *supra*.

[85] *Further Notice*, 29 FCC Rcd at 2179 (para. 243).

to employ this analysis as a further buttress for its budget-cutting proposal.[86] Nothing in the record contradicts the Rural Wireless Carriers' view that, even if "there is any basis for the Commission's assumptions regarding faulty targeting of legacy support in certain areas, … these assumptions do not support a ***reduction*** of the Mobility Fund Phase II budget."[87]

In fact, Blooston arrives at the same conclusion, explaining that "the Commission's focus on existing identical support as a way to justify a reduction in Phase II funding is misplaced."[88] Blooston explains that "[t]he identical support rule was designed in significant part to encourage competition against incumbent wireline and other service providers. The Mobility Fund Phase II is designed largely to bring advanced 4G broadband services to rural areas for which a business case cannot be made in the absence of support."[89] The Rural Wireless Carriers agree with Blooston's conclusion that, "in many respects[,] [the Commission's analysis] is an 'apples to oranges' comparison."[90]

d. The Commission's Baseline for Phase II Budget Reductions Is Arbitrary and Unsupported.

The Rural Wireless Carriers explain in their Comments that there is no basis for using $400 million (the Commission's estimate of the amount of support currently being received by smaller and regional carriers) as a baseline for the Commission's proposed cuts to the Mobility Fund Phase II budget.[91]

[86] *Id*.

[87] RWC Comments at 15 (emphasis in original).

[88] Blooston Comments at 7.

[89] *Id*. at 7-8 (footnote omitted).

[90] *Id*. at 8.

[91] RWC Comments at 18 (citing *Further Notice*, 29 FCC Rcd at 2179 (para. 243)).

RWA agrees with the Rural Wireless Carriers' analysis, pointing out that the $400 million funding level "reflects an amount that was frozen and ratcheted down to 60 percent of the 2011 baseline, and the $400 million is not reflective of carriers' current costs."[92] The Rural Carriers endorse RWA's conclusion that "[t]he Commission should not seek to make broad cuts to a critical and federally-mandated support program based on an arbitrarily-selected window of data."[93]

As the Rural Wireless Carriers discuss in their Comments, if the Commission proceeds with reductions to the Mobility Fund Phase II budget (which it should not), then more reasonable baselines would be $1.2 million (the 2010 level of high-cost support), $579 million (the level of support that was being received by regional and small competitive ETCs in 2010 before the phase-down began), or, at a minimum, $500 million (the current Phase II budget).[94]

e. There Is Considerable Support in the Record for Increasing the Phase II Budget.

The Commission can conclude from the record of comments in response to the *Further Notice* that the case for increasing the Mobility Fund Phase II budget is much stronger than the case for cutting it.

As general matter, the Concerned Rural ILECs criticize the Commission's imposed budget caps, arguing the "the FCC has created a system of winners and losers, and the potential for vast areas of rural America where neither the availability [nor] the affordability of services are comparable to those in urban America."[95] The Rural Wireless Carriers agree with the Concerned Rural ILECs' assessment that "[t]he Commission must reevaluate the overall budget for universal service

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[92] Rural Wireless Association, Inc. ("RWA") Comments at 5.

[93] *Id.*

[94] RWC Comments at 19.

[95] Concerned Rural ILECs Comments at 11.

funding and ensure that sufficient support is available to cover all services that must be provided as a condition of eligibility for support."[96]

Regarding the Mobility Fund Phase II budget specifically, C Spire explains that "the Commission [should] increase the $500 million annual budget [because] [t]here is a very large unmet need for high-quality coverage and mobile broadband in rural areas, and satisfying this need will require significant investment."[97] The level of investment required is staggering. A study commissioned by CTIA three years ago, for example, presents findings that "demonstrate the significant investment that will be required to achieve ubiquitous access to mobile broadband services—between 7.8 to 21 billion dollars in initial investment alone, depending on the coverage goal."[98]

Much of that investment will be made from the private resources of the wireless industry. The Mobility Fund was established by the Commission to complement this private investment in order "to help ensure that all Americans *in all parts of the nation*, including those in rural, insular, and high-cost areas, have access to affordable [mobile broadband] technologies that will empower them to learn, work, create, and innovate."[99]

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[96] *Id*. at 11-12.

[97] C Spire Comments at 6.

[98] CTIA, U.S. UBIQUITOUS MOBILITY STUDY (Sept. 21, 2011) at 3, *accessed at* http://www.costquest.com/uploads/pdf/ctia-ubiquitous_mobility_study---final.pdf. The study was carried out by CostQuest Associates, Inc.

[99] *CAF Order*, 26 FCC Rcd at 17682 (para. 53) (emphasis added) (discussing a performance goal "to ensure the universal availability of modern networks capable of delivering mobile broadband and voice service in areas where Americans live, work, or travel").

The current Mobility Fund budget is not up to this task. CCA calls attention to the fact that the Commission itself has "implie[d] that [the] effectiveness [of Mobility Fund Phase I] was limited by budgetary factors[,]"[100] and CCA concludes that, "[i]f anything, this experience [in Mobility Fund Phase I] suggests the need to *increase* the level of annual support earmarked for Phase II of the Mobility Fund. Yet the FNPRM proposes the opposite, suggesting that the Commission should *decrease* that support."[101]

The Rural Wireless Carriers agree with CCA that "the Commission should increase the funding available to mobile providers through the Mobility Fund to reflect the true state of mobile broadband deployment in the United States—which is far more limited than the Commission assumes in the FNPRM—and the increasingly essential nature of mobile broadband services."[102]

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[100] CCA Comments at 4 (citing *Further Notice*, 29 FCC Rcd at 7128 (para. 241)). *See* RWC Comments at 5. The Commission stated in the *Further Notice* that "demand for universal service support far exceeded the supply of available funding …." *Further Notice*, 29 FCC Rcd at 7128 (para. 241).

[101] CCA Comments at 5 (emphasis in original) (footnote omitted).

[102] *Id*. at 3. *See* RWC Comments at 34 (arguing that, given the "extraordinary trends in consumer preference for mobile wireless voice and broadband services, the Commission, instead of proposing reductions in Mobility Fund Phase II support, should explore ways to bolster the level of that support to better ensure that consumers in rural areas are able to join other Americans in accessing the benefits of mobile broadband services"). In addition, the Rural Wireless Carriers reiterate here the concern expressed in their Comments that "it is ill-advised for the Commission to now propose downsizing a $500 million Mobility Fund Phase II budget, while at the same time proposing no specific reductions in the disproportionately large $3.8 billion annual budget for price cap and rate-of-return incumbents." *Id*. at 31. Increasing the Mobility Fund Phase II budget would begin to address the budget disparities reflected in the fact that, under the Commission's current budget, wireless competitive ETCs receive only 11 percent of the budgeted support, while price cap carriers and rate-of-return carriers receive a combined 87 percent of support. At the same time, mobile wireless carriers are responsible for 44 percent of universal service contributions (based on their revenues), while incumbent local exchange carriers are responsible for 22 percent. *Id*. at 32.

2. If the Commission Does Decide To Reduce the Phase II Budget, It Should Not Reallocate the Support to Other Universal Service Programs.

The Rural Wireless Carriers, after demonstrating in their Comments that "there is no rational basis for the Commission to downsize the Mobility Fund Phase II budget[,]"[103] argue that, if the Commission nonetheless chooses to create some budgetary headroom through Phase II reductions, it should not shift this funding to either CAF Phase II or the Remote Areas Fund ("RAF").[104]

C Spire agrees that funds generated by cuts to the Mobility Fund Phase II budget should not be reallocated to CAF Phase II because "[r]eserving CAF Phase II support exclusively for price cap incumbents, while making far less support available to wireless carriers, harms rural areas by perpetuating the gross imbalance between price cap funding and competitive funding."[105] C Spire also objects to a reallocation to the RAF, because "the RAF is targeted for fixed satellite and fixed wireless services[,] … and … mobile services offer customers much greater flexibility than fixed services."[106]

The Rural Wireless Carriers agree with Blooston that acting now to cut the Mobility Fund Phase II budget, and to promulgate rules for reallocating the support formerly dedicated to mobile broadband, is putting the cart before the horse. Blooston "suggest[s] that the Commission hold the Phase II auction once new rules are adopted, and determine *at the end* of the auction whether there

[103] RWC Comments at 20.

[104] *Id*. at 20-25.

[105] C Spire Comments at 11.

