

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554**

In the Matter of)	
)	
Rural Digital Opportunity Fund)	WC Docket No. 19-126
)	
Connect America Fund)	WC Docket No. 10-90
)	
Digital Opportunity Data Collection)	WC Docket No. 19-195

COMMENTS OF USTELECOM—THE BROADBAND ASSOCIATION

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EXECUTIVE SUMMARY

Millions of Americans in rural communities continue to lack access to fixed high-speed broadband service. A lack of access to connectivity brings with it a lack of access to opportunity, jobs, economic development, modern healthcare and education, precision agriculture, 5G wireless service and all of the benefits that broadband enables. Therefore, USTelecom shares the Commission's objective to bring high-speed broadband to all Americans through the establishment of the Rural Digital Opportunity Fund.

USTelecom members have been on the front lines connecting millions of Americans for decades and are proud participants in the Commission's Connect America Fund (CAF) II Model Program, an effort that will provide robust broadband connectivity to over 3.6 million rural locations for over 7.3 million Americans by the end of 2020. As a result of our participation in the CAF II program and the CAF II Auction, USTelecom members are uniquely situated to offer guidance on how to most effectively structure the Rural Digital Opportunity Fund. Based on that experience, USTelecom urges the Commission to focus on: (1) making use of the best possible data as a foundational element of the Rural Digital Opportunity Fund in order to ensure service to all Americans; (2) investing in rural terrestrial facilities that can be used as a springboard for next generation communications; and (3) ensuring a seamless transition between providers with equitable and clearly-defined roles and responsibilities.

Taking advantage of infrastructure already in the ground, the CAF II Model Program allowed the Commission to spur immediate broadband deployment over a large scale. For the first time, however, the Rural Digital Opportunity Fund will allow competitors to bid for support in areas in which the price cap ILEC is currently providing broadband service as a result of CAF support. USTelecom members welcome the opportunity to compete, but also note that the Commission must very carefully consider the impact on CAF recipients and the consumers they serve in areas where a competitor is awarded funding. A careful and thoughtful transition to the Rural Digital Opportunity Fund, providing sufficient certainty for all participants prior to the auction, is essential. The Commission can continue to leverage its previous investments and the significant work that USTelecom members have done in rural communities while at the same time ensuring that obligations and funding are commensurate moving forward. Specific recommendations include the following:

Utilize the Best Available Data

- The Rural Digital Opportunity Fund should be designed and implemented using the best available data. Specifically, the Commission should leverage the exponentially better information about rural broadband service availability that the Digital Opportunity Data Collection proceeding is on track to produce. At a minimum, the Commission should move ahead as quickly as possible to begin the process of developing a Broadband Serviceable Location Fabric (Fabric) in unserved areas so that the Fabric can be available for Phase I of the auction, and then move quickly to establish a national Fabric.
- Given the difficulty in establishing accurate census block location counts and developing a true-up mechanism, the Commission should hold Rural Digital Opportunity Fund winners harmless for location discrepancies. The Commission should not reduce support for inaccurate location counts based on the Commission's recognizably flawed data and

model and the Commission should also make clear that if a winner determines there are more locations in its service area it will have no obligation to serve these locations but will be free to do so without receiving additional funding.

Provide Certainty for All Auction Participants In Advance of Auctions

- Clear obligations and rules for auction winners must be established in advance of the auction. As lessons from the CAF II Auction make clear, any pending petitions for reconsideration or clarification of relevant rules and requirements before the Rural Digital Opportunity Fund auction begins.
- The objective standards that will be used to determine a potential bidder's ability to complete service obligations in the short form process must be clearly enumerated before the auction. Information in the short form must be sufficient to ensure an applicant can scale its business (possibly substantially) should it win in the auction.
- The Commission should adjust its auction design proposals in several respects. These adjustments include funding amounts, eliminating the proposed subscribership metrics, and allowing for more CAF II Model locations to be eligible.
- The Commission should reconsider its proposals requiring auction winners to obtain Letters of Credit because they are an inefficient means of accomplishing the Commission's goal. There are substantial costs associated with securing a letter of credit and there are more efficient means of ensuring program integrity.

Maximize the Deployment of Wired Infrastructure Necessary for 5G in Rural Areas

- Explicitly establish a goal of maximizing the deployment of wired infrastructure necessary for the deployment of 5G in rural areas. The Commission should recognize that satellite broadband service is not a bridge to next generation broadband services, including 5G service that requires access to fiber backhaul. If satellite is not excluded from bidding in Phase I, the Commission should, at a minimum, enhance the high-latency tier weighting to appropriately recognize the narrower set of benefits that come with satellite broadband.

Carefully and Clearly Address Transition Issues at the Outset

- Clarify that auction winners have an obligation to offer voice services as an ETC beginning in the first month that USAC disburses Rural Digital Opportunity Fund support to them; once a broadband recipient's service term ends, it no longer has any obligation to continue offering service.
- Where there is no winner in an ILEC ETC's territory or an auction has not yet occurred by the end of the CAF II Model Program, the Commission must continue to offer support for services.

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COMMENTS OF USTELECOM—THE BROADBAND ASSOCIATION

USTelecom – The Broadband Association¹ respectfully submits these comments in response to the Federal Communications Commission’s (Commission) Notice of Proposed Rulemaking proposing to create the Rural Digital Opportunity Fund.² USTelecom members have been proudly connecting communities in rural America for decades and empowering precisely the types of opportunities that the Commission seeks to spur through the Rural Digital Opportunity Fund. USTelecom members have been key partners in preceding Commission actions to promote rural connectivity, and were founding participants in the Connect America Fund (CAF). Our members’ unique perspective, as some of the most experienced rural broadband providers in the nation, informs these comments. Based on that experience, USTelecom submits that the Commission should focus on: (1) making use of the best possible

¹USTelecom is the nation’s leading trade association representing service providers and suppliers for the broadband innovation industry. Its diverse member base ranges from large publicly traded communications corporations to small companies and cooperatives – all providing advanced communications and broadband services to hundreds of millions of customers around the world.

