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SUMMARY

The Coalition thanks the Commission for doubling the Mobility Fund to support an acceleration of investment in the next generation of mobile broadband technologies. Increasing support will move rural areas closer to having service quality and pricing that are reasonably comparable to those in urban and suburban areas, as Congress intended in Section 254(b)(3). In order to advance further along the path of closing the Digital Divide the Commission must develop and present to Congress an estimate of what it will cost to complete this task, so that universal service mechanisms may be adjusted as needed.

Adoption of the Broadband DATA Act this year has rendered “Option A” as proposed in the NPRM is a non-starter because it commands the Commission to develop accurate maps before making any new award of funding. The legislative history and a recent letter from four U.S. Senators made this clear. To charge forward without accurate maps risks a challenge and corresponding delay, as well as significant waste of support funds.

The Coalition supports Option B, provided the Commission accelerates its projected timetable so that a 5G Fund auction can be held in early 2022. Taking time to improve existing mapping resources will serve the public interest, and can commence within the existing DODC proceeding. The Commission has Congressional authority to use a small portion of its appropriated budget to begin the mapping process while it continues to push Congress for additional funding. The Commission should bar T-Mobile from participating in the upcoming 5G Fund auction be-

cause both approaches put forth by the Commission confer to T-Mobile critical first-mover advantages. If T-Mobile is permitted to participate there would be no way to prevent it from using 5G Fund support to cross-subsidize its merger commitments.

Coalition members welcome the ability to invest legacy high-cost support in any part of their ETC service areas. However, the Consolidated Appropriations Act of 2016, and successor laws, prohibit the Commission from phasing down legacy support to any carrier until Mobility Fund Phase II is implemented. Accordingly, the Commission is barred from commencing the phase down in ineligible areas upon adoption of an order in this proceeding. Under § 54.307(e)(5)(v) (2019), any such action would be *ultra vires*. Likewise, a proposed two-year phase down of legacy support for carriers serving ineligible areas on such short notice should be rejected as arbitrary, because it does not take into account how disruptive such actions are to rural carriers with limited budgets and long lead times to build networks.

Requiring carriers to deliver 5G broadband technology in areas being phased down is arbitrary and violates the Congressional directive in Section 254(e) that support be explicit and sufficient. The Coalition proposes alternatives for the Commission to ensure that phase down support is being used lawfully and for the benefit of rural citizens being served.

With respect to service deployment milestones, the Coalition urges the Commission to strive for an overall framework of rules that encourages small carriers to participate in the 5G Fund auction and do not overburden support recipients. In particular, the testing regime should allow carriers to produce a sampling of accessible areas instead of easting every square kilometer of a funded area.

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

In the Matter of)
)
Establishing a 5G Fund for Rural America) GN Docket No. 20-32

COMMENTS OF COALITION OF RURAL WIRELESS CARRIERS

The Coalition of Rural Wireless Carriers (“Coalition”),¹ by counsel, hereby submits these Comments, in response to the *Notice of Proposed Rulemaking and Order*, released by the Commission in the above-captioned proceeding.² Members of the Coalition are wireless carriers serving rural and remote areas in over thirty states, the overwhelming majority of which comprises rural geography.

I. INTRODUCTION.

The Coalition applauds the Commission for proposing to redirect support for mobile broadband from 3G/4G services to 5G, and to double Mobility Fund II (now rebranded as the “5G Fund”) to \$9 billion.³ In order for the Commission to fulfill its Congressional directive under

¹ Coalition members include Carolina West Wireless, Inc.; Cellular South Licenses, LLC dba CSpire; East Kentucky Network, LLC dba Appalachian Wireless; Cellular Network Partnership, a Limited Partnership, d/b/a Pioneer Cellular; Smith Bagley, Inc. (“SBI”); United States Cellular Corporation (“U.S. Cellular”); and Union Telephone Company dba Union Wireless.

² *Establishing a 5G Fund for Rural America, Universal Service Reform – Mobility Fund*, GN Docket No. 20-32, WT Docket No. 10-208 (closed), Notice of Proposed Rulemaking and Order, FCC 20-52 (Apr. 24, 2020) (“*NPRM*” and “*Order*”) (setting June 25, 2020, as the deadline for filing initial comments).

³ *Id.* at ¶ 2.

Section 254(b)(3) of the Communications Act of 1934 (“Act”)⁴ that supported services in rural areas should be reasonably comparable to those in urban areas, in both quality and affordability, support mechanisms must fund the next generation of mobile broadband technologies. In so doing, the Commission helps to ensure that rural consumers will receive services that are reasonably comparable to those available in urban areas well into the future. In the comments below, the Coalition provides its perspective on a number of issues raised in the *NPRM*.

II. DISCUSSION.

A. Support Must Be Sufficient to Fulfill Congressional Purposes.

Twenty-four years ago, Congress stated its intent that the Commission structure a universal service mechanism that leaves no American behind. Section 254(e) requires the Commission to create support mechanisms that are *sufficient* to achieve the universal service purposes that Congress set forth, including:

Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.⁵

Commendably, the Commission’s proposal to double support to \$9 billion evidences an intent to pursue the goal of rapidly advancing mobile broadband in rural America.

⁴ 47 U.S.C. § 254(b)(3).

⁵ *Id.*, see *NPRM* at ¶ 2.

That said, today nobody can credibly state how much support would be *sufficient* to provide high-quality next generation mobile broadband throughout the areas where rural Americans live, work, and travel, including residences, businesses, and agricultural lands. For rural citizens, it is not enough to have some signal in an area. What's necessary is to have high-quality and dependable service throughout an area that permits a person, at a minimum, to make 911/E-911 communications, to confidently conduct a business transaction, to reliably and securely transmit medical information, to provide comparable educational opportunities, and to meaningfully participate in our nation's economy.⁶ These abilities are at the core of the concept of rural Americans having services that are "reasonably comparable" to those in urban areas. Establishing mobile broadband capable of meeting all of these needs should be the Commission's North Star policy goal for its 5G Fund program.

If there is broad agreement that these goals for rural America are worthwhile, the first question for policymakers is one of cost. Until everyone agrees on an estimated cost of reaching the stated goals, there's no way to decide next steps.⁷ For example, if the cost of meeting the Congressional directive of reasonable comparability were \$18 billion, one policy judgment

⁶ See FCC, *Lands of Opportunity: Bringing Telecommunications Services to Rural Communities* (July 2006), accessed at <https://transition.fcc.gov/indians/opportunity.pdf>, at 4 (explaining that broadband can provide the capability to access a wide range of resources, services, and products, including education, culture, and entertainment; telehealth and telemedicine; economic development and e-commerce; electronic government (e-government); public safety and homeland security; and innovative applications such as VoIP).

⁷ See, e.g., U.S. Cellular Comments, WC Docket No. 19-126, *et al.* (filed Sept. 20, 2019), at 8 (explaining that, "[t]o get 100% of rural America up to much faster speeds, the Commission should determine the cost of doing so, and increase the overall size of the fund to accomplish that worthy goal").

could be to state that, over the next five years, the Commission will combine \$9 billion of Universal Service Fund (“USF”) support with \$9 billion from private investment to meet the capital expense side of the task. A similar calculation could be made for the ongoing operating expenses. A policy discussion on how best to get there would follow.

On the other hand, if the cost estimate for support needed to build rural America were \$180 billion, the FCC might decide that the universal service mechanism as currently structured does not appear to be capable of providing sufficient support to meet the need within the foreseeable future. At that point, the Commission could turn to Congress to make the big policy judgment, deciding whether to reform universal service, appropriate additional funds, or take other actions to achieve its Section 254 objectives. In sum, understanding the cost of meeting Congressional directives would lead to sound decision making.

Nine years after the National Broadband map made its debut, and nearly two years after it was decommissioned,⁸ there does not exist a reliable measurement of where high-quality mobile broadband exists in rural America. Indeed, there is no reliable measurement of where mobile coverage exists.⁹ As a result, the Commission does not know how much it will cost to

⁸ See *Decommissioning of the National Broadband Map and its APIs* (Dec. 7, 2018), accessed at <https://www.fcc.gov/news-events/blog/2018/12/07/decommissioning-national-broadband-map-and-its-apis>.