[106] *Id*. at 12.

are in fact surplus funds to be reallocated. The Commission can make decisions regarding any reallocation at that time."[107]

CTIA suggests that, if the Commission reduces the Mobility Fund Phase II budget, then "it should return that amount to contributors, a significant percentage of which are wireless consumers, rather than redirecting the funds to other universal service programs."[108] The Rural Wireless Carriers agree that, if the Commission determines that it has overfunded Mobility Fund Phase II—a finding that would be inexplicable—then using that "surplus" funding as a basis for reducing the contribution factor is an option the Commission should consider. This use of the "surplus" funding would be preferable to moving the funds into support mechanisms that the Commission has already determined are sufficiently funded, and that, in the Rural Carriers' view, have been excessively funded.

Finally, one party suggests that any Mobility Fund Phase II support that is made available by a budget cut should be reallocated to the RAF.[109] The Rural Wireless Carriers oppose such a reallocation because, as they explain in their Comments, "moving Phase II funding to the RAF would not serve the Commission's reform objectives[,]"[110] the implementation of the RAF has been deferred by the Commission,[111] and the Commission has decided to make CAF Phase II

[107] Blooston Comments at 8 (emphasis in original). The Rural Wireless Carriers note that they oppose the use of a reverse auction mechanism as the means for disbursing Mobility Fund Phase II support. *See* RWC Comments at 45 & n.137. The approach suggested by Blooston for addressing the reallocation of Phase II support, however, could be adapted for use in connection with other support disbursement mechanisms. *See id*. at 6-7.

[108] CTIA Comments at 6 n.17.

[109] Alaska Rural Coalition ("ARC") Comments at 27-28.

[110] RWC Comments at 23.

[111] *Id*. at 24.

support available for use in deploying broadband networks in extremely high-cost areas, enabling CAF Phase II funding to "do[ ] part of the job that the RAF was originally intended to do …."[112]

3. Cutting the Phase II Ongoing Budget and Converting a Portion of the Budget to One-Time Support Would Create Significant Problems for Rural Consumers.

There is no support in the record for the Commission's suggestion that, instead of maintaining the $500 million budget for Mobility Fund Phase II, the Commission could use a portion of that budget (potentially including undisbursed funds remaining from Mobility Fund Phase I) to provide one-time support for mobile broadband deployment in eligible unserved areas.[113] The Rural Wireless Carriers oppose in their Comments the Commission's suggestions regarding converting a portion of the Phase II budget for use as one-time support, arguing that "mak[ing] a permanent reduction in ongoing Mobility Fund Phase II support, and … only partially offset[ting] this reduction through the one-time provision of support for LTE deployment … lacks any credible factual basis or public policy rationale."[114]

C Spire uncovers a further problem with the Commission's scenario for the reallocation of Mobility Fund Phase II support to provide one-time support for mobile broadband capital expenditures. Specifically, C Spire explains that "[r]eallocation to a one-time support mechanism would result in a substantial loss of overall funding. For example, reallocating $100 million of Mobility Fund Phase II support to one-time support could remove $1 billion ($100 million for 10 years)

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112 *Id*. at 25.

113 *See Further Notice*, 29 FCC Rcd at 7130 (para. 247).

114 RWC Comments at 26. The Rural Wireless Carriers also oppose the Commission's suggestion that unclaimed Mobility Fund Phase I support could be shifted to the Mobility Fund Phase II budget, arguing that "a better approach for the disposition of undisbursed Mobility Fund Phase I support would be to make that support available immediately to next-in-line bidders in Auction 901 …." *Id*. at 29.

from continuing support for mobile."[115] Such a result obviously would be problematic, given the need for ongoing support to maintain mobile broadband networks after they are deployed.[116]

B. Numerous Other Commenters Agree with the Rural Wireless Carriers That the Commission Must Ensure the Accurate Determination of Existing 4G LTE Coverage.

The Rural Wireless Carriers argue in their Comments that the Commission must develop mechanisms that accurately measure which areas are actually served by 4G LTE broadband.[117] Mobility Fund Phase II support will not be effective in achieving ubiquitous mobile broadband coverage "if the Commission simply declares rural areas to be covered by LTE service when they in fact are not."[118] Other commenters agree that the Commission should give priority to this task.

C Spire, for example, points out that "[a]n accurate map would show that large portions of rural America lack access to mobile broadband service, and even larger portions lack access to 4G LTE service[,]"[119] but expresses concern that "[t]he Commission does not now have adequate information to accurately identify [these] unserved areas."[120]

The Commission's new FCC Form 477 reporting requirements are intended "to ensure that accurate depictions of 4G LTE coverage are collected and made available to interested parties[,]"[121] but there is some concern that the Commission's "change in data collection may result

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[115] C Spire Comments at 12.

[116] See Section II.A.1.b., *supra*.

[117] The Rural Wireless Carriers also emphasize in their Comments that "the Commission should be careful to preserve existing mobile broadband service supported by universal service mechanisms, and should not focus exclusively on extending service to currently unserved areas." RWC Comments at 34.

[118] *Id*. at 35.

[119] C Spire Comments at 5. *See* Deere Comments at 3, 7 (discussed in Section II.A.1.b., *supra*).

[120] C Spire Comments at 5.

[121] RWC Comments at 36.

in a lower level of confidence ....”[122] Blooston argues that “reliance on data reported by AT&T and Verizon on Form 477 may provide a starting point, but by definition this information contains room for bias.”[123]

The Rural Wireless Carriers suggest in their Comments various steps to help ensure the accuracy of the Form 477 data, including “provid[ing] interested parties with an opportunity to submit comments that address the extent to which the new Form 477 reporting requirements are producing more accurate information ....”[124] The Rural Carriers also agree with Blooston’s suggestion that the Commission should either make available to interested parties individual and unredacted Form 477 data for AT&T and Verizon Wireless, or “publish a composite map depicting the LTE coverage areas of AT&T and Verizon Wireless together.”[125] The Rural Carriers also support Blooston’s view that, “[i]n disputed areas, the Commission should place the burden on AT&T and Verizon to demonstrate that a challenged area should be foreclosed from Phase II support.”[126]

There is support in the record for the Rural Wireless Carriers’ argument that, in the case of areas where a portion of a mobile broadband provider’s network overlaps with an area that has 4G LTE coverage from AT&T or Verizon, “the Commission should treat the entire area—including the portion that overlaps with AT&T or Verizon LTE coverage—as eligible for Mobility Fund Phase II support.”[127] RWA argues that, “[p]articularly in areas where census blocks can be large,

[122] State of Utah, Governor’s Office of Economic Development (“Utah GOED”), Comments at 3 (unpaginated).

[123] Blooston Comments at 4.

[124] RWC Comments at 36.

[125] Blooston Comments at 5.

[126] *Id.*

[127] RWC Comments at 36.

it would be inequitable to foreclose all Phase II support to a potentially eligible area because Verizon or AT&T's 4G LTE coverage overlaps with some portion of the area (that likely is urban or densely populated)."[128]

The Rural Wireless Carriers also agree with Cordova that "[t]he Commission should not deny Mobility Fund support for areas where AT&T and Verizon claim they can provide service or claim they intend to provide service at some time in the future, but do so only through roaming."[129] As Cordova explains, small and regional wireless carriers should be eligible for support where AT&T or Verizon is using these carriers' underlying networks.[130]

Finally, AT&T objects to the Commission's proposal to exclude from Mobility Fund Phase II eligibility only those areas in which 4G LTE service is being provided by AT&T or Verizon, arguing that "the Commission should exclude from MFII eligibility *any* area covered by 4G LTE, regardless of the identity of the service provider."[131]

The Rural Wireless Carriers submit that AT&T's argument for further restricting eligible areas ignores a far more fundamental concern. Instead of focusing on whether areas should be disqualified based only on mobile broadband deployment undertaken by AT&T and Verizon, the Commission should concentrate its efforts on developing and implementing accurate and reliable

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[128] RWA Comments at 9. *See* Utah Division of Public Utilities Comments at 1 (indicating that, "[i]n rural areas, especially in the western states, census blocks may be quite large. … In Utah, 89 census blocks are larger than 100 square miles in area. Effectively eliminating census blocks such as these from funding because of partial service in one or more small areas of the census block might leave residents without acceptable service for many more years."); Utah GOED Comments at 2.

[129] Cordova Comments at 8.

[130] *Id*.