² *Rural Digital Opportunity Fund, Connect America Fund*, Notice of Proposed Rulemaking, WC Docket Nos. 19-126, 10-90, FCC 19-77 (rel. Aug 2, 2019) (“Notice”).

data as a foundational element of the Rural Digital Opportunity Fund in order to ensure service to all Americans; (2) investing in rural terrestrial facilities that can be used as a springboard for next generation communications; and (3) ensuring a seamless transition between providers with equitable and clearly-defined roles and responsibilities.

The Rural Digital Opportunity Fund – a ten year program proposing to spend over \$20 billion – is a transformational opportunity to connect the remaining unserved Americans. As the Commission prepares to launch this program it must recognize the significance of the fact that for the first time, it is creating the possibility of awarding support to providers in areas where it has already paid the incumbent carrier to build a broadband-capable network, therefore subsidizing a new competitor to overbuild a previously government-funded network. In many areas the incumbent carrier will compete and win support to newly serve consumers or upgrade its network and continue providing service. In other instances, the incumbent will lose support to a new company proposing to serve part of the incumbent’s service area. It is critical that the Commission’s rules properly account for such a change, including clearly addressing important transition issues. USTelecom appreciates the opportunity to offer its perspective on how to best ensure that all consumers get access to high speed, high quality broadband service, that funds are spent efficiently and effectively, and that appropriate transitions are established for carriers and consumers.

**I. BACKGROUND: USTELECOM MEMBERS ARE COMMITTED PARTNERS
IN RURAL BROADBAND DEPLOYMENT PROGRAMS**

**A. USTelecom Members Are Proud of Their History of Rural Deployment and
Welcome the Transition to the Rural Digital Opportunity Fund**

USTelecom members volunteered to be the cornerstone of the Commission’s CAF Phase II model-based program (CAF II Model Program), in line with their history of serving rural

America.³ The CAF II Model Program set in motion a vehicle for incumbent local exchange carriers (ILECs) to deploy broadband and voice services to over 3.6 million rural locations by the end of 2020⁴—this effort will enable service to over 7.3 million Americans or roughly 4,000 Americans per day over the life of the program. Under the Commission’s rules, CAF II Model Program participants were required to deploy to 60 percent of their CAF II targets by the end of 2018—over 2.1 million locations serving approximately 5.25 million people.⁵ In fact, USTelecom’s analysis shows that, in aggregate, participating carriers went above and beyond the CAF fourth-year milestone and deployed to 10 percent more locations than required. As a result, approximately 525,000 more rural Americans—more than 5.77 million in total—now have access to high quality broadband through 2018.⁶

The CAF II Model Program allowed the Commission to spur immediate broadband deployment over a large scale. ILECs were required to accept the offer of funding in their territory on a state-by-state basis and the Commission was able to authorize USAC to begin payments on the same day. That efficiency plus the existing facilities of price cap ILECs in large rural service areas enabled a rapid expansion of broadband access to millions of Americans.

³ *Connect America Fund et al.*, Report and Order, 29 FCC Rcd 15644 (2014) (*2014 CAF II Order*) (establishing the CAF Phase II Model Support program, which carriers elected into in 2015).

⁴ Press Release, FCC, Carriers Accept Over \$1.5 Billion in Annual Support from Connect America Fund to Expand and Support Broadband for Nearly 7.3 Million Rural Consumers in 45 States and One Territory (Aug. 27, 2015), http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0827/DOC-335082A1.pdf.

⁵ *2014 CAF II Order* 29 FCC Rcd at 15658, para. 36, Table 1.

⁶ See USTelecom—The Broadband Association, CAF 2’s Success Story (Mar. 19, 2019) <https://www.ustelecom.org/caf-2s-quiet-success-story/>. The actual number served via the CAF II Model Program will likely be closer to 9 million rural Americans than the FCC’s reported 7.3 million. As of 2018, the average number of people per household was 2.53, which when multiplied by the 3.6 million locations results in 9.1 million people, though some locations will be businesses, not households, reducing the total population served somewhat. Statista, Average Number of People Per Household in the United States from 1960-2018, <https://www.statista.com/statistics/183648/average-size-of-households-in-the-us/> (last visited Sept. 20, 2019).

Rural consumers have appreciated the Commission’s partnership with the CAF II Model

Program providers, noting the life-changing capabilities the program has brought to rural

America. For example:

- AT&T customer Michael M. of Hawthorne, FL, stated, “I have been extremely happy so far with this service. It works fantastic and doesn’t cost a lot. ... It gives me a lot of comfort knowing that I finally have sufficient data to use. Great service, thank you for looking out for us here in the sticks.”
- A “\$3.9 million Fredenberg, MN project led by CenturyLink, based on \$1.8 million in federal and state grants, offers gigabit speeds,” leading residents to say, “It’s quite something. It’s going to change the whole town. It’s going to make a big difference in our home values, and a big difference that people can work from their homes.”⁷
- In September 2017, Frontier Communications used CAF funding to change the future of the 2500-person community of Bonners Ferry, ID. Despite this rural location, award-winning high school science teacher Ed Katz used the connections to create a world-class robotics and career preparation program that put this small community’s students on a national stage experimenting with next-generation technology.⁸
- Shari Vanden Heuvel and her husband are making their retirement dreams come true in Osceola, Iowa thanks to the employment mobility a high-speed internet connection from Windstream offers. The income Shari earns working remotely made it possible for the Vanden Heuvels to move to a custom home on 80 acres in Clarke County, and transition into semi-retirement. That didn’t exist at her Clarke County address until Kinetic by Windstream, through private investment and public incentives including the Connect America Fund, brought 100 Mbps speeds over the air to her home.⁹

In this way, the CAF Phase II Model Program has effectively met the Commission’s high-cost support objective “to extend broadband-capable infrastructure to as many high-cost locations as

⁷ Brooks Johnson, *Rural Broadband Catching Up But Still Has Miles to Go*, Duluth News Tribune (Jul. 21, 2019) <https://www.duluthnewstribune.com/3980922-Rural-broadband-catching-up-but-has-miles-to-go>.

⁸ Frontier Communications, *Connecting the Future: Frontier’s Commitment to Rural America* (Nov. 16, 2017) <https://frontier.com/corporate/responsibility/policy-blog/connecting-the-future>.