⁹ See, e.g., California Emerging Technology Fund Comments, WC Docket No. 19-126, *et al.* (filed Sept. 20, 2019), at 7 (indicating that “broadband mapping reported on FCC Form 477 is not as accurate as it should be to reveal the actual unserved or underserved areas in a census block. Broadband providers may report a census block as served if just a single consumer is served in that census block. This historic overreporting has caused many communities to be stuck on the wrong side of the Digital Divide, unable to qualify their allegedly ‘served’ areas for broadband grant funding.”).

complete the job of providing high-quality *coverage* to rural America, much less the cost of delivering 4G LTE or 5G. Even where coverage is available, rural cell sites lacking fiber often operate at 2G/3G levels, constrained by the high cost of upgrading the microwave links that transport traffic.¹⁰ Without accurate maps, there is no way to fully understand *where* service is lacking, or to even begin analyzing where the initial 5G Fund investments would yield the highest return, by covering the greatest number of unserved/underserved rural communities, road miles, and population per dollar invested.

The Commission is right to direct 5G Fund support to “areas of our country that would be unlikely to see timely deployment of voice and 5G broadband service absent high-cost support....”¹¹ However, this is a tactical decision that obscures what should be the Commission’s current policy goal – to provide a mechanism that is *sufficient* to deliver services throughout the land. Without accurate maps of where service is currently available, and at what level, there’s no way to debate how much support is sufficient or develop an overall strategy to structure the program to achieve Congressional directives.

Accordingly, before adopting a budget of \$9 billion AND undertaking to expend \$8 billion of USF contributions in Phase I, the better course is to develop reliable maps and estimates

¹⁰ For example, in 2017, Smith Bagley, Inc., informed the Commission that only a small percentage of its towers on remote Tribal lands were served by fiber, solely due to the extraordinary installation costs. Smith Bagley Reply Comments, GN Docket No. 17-199 (Oct. 6, 2017) at 2 (stating that “[i]n terms of infrastructure development, SBI can report that it currently has 144 cell sites on Tribal lands, but only 17 are served by fiber and it appears feasible to serve another 25 towers with fiber. SBI estimates the average cost for a telephone company to install fiber to be \$25 per foot, or \$132,000 per mile. On average, it takes 2.5 microwave ‘hops’ to reach one of SBI’s Tribal towers.”).

¹¹ *NPRM* at ¶ 2. A discussion on how to account for T-Mobile’s merger commitments is set forth below.

that would underpin the development of a strategy to provide rural America with reasonably comparable services. If the Commission cannot credibly state that the 5G Fund mechanism, as proposed, would be *sufficient* to make services in rural America reasonably comparable to those in urban areas, then it should go forward with a small fraction of available funding, targeted to areas that will yield the highest return for rural consumers, while simultaneously improving its maps and developing an estimate of how much support it will need to complete the task. Spending 89 percent of available 5G Fund support¹² under the current conditions would be irresponsible.

B. The Broadband DATA Act Makes “Option A” a Non-Starter.

The Commission explains that, under Option A for identifying areas that would be eligible for 5G Fund support, the Commission could:

take immediate action to define eligible areas based on current data sources that identify areas as particularly rural, and thus in the greatest need of universal service support. In recognition of the particular challenges of ensuring that voice and 5G broadband service are deployed to areas that lack any mobile broadband service, we would prioritize areas that have historically lacked 4G LTE, or even 3G, service.¹³

The Coalition urges the Commission not to adopt this approach, which would be problematic for a number of reasons.

¹² The Commission proposes to allocate “at least \$8 billion of support” in Phase I of the 5G Fund. *Id.* The remainder would be available for Phase II. *See id.* at ¶ 5.

¹³ *Id.* at ¶ 3.

1. The Broadband DATA Act Requires Mapping Before Funding.

The mapping provisions of the Broadband DATA Act¹⁴ reflect Congressional intent that the Commission produce the coverage maps called for by Section 802(c)(1) of the Communications Act of 1934 (“Act”),¹⁵ as added by the BDA, before awarding any further Federal funding for broadband deployment. Congress employed mandatory and unequivocal language in commanding that “[t]he Commission *shall* ... after creating the maps under paragraph [(c)](1), use such maps ... when making *any* new award of funding with respect to the deployment of broadband internet access service intended for use by residential and mobile customers.”¹⁶

The legislative history confirms that Congress meant what it said when it directed the Commission to use the statutorily-mandated coverage maps when awarding any new broadband deployment funding. The Senate report stresses the importance of accurate coverage maps to the accurate targeting of broadband funding:

Mapping ... is a critical tool in closing [the] digital divide. For example, maps produced by the FCC are used to determine the unserved areas eligible for billions of Federal subsidy dollars for broadband deployment.... Flawed and inaccurate maps can result in wasted resources and the stifling of opportunities for economic deployment, especially in rural and tribal areas.¹⁷

¹⁴ Broadband Deployment Accuracy and Technological Availability Act, P.L. 116-130, 134 Stat. 228, 47 U.S.C. § 641-646 (2020) (“BDA”).

¹⁵ 47 U.S.C. § 802(c)(1).

¹⁶ *Id.*, § 802(c)(2)(B) (emphasis added).

¹⁷ *Broadband Deployment Accuracy and Technological Availability Act*, Report of the Committee on Commerce, Science, and Transportation, S. Rep. No. 116-174, at 2 (Dec. 12, 2019) (“S. Rep.”), at 2.

Considering its concern that the use of “the Nation’s problematic broadband deployment maps” would lead to wasteful funding,¹⁸ Congress clearly intended that Section 802(c)(2) of the Act¹⁹ (as added by the BDA) “would *direct* the FCC to use [the BDA mandated] coverage maps (1) to determine the areas where broadband ... service is and is not available, and (2) when making any new award of funding with respect to the deployment of broadband ... service.”²⁰

On April 22, 2020, four Senators wrote to Chairman Pai, affirming Congressional intent that the Commission fix its mobile broadband maps *before* conducting the 5G Fund auction:

We urge you to prioritize the implementation of the mobile mapping provisions in the Broadband DATA Act so that the proposed \$8 billion in Phase I support can be distributed in a manner that is consistent with Congressional intent. Failure to do so will prevent these commonsense bipartisan reforms from impacting Universal Service Funding for mobile broadband until 2031 at the earliest. We assure you that that was not our intent.²¹

To charge ahead with Option A would contravene the statute and clear Congressional intent, and would unnecessarily risk yet another setback, as it is likely that one or more interested parties would seek to litigate the Commission’s interpretation of a statutory directive,

¹⁸ *Broadband Deployment Accuracy and Technological Availability Act*, Report of the Committee on Energy and Commerce H.Rep. No. 116-350 (Dec. 16, 2019), at 8.

¹⁹ 47 U.S.C. § 802(c)(2).

²⁰ S. Rep. at 14 (emphasis added).

²¹ Letter from the Honorable Joseph Manchin III, James Lankford, Jon Tester & Cindy Hyde Smith to Ajit Pai, Chairman, FCC (Apr. 22, 2020) (“Bipartisan Senate Letter”). The Bipartisan Senate Letter noted Chairman Pai’s recent testimony to the Senate Committee on Appropriations confirming that getting new maps “is an issue of months, not years.”

and their case would be strongly supported by the Senate report confirming Congressional intent.²² The Commission must heed these directives, and, as shown below, it can do so without any significant delay in the implementation its 5G Fund.

2. Investing Support Without Accurate Maps Risks Billions in Wasted Funds.

“[I]naccurate broadband mapping data reduces the effectiveness of broadband deployment subsidies.”²³ The FCC should not proceed to invest \$8 billion without having an accurate picture of where mobile wireless coverage and 5G broadband are needed in rural America.²⁴ Under Option A, the Commission would proceed to auction using a map that identifies eligible areas derived from Rural-Urban Commuting Area (“RUCA”) Codes, based on “the most recent decennial census data (2010) and the 2006-10 American Community Survey.”²⁵

²² See Letter from Alexi Maltas, Senior Vice President & General Counsel, Competitive Carriers Association, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 20-32 (filed Apr. 13, 2020).

²³ Frontier Communications Corporation Comments, WC Docket No. 19-126, *et al.* (filed Sept. 20, 2019), at 4.