[131] AT&T Services, Inc. ("AT&T"), Comments at 34 (emphasis in original).

mechanisms that yield coverage data sufficient to serve as a reasonable and defensible basis for making eligibility determinations.

Preliminary analysis undertaken by U.S. Cellular suggests that the tools currently being employed by the Commission to determine mobile broadband coverage are resulting in a significant overstatement of mobile broadband availability in rural areas. These tools need to be overhauled as a means of ensuring that Mobility Fund Phase II support is available where needed to meet the Commission's mobile broadband deployment goals.

C. The Record Supports Effective Action by the Commission To Ensure that Wireless Competitive ETCs Receiving Legacy Support Are Able To Maintain Service to Existing Customers.

The Rural Wireless Carriers argue in their Comments that actions taken by the Commission must ensure that wireless competitive ETCs currently receiving frozen legacy support are able to continue service to existing customers during the transition to the Mobility Fund Phase II.[132] Other commenters agree.

C Spire, for example, argues that "[i]t is essential that the Commission maintain ongoing support at the current frozen levels so that carriers can maintain service to their customers during the transition to whatever Mobility Fund Phase II support mechanism the Commission adopts."[133] Parties make several proposals regarding how the transition should work. CCA, for example, argues that the phase-down of legacy high-cost support should not be resumed until (1) Phase II is

[132] RWC Comments at 44.

[133] C Spire Comments at 3.

fully implemented and initial support has been made available; and (2) the Commission has taken action in its universal service contribution reform proceeding.[134]

RWA argues that the Commission should not resume the phase-down until Mobility Fund Phase II is implemented, and that this implementation should be defined to mean that "50 percent of Phase II funds have been disbursed to carriers[,]"[135] explaining that "[o]nly by halting the phase-down of legacy support until carriers have at least half of their Phase II funds in hand can the Commission ensure the continued provision of wireless services and deployment of new wireless services to high-cost areas."[136]

Both C Spire and CTIA support the Commission's proposed transition, under which the existing level of legacy support would be maintained until Mobility Fund Phase II support is authorized (in the case of competitive bidders, if the Commission adopts a competitive bidding mechanism), or until a Public Notice announces the Phase II funding awards (in the case of competitive ETCs that are not reverse auction winners).[137] CTIA argues that "[t]he proposal reasonably balances encouraging cost-effective and efficient deployment of service to rural and high-cost areas while ensuring the phase-down does not result in service disruptions to customers."[138]

The Rural Wireless Carriers believe that any of these approaches would be effective in meeting the objective that wireless competitive ETCs should be able to continue service to existing customers with their frozen legacy support until Mobility Fund Phase II is implemented. On the

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[134] CCA Comments at 24-25. The issue of universal service contribution reform is discussed in Section IV.A., *infra*.

[135] RWA Comments at 4.

[136] *Id*.

[137] C Spire Comments at 3; CTIA Comments at 7.

[138] CTIA Comments at 7.

other hand, as C Spire argues, the Commission should not link the resumption of the phase-down of legacy support to its adoption of rules for the operation of Phase II.[139] As the Rural Carriers have explained, this approach is problematic "because there could be considerable lag-time between the adoption of rules and the actual authorization of ongoing Phase II support."[140]

The Rural Wireless Carriers also criticize in their Comments the Commission's proposed "1 percent rule," pursuant to which the Commission would accelerate the phase-down of legacy support in the case of any wireless competitive ETC for which legacy high-cost support represents 1 percent or less of its wireless revenues,[141] arguing that the proposed rule could inadvertently accelerate the elimination of legacy support received by smaller competitive ETCs, and that this accelerated loss of support, "despite [the] small amount [of the support], could impair a smaller carrier's ability to maintain service."[142]

Other commenters share the concern expressed by the Rural Wireless Carriers. AT&T, for example, complains that "[i]t is not even clear that the Commission has tested its proposed metric to determine which companies will be captured by this arbitrary threshold and whether its assumption that these carriers are 'not relying on such support' has any basis in fact."[143] AT&T explains that "[c]ompanies of vastly different sizes and investment profiles could be caught in this net with totally unpredictable results for each one of them."[144] To address these concerns, the Rural Carriers

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[139] C Spire Comments at 3-4. *See* RWC Comments at 44.

[140] RWC Comments at 44.

[141] *Id*. at 44 n.133. The Commission proposes to eliminate legacy support on December 31, 2014, or the effective date of the new 1 percent rule, whichever is later. *Further Notice*, 29 FCC Rcd at 7133 (para. 253).

[142] RWC Comments at 44 n.133.

[143] AT&T Comments at 38 (quoting *Further Notice*, 29 FCC Rcd at 7133 (para. 253)).

[144] *Id*. *See* C Spire Comments at 4-5; CCA Comments at 23.

reiterate the proposal made in their Comments, that "the acceleration rule … could be structured so that it applies only to competitive ETCs (1) for which high-cost support represents 1 percent or less of their wireless revenues; and (2) that have more than 1,500 employees."[145]

Finally, the Rural Wireless Carriers disagree with a suggestion made by AT&T that the phase-down of legacy support should resume immediately in "those areas where there is at least one facilities-based unsubsidized provider offering mobile wireless service in the same geographic area as a wireless frozen [support] recipient …."[146]

The problem with AT&T's suggestion is that it would defeat the purpose behind the Commission's decision to phase down—and not to flash-cut—competitive ETCs' legacy support, which is "to avoid shocks to service providers that may result in service disruptions to customers."[147] The Commission adopted the phase-down to ensure, to the extent possible, sufficient support for legacy carriers, so that their existing customers will continue receiving service during the transition, before the legacy carriers have an opportunity to become eligible for Mobility Fund Phase II support.

D. Other Mobility Fund Issues.

1. The Commission Should Adopt a 10-Year Term for Phase II Support.

There is support in the record for the Rural Wireless Carriers' position that the Commission should adopt its proposed rule authorizing Mobility Fund Phase II participants to receive support for a 10-year term,[148] with C Spire pointing out that "[a] shorter term would be counterproductive

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[145] RWC Comments at 44 n.133.

[146] AT&T Comments at 39.

[147] *CAF Order*, 26 FCC Rcd at 17830 (para. 513).

[148] RWC Comments at 47 (citing proposed Section 54.1018(b) of the Commission's Rules).

as smaller wireless carriers would find it difficult to raise capital to be used in satisfying the Commission's network deployment obligations."[149]

The Rural Wireless Carriers also suggest in their Comments that the Commission should clarify whether support disbursements will be made on a quarterly or other periodic basis during the 10-year term,[150] and RWA agrees, arguing that "the Commission should give providers the ability to request regular and predictable disbursements similar to how disbursements of legacy universal service high-cost support are handled."[151]

2. The Commission Should Use Road Miles as the Basis for Disbursing Phase II Support.

The Rural Wireless Carriers oppose in their Comments the Commission's proposal in the *Further Notice* to switch from road miles to population as the basis for determining whether construction deadlines have been met by Mobility Fund Phase II support recipients.[152] Other commenters also oppose the Commission's proposal.

CCA objects to the proposal because there is no basis for moving in a direction that conflicts with the *CAF Order*. CCA explains that "[t]he FNPRM's shift in focus is entirely unexplained and made more questionable by the fact that the *Sixteenth Report* estimates that *<u>about 10 percent</u>* of U.S. road miles currently are not covered by mobile broadband networks (the true number likely is even higher …)."[153] The Rural Wireless Carriers agree with CCA's criticism that "[t]his about-face, which plainly has the effect of understating the true need for support, cannot be

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[149] C Spire Comments at 9.

[150] RWC Comments at 47-48.

[151] RWA Comments at 11.

[152] RWC Comments at 48-49.

[153] CCA Comments at 8-9 (emphasis in original).

squared with Section 254 of the Act, which requires support to be sufficient and predictable, or the Commission's own universal service policies implementing the statutory directive."[154]

Other commenters agree with the Rural Wireless Carriers that the Commission's proposal seems intent upon trying to fix something that is not broken. CTIA explains that "[a] principal purpose of the Mobility Fund as adopted by the Commission was to serve road miles, not just residential locations. The Commission found that using road miles is 'consistent with [its] performance requirements and goal of extending coverage to the areas where people live, work, and travel.'"[155]

RWA supports the Commission's proposed shift to population as the basis for determining compliance with coverage and performance requirements,[156] but RWA suggests that the Commission should also permit the use of various proxies for population, including road miles.[157] In the Rural Wireless Carriers' view, it would make more sense to retain the current road mile measurement standard, instead of introducing proxy procedures that could be cumbersome and confusing to administer.