⁹ Windstream Expands Broadband Availability Across Iowa with Fixed Wireless, Press Release (Jul. 2, 2019) <https://news.windstream.com/news/news-details/2019/Windstream-Expands-Broadband-Availability-Across-Iowa-With-Fixed-Wireless/default.aspx>.

efficiently as possible, and at the same time ensure that we are best utilizing the funds that consumers and businesses pay into the universal service system.”¹⁰

The successes of the entire CAF II Model Program are ongoing; because the Program milestones do not conclude until 2020, the Rural Digital Opportunity Fund will be a rapid continuation of the Commission’s support for broadband in high-cost rural areas. For the first time, however, the Rural Digital Opportunity Fund will expand the potential to bid for support in areas in which a price cap ILEC is currently serving and has not affirmatively declined support to serve the area. The convergence of the CAF II Model Program and the Rural Digital Opportunity Fund will require careful orchestration to ensure that the Commission can continue to leverage its previous investments and the significant work that USTelecom members have done in rural communities while at the same time ensuring that obligations and funding are commensurate moving forward, particularly during the transition.

B. Broadband Mapping Advancements Have Demonstrated the Potential to Unlock Better Location Data Necessary to Targeting Broadband Funding in Rural America

Recent Commission action to improve the granularity of broadband mapping has put the Commission on the verge of, for the first time, having an accurate depiction of exactly which locations have broadband service available, and which do not, a tool that will prove to be indispensable for targeting broadband funding. The Commission has recently found that “[a]ccurate broadband deployment data is critical to the Commission’s efforts to bridge the digital divide. Effectively targeting federal and state spending efforts to bring broadband to those areas most in need of it means understanding where broadband is available and where it is

¹⁰ 2014 CAF II Order at para. 17.

not.”¹¹ USTelecom agrees entirely with this mission; it is essential to know precisely which locations need service in order to efficiently target funding.

The Broadband Mapping Initiative, a proof of concept pilot (Pilot) in which USTelecom and its members were key partners and participants, demonstrates that broadband mapping can be improved significantly by accurately geocoding broadband serviceable structures.¹² As the Pilot overview explains, “[u]sing state-of-the-art technology and a combination of public and commercial datasets, the Pilot demonstrates that it is now possible to identify and precisely locate virtually every structure in a geographic area that is capable of receiving broadband service; this is referred to as the Broadband Serviceable Location Fabric (Fabric).”¹³ The Pilot successfully created the Fabric in two states: Missouri and Virginia. Subsequent analysis of the Fabric overlaid with participating providers’ service availability data delivered several key findings aimed at benefitting both unserved rural Americans as well as the service providers endeavoring to serve them effectively and efficiently. Findings include:

1. Locating hundreds of thousands of unserved locations in census blocks that were previously considered “served” in analyzing *only* two states.¹⁴ Ultimately, USTelecom estimates that approximately five million broadband serviceable locations in rural areas nationwide could be currently errantly counted as served, with approximately 1.1 million

¹¹ *Establishing the Digital Opportunity Data Collection*, WC Docket Nos. 19-195, 11-10, Report and Order and Second Further Notice of Proposed Rulemaking, FCC 19-79, at para 1 (rel. Aug. 6, 2019) (Digital Opportunity Data Collection).

¹² See Letter from Jonathan Spalter, President & CEO, USTelecom, Genevieve Morelli, President, ITTA, Claude Aiken, President & CEO, WISPA, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 19-195, 11-10, 10-90, 19-126 (filed Aug. 20, 2019) (Broadband Mapping Initiative Results Letter).

¹³ Broadband Mapping Initiative Results Letter at 1.

¹⁴ Under the Commission’s current Form 477 reporting construct, if one location is “served” by a provider then all locations within that census block are counted as “served” as well; there is currently no more granular way of mapping broadband availability, though the Digital Opportunity Data Collection is seeking to change that. See Digital Opportunity Data Collection at paras. 5-6.

in “high cost” rural areas¹⁵ (i.e., those where the Connect America Model (CAM) estimates the cost per location to exceed \$52.50 per month).¹⁶

2. Confirming that location counts in rural census blocks vary widely from the 2011 census data estimates. According to the Pilot results, 48 percent of rural census block Fabric location counts do not match currently used estimates of location counts.¹⁷ Further, the Pilot found that 23 percent of rural Pilot locations are not mapped to the correct census block once their true geocoded location was determined.¹⁸
3. Illustrating inconsistencies among the locations of where different commercial geocoders map the same structure or housing unit. The Pilot found that 61 percent of the Pilot participant provided geocoded locations were 7.6 meters/25 feet away from where they appear in the Fabric and 25 percent of those locations are over 100 meters away.

The Commission has recognized the value of improving its mapping capabilities using newly available technologies. To that end, the Commission has already “propose[d] to create and integrate a broadband-serviceable location tool into the Digital Opportunity Data Collection,”¹⁹ which, combined with the now-required granular broadband mapping,²⁰ will be the key to unlocking unserved locations and targeting funding to serve them.

¹⁵ This estimate is based on a comparison of the data the Pilot reveals about unserved locations in “served” census blocks to a recent study done by the state of Georgia that did much the same thing—it comprehensively examined location-based broadband service compared to the Form 477 data in three rural counties. *See* Letter from Mike Saperstein, Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126 (filed June 24, 2019).

¹⁶ *See* Notice at para. 50.

¹⁷ Broadband Mapping Initiative Results Letter Attachment at 7.

¹⁸ *Id.*

¹⁹ Digital Opportunity Data Collection at para. 100.

²⁰ *Id.* at para. 12 (“We require all fixed providers to submit broadband coverage polygons depicting the areas where they actually have broadband-capable networks and make fixed broadband service available to end-user locations.”) (citations omitted).