²⁴ As U.S. Cellular has argued:

The Commission cannot go forward with an auction until it has a picture of rural America that is more accurate than the one depicted by FCC Form 477. The best policy choice is for the Commission to gain a full understanding of where broadband is available, and where it is not available, and then conduct an auction to distribute ... support. Plowing forward with poor mapping data is bad policy, and it flies in the face of substantial Congressional guidance that the Commission should fix the broadband coverage maps first, and then distribute support accurately, at the earliest possible date.

U.S. Cellular Comments, WC Docket No. 19-126, *et al.* (filed Sept. 20, 2019), at 11.

²⁵ *NPRM* at ¶ 28. The RUCA Code system depicts the nation’s rurality using ten primary codes (1-10) and secondary codes (*e.g.*, 7.1) to depict urban and rural areas.

The Commission states that it “expect[s] that the RUCA codes would be able to distinguish those areas of the country that are less likely to receive 5G service absent subsidies”²⁶ There is no discernible basis for this expectation. As we understand this, the Commission proposes to go from having FCC Form 477 data that systematically overstates coverage, to a proxy for rurality that is over a decade old and contains no coverage data. Industry is being asked to comment on these RUCA Code data sets in the context of an auction proceeding, rather than the Digital Opportunity Data Collection (“DODC”) docket, without ever having any experience with the use of these data sets.

Literally, right on the heels of Congress passing a law directing the FCC to improve our nation’s mapping resources so that support can be invested more efficiently, the Commission is proposing to go forward with disbursing \$8 billion in 5G Fund Phase I support based on a decade-old proxy for rurality.

The Commission indicates that:

Given the urban-rural delineation described above, we propose to make eligible for support only those areas contained within RUCA codes 5 through 10, where code 5 is defined as micropolitan high commuting: primary flow 30% or more to a large Urban Cluster, and code 10 is defined as rural areas: primary flow to a tract outside an Urban Area or Urban Cluster.²⁷

²⁶ *Id.* at ¶ 29.

²⁷ *Id.* The urban-rural delineation description referenced by the Commission is as follows:

The primary RUCA codes (1-10) delineate metropolitan, micropolitan, small town, and rural commuting areas based on the size and direction of the primary (largest) commuting flows. In addition, the secondary RUCA codes identify other connections among rural and urban places based on the size and direction of the secondary, or second largest, commuting flow.

Although it is not entirely clear, the assumption underlying the Commission’s proposal appears to be that it is unlikely that 5G networks are today, or will be soon, constructed in RUCA Codes 5-10. That is an entirely arbitrary assumption.

What we do know is that investing \$8 billion based on flawed data (or, in the case of any reliance on RUCA Codes, no data) would risk severe exposure for the agency. It is not an overstatement to say that wasteful investments, which would flow from 5G Fund disbursements based on the eligibility standards proposed by the Commission, could put the universal service program’s credibility at risk. Moreover, taking such actions while failing to adhere to the mandates of the Broadband DATA Act would court disaster.²⁸ It should be unacceptable for the Commission to conduct an auction in 2021, using ancient data sets that don’t even purport to show where service is available today, or where it might be deployed over the next five to ten years. Using this option, it may be that support is awarded in places that will deliver very little value, as opposed to remote but productive rural areas where people live, work, and travel, and where farmlands, ranches, and other small businesses today have no service, or lack high-quality

Id. at ¶ 28 (footnotes and quotation marks omitted).

²⁸ To cite just two examples, it appears that significant portions of the Navajo Nation, especially in New Mexico, would be classified as ineligible for the 5G Fund Phase I auction, if the Commission’s proposed eligibility standard were adopted. In addition, a significant portion of southern West Virginia would be excluded. In any rational analysis of where upgraded mobile broadband is most needed, these areas would be in the top 5-10% of places in the continental U.S. See FCC, Rural Broadband Auctions Task Force & Office of Economics and Analytics, *Working Toward the 5G Fund for Rural America: Option A Eligibility Analysis*, accessed at <https://docs.fcc.gov/public/attachments/DOC-363633A1.pdf>, at 5 (“5G Fund Option A Eligible Areas”).

ity service. If the Commission develops accurate mapping resources, decisions on where to invest support for rural broadband networks will be much better informed than using RUCA codes.

The Commission seeks comment on what data sources will allow it to “best target 5G Fund support to areas that have historically lacked mobile service.”²⁹ This request for comment is, and should continue to be, properly addressed within the DODC process, not an auction proceeding. The Commission, through its DODC rulemaking, should be working through how best to vet and then incorporate existing data sets, including crowd-sourced data and various state resources, into the DODC, to prepare an accurate map on which the 5G Fund auction can be based.

If, after completing the DODC process, the FCC could accurately identify areas that have no coverage, or only 2G/3G service, it could then prioritize them at the auction. Providing an upward adjustment to areas that have 2G/3G service, and a larger upward adjustment for areas that have no service, would encourage construction of new towers and the extension of fiber to existing towers in remote areas that are currently served by one or more point-to-point microwave links.

In sum, the inability to develop accurate mapping resources that would drive sound investments is a problem more than a decade in the making. It is shared among several federal agencies and Congress. That said, if the 5G Fund Phase I auction goes forward, and DODC data were subsequently to reveal proof that billions of dollars of support have been wasted because

²⁹ *NPRM* at ¶ 34.

the RUCA Code maps failed to delineate between areas that should be treated as eligible or ineligible for support, that result would be another huge setback for which the Commission would be solely responsible.

The best tool in the Commission's toolbox is the DODC. That tool should be honed, making it the best it can be, combining carrier reporting with crowd-sourced and other credible data, to develop the best picture of real-time coverage available. Then, and only then, should a 5G Fund auction commence. Investing \$8 billion in support in the absence of high-quality data should not be Option A; it should not be an option at all.

C. Option B is a Better Option, Provided the Commission Develops DODC Data on a More Aggressive Timetable.

Under Option B, the Commission would conduct the 5G Fund auction "in 2023 or later," after it completes work "to develop more granular mobile broadband coverage maps in the DODC proceeding."³⁰ The Coalition urges the Commission to move toward Option B, but instead of delaying the first phase of the auction to 2023 or beyond, the Commission should accelerate its DODC process, setting a goal of 1Q 2022 for the 5G Fund Phase I auction.³¹ The Coalition suggests the following timetable:

³⁰ *NPRM* at ¶ 37.

³¹ Ideally, the Commission would have set this course shortly after the DODC proceeding kicked off in August of 2019. The Commission indicates in the *NPRM* that:

Given the anticipated timeline of our proposal to define eligibility based upon degree of rurality, we expect that the 5G Fund Phase I auction would close before the creation of the maps required by the statute [*i.e.*, the BDA], obviating the need to use those maps when determining the areas eligible for Phase I. We seek comment on this view.

Id. at ¶ 36. Leaving aside that this statement seems to telegraph that the Commission has already decided to adopt Option A, the Coalition's comment is that the Commission should make every effort to

- By March 31, 2021: Complete the DODC rulemaking, including the notice and comment made necessary by the BDA, and prepare the data collection portal to receive data submissions.
- 2Q 2021: Collect DODC data.
- 3Q/4Q 2021: Conduct a challenge process.
- 12/31/21: Finalize 5G Fund Map.
- 1Q-2Q 2022: Conduct 5G Fund Phase I Auction.

Under this third way, the 5G Fund auction would be delayed one year, or perhaps 15 months. Taking this extra time to improve mapping resources serves the public interest because support will be invested far more efficiently than it would using FCC Form 477, and certainly much more than using a proxy for mobile coverage, as proposed by the Commission in Option A. The public interest in investing accurately is greater than the interest in going fast, especially where the delay could be minimized to one year. Additional time will yield additional and valuable data, such as where T-Mobile has deployed, where unsubsidized 5G networks are being deployed, and where fiber built with RDOF support is being installed and how it is affecting 5G deployments.

utilize maps produced as a result of the BDA requirements as a basis for awarding 5G Fund Phase I support. The third way advocated by the Coalition provides a workable approach for achieving this result.

Some may argue that the Commission is hamstrung by the fact that the BDA is not funded.³² The fact is, however, that the Commission has viable options for proceeding immediately with implementation of the statute. While Section 805(b) of the Act,³³ as added by the BDA, anticipates additional appropriated funding for implementing the BDA and authorizes the Commission to recover BDA-related costs through the collection of regulatory fees, it also is the case that the Commission has authority to use funds already appropriated for its use by the Consolidated Appropriations Act, 2020,³⁴ to proceed now with its work in implementing the statute.