Finally, the Rural Wireless Carriers suggest that the use of road miles for determining compliance with coverage and performance requirements should be adapted to accommodate Deere's

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[154] *Id*. at 9.

[155] CTIA Comments at 5-6 (footnotes omitted) (quoting *CAF Order*, 26 FCC Rcd at 17789 (para. 353)). *See* C Spire Comments at 10 (emphasis in original) (arguing that "requiring additional coverage of road miles directly reflects the objective of the Mobility Fund to extend *mobile* services in particular").

[156] RWA Comments at 10-11.

[157] *Id*. at 11.

recommendation "that the Commission consider enhancing the definition of unserved and under-served areas to include the USDA [U.S. Department of Agriculture] definition of 'cropland.'"[158] Deere explains that the inclusion of croplands "would allow machine-to-machine mobile broad-band transmissions by agricultural equipment in the field and associated operators' mobile devices to be counted in the justification for broadband expansion."[159]

III. CONNECT AMERICA FUND PHASE II.

The Commission is faced with several critical issues involving the implementation of CAF Phase II, and its resolution of these issues will have a direct bearing on the effectiveness of the Phase II mechanism in furthering the Commission's universal service goals.

The record demonstrates that the use of CAF Phase II support for broadband network deployment will be enhanced considerably if the Commission decides to make mobile wireless broadband providers eligible to compete for Phase II support, and acts to ensure that Phase II public interest obligations are not crafted in a manner that has the effect of precluding providers using spectrum-based technologies from qualifying for support.

In determining service areas that are eligible for model-based CAF Phase II funding, the Commission should exclude areas that are served by unsubsidized mobile broadband competitors. Finally, the Commission should bar price cap carriers receiving model-based CAF Phase II support, through the exercise of their right of first refusal, from using this support to deploy spectrum-based broadband networks.

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[158] Deere Comments at 4 (footnote omitted). For a discussion of total cropland, cropland used for crops (including cropland harvested, crop failure, and cultivated cropland), cropland used only for pasture, and idle cropland, see the U.S. Department of Agriculture website, *accessed at* http://www.ers.usda.gov/data-products/major-land-uses/glossary.aspx#.U_tGDcVdV4k.

[159] Deere Comments at 4.

A. There Is Strong Support in the Record for Making Wireless Competitive ETCs Eligible for CAF Phase II Support.

Commenters demonstrate that opening up CAF Phase II to mobile wireless broadband providers will enhance immeasurably the effectiveness of the Phase II funding mechanism in enabling service providers to meet the demand in rural areas for both fixed and mobile broadband services. The record also shows, however, that this result can be achieved only if the Commission applies speed, minimum usage, and other performance standards in a manner that does not result in mobile wireless broadband providers being unable to compete for Phase II support.

1. Numerous Benefits Will Be Realized If Mobile Broadband Providers Are Permitted To Compete for CAF Phase II Support.

The Rural Wireless Carriers advocate in their Comments that the Commission should now confirm an expectation signaled in the *CAF Order* "by making mobile broadband providers eligible for CAF Phase II funding."[160] This position finds considerable support in the record.

First, several commenters agree with the general policy that service providers using mobile wireless broadband technology should be eligible to compete for CAF Phase II support. ADTRAN, for example, agrees with the Commission's suggestion that "a service provider could fulfill its obligations to deploy broadband service to unserved locations using 'any technology or combination thereof—whether wireline or wireless, fixed or mobile, terrestrial or satellite—that meets the performance standards for Phase II.'"[161]

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[160] RWC Comments at 38 (indicating that, in the *CAF Order*, the Commission anticipated that mobile broadband providers may also be eligible for CAF Phase II support in areas where price cap carriers do not exercise their right of first refusal).

[161] ADTRAN Comments at 13 (footnote omitted) (quoting *Further Notice*, 29 FCC Rcd at 7105 (para. 154)). *See* Deere Comments at 6; NRECA Comments at 7 (footnote omitted) (noting that "[m]obile, wireless services such as LTE … meeting the Phase II requirements, while maintaining the service and pricing standards … for the offer of model-based support, should be eligible for Phase II support").

The Rural Wireless Carriers agree with CCA's conclusion that "[t]here is no justifiable basis—and no basis at all in the record—for categorically excluding *any* technology that can satisfy the Commission's broadband performance requirements, which are designed to ensure that consumers have access to services that provide a quality 'broadband' experience[,]"[162] and that "[a]ny contrary position would be antithetical to the principles of competitive and technological neutrality that have been the cornerstones of the Commission's universal service policy for decades."[163]

Second, opening up CAF Phase II competitive bidding to mobile broadband providers will benefit rural consumers and businesses. According to C Spire, for example, "[p]articipation by mobile wireless providers in the CAF Phase II auction would … benefit consumers in rural areas by opening the possibility that CAF Phase II funding will provide access not just to broadband, but to mobile broadband, which many citizens, especially those in low income communities, already prefer."[164] Deere explains that, "[f]or many rural areas, including farm-intensive areas with significant tracts of cropland, wireless service will be *the superior technology choice* to achieve cost-effective coverage."[165]

Third, determining that carriers using mobile broadband technologies are eligible for CAF Phase II support will make the reverse auction process more competitive. As CTIA explains:

> The Commission can help guarantee the success of CAF Phase II by making the competitive bidding process competitively and technologically neutral and encouraging participation by a wide range of providers. Greater participation will lead to

[162] CCA Comments at 17 (emphasis in original).

[163] *Id*.

[164] C Spire Comments at 13.

[165] Deere Comments at 6 (emphasis added) (discussing the prospect of allowing the use of mobile or satellite technology that meets CAF Phase II requirements, while maintaining the service and pricing standards applicable to the offering of model-based support).

> more aggressive bidding, lower funding awards, more effective use of universal service and public resources, and deployment of high-speed broadband services to more rural and high-cost areas.[166]

Midwest Energy agrees, arguing that "[a] diversity of competitors for CAF funding to provide rural broadband strengthens the likelihood that service will actually be extended into rural areas at reasonable prices."[167]

Fourth, making CAF Phase II funding available to wireless competitive ETCs "would be a small step toward alleviating the massive funding disparities between wireline and mobile wireless broadband technologies set forth in the universal service budget adopted by the Commission in the *CAF Order*."[168]

Fifth, enabling wireless competitive ETCs to compete for CAF Phase II funding would help to counter the failure of price cap carriers to construct broadband networks in high-cost rural areas because these incumbents instead "historically have prioritized the better business case made in more populated areas."[169]

And, *sixth*, mobile broadband providers' eligibility would promote more efficient use of CAF Phase II support. As CCA indicates, "[d]irecting support to providers employing various technologies that meet these [performance] requirements would allow limited funding to be used more effectively, and ultimately could reduce funding requirements and the contribution costs borne by consumers."[170]

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[166] CTIA Comments at 2. *See* C Spire Comments at 13.

[167] Midwest Energy Comments at 6.

[168] C Spire Comments at 13.

[169] Midwest Energy Comments at 6 (footnote omitted).

[170] CCA Comments at 17.

This array of arguments makes a compelling case that the Commission's universal service goals and objectives will be advanced if the Commission adopts rules making CAF Phase II support available to mobile wireless broadband providers. The record supports the conclusion that such a step makes sense not only from the perspective of sound public policy and consumer interests, but also because it has important budgetary benefits.

The central argument made by commenters opposed to making mobile broadband providers eligible for CAF Phase II support is that, since mobile broadband is not functionally equivalent to fixed broadband, mobile broadband providers should be excluded from participating in the CAF Phase II support mechanism. This argument is not persuasive.

Windstream urges the Commission to continue "to adhere strictly" to the requirement that only terrestrial fixed broadband providers may receive CAF Phase II support,[171] "[u]ntil comprehensive, accurate, independent testing exists to verify that … mobile services can deliver broadband that meets all of the performance standards for CAF Phase II to all households within a given service area …."[172] WISPA mirrors this view, arguing that "mobile wireless technology is not the 'functional equivalent' of fixed technology for end users, and should not be acceptable for CAF Phase II."[173]

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[171] Windstream Corporation ("Windstream") Comments at 7.

[172] *Id*. at 8.