II. THE COMMISSION SHOULD TAKE ADVANTAGE OF THE BEST AVAILABLE BROADBAND MAPPING DATA TO IMPROVE THE RURAL DIGITAL OPPORTUNITY FUND

USTelecom’s goals for the Rural Digital Opportunity Fund, consistent with Section 1 of the Communications Act,²¹ are to make broadband available to the largest number of unserved rural Americans and to drive next generation terrestrial broadband infrastructure deeper into rural America, which will allow for future communications innovation. These goals are consistent with our past performance and dedication to the future of rural America. Accordingly, we agree with the Commission that “[f]or Communities throughout our nation to thrive and prosper, their residents must have the option to obtain high-speed Internet access”²² and that the framework proposed in the Notice “represents the Commission’s single biggest step yet to close the rural digital divide and . . . connect millions more rural homes and small businesses to high-speed broadband networks.”²³ Further, we agree with the Commission’s four specific goals for the Rural Digital Opportunity Fund of “(1) ensuring that high-speed broadband is made available to all Americans quickly, and at an affordable price; (2) reducing waste and inefficiency in the high cost program and promoting the use of incentive-based mechanisms to award support; (3) requiring accountability to ensure that public investments are used wisely to deliver intended result; and (4) minimizing the contribution burden.”²⁴

²¹ 47 U.S.C. § 151 (“For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communications . . .”).

²² Notice at para. 1.

²³ *Id.* at para. 4.

²⁴ *Id.* at para. 13.

The best way to meet these goals is to ensure that the Rural Digital Opportunities Fund is designed to leverage the exponentially better information about rural broadband service availability that the Digital Opportunity Data Collection proceeding is on track to produce, with a combination of the Fabric and more granular shapefile reporting.²⁵ This data will serve to promote the Commission’s goal of “ensuring that high-speed broadband is made available to all Americans” because, for the first time, we will have a pinpoint view into not just which locations have service available, but which do not. At a minimum, making use of the Fabric would produce a more efficient auction result, decreasing the cost-per-deployment and thereby stretching the Commission’s “broadband buck” as far as possible. USTelecom has commented extensively on the benefits of taking advantage of broadband mapping for Rural Digital Opportunity Fund purposes in this docket and incorporates those prior statements by reference.²⁶

The Fabric will also enable the Commission to improve on the 2011 Connect America Model, which establishes the “support needed for each area” based on costs of “efficient routing to ensure each location is ‘passed’ by a network.”²⁷ In other words, census block reserve prices are based upon the number of locations in a given census block. If the location counts from 2011 that the CAM used as inputs are no longer valid, which the Pilot demonstrates,²⁸ then the cost basis of serving each census block area is also out of date.

²⁵ See generally, Digital Opportunity Data Collection.

²⁶ See Letter from Mike Saperstein, Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, WC Docket Nos. 19-126, 10-90, 19-195, 11-10 (filed July 22, 2019) (“The experience of USTelecom’s members suggest that auctioning all unserved locations together allows for substantially more efficient bidding through a potentially larger-scale network design, which in turn would drive down the price to serve these areas and maximize the budget available.”).

²⁷ Notice at para. 8, n.10 (citing the *Connect America Fund; High-Cost Universal Service Support*, WC Docket Nos. 10-90, 05-337, 29 FCC Rcd 3964 (WCB 2014) (*2014 Cost Model Order*)).

²⁸ See discussion *supra* at 7.

We have enumerated just a few of the potential benefits that a totally new broadband map based on the Fabric and more granular reporting could bring to the Rural Digital Opportunity Fund and believe it to be the most overall efficient course. However, USTelecom acknowledges the desire to “allocate support to wholly unserved census blocks—that is, those areas where our existing data tell us there is no service at all—in order to make sure that the areas most in need will get broadband service as quickly as is feasible.”²⁹ USTelecom members’ CAF II experiences and the learnings from the Pilot can help make Phase I of the Rural Digital Opportunity Fund a better auction and we offer several suggestions in the following section.

III. THE COMMISSION SHOULD CREATE THE FABRIC FOR UNSERVED AREAS AND APPLY LESSONS LEARNED FROM THE CAF PHASE II AUCTION TO THE RURAL DIGITAL OPPORTUNITY FUND

Lessons learned as CAF II model-based recipients and applicants for the 2018 CAF Phase II Auction³⁰ (CAF II Auction) inspired USTelecom members’ interest in improved broadband mapping, resulting in recommendations that can be applied to the Rural Digital Opportunity Fund. The CAF Phase II Auction demonstrated that the Commission is capable of auctioning high-cost support for voice and broadband services and we agree with the Commission that the CAF II Auction experience should inform the design of the Rural Digital Opportunity Fund. USTelecom members were among the many parties who analyzed the CAF II auction opportunity, applied and were authorized to participate, and successfully bid in the CAF II Auction, in addition to continuing to meet their commitments under the CAF II Model program. Our experience as both participants and observers informs our comments.

²⁹ Notice, Statement of Chairman Ajit Pai at 1.

³⁰ See generally FCC, Connect America Fund Phase II Auction (Auction 903), <https://www.fcc.gov/auction/903> (last visited Sept. 20, 2019).

A. The Commission Should Take Steps to Rectify or Account for Location Data Errors

i. The Commission Should Create the Fabric for Phase I Census Blocks

The Commission plans to conduct the Rural Digital Opportunity Fund using census block location count information that has proven to be outdated; as a result, a provider will not know exactly how many locations truly exist in the area it is proposing to serve. If it is not possible to implement the entire Digital Opportunity Data Collection (which includes both building the Fabric as well as collecting broadband service availability from carriers to layer on top of the Fabric) before the Rural Digital Opportunity Fund, it is possible to complete the Fabric (identifying and geocoding broadband serviceable locations) for all the census blocks to be included in Phase 1; we believe the Fabric can be done in 5-8 months for currently unserved census blocks. We strongly urge the Commission to move ahead as quickly as possible to begin the process, starting in unserved census blocks and moving quickly to a national Fabric.

Creating the Fabric for the Phase I Rural Digital Opportunity Fund census blocks will improve the efficiency of the auction by updating location counts and by accurately geocoding the identified locations. All bidders must have the same information for the auction to be efficient. So all bidders need to know both the exact location counts and the precise location to be served, which would, in turn, enable them to develop and rely on a more accurate business case and network plan to support their bidding strategy. The Pilot revealed that 61 percent of locations are incorrectly geocoded with the correct location being greater than 7.6m (25 feet) away from where it was thought to be. Many geocodes are far less precise than that, with 37 percent of locations inaccurate by greater than 50m, and 25 percent off by over 100m.³¹ The

³¹ Broadband Mapping Initiative Results Attachment at 7.