Specifically, the Commission has authority to direct portions of its current \$339 million in appropriated funding to move the ball forward with implementation of the BDA. Given that the BDA “affirms the FCC’s approach to collecting more precise and granular broadband data through [the Commission’s] new Digital Opportunity Data Collection program[,]”³⁵ it would make sense for the Commission to free up modest portions of its already-available appropriated funds to move forward with implementing the BDA, rather than letting the statute sit on the shelf until Congress appropriates additional funds.

Initial steps can be taken, and progress can be made toward meeting the statutory deadline for the Commission’s issuing final rules implementing the BDA, by utilizing a portion of

³² The Commission notes that Congress has not appropriated sufficient funds to implement BDA. *Id.* at ¶ 37 n.68.

³³ 47 U.S.C. § 805(b).

³⁴ P.L. 116-93, 133 Stat. 2317 (Dec. 20, 2019). The statute appropriates \$339 million for the Commission’s “necessary expenses” *Id.* at 2461.

³⁵ FCC Statement, *Chairman Pai Statement on the Broadband Data Act* (Mar. 24, 2020).

the Commission's current funding. The Commission's implementation process can then proceed to its conclusion after Congress appropriates additional funding.

Apart from the Commission's utilization of its currently-available funding to begin implementing the BDA, the Commission has other options for pushing ahead now on the path toward accurate and reliable broadband maps. The Commission was well on its way to implementing the DODC long before the BDA was enacted, and nothing in the BDA directs the FCC to stop its DODC process. There's no reason why the Commission cannot fold questions posed by the BDA into its DODC rulemaking, without spending any funds that it would not already be expending on its DODC proceeding.

In other words, and as discussed above, while Section 802(a) of the Act³⁶ (as added by the BDA) *requires* the Commission to develop broadband maps pursuant to the specifications enacted in the statute, the BDA does *not* limit the Commission's discretion to use otherwise available funding to initiate efforts to develop coverage maps that conform to those specifications. In addition, moving forward on implementing the DODC will send a strong message to Congress that if it values the BDA it passed earlier this year, it needs to appropriate additional funding for its implementation.

Within this third option, the Coalition agrees that basing eligibility on where 4G LTE has yet to be deployed without support is a good starting point, but that areas lacking unsubsidized 5G must also be included.³⁷ That said, we are constrained to note that targeting support under

³⁶ 47 U.S.C. § 802(a).

³⁷ *NPRM* at ¶¶ 38-39.

any option proposed requires a reasonably accurate eligibility map. Any eligibility analysis that uses decade-old rurality data, and poor Form 477 data that overstates existing coverage, should be rejected.

In sum, this third way, essentially choosing Option B with a renewed focus on DODC to accelerate an outcome, would be far better from a policy perspective, because \$9 billion in funding would be more accurately targeted to rural citizens who need it most, and would yield a higher “bang for the buck” than distributing support with a decade-old proxy for rurality.

By moving quickly on DODC, the FCC would signal Congress that the Commission is moving forward to complete its DODC process, and conduct the 5G Fund Phase I auction, increasing the likelihood that funds would be appropriated. As the Bipartisan Senate Letter urged, “[w]e do not have to choose between updated coverage maps and the deployment of the next generation of mobile broadband support. We can do both. We must do both.”

D. The FCC Should Bar T-Mobile from Participating in the 5G Fund Phase I Auction.

As a condition for FCC authority to acquire Sprint, T-Mobile has committed to “create an unprecedented, world-leading, nationwide 5G network ... provid[ing] virtually ubiquitous and deep 5G coverage across the country, including in rural areas.”³⁸ Within six years of the merger’s close, T-Mobile commits to deploy a 5G network providing 99% of the population, and

³⁸ *Applications of T-Mobile US, Inc., and Sprint Corporation For Consent to Transfer Control of Licenses and Authorizations; Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, WT Docket No. 18-197, ULS File Nos. 0008741236, 0008741420, 0008741603, and 0008741789 *et al.*, Memorandum Opinion and Order, Declaratory Ruling, and Order of Proposed Modification, 34 FCC Rcd 10578, 10802 (2019) (*T-Mobile-Sprint Order*), Appendix G (Letter from Sprint Corporation & T-Mobile US, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-197 (May 20, 2019) (T-Mobile May 2019 Letter”), at 2).

90% of the rural population, with download speeds of at least 50 Mbps.³⁹ As the Commission notes, however, T-Mobile could keep these commitments while at the same time leaving up to 81% of the rural land area of the United States uncovered.⁴⁰ Such is the nature of a population commitment in a nation that is both overwhelmingly urban in population and rural in geography.⁴¹ Accordingly, the Commission is correct that it is inappropriate to allow T-Mobile to use 5G Fund support to fulfill its merger commitments.⁴² The only way to ensure this outcome is to prohibit T-Mobile from participating in the 5G Fund auction.

The Commission offers two approaches to prevent T-Mobile from using “any eligible areas for which it might win 5G Fund support to fulfill its transaction-specific rural commitments.”⁴³ In both approaches, T-Mobile would pre-select areas before the auction and the Commission would remove those areas from the bidding process. In the first approach, T-Mobile would be prohibited from participating in the auction; in the second, T-Mobile would be allowed to bid for the remaining areas. Both of these options will fail to achieve the Commission’s goal of using 5G Fund support to maximize rural coverage.

³⁹ *Id.* at 3-4.

⁴⁰ *NPRM* at ¶ 23.

⁴¹ Of the nation’s 3.5 million square miles, approximately 97% of it is rural, yet approximately 81% of the population lives in urban areas. *See, e.g.*, U.S. Census Bureau, Press Release, *New Census Data Show Differences Between Urban and Rural Populations* (Dec. 8, 2016), accessed at <https://www.census.gov/newsroom/press-releases/2016/cb16-210.html>.

⁴² *NPRM* at ¶ 23 (stating that “we believe it would be inappropriate to allow the use of high-cost support to fulfill merger conditions, and therefore expect that the support awarded via the 5G Fund would be used to deploy 5G service to areas other than where T-Mobile will deploy”).

⁴³ *NPRM* at ¶¶ 130-131.

Both options would grant T-Mobile a valuable first-mover competitive advantage by granting it the right to pre-select its 5G Fund territories without facing competition from other carriers, some of which have a higher level of deployed network due to investments made with universal service support and would otherwise have an advantage in an auction.⁴⁴ That is, T-Mobile would have a strong incentive to use what is effectively a right of first refusal to achieve a competitive advantage, especially in rural areas where T-Mobile would otherwise face competition. For example, T-Mobile could select a patchwork of service territories (“swiss cheese”) that would effectively prevent other competing operators from profitably serving the “holes.”⁴⁵

The Coalition agrees with T-Mobile that requiring it to declare its service territory six years in advance of the completion of its merger commitment is impractical and uneconomic. As T-Mobile explained in a recent letter to the Commission, T-Mobile conceded that, “the exact census tracts and precise contours of T-Mobile’s 5G network six years from now are not fixed, and thus, it is not practicable to be the basis for the 5G Fund.”⁴⁶ T-Mobile’s proposed solution is to demand that any map it may submit showing planned 5G network construction would of

⁴⁴ Coalition Members believe that in many areas, their networks, funded in part with universal service support, have achieved higher levels of densification and service quality than the Big 3 carriers.

⁴⁵ This concern is particularly well founded in light of the fact that the Commission decided to refrain from requiring T-Mobile to comply with any enhanced regulation of intercarrier roaming arrangements that would have encouraged and protected competition in rural areas.

⁴⁶ Letter from Steve Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 20-32 (Apr. 16, 2020), at 2, *accessed at* <https://ecfsapi.fcc.gov/file/1041641647200/5G%20Fund%20Ex%20Parte%204.16.20.pdf> (“T-Mobile April ex parte”).

necessity be “completely voluntary.”⁴⁷ But of course this is no solution at all, as it does not address, let alone solve, the problem of preventing T-Mobile from using 5G Fund support to meet its merger commitment or to harm competition.