[173] Wireless Internet Service Providers Association ("WISPA") Comments at 7 (footnote omitted). *See* Rural Associations Comments at 36 (footnote omitted) (arguing that, "while mobile services are a useful and highly desirable complement to fixed broadband, recent experiences call into question whether such services can provide a truly functional equivalent for fixed voice and broadband even if the mobile offerings can otherwise meet some basic service performance criteria") (citing Letter from Jodie Griffin, Public Knowledge, *et al*., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-353, *et al.* (filed May 12, 2014)).

The problem with these arguments is that they overlook the purpose of, and the role played, by the Commission's public interest obligations applicable to CAF Phase II support recipients. Windstream and other commenters contend that mobile wireless broadband providers should be barred at the gate of CAF Phase II based on these commenters' *assertion* that mobile broadband providers cannot meet the CAF Phase II public interest obligations.

Instead of foregoing the benefits to be gained by opening up CAF Phase II support to mobile broadband providers, by making an *ex ante* finding that these providers cannot qualify for support, the Commission should, at a minimum, permit these providers to compete for Phase II support, and to receive such support upon their demonstration that they are capable of meeting the performance standards for Phase II.[174] Such an approach is consistent with the Commission's observation that it:

> expect[s] wireless providers that meet the requisite service standards will participate in … the … Connect America Fund. Wireless technology may well be the appropriate solution to serve many areas lacking broadband today, and the Connect America Phase II competitive bidding process … will be implemented in a technologically neutral manner to allow the participation of as many entities as possible.[175]

Put simply, the Rural Wireless Carriers and other commenters argue that broadband providers using *any* technology should be given the *opportunity* to demonstrate that they are eligible for CAF Phase II support because they are capable of meeting the applicable performance standards. Opponents of eligibility would have the Commission deny all broadband providers—other than those

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[174] In the following sections (Sections III.A.2., III.A.3., *infra*) the Rural Wireless Carriers discuss reasons why the Commission should apply the CAF Phase II performance standards in a flexible manner to better accommodate participation by mobile wireless broadband providers in the CAF Phase II reverse auction, and thereby enable the use of CAF Phase II support to bring the benefits of mobile broadband services to rural consumers and businesses.

[175] *Further Notice*, 29 FCC Rcd at 7130 (para. 246) (discussing the Commission's proposal to reallocate support from Mobility Fund Phase II to CAF Phase II, or to the RAF).

using fixed technologies—even the opportunity to show that their services meet the public interest obligations. The Commission should reject this narrow view.

Opponents of mobile broadband providers' eligibility for CAF Phase II support also make some tertiary arguments that uniformly lack merit. ARC, for example, opposes CAF Phase II support for mobile wireless providers because the Mobility Fund already serves the purpose of providing support for mobile broadband networks.[176] This argument might be more credible if the Mobility Fund could be shown to be a *sufficient* funding mechanism for mobile broadband deployment and operations. The Rural Wireless Carriers and other commenters have demonstrated convincingly, however, that the $500 million Mobility Fund Phase II budget—which the Commission now proposes to cut—simply is not adequate to meet the Commission's mobile broadband goals.

UTC contends that, "as a practical matter[,] … awarding support for wireless … providers may draw funds away from terrestrial technologies that are better able to meet future demand for capacity and quality broadband services."[177] In fact, CAF Phase II funds would be drawn away from incumbent carriers only to the extent that incumbents (as reflected in their reverse auction bids) cannot provide broadband service as efficiently as mobile broadband providers.

UTC also argues that CAF Phase II support should be reserved to fixed broadband providers because their services have capabilities and attributes that are not matched by wireless broadband services.[178] The fact is, however, that the same can be said for wireless broadband services, which offer consumers and businesses features and capabilities that cannot be provided by fixed

[176] ARC Comments at 6. *See* WISPA Comments at 7.

[177] Utilities Telecom Council ("UTC") Comments at 15. *See* ARC Comments at 6.

[178] UTC Comments at 15.

broadband. Deere's discussion of the importance of wireless broadband for today's farming operations provides one example of this fact.[179]

WISPA suggests that mobile wireless broadband providers should be ineligible for CAF Phase II support—even if they "can meet the CAF public interest requirements"—because "mobile technology does not enable the same user experience that fixed networks permit."[180] Such an approach, on its face, would not be competitively or technologically neutral.[181]

Finally, WISPA argues that mobile wireless broadband providers should be ineligible for CAF Phase II support because "[m]obile broadband is expensive to build, … and is several time[s] more expensive for end users … ."[182] These assertions—even if they were accurate—are not relevant, however, because, to the extent mobile broadband providers' costs exceed those of fixed broadband providers, the mobile broadband providers will be underbid in the CAF Phase II reverse auction.

2. If the Commission Adopts a 10 Mbps Speed Standard for CAF Phase II, It Should Apply the Standard in a Manner That Does Not Frustrate the Ability of Wireless Competitive ETCs To Compete for CAF Phase II Support.

The Rural Wireless Carriers argue in their Comments that the 10 Mbps speed requirement proposed by the Commission for CAF Phase II[183] should be applied to mobile broadband providers

[179] *See, e.g.*, Deere Comments at 3, 7.

[180] WISPA Comments at 7.

[181] The Rural Wireless Carriers favor an approach that takes the overall user experience into account as an alternative to a rigid application of performance standards that otherwise would exclude service providers from CAF Phase II eligibility, see Section III.A.2., *infra*, but, if, as WISPA posits, a service provider meets the performance standards, then there is no rational basis for excluding that service provider based on an analysis of the user experience delivered by that provider's broadband services.

[182] WISPA Comments at 7.

[183] *Further Notice*, 29 FCC Rcd at 7100 (para. 138).

only to the extent that "the availability of new spectrum and technology enables these carriers to acquire sufficient bandwidth to deploy mobile broadband meeting the speed requirement."[184] There is support for this approach in the record.

CTIA explains that a restrictive, exclusionary approach to applying the CAF Phase II speed requirement and other performance standards to mobile broadband providers would "harm consumers by limiting participation in the CAF Phase II bidding process, thereby increasing universal service costs."[185] CTIA observes that this unwanted result can be avoided if the Commission "instead craft[s] performance standards that ensure high-quality broadband service from different types of broadband technologies, including those that are spectrum-based."[186] The Satellite Broadband Providers agree, noting that "[t]he Commission should ensure that CAF Phase II funding is available on a competitively neutral basis, setting requirements that do not exclude any broadband technology that is in use by consumers in rural America."[187]

The Rural Wireless Carriers point out in their Comments that applying the 10 Mbps speed requirement flexibly, by taking into account whether mobile broadband providers have access to

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[184] RWC Comments at 40.

[185] CTIA Comments at 3. The Rural Wireless Carriers support CTIA's suggestion that the Commission should adopt CAF Phase II latency standards that do not categorically exclude spectrum-based broadband providers. *See id.*

[186] *Id*.

[187] Satellite Broadband Providers Comments at 3. The Satellite Broadband Providers also argue that, "[i]n any event, the Commission should not limit participation in bidding to broadband technologies that mirror the performance and technical characteristics of fiber. Such a requirement would be the regulatory equivalent of a rigged request for proposals." *Id.*

sufficient bandwidth, "would not detract from the quality of the user experience …, since consumers would be receiving a wide array of features, functions, and capabilities that are unique to mobile broadband ….”[188]

CCA supports this approach, advocating that the Commission should avoid taking a narrow view of the quality of broadband services that will be eligible to receive CAF Phase II support, and suggesting that, "[i]n evaluating the overall 'quality' of a given broadband offering for comparative purposes, … characteristics [other than the Commission's broadband performance criteria] may be more salient, and such salience is likely to vary depending on the specific application or user in question."[189] CCA explains that, "[f]or example, mobility provides significant benefits to consumers and to first responders, as the Commission has recognized, even though those benefits are not reflected in narrow assessments of speed, latency, and usage allowances."[190]

The record thus presents a clear path to a reasonable and beneficial result. The Commission can significantly improve the effectiveness and efficiency of the support budgeted for CAF Phase II, thus benefiting consumers and businesses in rural, high-cost areas and reducing universal service costs, by applying its minimum speed criterion in a manner that takes into account the overall user experience[191] as well as "the interplay between higher speed requirements, the use of mobile technology, and the availability of spectrum."[192]

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[188] RWC Comments at 40.

[189] CCA Comments at 21.

[190] *Id*.

[191] The Commission "note[s] that the quality of the user experience is not limited to merely the quantifiable metrics of speed, usage allowance, latency, and price." *Further Notice*, 29 FCC Rcd at 7105 (para. 154 n.338).