Pilot shows that in one example, the Fabric demonstrates that for just eight locations, the difference from the High Cost Universal Broadband (HUBB)-reported geocoordinates (based on a commercial geocoder) to the actual structures resulted in an extra distance of 521m (1709 feet).³² This miscalculation of the exact location of a broadband serviceable structure for just these eight locations can end up costing a provider thousands of dollars more in deployment costs and can be the difference between a viable project and uneconomic project. A more informed bidding process based on better location information will lead to more accurate bids and ultimately a more efficient auction.

ii. The Commission Should Hold Winners Harmless for Inaccurate Location Data

Given the difficulty in establishing accurate census block location counts and developing a true-up mechanism, the Commission should hold Rural Digital Opportunity Fund winners harmless for location discrepancies. In the CAF II Auction the Commission gave winners one year from the close of the auction to true up location counts and return funding if the actual count falls short.³³ However, the one-year anniversary has passed and the Commission has yet to develop true-up procedures. The better solution, which should be adopted for the Rural Digital Opportunity Fund, is to hold winners harmless for the quality of the Commission's data, either the CAM data or the data produced by the Fabric.

The Pilot has effectively shown that a bidding provider cannot rely on 2011 census location counts that serve as the basis of the auction nor can it rely on commercial geocoders to

³² *Id.* at 22.

³³ *Connect America Fund*, WC Docket No. 14-259, Order on Reconsideration, 33 FCC Rcd 1380, 1390-92, paras. 23-28 (2018) (*Phase II Auction Reconsideration Order*).

accurately locate the physical site of the broadband serviceable structure.³⁴ Early results from the Alternative Connect America Model (A-CAM) and the Rural Broadband Experiments also demonstrate that this is not a hypothetical concern. Participants from both programs currently have petitions pending before the Commission to determine how to handle location discrepancies because their real-world attempts to deploy broadband in an area has revealed that there are less locations today than what the census estimated nearly a decade ago.³⁵ The Commission has an ongoing proceeding to deal with precisely the question of how to address location shortfalls in the A-CAM context.³⁶ While the Notice makes the point that “no price cap carrier receiving CAF Phase II model-based support has asked the Bureau to modify its number of required locations in a state,”³⁷ this is not indicative of the lack of a problem. Precise location counts were not as critical in the CAF II Model Program because a carrier could draw on locations in other CAF II-eligible census blocks across its statewide service territory to make up for deficient locations in any particular census block; this is not the case in an auction context where a provider bids to serve a set number of locations across a smaller geographic area. As currently

³⁴ See discussion *supra* at 7.

³⁵ See, e.g., Letter from John Kuykendall, Vice President, JSI, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 14-58, 07-135 and CC Docket 01-92 (filed July 1, 2019) (“CCNI receives RBE funding for 171 extremely high cost locations in rural North Dakota, and the company is confident that it has deployed broadband to every single location in the funded census blocks. However, CCNI could only find a total of 162 locations after extensive searching in the sparsely populated census blocks. With no mechanism in place for dealing with location discrepancies, CCNI is faced with a situation where it must continue to pay to keep its ILOC open until the end of the RBE funding term, despite having completed its buildout last year. Furthermore, CCNI is concerned that it will face penalties for not certifying a completed buildout to 171 locations at the end of the funding period. Since CCNI filed its petition for waiver in April, it had to renew its ILOC once again.”); Letter from John Kuykendall, Vice President, JSI, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 14-58, 07-135 and CC Docket 01-92 (filed May 29, 2019) (“[S]eek[ing] guidance from the FCC regarding questions JSI has received from clients who are considering electing A-CAM II when their due diligence reveals that the actual number of locations in supported census blocks are significantly less than the number shown in the model.”).

³⁶ Wireline Competition Bureau Issues Corrected Alternative Connect America Model II Offers to 37 Companies, Extends the Election Deadline, and Seeks Comment on Location Adjustment Procedures, Public Notice, WC Docket No. 10-90 (WCB Rel. June 5, 2019).

³⁷ Notice at para. 30.

structured, the bidding provider bears an inordinate amount of risk for the Commission’s inaccurate location information; creating the Fabric will greatly improve the information but some errors are inevitable, and the associated risks should also not be borne by bidders. There are, however, steps the Commission can take to mitigate the risk and in doing so incent participation in the Rural Digital Opportunity Fund.

First, the Commission should not reduce support for inaccurate location counts based on the Commission’s data and model. The Notice proposes to follow the CAF II Auction model and “permit support recipients to bring to its attention disparities between the number of locations estimated by the CAM and the number of locations actually on the ground in the eligible census blocks within their winning bid areas in a state. If a support recipient could sufficiently demonstrate that it is unable to identify enough actual locations on the ground across all of the census blocks for which it won support in a state, its deployment obligation and support will be reduced on a pro rata basis.”³⁸ This approach will not work because it puts an unfair burden on winning bidders to true up location counts, and to do so in a very short amount of time.

It is unclear exactly what would be involved with “sufficiently demonstrat[ing]” a lack of location counts because the Bureau is still considering the exact procedures for doing so.³⁹ However, of the known procedures, the Commission directed that “within one year after release of the Phase II auction closing public notice, a recipient that cannot identify enough actual locations must submit evidence of the total number of locations in the eligible areas in the state,

³⁸ *Id.* at para. 30 (citations omitted).