As the Commission well knows, money is fungible, and any proposal that allows T-Mobile to bid and win 5G funding would inevitably lead to cross-subsidization. For example, T-Mobile would logically bid for areas where it could invest 5G Fund support to build towers that can be shared with its transaction-mandated buildouts. Even attempting to prevent such cross-subsidization would be an extraordinary regulatory task, harkening back to the sort of tight pre-1983 Title II oversight of every aspect of T-Mobile’s financial operations. In the current world, such oversight is impossible.

It is not necessary to adopt the FCC’s proposal to grant T-Mobile a pre-selection right to avoid excessive or inefficient overbuilds. Bidders in the 5G Fund auction will have strong incentives to take into consideration the areas in which T-Mobile and other operators are most likely to build, and to de-emphasize those areas in their bidding strategies, focusing instead on areas in which they would be the sole providers.⁴⁸ Furthermore, as T-Mobile also correctly explains, “deployment plans can change substantially over time in response to marketplace realities and conditions on the ground. These can include population shifts, the development of new com-

⁴⁷ *Id.*

⁴⁸ By the same token, once the 5G Fund auction is complete, T-Mobile will have incentives to build out its network in areas not receiving 5G Fund support.

munities and highways, difficulties and delays in constructing in a given area, and the availability of funding.”⁴⁹ In this highly dynamic environment, it is unlikely that the Commission can predict the optimal 5G footprints of all operators with greater accuracy than the operators themselves.

In fact, T-Mobile’s plans to meet its rural build out commitments should be deemed irrelevant in these proceedings except in those geographic areas in which T-Mobile has actually built out networks in furtherance of their commitments at the time that coverage maps are developed and the FCC determines eligible areas for participation in the auction. Considering speculative buildout promises by T-Mobile would be anathema to sound policy, as it would defeat the purpose for which broadband coverage maps are to be created. Instead, the Commission must use actual network deployments, backed up by real world coverage maps, to determine eligible bidding areas.

E. The Commission Must Develop a Budget for Mobile Broadband that Includes an Estimate of the Cost of Fulfilling Its Congressional Objectives.

Without having developed data that would allow it to determine the cost of building high-quality terrestrial mobile broadband everywhere that rural Americans live, work, and travel, the Commission proposes a total budget of up to \$9 billion for the 5G Fund.⁵⁰ As discussed above, given that Congress directed the Commission to provide an amount of support *sufficient* to bring rural America up to reasonable comparability with urban and suburban areas, it would seem that developing an estimated cost of undertaking and completing that task

⁴⁹ See, *T-Mobile April ex parte* at 2.

⁵⁰ *NPRM* at ¶ 42.

would be paramount objective for the Commission. And yet, 24 years after the enactment of the Telecommunications Act of 1996 (“1996 Act”), we’re still not there.

It is not necessary for the Commission to finalize a budget before conducting Phase I of the 5G Fund Phase I auction – the Coalition agrees that it is important to move forward. What is badly needed, however, is for the Commission to fold into its DODC process the task of estimating how much it will cost to support the deployment and operation of terrestrial 5G networks. Having an estimate will enable the Commission to advise Congress regarding how long it expects that it will take to fulfill the directive to make rural areas reasonably comparable to urban and suburban areas. Such a report from the Commission would assist Congress in ultimately deciding how long it should take to complete the mission, and whether to devote additional resources through legislation to speed up the deployment process as much as possible.

All available information suggests that the amount of support needed will be significantly larger than \$9 billion. A 2017 report by CostQuest Associates calculated that in order to build out a 4G LTE network in rural America it would take approximately 37,500 new towers and \$12.5 billion in capital investment, with another \$2.13 billion in annual maintenance capital and operating expenses going forward. The ten-year net present value of such investments was

estimated to be \$25.6 billion, with an annual shortfall of approximately \$3.8 billion.⁵¹ These figures suggest the need for a substantial mobile broadband support mechanism just to get to 4G LTE in ten years, even if carriers are investing a substantial portion of what is needed.

In a 2017 White Paper, the Commission’s Office of Strategic Planning and Policy Analysis (“OSP”) suggested that the first task in executing a plan to improve the nation’s digital infrastructure plan would be “defining the object of the effort,”⁵² which includes assessing the costs of achieving the objective. The OSP paper cited CostQuest’s January 10, 2017 work product as providing an example of the cost of providing ubiquitous 5G coverage.⁵³ CostQuest’s paper, titled “The 5G Mobile Ubiquity Price Tag,” summarized four scenarios for ubiquitous 5G coverage, spanning user demand of 2 Gb per month up to 50 Gb per month (which would include autonomous vehicle support).⁵⁴ The estimated price tag of the four scenarios ranged from \$61 billion (450,000 cell sites) to \$250 billion (2.8 million cell sites)⁵⁵ but did not take into account potential technological advancements such as virtualized core infrastructure or open RAN architectures that may be available now or in the foreseeable future. Notably, the study’s estimates

⁵¹ CostQuest Associates, Inc., *Case Study – Cost Study for 4G Unserved Areas in the U.S.*, (Feb. 15, 2017), accessed at <https://ecf-sapi.fcc.gov/file/10218108506527/2017%200216%20CQ%20Cost%20Study%20for%20Unserved%20Areas%20FINAL.pdf> (“CostQuest 4G Study”).

⁵² Paul de Sa, *Improving the Nation’s Digital Infrastructure* (Jan. 19, 2017), <https://www.fcc.gov/document/improving-nations-digital-infrastructure> at 4.

⁵³ *Id.* at 4, n.9.

⁵⁴ CostQuest Associates, *The 5G Mobile Ubiquity Price Tag, Costs for Full U.S. Deployment of 5G – With and Without Support for Autonomous Driving* (Jan. 10, 2017), <https://www.costquest.com/uploads/pdf/5g-mobile-ubiquity-costs-summary.pdf>.

⁵⁵ *Id.*

envisioned construction of 5G service throughout the nation's roads. It did not provide estimates of the additional costs of constructing high-quality 5G service beyond rural roadways, to reach agricultural and rural industrial areas. That cost would be significantly higher.

Even in the most conservative scenario, the price of delivering mobile 5G broadband is going to be substantial, suggesting that it would be prudent to project that it will cost many billions above the current 5G Fund budget to get from where we are today to a nationwide 5G network in rural America. So, while \$9 billion is a good starting point, it cannot reasonably be considered to be the ultimate and final 5G Fund budget for rural America. The nation's rural consumers and businesses deserve — and the Commission's responsibilities under 1996 Act require — a fact-based analysis of how much support is required, and how best to invest it, to meet Congress' 1996 objectives for high-cost support in rural areas.

F. Transitioning Legacy High-Cost Support to 5G Fund Support.

The Commission proposes rules to transition from legacy high-cost support to new 5G Fund support, in some cases as soon as the Order adopting new rules becomes effective. During the transition period, multi-state carriers would be permitted to invest legacy support within any part of the ETC service area, regardless of whether those areas span more than one state.⁵⁶ Coalition members welcome this proposal, which is a no-cost means of improving the efficiency of investments to cover the greatest number of rural citizens. With respect to the remaining transition proposals, the Coalition offers the following comments.

⁵⁶ *Id.* at ¶ 70.

1. The Statute Prohibits the Commission from Commencing the Phase Down of Support in Areas Deemed to be Ineligible Upon Adoption of an Order.

Once the challenge process collapsed in late 2019, the Commission could have continued forward, revamping the support mechanism for a 5G world, under the same Mobility Fund banner. Instead, it chose “5G Fund” as the new name for its improvements to the second phase of the Mobility Fund support mechanism.⁵⁷ Under the Commission’s proposal to phase down legacy support in areas ineligible for 5G Fund support, “legacy support would be phased down starting the first day of the month **after the effective date of an order** adopting these requirements and release of the final list of areas eligible for 5G Fund support.”⁵⁸ This new proposal differs from the Commission’s prior approach, which proposed to phase down support **following conclusion of the auction**, consistent with 47 C.F.R. § 54.307(e)(5)(ii).

The Commission reasons that in Mobility Fund II, ineligible areas could not be known until after the Challenge Process concluded,⁵⁹ which in hindsight, would likely have been several months before the start of the Mobility Fund II auction. The difference here, according to the Commission, is that under Option A, ineligible areas will be known upon adoption of the rules,⁶⁰ again, several months before the FCC plans to commence the 5G Fund Auction. In other words, there may be very little difference, or even zero difference between Mobility Fund II and the 5G

⁵⁷ Chairman Pai Announces Plan to Launch \$9 Billion 5G Fund for Rural America, News Release, Dec. 4, 2019) at <https://docs.fcc.gov/public/attachments/DOC-361168A1.pdf>.