[192] *Id*. at 7106 (para. 154 n.339).

Aligned against this reasonable and productive approach are several commenters who present a perspective regarding the criteria for CAF Phase II eligibility that the Rural Wireless Carriers urge the Commission to reject. These commenters raise three basic arguments, all of which are plagued by an overly constricted view of how broadband performance should be measured.

__First__, ADTRAN argues that applying the CAF Phase II speed requirement (and other performance standards) uniformly to all technologies would ensure that "consumers will have access to broadband that will allow them to enjoy the services and applications commonly accessed by subscribers now and into the foreseeable future."[193]

Similarly, ITTA argues that "relegating certain consumers to service that is substantially lower in quality than that available to consumers served by other recipients of CAF Phase II support would not be consistent with the Commission's universal service goals[,]"[194] and the Rural Associations contend that:

> if a would-be competitor or competitive bidder is … "given a pass" on satisfying … Commission-defined [CAF Phase II] obligations to the same degree as a USF/CAF recipient, then universal service by definition will fail in the areas where a substandard competitor's presence results in the denial of USF support—and Commission policy would thereby relegate consumers in those areas to 'unreasonably inferior' service.[195]

At bottom, these arguments assume that administering the proposed 10 Mbps speed requirement in the manner advocated by the Rural Wireless Carriers and other commenters would harm consumers by facilitating the delivery of "substandard" service. The arguments built on that assumption steer the debate in the wrong direction. The issue should be whether opening up CAF

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[193] ADTRAN Comments at 13.

[194] ITTA–The Voice of Mid-Size Communications Companies ("ITTA") Comments at 17.

[195] Rural Associations Comments at 38-39 (footnote omitted).

Phase II to competitive ETCs would enable delivery of a *different*—not "substandard"—service to consumers, which has its own unique benefits that are in demand by rural consumers.

The record contains considerable evidence that mobile broadband in fact is uniquely capable of providing benefits relating to public safety communications, telemedicine and other healthcare related communications, agricultural operations, educational programs, and similar endeavors.[196] It is this capability that buttresses the policy reasons for making wireless competitive ETCs eligible to compete for CAF Phase II support.

Second, a few commenters argue that, since the Commission in the Open Internet proceeding has proposed to exempt mobile broadband providers from certain rules due to technology limitations, it should not "ignore the limits on mobile broadband technology in this [CAF Phase II] context so as to provide support even if the mobile broadband services did not meet the prescribed specifications."[197] This comparison between universal service and the Open Internet proceeding, however, is not apt.

In the pending Open Internet proceeding, the Commission seeks comment on whether differences between mobile and fixed broadband make it inappropriate to apply some aspects of its proposed "no-blocking" rule to mobile broadband providers, noting that a more limited variation

[196] *See*, *e.g*., C Spire Comments at 7-8; Deere Comments at 3; RWC Comments at 7-10.

[197] ADTRAN Comments at 14 n.20. *See* Rural Associations Comments at 37 n.83. The Commission's recent Open Internet proposal would maintain a "no-blocking" rule that is "applied differently to mobile broadband providers than to fixed …." *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Notice of Proposed Rulemaking, 29 FCC Rcd 5561, 5598 (para. 105) (2014) ("*Open Internet NPRM*"). The Commission's proposed approach "would prohibit mobile broadband providers from blocking lawful web content as well as applications that compete with the mobile broadband providers' own voice or video telephony services, subject to reasonable network management." *Id*. The Commission seeks comment on how "treating mobile broadband differently from fixed broadband [would] affect consumers in different demographic groups, including those who rely solely on mobile broadband for Internet access …." *Id*. at 5598 (para. 106).

of its original no-blocking rule, adopted in 2010, was "applied to mobile broadband providers, due to the operational constraints that affect mobile broadband services, the rapidly evolving nature of the mobile broadband technologies, and *the generally greater amount of consumer choice for mobile broadband services than for fixed*."[198] Thus, the more limited no-blocking rule applied to mobile broadband providers in 2010 was not based exclusively on the limits of mobile broadband technology, but also took competitive issues into account.

Here, the Rural Wireless Carriers and other commenters suggest that differences in mobile broadband technology—which are the basis for unique benefits that mobile broadband is capable of delivering to rural consumers and businesses—warrant application of the 10 Mbps speed requirement in a manner that does not prevent mobile broadband providers from competing for CAF Phase II support.

The Commission's proposed treatment of mobile broadband in the Open Internet proceeding cannot be said to preclude the Commission from seeking to capture different, but considerable, benefits that mobile broadband uniquely delivers by making mobile broadband providers eligible for CAF Phase II. "Operational constraints" may preclude some mobile broadband providers from meeting a 10 Mbps speed requirement throughout their service areas, especially if sufficient spectrum bandwidth is not available, but the operational characteristics of mobile broadband also provide unique enhancements to the user experience.

And, *third*, opponents of making CAF Phase II funding available for mobile broadband deployment argue that the Commission has a statutory obligation to ensure reasonable comparability between the quality and price of broadband services in urban and rural areas, and that

[198] *Open Internet NPRM*, 29 FCC Rcd at 5594 (para. 91) (emphasis added) (footnote omitted).

"[a]dopting less robust requirements for providers that are authorized to receive support pursuant to the competitive bidding process would contradict [this] statutory duty …."[199] The Commission should conclude, however, that, instead of insisting upon adherence to the "quantifiable metric" of aa 10 Mbps speed requirement in all instances, reasonable comparability can be achieved and the quality of the end user experience can be enhanced by enabling high-quality broadband service from different types of broadband technologies.

Finally, the Rural Wireless Carriers observe that their proposal that the Commission should take the availability of spectrum into account in applying the proposed 10 Mbps speed requirement is analogous to the approach the Commission has taken in applying its broadband performance standards to rate-of-return carriers. The Commission has explained that, if it adopts a higher speed requirement, new broadband deployments made by rate-of-return carriers would be required to meet the new speed benchmark. But the Commission has clarified that "a rate-of-return carrier would only be required to meet that higher speed if the request for service was ***reasonable***. A reasonable request is one where the carrier could cost-effectively extend a voice and broadband-capable network to that location."[200]

The Rural Associations contend that broadband speeds are affected "by the middle mile facilities that transport traffic between [rate-of-return carrier] networks and the Internet[,]"[201] and that, in many cases, rate-of-return carriers "cannot obtain sufficient middle mile capacities they need at reasonable prices, and thus may be unable to meet certain Commission broadband speed

[199] ITTA Comments at 17.

[200] *Further Notice*, 29 FCC Rcd at 7102 (para. 144) (emphasis in original).

[201] Rural Associations Comments at 33.

or latency standards no matter how much they upgrade their own networks."[202] The Rural Associations suggest this middle mile issue (as well as certain other factors) should be taken into account by the Commission "in its consideration of … 'reasonable request' issues."[203]

Thus, rate-of-return carriers are arguing that customer requests for their broadband service at the 10 Mbps speed should not be considered reasonable requests (and thus would not have to be met) unless and until the rate-of-return carriers have access to affordable middle mile services. Similarly, the Rural Wireless Carriers propose that the difficulties some mobile broadband providers may face in obtaining the spectrum necessary to provide service meeting a 10 Mbps speed requirement should be taken into consideration by the Commission with respect to the manner in which it applies the speed requirement to these mobile broadband providers. The Rural Carriers and other commenters have stressed that the Commission's taking this approach will benefit rural consumers and businesses by enhancing their opportunity to access, and utilize the benefits of, mobile broadband services.

There is no compulsion for the Commission to treat the proposed 10 Mbps speed standard as an immutable part of the public interest obligations for CAF Phase II support,[204] so long as the Commission is able to conclude and demonstrate that its overall administration and enforcement of the CAF Phase II performance standards are reasonable and serve the public interest. The Commission has considerable latitude to take into account the factors suggested by the Rural Wireless

[202] *Id*. (footnote omitted). It is important to note that mobile broadband providers face the same problem as rate-of-return carriers regarding middle-mile facilities. Speeds provided by mobile broadband networks are affected by the capacities of middle-mile facilities, and obtaining sufficient middle-mile capacities imposes considerable costs on mobile broadband providers.

[203] *Id*.

[204] *See Further Notice*, 29 FCC Rcd at 7105 (para. 154 n.338).