³⁹ *Wireline Competition Bureau Seeks Comment on Procedures to Identify and Resolve Discrepancies in Eligible Census Blocks Within Winning Bid Areas*, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 8620 (WCB 2018) (*Location Resolution Public Notice*).

including geolocation data (indicating the latitude/longitude and address of each location), in a format to be specified by the Bureau, for all the actual locations it could identify.”⁴⁰ While this type of showing was arguably appropriate for the much smaller CAF II Auction, it does not scale—either for the Commission or the participants—to the much larger \$16 billion auction the Commission proposes for Phase I. Bidders covering potentially hundreds of thousands of, if not over a million, locations cannot reasonably be expected to supply accurate geolocation data for such a large number of locations within a year. USTelecom members’ experience with using commercial geocoders in rural areas shows that they often cannot identify locations at all, let alone the latitude/longitude of each address in any reliable fashion. If commercial geocoders are the only source of information on rural broadband serviceable locations—which they are at this time until the Commission commits to developing a Broadband Serviceable Location Fabric—it is not clear what providing this information to the Commission would prove. It would not demonstrate that the locations provided are where they are reported to be or that other locations do or do not exist.

Bidders must be able to build a business case and bid based on the location counts provided by the Commission without the risk of losing funding should the Commission’s counts prove inaccurate. Participants in the Rural Digital Opportunity Fund auction are already taking on the risk of deploying costly broadband networks in areas the Commission itself has determined are uneconomic to serve. Companies are basing their bids on the assumption that the subsidies they are able to win are sufficient to turn locations that are otherwise uneconomic to serve into a viable business case but there is no guarantee that will be the result. Instead of adopting its proposed one-year true up process, the Commission should allow Rural Digital

⁴⁰ *Phase II Auction Reconsideration Order*, 33 FCC Rcd 1389, para. 23.

Opportunity Fund winners to identify any location shortfall no later than the time they report their 80 percent milestone. This provides the providers the ability during the normal course of deploying a network to determine if location shortfalls exist. After verification, the winner's total location count commitment will be adjusted accordingly but no funding will be returned or penalty assessed. The Commission should also make clear that if a winner determines there are more locations in its service area it will have no obligation to serve these locations but will be free to do so without receiving additional funding.

B. Clear Rules and Obligations are Essential in an Auction

It is essential for the Commission to set clear obligations and rules for auction winners in advance of the auction. The Commission should address any pending petitions for reconsideration or clarification of relevant rules and requirements before the Rural Digital Opportunity Fund auction begins. Over a year after the CAF II Auction's conclusion, it is striking that the Commission has yet to authorize many funded locations, namely those bid and won by a single satellite provider that won the greatest number of locations in the entire auction.⁴¹ Viasat only last week, more than a year after the completion of the CAF II Auction, had its Petition for Reconsideration resolved.⁴² This Petition for Reconsideration was intrinsically tied to its ability to meet the Commission's voice service requirements, an essential element of the CAF II Auction obligation for any participant.⁴³ As another example, there are

⁴¹ Viasat, Inc. won 190,595 locations in the CAF II Auction, representing 26.7% of the total locations won. FCC Connect America Fund Phase II Auction, Auction ID 903, Winning Bidder Summary (Aug. 28, 2018) <https://docs.fcc.gov/public/attachments/DA-18-887A2.pdf>.

⁴² *Connect America Fund*, Order on Reconsideration, WC Docket No. 10-90, DA 19-911 (WCB Sept. 12, 2019) (*September 2019 Viasat Order*).

⁴³ *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17680, para. 49 (2011), aff'd sub nom *In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014) (*USF/ICC Transformation Order*) ("The first performance goal we adopt is to preserve and advance universal availability of voice service. In doing so, we reaffirm our commitment to ensuring that all Americans have

active questions regarding what type of location counts against a winner’s commitment and whether home businesses can be counted separately from the home.⁴⁴ This lack of clarity can affect the efficiency of the auction and creates loopholes for waste, fraud and abuse.

By the same token, the Commission should not entertain rule modifications after the auction closes. Even though the Bureau has now decided the Viasat issue, Viasat’s petition seeking rule changes after the auction closed cast a shadow of uncertainty over the entire CAF II Auction and sets a poor precedent for future auctions. As USTelecom has previously stated, “Viasat’s Petition for Reconsideration to alter the voice testing methodology set forth in the Performance Metrics Order would undermine the integrity of the Connect America Fund (CAF) program and its auction process.”⁴⁵ The reason it risks undermining the auction is that “Viasat knew the rules and chose to participate. Other carriers chose not to participate because of the rules. By participating in spite of its own compliance concerns, Viasat may have effectively blocked proven providers from the opportunity to deliver the required voice and broadband services to rural America; its actions influenced auction results and could ultimately harm consumers.”⁴⁶ Simply put, the stakes are far too high in the Rural Digital Opportunity Fund, which is nearly 15 times the size of the CAF II Auction, to have any ambiguity—perceived or real—threaten the results in such a drastic manner as is happening in the CAF II Auction context. This uncertainty ultimately threatens the timely deployment of broadband service to rural Americans.

access to voice service while recognizing that, over time, we expect that voice service will increasingly be provided over broadband networks.”).

⁴⁴ *Location Resolution Public Notice*, 33 FCC Rcd at 8623-24, paras. 9-10.

⁴⁵ Letter from Mike Saperstein, Vice President, Policy & Advocacy, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 at 1 (Apr. 2, 2019) (USTelecom Viasat Ex Parte).

⁴⁶ *Id.*

**C. The Commission Should Set Clear Standards for Review of a Bidder's
Capability to Complete its Obligations**

The Commission should enumerate the objective standards that it will use to determine a potential bidder's ability to complete service obligations in the Short Form process. USTelecom members in both CAF II Model Program and CAF II Auction are using a number of technologies to fulfill their requirements under the program, including fiber, fixed wireless, and DSL; we are committed to technological neutrality so long as an applicant can fulfill its obligations. We question, however, whether the standards that the Commission is using are suitable for determining an applicant's operational capabilities and recommend that the Commission seek more information up front from potential bidders to ensure their operational readiness.