⁵⁸ NPRM at ¶ 75.

⁵⁹ Id.

⁶⁰ Id.

Fund auction timelines. Nobody knows how quickly the Mobility Fund II auction would have commenced, nor do we don't know how quickly an "Option A" choice would lead to a 5G Fund auction. In the Coalition's view, a policy choice has been made, to commence the phase down of support to legacy carriers at the earliest possible date. As shown below, this policy change is unlawful.

The Consolidated Appropriations Act, 2016 ("2016 Appropriations Act") became law on December 18, 2015. Section 631 of Title VI of Division E of the 2016 Appropriations Act provided:

None of the funds appropriated by this Act may be used by the Federal Communications Commission to modify, amend, or change the rules or regulations of the Commission for universal service high-cost support for competitive eligible telecommunications carriers in a way that is inconsistent with paragraph (e)(5) or (e)(6) of section 54.307 of title 47, Code of Federal Regulations, as in effect on July 15, 2015: *Provided*, That this section shall not prohibit the Commission from considering, developing, or adopting other support mechanisms as an alternative to Mobility Fund Phase II.⁶¹

The legislative history of § 631 of the 2016 Appropriations Act indicates that it was the intent of Congress to "provide certainty to rural wireless broadband users and carriers across the Nation as the ... Commission continues to develop a new framework for parts of the Universal Service Fund." S. Rep. No. 114-97, at 80 (2015). Congress wanted to ensure that competitive ETCs "will continue to receive reliable support until Mobility Fund Phase II is implemented."

Id.

⁶¹2016 Appropriations Act, Pub. L. No. 114-113, Div. E, Tit. VI, § 631, 129 Stat. 2242, 2470 (2015) ("§ 631 of the 2016 Appropriations Act").

By § 631 of the 2016 Appropriations Act, Congress placed a freeze on ¶¶ (e)(5) and (e)(6) of § 54.307 of the Rules as they were in effect on July 15, 2015. Congress prohibited the Commission from modifying, amending, or changing ¶ (e)(5) or ¶ (e)(6), because any such modification, amendment, or change would be “inconsistent” with the July 15, 2015 version of the two provisions. On July 15, 2015, ¶¶ (e)(5) and (e)(6) of § 54.307 provided in pertinent part as follows:

(5) Implementation of Mobility Fund Phase II Required. In the event that the implementation of Mobility Fund Phase II has not occurred by June 30, 2014, competitive [ETCs] will continue to receive support at the level described in paragraph (e)(2)(iii) of this section until Mobility Fund Phase II is implemented....

(6) Eligibility after Implementation of Mobility Fund Phase II. If a competitive [ETC] becomes eligible to receive high-cost support pursuant to the Mobility Fund Phase II, it will cease to be eligible for phase-down support in the first month for which it receives Mobility Fund Phase II support.⁶²

On July 15, 2015, § 54.307(e)(2)(iii) of the Rules provided that “[f]rom July 1, 2013 to June 30, 2014, each competitive [ETC] shall receive 60 percent of its monthly baseline support amount each month.” 47 C.F.R. § 54.307(e)(2)(iii) (2015). Thus, § 631 of the 2016 Appropriations Act worked to ensure that competitive ETCs receive 60 percent of their monthly baseline support amount each month until Mobility Fund Phase II support begins.

In the face of a clear Congressional directive set forth in § 631 of the 2016 Appropriations Act, the Commission purported to make wholesale changes to ¶ (e)(5) and ¶ (e)(6) of § 54.307 in 2017. See *Connect America Fund, Universal Service Reform – Mobility Fund*, 32 FCC

⁶² 47 C.F.R. § 54.307(e)(5), (6) (2015) (emphasis in original).

Rcd. 2152, 2245 (2017). The Commission claimed that its new phase-down rules had been designed so as not to be inconsistent with the 2015 version of ¶¶ (e)(5) and (e)(6) “unless and until the restrictions in [§ 631 of the 2016 Appropriations Act] are no longer in effect.” *Id.*, 32 FCC Rcd. 2182 n.188. To avoid conflict with the statute, it maintained consistency with the 2015 phase-down rules by adding the following provision, delaying the effectiveness of the new rules:

Notwithstanding the foregoing schedule, the phase-down of identical support below the level described in paragraph (e)(2)(iii) of this section shall be subject to the restrictions in [§ 631 of 2016 Appropriations Act] unless and until such restrictions are no longer in effect.⁶³

The “restrictions” that Congress imposed on the Commission’s authority to modify, amend, or change § 54.307 of the Rules remain in effect today. They were reenacted in every appropriations bill passed by Congress since 2015. The restrictions were last enacted in § 625 of Title VI of Division C of the Consolidated Appropriations Act, 2020.⁶⁴

By operation of § 625 of the 2020 Appropriations Act and § 54.307(e)(5)(v) of the Rules, the new ¶¶ (e)(5)(i)-(iv) and (e)(6) of § 54.307 that the Commission adopted in 2017 have not gone into effect. Consequently, a competitive ETC is currently entitled to receive 60 percent of its monthly baseline support amount each month until Mobility Fund Phase II is implemented. *See* 47 C.F.R. § 54.307(e)(5) (2015). A competitive ETC will cease to be eligible to receive 60

⁶³ *Id.* § 54.307(e)(5)(v) (2019).

⁶⁴ *See* Consolidated Appropriations Act, 2020, Pub. L. No. 116-93, Div. C, Tit. VI, § 625, 133 Stat. 2317, 2482 (2019) (“§ 625 of the 2020 Appropriations Act”).

percent of its monthly baseline support amount each month in the first month for which it receives Mobility Fund Phase II support. *See id.* § 54.307(e)(6). The Commission is barred from modifying, amending, or changing that entitlement by § 625 of the 2020 Appropriations Act and § 54.307(e)(5)(v) of the Rules and any attempt to do so would be *ultra vires*.

The Commission is also barred from finding that, by adopting new rules it will have successfully “implemented” the rebranded Mobility Fund II. The transitive verb “implement” is defined as “carry out, accomplish, esp. to give practical effect to and ensure of actual fulfillment by concrete measures.”⁶⁵ By its plain meaning, implementation means carrying out or accomplishing the new program, not just adopting rules. Until the Mobility Fund II auction is carried out or accomplished, no phase down of support can commence. Congress chose its words carefully in § 631 of the 2016 Appropriations Act. It explicitly allowed for “considering, developing, or adopting other support mechanisms as an alternative to Mobility Fund Phase II,” but none of those interim actions amount to “implementing” the Mobility Fund II program, the prerequisite to phasing down support in Section 54.307(e)(5). Note that the 2015 version of 54.307(e)(6) contemplated support to legacy carriers changing “After Implementation of Mobility Fund Phase II,” which was described as after the Mobility Fund II auction closes.

In the final analysis, the term “implement” must be interpreted as it is used in the 2015 version of both ¶¶ (e)(5) and (e)(6), which as shown above, are still in effect. Paragraph (e)(6) provides under the rubric “Eligibility after Implementation of Mobility Fund Phase II,” that a competitive ETC’s eligibility for phase-down support will cease “in the first month for which it

⁶⁵ Merriam-Webster, at <https://www.merriam-webster.com/dictionary/implement?src=search-dict-hed>.

receives Mobility Fund Phase II support.” 47 C.F.R. § 54.307(e)(6) (2015). By these rules, the rebranded Mobility Fund Phase II will be implemented in the first month in which competitive ETCs receive 5G Fund support, at which time the phase down of support under (e)(5) would also commence.

It makes no difference that the Commission plans to modify the Mobility Fund Phase II and rebrand it as the 5G Fund. Congress has mandated that competitive ETCs receive legacy high-cost support until they receive the next phase of USF funding for mobile wireless broadband service in rural America. Thus, so long as the restrictions imposed by § 625 of the 2020 Appropriations Act remain in effect, the Commission cannot end legacy high-cost support until the 5G Fund is implemented.

2. Moving Up the Commencement of a Two-Year Phasedown in Ineligible Areas Under Option A Should Be Rejected as Arbitrary.