Carriers and other commenters, if doing so furthers its universal service goals. If the Commission determines (as it should) that wireless competitive ETCs' access to CAF Phase II funding will advance those goals, then the Commission has the authority and discretion to apply the CAF Phase II public interest obligations in a manner that avoids the practical effect of freezing wireless competitive ETCs out of the competition for CAF Phase II funding.

3. Application of Other Proposed CAF Phase II Public Interest Obligations to Wireless Competitive ETCs.

a. 100 GB Minimum Usage Allowance.

The Commission proposes that "all [CAF] Phase II recipients would be required to offer at least one plan with an initial minimum usage allowance of 100 GB, adjusted over time to take into account trends in consumer usage, at a price that is reasonably comparable to similar fixed wireline offerings in urban areas."[205]

The Rural Wireless Carriers agree with CTIA that "[u]sage requirements, if any, should be set at levels that do not categorically exclude spectrum-based services."[206] CTIA notes that "consumers' average usage on mobile devices has been estimated at less than 10 GB per month[,]"[207] and argues that a minimum 100 GB plan requirement would ignore the capacity limits faced by spectrum-based networks.[208] Applying the proposed 100 GB minimum usage standard rigidly would make it virtually impossible for mobile broadband providers to be eligible to compete for

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[205] *Id*. at 7103-04 (para. 149) (footnote omitted).

[206] CTIA Comments at 4 (footnote omitted).

[207] *Id*. at 4 n.6 (citation omitted).

[208] *Id.* at 4. *See* Satellite Broadband Providers Comments at 4 (footnote omitted) (arguing that "capacity limits should recognize the realities of spectrum-based services such as satellite. All wireless networks face capacity limitations. A 100 GB plan requirement as suggested in the *Further Notice* is simply not realistic for spectrum-based service providers. A 10 GB per subscriber monthly allowance is more in line with satellite providers' existing entry-level plans, and is also consistent with recent data on mobile data usage.").

CAF Phase II support, which, in turn, would deprive both consumers and businesses in rural areas of the unique benefits available from mobile broadband networks.

b. Tethering Mobile Connections; Simultaneous Use of Multiple Devices.

In seeking comment "on how to ensure that the end-user experience is functionally equivalent whether the connection is provided through fixed or mobile means[,]"[209] the Commission asks whether it should require that providers allow consumers subscribing to the service to attach or tether their mobile connections to other devices, and also require that "the mobile service allow users to be able to use multiple devices simultaneously …."[210]

The Rural Wireless Carriers agree with commenters who suggest that adopting tethering and multiple connection requirements as CAF Phase II performance standards would further the Commission's goal of "ensur[ing] that networks supported with universal service funds provide consumers with high-quality broadband access regardless of the technology deployed …."[211] As Deere explains, "[e]nabling consumers and businesses the flexibility to use subsidized mobile services in whatever way best meets their needs [*e.g.*, through tethering or the connection of multiple devices] allows users to shape their own technology solutions based on specific needs and local conditions and is consistent with the experience of urban users."[212]

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[209] *Further Notice*, 29 FCC Rcd at 7106 (para. 156).

[210] *Id*.

[211] *Id*.

[212] Deere Comments at 6.

CTIA argues that "[i]n the current technological environment, there is no need for concern about whether mobile broadband services allow customers to connect multiple devices[,]"[213] explaining that "[m]ore than 105 mobile broadband-connected devices today, such as smartphones and tablets, have the capability to serve as hotspots, and it is becoming the norm for service providers to allow the connection of multiple devices."[214]

The utility of CAF Phase II performance standards for tethering, and for the ability of a mobile connection to support multiple devices, should help the Commission reach a conclusion that mobile broadband providers should be eligible for Phase II support. Adoption of these performance standards would make the end user experience more functionally equivalent to that of fixed broadband users, and, as discussed in the previous sections, mobile broadband networks also would be capable of delivering unique benefits to end users that are not available from fixed broadband services.

B. Areas in Which Mobile Broadband Providers Operate as Unsubsidized Competitors Should Be Excluded from Model-Based CAF Phase II Funding.

The Commission asks for comment on the question of whether, for the CAF Phase II competitive bidding process, it should "exclude from eligibility for funding any area that is served by a competitor that meets the Commission's current standards for the offer of model-based support to price cap carriers, … *regardless of technology* …."[215] The Rural Wireless Carriers join other commenters who advocate adopting this approach, but only with respect to the use of *model-based* CAF Phase II support.

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[213] CTIA Comments at 4 (footnote omitted).

[214] *Id*. (footnote omitted).

[215] *Further Notice*, 29 FCC Rcd at 7106 (para. 155) (emphasis added).

Importantly, although the Commission frames this question in the context of the Phase II competitive bidding process, the Rural Wireless Carriers agree with NCTA that the exclusionary rule should apply ***only*** in the case of model-based Phase II support disbursed to price cap carriers exercising their right of first refusal.[216] Applying the exclusionary rule to model-based Phase II support is necessary because incumbent price cap beneficiaries of the right-of-first-refusal mechanism have exclusive access to model-based support. They should not be given any opportunity to use this support to overbuild existing mobile broadband networks.[217]

A few commenters oppose treating a service area as ineligible for CAF Phase II support if an unsubsidized competitor, using any technology, is providing broadband service in that area, but these commenters either do not provide a basis for their opposition or they present arguments that are not relevant. ITTA argues that the Commission should exclude from Phase II support "only those areas where the current provider or providers certify the ability and willingness to continue providing terrestrial ***fixed*** residential voice and broadband services meeting the Commission's service requirements[,]"[218] but does not explain why the exclusion should be limited to fixed service providers.

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[216] NCTA explains that "concerns [regarding inefficient overbuilding] are less significant in a competitive bidding regime so long as any entity with an existing network has the opportunity to participate in the bidding for support, an opportunity that competitive providers have been denied in the initial stage of CAF Phase II." NCTA Comments at 6-7.

[217] As NCTA has indicated:

> Because the Commission has granted the price cap LECs an exclusive right to make a statewide commitment [and exercise a right of first refusal], it must take special care not to permit inefficient overbuilding by including [for model-based Phase II funding eligibility] areas where companies already have invested private capital in providing broadband service to consumers.

Id. at 6.

[218] ITTA Comments at 18 (emphasis added).

The Rural Associations argue that "[i]t is … critical that any unsubsidized competitor offerings be either *fixed* wireline or *fixed* wireless services"[219] because, "while mobile services play an important and useful role in enabling access to broadband 'on the go' for millions of Americans, their limitations render them a complement, and not a substitute, for what the Commission is defining as universal broadband in this proceeding …."[220]

A better formulation, in the Rural Wireless Carriers' view, is that, for purposes of the Commission's model-based CAF Phase II funding mechanism, broadband services offered by different technologies are "substitutes" if each of the services meets the applicable performance standards as administered by the Commission.[221] The Rural Associations' discussion regarding complementary and substitutable services is not relevant, because the Commission stipulates in the *Further Notice* that an area would be excluded from Phase II support only if a competitor is offering broadband service "that meets the Commission's current standards for the offer of model-based support to price cap carriers, … presuming that the same service and pricing standards are met …."[222]

C. Price Cap Carriers Receiving Model-Based CAF Phase II Support Should Be Barred from Using This Support To Deploy 4G LTE Networks.

The Rural Wireless Carriers suggest in their Comments that the Commission "should revisit the issue of whether incumbent price cap carriers exercising the right-of-first-refusal option to receive model-based CAF Phase II support should be permitted to use this support to construct

[219] Rural Associations Comments at 48 (emphasis in original).

[220] *Id*. at 50.

[221] See Section III.A.2., *supra*, for a discussion of how the Commission's CAF Phase II public interest obligations should be administered in a manner that does not have the effect of excluding wireless competitive ETCs from competing for Phase II support.

[222] *Further Notice*, 29 FCC Rcd at 7106 (para. 155).

4G LTE broadband networks[,]"[223] arguing that the Commission's universal service reform goals would not be served by permitting price cap carriers to utilize model-based support to deploy wireless networks. In the Rural Carriers' view, price cap carriers receiving model-based CAF Phase II support should be barred from using the support for mobile facilities that compete with either an unsubsidized wireless carrier or one that relied on legacy support to construct networks, and may need ongoing support to continue to meet operating expenses.