The Commission noted in developing the CAF II Auction procedures that in the context of the short-form application, “[w]e do not know where Phase II bidders will bid, how much support they will request, or how much support will ultimately be provided to serve a particular location.”⁴⁷ To this end, the Commission asked certain questions to evaluate a potential applicant's financial viability based on a five-point scale⁴⁸ and also to submit specific information regarding its planned means of operation to fulfill the requirements of the program.⁴⁹ In this context, “[a]n applicant that does not have at least two years of operational experience” must submit financial statements as a counterbalance, as well as a letter of interest from a bank that it would certify a letter of credit on behalf of the bidder.⁵⁰ What the Commission does not

⁴⁷ Connect America Fund Phase II Auction Scheduled for July 24, 2018, Notice and Filing Requirements and Other Procedures for Auction 903, Public Notice, 33 FCC Rcd 1428, 1450 para. 58. (2018) (*CAF II Auction Procedures PN*).

⁴⁸ *Id.* at 1447, para. 49.

⁴⁹ *Id.* at 1452-54, paras 65-71.

⁵⁰ *Id.* at 1445-46, para. 45.

describe is how it makes its decisions about an applicant’s capability to serve when the service tier it plans to bid in is well above its current offerings.

USTelecom is concerned that the information now required in the short form is insufficient to ensure an applicant can scale its business (possibly substantially) should it win in the auction. The Commission should add questions to its short form evaluation process to help determine not just that a company has been in business for two years and has audited statements, but that it has the employees and expertise to scale its network, if necessary. In addition to inquiring about an applicant’s current subscribership counts, the Commission also should require the applicant to provide its subscribership trends because it is uncertain whether companies with few current customers can expand rapidly, as is required of an auction participant. The Commission should inquire about a bidder’s current network capabilities as a determining factor as well. For example, while the Commission disallowed bidding in the gigabit tier for fixed wireless and DSL technologies if the applicant did not previously provide such a service tier using that technology, it did not require the same in the “Above Baseline” 100/20 Mbps tier. The Commission stated that “[i]f an applicant does not offer a fixed wireless or DSL service at or above 100/20 Mbps based on its FCC Form 477 data, the applicant *may* be deemed eligible to bid in the Above Baseline performance tier, but that determination will be informed by its FCC Form 477 data as well as its operational information.”⁵¹ The Commission did not describe the circumstances in which an applicant “*may* be eligible” to bid above its historical offerings in the fixed wireless or DSL context, but this result appears to have occurred in the case of the CAF II Auction.⁵² Another approach the Commission should consider is whether an applicant should

⁵¹ *Id.* at 1466, para. 101 (emphasis in original).

⁵² Others share this view as well. *See, e.g.*, AVL Communications Law Blog, “Punching Above Your Weight” – AMG Big Winner in CAF II Auction, <https://anthonyveachlaw.com/blog/2018/10/1/punching-above-your-weight-amg-big-winner-in-caf-ii-auction> (last visited Sept. 20, 2019). (“To put everything in perspective, AMG must

be limited to bid for a total amount of support no greater than its annual revenues.⁵³ This would prevent a business from risking public funding to grow rapidly/exponentially in a way that may threaten the company’s overall viability. The Commission should consider this and other criteria to develop objective standards of review and provide greater clarity into how it makes its determinations at the short form stage in order to avoid after-the-fact questions or concerns about a winning bidder’s capability to carry out its obligations.

IV. THE RURAL DIGITAL OPPORTUNITY FUND SHOULD PROVIDE A FOUNDATION FOR THE FUTURE OF RURAL CONNECTIVITY—WIRED AND WIRELESS

The Commission has a unique opportunity to use the Rural Digital Opportunity Fund to satisfy its statutory obligation to bring “reasonably comparable” connectivity to unserved rural Americans⁵⁴ via terrestrially-based technologies while also paving the way for future deployment of next generation 5G technologies. The Commission can achieve this forward-looking goal by investing today in terrestrial networks that will serve as a springboard to future rural wireless deployments.

Chairman Pai has recognized fiber backhaul as an essential pillar of his 5G FAST plan, noting that the Commission has “modernized [its] rules to encourage the deployment of optical fiber. That’s because 5G isn’t just about wireless; we also need strong wired networks to carry all of this traffic as well once it’s offloaded from the airwaves.”⁵⁵ All rural terrestrial networks

provide broadband service to an area much larger than its current service territory, at speeds it currently cannot or does not offer, and it will rely on spectrum it does not exclusively control. Will AMG be able to follow through on these promises?”).

⁵³ For example, if a bidder’s total revenues for the previous year are \$100 million, the most support for which it could be in the auction would also be \$100 million, or \$10 million a year for ten years.

⁵⁴ 47 U.S.C. § 254(b)(1).

⁵⁵ Ajit Pai, Chairman, FCC, Remarks to the New York State Wireless Association (June 21, 2019) <https://docs.fcc.gov/public/attachments/DOC-358113A1.pdf>.

that will provide service at the baseline (25 Mbps) and higher speed tiers that the Commission proposes to use in the Rural Digital Opportunity Fund are dependent upon robust backhaul, generally in the form of fiber. Higher speeds to the end-user require deeper fiber penetration in order to provide the additional capacity closer to the customer. A robust fiber backbone throughout rural America will not be built absent government subsidies, so it would be logical to use this unprecedented \$20.4 billion investment as a springboard to promoting advanced rural capabilities, including 5G technology.

While satellite broadband may be appropriate for those truly hardest-to-serve areas, it must be recognized that satellite broadband service is not a bridge to next generation broadband services. Funding satellite broadband through the Rural Digital Opportunity Fund will not lead to any new backhaul investments in rural America, and it will have no spillover benefits, including job creation, in the process of deploying new futureproof infrastructure. Chairman Pai also recognized the necessity of using the Rural Digital Opportunity Fund as a down payment for rural America's broadband future, stating during the White House announcement of the program that "[t]his money will extend high-speed broadband to up to four million homes and small businesses in rural America. These next-generation networks will bring greater economic opportunity to America's Heartland and will help support future 5G technologies."⁵⁶

Accordingly, USTelecom recommends that, if the Commission decides not to exclude satellite from bidding in Phase I of the Rural Digital Opportunity Fund, it should, at a minimum, enhance the high-latency tier weighting to appropriately recognize the narrower set of benefits that come with satellite broadband. A benefit of this approach is that the Commission can

⁵⁶ Ajit Pai, Chairman, FCC, Remarks at the White House, 2 (Apr. 12, 2019) <https://docs.fcc.gov/public/attachments/DOC-356994A1.pdf> (Chairman Pai's White House Remarks).

leverage its prior investment in existing network infrastructure in CAF Phase II Model areas even where the ILEC may not be the winning bidder.⁵⁷ Though not all CAF infrastructure may provide speeds of 25 Mbps today (the baseline tier), it is more easily upgradable than deploying completely new backhaul.