Under Option A, for carriers receiving legacy support in areas determined to be ineligible, “legacy support would be phased down starting the first day of the month after the effective date of an order adopting these requirements and release of the final list of areas eligible for 5G Fund support.”⁶⁶ The Commission posits that once support is disaggregated, carriers should not receive support in the ineligible areas.⁶⁷

⁶⁶ *NPRM* at ¶ 75; *see generally id.* at ¶¶ 73-81.

⁶⁷ The Commission states that:

Since we expect that carriers would not require support in order to deploy 5G service in areas ineligible for 5G Fund support, and legacy support recipients would not be able to win 5G Fund support in the auction for those areas, we tentatively conclude that it would not be in the public interest to continue legacy support for ineligible areas.

If the Commission chooses Option A, it could commence the phase down in just a few months' time. This is significantly different from the rule adopted in the Mobility Fund context, which states that the phase down of legacy support begins following the close of a successful auction.⁶⁸ Aside from the statutory bar discussed above, the Commission provides no rationale for the "differences"⁶⁹ here present, other than asserting that a shorter phase-down period is justified because the determination of the final set of areas eligible for 5G Fund Phase I support can be made earlier than was the case for Mobility Fund Phase II.⁷⁰

This justification falls far short of providing any rationale for why phasing down support pre-auction would be a superior alternative for rural consumers than the current rule. As the Commission surely knows, new equipment orders and work orders for operations capital expenses are placed with 12-month to 24-month lead times, depending upon rights-of-way and permitting approvals. Today, support funds have been committed to improve networks for the benefit of rural consumers and businesses in 2020 and 2021.

Notifying legacy carriers that their support will be cut on perhaps less than six months' notice contravenes the Commission's policy of avoiding flash cuts for carriers using legacy support to operate and maintain networks.⁷¹ In response to the Commission's rationale that a

Id. at ¶ 75.

⁶⁸ See 47 CFR § 54.307(e)(5). This rule is not even acknowledged in the text of the Commission's proposal.

⁶⁹ *NPRM* at ¶ 73.

⁷⁰ *Id.* at ¶ 75.

⁷¹ See, e.g., *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17633, 17752 (¶ 242) (2011) (stating a Commission policy "to avoid a flash cut that would dramatically affect either carriers or the consumers they serve.").

short schedule for reducing legacy support is fair because carriers have received legacy support since 2017,⁷² Coalition members are compelled to note that they continue to use support to operate, maintain, and upgrade networks built with high-cost support, and are prepared to demonstrate such. Legacy support has been key to carriers' ability to upgrade network core infrastructure to 4G LTE and in many cases, to be 5G-ready. It has enabled small wireless carriers to compete with larger rivals and has enabled the introduction of mobile broadband into rural areas that would not otherwise have received it.⁷³

The Coalition also opposes commencing a two-year phase down early, based on "disaggregated support," which will be some yet-to-be determined fraction of support currently being provided. It is unclear when determinations of disaggregated support will be finalized,⁷⁴ but it is safe to say that it will provide carriers with very little advance notice as to the amount of phase-down support that will be received when the order is adopted.

As discussed above, inconsistent and systematically overstated FCC Form 477 mapping data should not be used for any purpose.⁷⁵ It is not possible, using Form 477 data, to accurately

⁷² *Id.* at ¶ 74.

⁷³ Coalition member companies have observed larger carriers that have relinquished legacy support in rural areas, decommissioning towers that are not economically viable without support.

⁷⁴ The Office of Economics and Analytics and Wireline Competition Bureau are tasked with proposing, seeking comment on, and establishing an adjustment factor that will be incorporated into the framework for disaggregating legacy high-cost support for competitive ETCs. *Order* at ¶¶ 202-203. No timeframe is set for the completion of this exercise.

⁷⁵ We note but do not repeat here discussion of the "centroid" problem and other shortcomings of the Commission's Form 477 regime for mobile broadband carriers. The author does note, however, the incongruity of consistently receiving mobile broadband throughput of 6.6/0.16 in suburban Fairfax County Virginia, 15 miles from the Washington Monument as the crow flies, while the Commission's most recent Broadband Deployment Report shows 97.1% of urban America as having access to 4G LTE at 10/3. See <https://docs.fcc.gov/public/attachments/FCC-20-50A1.pdf>, at Figure 2b.

say whether a “serving carrier” provides high-quality coverage throughout an area, and by extension, to accurately identify ineligible areas. Using RUCA Codes to determine eligibility, as proposed by the Commission, attempts to skirt this problem by proxy. This is arbitrary as well. If legacy support is to be disaggregated and phased down, then the Commission must use high-quality data, which will only flow from the DODC process.

Coalition members want the Commission to appreciate how disruptive even proposing such short-term policy shifts can be. Every Coalition member must, today, reassess its budget for calendar year 2020 as a result of this phase-down proposal. In some cases, plans to build or upgrade networks will be frozen. Important credit covenants must be reassessed for 4Q 2020 and 1Q 2021. Coalition members understand fully that there is no such thing as “certainty” in the business world. As we’ve seen this year with the COVID emergency, things can change on a dime.

Yet, especially now, when carriers in rural areas are particularly burdened by events beyond their control, it is especially discouraging to face proposed changes to existing rules that introduce significant uncertainty without substantial justification. An FCC that values investment and competition would not propose to short-circuit the existing phase-down rule, but would maintain the rule so that the phase-down commences after completion of the 5G Fund Phase I auction. Coalition members roundly reject the notion that legacy support is being used inefficiently, especially in light of the extraordinary demands they are currently meeting in rural areas during the COVID emergency.

The Coalition urges the Commission to strive for consistency with its current rules and avoid significant disruption for small carriers that have been carrying out the mission of providing services in rural America. For years, the entire industry has built expectations around the existing rule, and fidelity to that rule will deliver the least amount of disruption to existing services in rural areas.

3. Requiring Legacy Carriers to Deliver Ubiquitous 5G Service in Exchange for Support Levels Untethered from Actual Costs Should Be Rejected as Arbitrary.

For eligible areas where there is no winning bidder, the Commission proposes to provide support to a legacy carrier over a five-year period, with the carrier receiving the “minimum level of sustainable support.”⁷⁶ The proposed definition is vague: “We propose to define the minimum level of sustainable support to be the lowest amount of legacy support among carriers that have deployed the highest level of mobile technology within the state.”⁷⁷ So, under the Commission’s proposed approach, it is not possible to know how much support a legacy carrier may receive during the phase down, and such support may not be determined until very close to the time when it is distributed.

Yet, in areas served by a legacy carrier that are not won in the auction, the FCC would impose on the legacy high-cost support recipient a “public interest obligation to provide 5G service alongside the voice service for which high-cost support is provided, and to meet measured

⁷⁶ *NPRM* at ¶ 79.

⁷⁷ *Id.*

performance requirements as a condition of receiving support.”⁷⁸ In the absence of, (i) a determination of the actual costs of providing 5G service within any particular area, or (ii) a reverse auction, it would be arbitrary for the Commission to require a carrier to build and operate a ubiquitous 5G network within five years for a level of support that is untethered to the underlying construction and operating costs.

Put another way, the Commission has no means to assess whether the level of legacy support to be provided to the carrier represents any relationship to the requirement that it be imposed. It may be a windfall, or it may be a small fraction of the amount needed to build and operate a 5G network in a rural area. In either case, it violates the Congressional directive that “support should be explicit and sufficient to achieve the purposes of this section.”⁷⁹

Whatever the Commission may determine to be the “minimum level of sustainable support” in any given area, that amount would bear no relation to the cost of providing service, and there’s no evidence, nor could there be absent a case-by-case analysis of each area, supporting a conclusion that such “minimum level of sustainable support” would be sufficient to deliver high-quality 5G service to the area.

For example, in poor demographic or low-density areas, legacy support may be sufficient for nothing more than “just keeping the lights on,” as opposed to a high-demographic or

⁷⁸ *Id.* at ¶ 82. The Commission explains that, “under [its] proposal, legacy support recipients would be required to provide voice and data services that comply with the same 5G-NR technology required for 5G Fund support recipients.” *Id.*

⁷⁹ Section 254(e) of the Act, 47 U.S.C. § 254(e).

higher density area where the same amount of legacy support may be sufficient to increase capacity to meet demand that would otherwise not be possible. In a remote area in Washington, U.S. Cellular unexpectedly needed to invest well over \$1 million to construct an additional tower needed to meet its Mobility Fund Phase I obligations. The site does not generate enough revenue to warrant an upgrade to 5G. To the extent that remote areas similar to this are not won in the 5G Fund Phase I auction, no legacy high-cost support recipient should be forced to upgrade its network to 5G without support sufficient to ensure that rural citizens in the area receive high-quality services.