CCA agrees, explaining that "[p]rice-cap carriers should not be allowed to game the system where they receive support based on the wireline cost model."[224] Allowing wireline-model support to be used by incumbent price-cap carriers to deploy mobile wireless broadband networks would not be an efficient use of the support, since it "would provide ILECs with inflated support at the expense of American consumers."[225]

CCA also explains that "a wireline incumbent would likely realize an unjustified windfall if it ultimately used non-wireline technologies with lower costs than those predicted by the CAF model (which assumes the use of more expensive wireline technologies)."[226] For these reasons, the Rural Wireless Carriers agree with CCA's proposal that incumbents receiving model-based CAF Phase II support and deploying non-wireline technologies at lower cost "should have their support levels reduced accordingly from the levels established by the Commission's wireline cost model."[227]

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[223] RWC Comments at 41.

[224] CCA Comments at 18.

[225] *Id*.

[226] *Id*.

[227] *Id*.

Finally, in endorsing a suggestion made by the Rural Wireless Carriers in their Comments,[228] CCA suggests that, "[i]f the FCC insists on granting the ILECs a right-of-first-refusal, for the sake of fairness and consistency, perhaps the wireless carriers should receive the same preference with respect to [their] legacy support."[229] The Rural Carriers have proposed that such a rule should apply if wireless competitive ETCs "demonstrate that they are using such funding in compliance with the Commission's public interest obligations and accountability standards."[230]

IV. OTHER ISSUES.

A. The Commission Should Give Priority to Universal Service Contribution Reform.

The Commission recently adopted an Order[231] referring to the Joint Board the record developed in a Commission proceeding two years ago regarding universal service contribution reform, asking the Joint Board to make recommendations, no later than April 7, 2015, on issues relating to "who should contribute, how contributions should be assessed, and how to make the system more transparent and fair."[232]

The Rural Wireless Carriers commend the Commission for taking this step, but also note that this is merely the latest chapter in an effort that was begun 13 years ago to come to grips with

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[228] *See* RWC Comments at 43.

[229] CCA Comments at 18.

[230] RWC Comments at 43.

[231] *Federal-State Joint Board on Universal Service, et al.*, WC Docket No. 96-45, *et al.*, Order, FCC 14-116 (rel. Aug. 7, 2014) ("*Referral Order*").

[232] *Id*. at para. 2 (footnote omitted). This will not be the first time around this block for the Joint Board. *See* State Members of Universal Service Joint Board Comments, WC Docket No. 10-90, *et al*. (filed May 2, 2011), at v-vi (recommending, *inter alia*, that the contribution base be expanded to include various types of broadband services because "[t]his better matches the benefits of universal access programs to the burden of supporting those programs. It also would lower the federal surcharge rate considerably and should be more resistant to the erosion of narrow-band voice service revenue.").

reforming the Commission's contribution rules and mechanisms,[233] but that still has produced no results.

Meanwhile, as RICA explains, the Commission has made erroneous conclusions regarding the sufficiency of its capped universal budget and the absence of any need to increase contribution requirements.[234] The Rural Wireless Carriers agree with RICA's assessment that "[c]ontinued adherence to these erroneous conclusions will necessarily result in a lack of broadband service in many rural areas, contrary to the objectives of the Act."[235]

U.S. Cellular has long been an advocate of contribution reform,[236] and joins the other Rural Wireless Carriers in agreeing with CCA's analysis that "[t]he Commission's lack of progress in the contribution reform proceeding appears to be driving the Commission to adopt suboptimal policies on the distribution side, as pressures to mitigate the elevated contribution factor have prompted the imposition of artificial limits on the support available to competitive carriers."[237] CCA concludes that:

> The Commission should act to protect consumers by expanding the USF contribution base, which would: (i) reduce the USF contribution factor and the contribution burden placed on individual consumers, and (ii) yield funds that could be used to provide much-needed support critical to the advancement of the Commission's universal service objectives (*e.g.*, through an expanded Mobility Fund).[238]

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[233] *See Referral Order* at para. 2 n.5.

[234] RICA Comments at 6.

[235] *Id*.

[236] *See*, *e.g.*, U.S. Cellular Reply Comments, WC Docket No. 10-90, *et al*. (filed Feb. 17, 2012) ("U.S. Cellular CAF Reply Comments"); U.S. Cellular Contribution Reform Comments; U.S. Cellular Reply Comments, WC Docket No. 06-122, *et al*. (filed Aug. 6, 2012) ("U.S. Cellular Contribution Reform Reply Comments").

[237] CCA Comments at 25.

[238] *Id*.

U.S. Cellular has explained that "[t]he Commission's defense of its austerity budget, in which the goal appears to be to drive down the level of support as much as possible, rings hollow as the Commission fails to move forward with contribution reform."[239] U.S. Cellular has also stated that, as a general matter, it "favors a policy that provides that, to the extent that the Commission makes USF funding available to support broadband services, these broadband services also should be subject to a contribution requirement[,]"[240] and that it "favors assessing all forms of broadband (*e.g.*, over cable, satellite, wireline telephone networks, fixed and mobile wireless networks, and power-line networks) …."[241]

The Rural Wireless Carriers urge the Commission to act promptly after receiving the Joint Board's recommendations next April, because the Commission's leadership in spearheading contribution reform will help to address the budget issues that the Rural Carriers and other commenters have presented in this proceeding.[242]

B. There Is Support in the Record for Adopting Late-Filing Penalties with Modifications.

The Rural Wireless Carriers indicate in their Comments that they generally support the Commission's proposals to revise its rules relating to late-filing penalties, but they suggest several changes to the terms and operation of the grace period proposed by the Commission.[243] Other commenters agree, and also argue for retention of the waiver process and propose modifications to the proposed grace period rule. The Rural Carriers support these arguments and proposals.

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[239] U.S. Cellular CAF Reply Comments at 3-4.

[240] U.S. Cellular Contribution Reform Comments at 22.

[241] *Id*.

[242] See Section II.A.1., *supra*.

[243] RWC Comments at 49-50.

ARC states that it does not believe that "the proposed grace period should be available one-time only or serve as a replacement of the waiver process[,]"[244] and "urges the Commission to leave itself the maximum flexibility to provide equitable solutions. At the time the FCC is heaping reporting requirements on small rural companies and decreasing support, it is very problematic and unfair to take an inflexible approach to missed deadlines."[245] UTC also supports a continuation of the waiver process, arguing that "[i]t would not serve the public interest to significantly reduce funding to an entity that is simply unfamiliar with the rules or that inadvertently fails to file a report on time."[246]

V. CONCLUSION.

The Rural Wireless Carriers respectfully submit that the record in this proceeding provides convincing arguments that the Commission should increase the Mobility Fund Phase II budget, rather than adjusting it downward, that the Commission should adopt rules providing mobile broadband providers with a realistic opportunity to compete for CAF Phase II funding, that the Commission should adopt technology-neutral rules that prevent incumbent price cap carriers from using model-based CAF Phase II support to build duplicate broadband networks in areas that already have access to broadband service provided by unsubsidized mobile broadband competitors, and that the Commission should bar incumbents from using model-based CAF Phase II support to construct 4G LTE mobile broadband networks.

In addition, the record provides strong support for the Rural Wireless Carriers' position that the Commission should take sufficient steps to ensure that it does not simply declare rural

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[244] ARC Comments at 54.

[245] *Id.* (footnote omitted).

[246] UTC Comments at 28.

areas to be covered by LTE service when they in fact are not, that the Commission should adopt Mobility Fund Phase II transitional rules that enable wireless carriers receiving legacy support to maintain service to their customers, that a 10-year term should be used for Mobility Fund Phase II support, and that road miles should be used as the basis for disbursing Mobility Fund Phase II support and determining compliance with build-out obligations.

And, finally, in light of the increasingly urgent need for action to help ensure the sustainability of the Commission's universal service support mechanisms, the Rural Wireless Carriers re-

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spectfully urge the Commission "to act expeditiously in taking the final steps necessary to achieve contribution reform."[247]

Respectfully submitted,

RURAL WIRELESS CARRIERS

United States Cellular Corporation
NE Colorado Cellular, Inc., d/b/a Viaero Wireless
Cellular South Licenses, LLC d/b/a C Spire
Smith Bagley, Inc.
DOCOMO PACIFIC, Inc.
Union Wireless Company
Cellular Network Partnership, An Oklahoma Limited Partnership
Nex-Tech Wireless, LLC
Texas 10, LLC, d/b/a Cellular One
Central Louisiana Cellular, LLC, d/b/a Cellular One
Carolina West Wireless, Inc.
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September 8, 2014

[247] U.S. Cellular Contribution Reform Reply Comments at 70.