The Commission attempts to justify its proposal to require 5G service without any corresponding assurance that support will be sufficient by asserting, without any record evidence whatsoever, that “the absence of broadband public interest obligations and performance requirements does a disservice to rural Americans living in areas served by legacy support recipients....”⁸⁰ The Commission asserts that because the rules don’t require legacy support carriers to deploy the most current wireless technologies or expand their services to meet current standards, rural citizens are disserved. The Commission even goes so far as to say that Coalition member companies and other legacy high-cost support recipients may be “incentivized to reduce services to increase profit margins.”⁸¹

These speculative assertions warrant reply in two respects. First, the law requires carriers to “use [universal service] support only for the provision, maintenance, and upgrading of

⁸⁰ *Id.* at ¶ 84.

⁸¹ *Id.*

facilities and services for which the support is intended.”⁸² The Commission is fully empowered to regulate carriers receiving legacy support to ensure that the purposes of the Act are being fulfilled. Second, and more important, even a cursory review of Coalition member networks would reveal that all these carriers have deployed 4G LTE technology at the core, and throughout the greatest possible service area, given the amount of internally-generated capital and support funds that are available. In fact, rural carriers are sometimes constrained by the current phase down, which provides insufficient levels of support to enable 4G LTE expansion into remote areas where issues such as a lack of fiber at existing towers present insurmountable obstacles to achieving 4G/5G speeds.⁸³

In sum, Coalition members reject the Commission’s unsupported characterization that its failure to impose deployment obligations on legacy support recipients has disserved rural America. The facts on the ground demonstrate that, even in the absence of these prescribed requirements, small rural carriers are investing legacy support, and their own capital, to improve networks, to remain competitive with larger carriers, and to survive as small businesses in rural America.

The Coalition also observes that, in contrast to what the Commission has put on the table, there are other mechanisms that would serve to better fulfill the Commission’s statutory

⁸² Section 254(e) of the Act, 47 U.S.C. § 254(e).

⁸³ On October 26, 2016, SBI submitted to the Commission a detailed proposal, including investments in the nine figures, for expanding 4G LTE throughout its network in and around Tribal lands. See <https://ecf-sapi.fcc.gov/file/10261682207349/2016%201026%20SBI%20MFII%20Presentation%20PUBLIC%20VERSION.pdf>.

requirements, accelerate the delivery of 5G services to rural America, and be simpler to implement and monitor. For example, the Commission could provide legacy support carriers the option to deliver 5G in eligible area at the auction's reserve price. These carriers are already well-positioned by virtue of their existing networks and commitment to the communities they serve. Or, the Commission could invite legacy carriers, during the phase-down period, to file annual reports detailing how legacy support is being used to build and upgrade 5G networks.

The Commission's proposal, which does not even pretend to deliver the necessary level of support to deliver 5G, is the antithesis of rational rulemaking. Moreover, as set forth above, it contravenes Section 254(e) of the Act. As such, the proposal should be rejected in favor of options that do not treat legacy carriers in a punitive fashion and do not threaten service levels for citizens living in rural areas.

G. Interim Service Milestones for the 5G Fund Must Align with the Commission's Fixed Satellite Service Relocation Timetable in the C-Band.

Some rural carriers lack a sufficient quantity of spectrum to provide high-quality and ubiquitous 5G services in many rural areas. Obtaining C-Band spectrum will be critical to their ability to serve customers and meet any construction and performance requirements the Commission may impose as a condition of 5G Fund support. Accordingly, it is important for the Commission to align its performance requirements with the availability of spectrum for auction winners. The proposed 5G Fund timetable, especially under Option A, does not achieve this goal. Indeed, if the Commission commences the 5G Fund auction in 2021 under Option A, and the C-Band auction and clearing process runs as scheduled, 5G Fund awardees may have less than one year to build networks needed to meet the first 5G Fund milestone.

By our estimate, if the C-Band spectrum auction is held in December 2020, the clearing process will free up 100 MHz in 46 of the top 50 PEAs by 2021, and up to 280 MHz will be available nationwide by December 2023.⁸⁴ If the 5G Fund auction commences in 2021 under Option A, it is estimated that awards will be made near the end of 2021. The Commission's first service milestone for a support recipient is at the end of the third full calendar year following authorization of support, or approximately late-2024.⁸⁵ At that time, an awardee must cover "at least 40% of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state."⁸⁶

The upshot is that even if the clearing process proceeds without delay, a 5G Fund auction winner under Option A will, under the best of circumstances, face a very compressed timetable to deploy C-Band spectrum to meet the first milestone, perhaps less than one year. Any delay in C-Band clearing could make it impossible.

Coalition members urge the Commission to take these facts into account and either delay the first 5G Fund performance milestone, or make clear that if an auction winner does not have clean spectrum needed to build and operate due to C-Band clearing delays, the performance milestones will be postponed so that 5G Fund awardees have a fair opportunity to meet their first interim milestone.

⁸⁴ News Release, C-BAND SPECTRUM WILL BE MADE AVAILABLE FOR 5G SERVICES ON AN ACCELERATED BASIS, (June 1, 2020) at <https://docs.fcc.gov/public/attachments/DOC-364655A1.pdf>.

⁸⁵ *NPRM* at ¶ 95.

⁸⁶ *Id.*

H. Requirements Imposed to Demonstrate Compliance with Service Deployment Milestones Must Minimize Burdens on Small Rural Carriers.

The Coalition agrees that measurement methods adopted by the Commission to demonstrate that 5G Fund recipients have met service deployment milestones should “balance the desire for limiting the cost and complexity of speed test measurement campaigns, with the desire for high confidence in the resulting maps.”⁸⁷ The Coalition is concerned, however, that measurement requirements that tip the balance too far away from the objective of minimizing costs and complexity would have problematic effects.

Specifically, the Commission should strive for an overall framework of rules, requirements, and incentives that encourages and enables small rural carriers to participate in the 5G Fund Phase I auction. These carriers have a proven track record of bringing advanced mobile broadband services to rural communities. Their ability to continue in this role — which has consistently been effective in serving rural consumers and businesses — should not be short-circuited by overly burdensome performance measurement requirements.

The Coalition therefore suggests several considerations that the Commission should take into account as it seeks to achieve the desired balance it has described in the *NPRM*. First, the Commission’s adoption of the Coalition’s proposal to use signal strength requirements, together with a link budget, instead of imposing speed and latency,⁸⁸ would significantly simplify

⁸⁷ *NPRM* at ¶ 114.

⁸⁸ See Sec. II.F., *supra*. The Coalition also argues that the Commission should adopt its proposal that 5G funding recipients will be required to use 5G-NR technology. See *id.*

the methodology for demonstrating compliance with performance requirements and reduce the costs associated with demonstrating compliance.

Second, if the Commission decides to impose speed and latency requirements, then the Coalition encourages the Commission to pursue some of the alternative approaches for testing that it discusses in the *NPRM*. For example, small rural carriers should have the option to test by sampling drivable or accessible areas instead of “testing every square kilometer of [their] 5G Fund area.”⁸⁹ Although the Commission may need to seek further comment on the issue of what percentage of grid cells should be sampled in order to ensure a sufficient level of confidence in the accuracy of the full coverage map, the Coalition urges the Commission to adopt the policy that testing a sample of grid cells will be a sufficient means of demonstrating coverage, especially for small rural carriers.

Third, the Commission should consider whether it would be advisable to simply mirror, as much as possible, the measurement methods that T-Mobile must use to demonstrate that it is meeting its mobile 5G commitments set forth in the *T-Mobile-Sprint Order*. The objective of this approach would be to ensure that 5G Fund support recipients would not face any requirements that are more burdensome than those that T-Mobile pledged to meet.

⁸⁹ *NPRM* at ¶ 114.

III. CONCLUSION.

The Coalition thanks the Commission for moving forward on a 5G Fund auction and appreciates the opportunity to provide these comments for consideration in this proceeding.

Respectfully submitted,

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