As Chairman Pai has said, “5G will improve Americans’ lives in many ways. From precision agriculture to smart transportation networks to telemedicine and more, we want Americans to be the first to benefit from this new digital revolution, while protecting our innovators and citizens. And we don’t want rural Americans to be left behind.”⁵⁸ Increasingly, from telemedicine to long-distance learning, to self-driving cars, our next generation technologies and services will depend on low latency broadband.⁵⁹ The recently-decided Viasat dispute, in which it sought a different method of testing its voice service than the one specified in the Commission’s Broadband Metrics Performance Order,⁶⁰ demonstrates the problem with allowing satellite to win significant portions of the funding. The fact that satellite voice may be unable to satisfy the Commission’s latency requirements —when voice can tolerate relatively substantial latency—shows that current satellite performance is almost certainly insufficient to deliver next generation communications.⁶¹ While next generation wireless deployment faces its

⁵⁷ Multiple types of auction bidders may benefit from existing transport and backhaul networks in rural areas. See Joseph Gillan, *Lessons from the CAF II Auction and the Implications for Rural Broadband Deployment and the IP Transition*, NRRI Insights at 7 (Apr. 2019) <https://pubs.naruc.org/pub/9F958420-E885-F843-1AEC-4D290DC9A28E> (Gillan NRRI Insights Report) (“[A] natural economic fit would be for locally-focused providers to provide the last-mile access component, while the price cap ILEC provides the middle-mile transport facilities to aggregate rural markets and interconnect their networks to the world at large.”).

⁵⁸ Chairman Pai’s White House Remarks at 1.

⁵⁹ Gary Shapiro, FCC: Future Connectivity and Creativity, Morning Consult (Aug. 2, 2018) (“[An] extremely high data rate, combined with very low latency, means 5G can help deliver significant innovations across entire industries, including automotive, telecom and health care – and enable emerging sectors such as smart cities.”) <https://morningconsult.com/opinions/fcc-future-connectivity-and-creativity/>.

⁶⁰ See *September 2019 Viasat Order* at para. 6.

⁶¹ See Gillan NRRI Insights Report at 5 (“[I]t remains unclear whether the latency associated with satellite technologies can be overcome to support real-time requirements such as voice.”).

own economic challenges in rural America, it is clear that if satellite wins a significant percentage of the locations—as it did in the CAF II Auction—it will be more expensive and act as a disincentive to deploy next generation technologies to those areas in the future. This is not to say satellite has no role in providing broadband service in rural areas—it is probably the best technology available for serving the most remote areas of the country where the economics of terrestrial broadband are not justified with any reasonable subsidy (though those locations are unlikely to be revealed in Phase I of this program as contemplated).

The ability to extend terrestrial networks is of course dependent upon investing in terrestrial infrastructure. The cost structure of satellite bidding, where satellite companies essentially have minimal marginal costs per unit served, make it very difficult to have an “apples to apples” or even “apples to oranges” discussion about the costs of deploying terrestrial versus satellite infrastructure. As Table 1 below demonstrates, in the CAF Phase II Auction the cost per-location served for high-latency baseline (25/3 Mbps) service averaged \$642 total for the ten-year program, while the cost per low-latency baseline location served was more than double that at \$1375; the delta is even larger when considering other service tiers.⁶²

Table 1. CAF II Auction Support per Location Served in Relevant Tiers

	≥ 25/3 Mbps and High Latency	≥ 25/3 Mbps and Low Latency	≥ 100/20 Mbps and Low Latency	≥ 1 Gbps/500 Mbps and Low Latency
10 Year Support	\$122,494,120	\$197,804,410	\$652,420,690	\$405,413,980
Locations	190,595	143,824	241,087	135,883
Support per Location over 10 Years	\$642.69	\$ 1,375.32	\$2,706.16	\$ 2,983.55

⁶² There were some locations for which USTelecom could not adequately determine the speed tier assigned to the location; those results are omitted from this analysis. This table does not present the Minimum (10 Mbps) tier as it is not proposed as a service tier for the Rural Digital Opportunity Fund.

While it may be cheaper from a pure cost perspective to serve all of rural America using satellite service, there are a number of significant drawbacks associated with satellite broadband that the Commission should carefully consider the policy implications of doing so (particularly when satellite providers already cover nearly the entire country) and possibly widening the digital divide.

If the Commission maintains satellite as an eligible technology for Phase I of the Rural Digital Opportunity Fund, it should enhance the weight given to the high-latency tier.⁶³ The Commission proposes to increase the weight of a High-Latency bid to 40,⁶⁴ which USTelecom believes is the minimum weight that the service should be given for the policy reasons discussed. In order to ensure a more efficient auction where satellite cannot drastically undercut terrestrial infrastructure because of its minimal deployment cost per unit, USTelecom recommends a High-Latency weight of 60. This weight would not only ensure more parity in the auction with the low latency tiers, but in fact it would better accord with the Commission’s own rationale that “weights favor higher-than Baseline speeds and low-latency services” in order “to encourage the deployment of higher speed services, and in recognition that terrestrial fixed networks may serve as a backbone for 5G deployments.”⁶⁵

V. IT IS ESSENTIAL TO DETERMINE SERVICE TRANSITION OBLIGATION AND FUNDING ISSUES AT THE OUTSET

The implementation of the Rural Digital Opportunity Fund marks an inflection point where an incumbent will be replaced by a new high-cost ETC (or likely many) in portions of its

⁶³ See Gillan NRRI Insights Report at 5 (“Although the CAF II Auction assigned a weight to disadvantage high latency proposals, the weight could be offset by significantly lower cost.”)

⁶⁴ Notice at para. 25.

⁶⁵ *Id.*

high-cost service territory. As support ceases for the ILEC, so must related obligations. A recent paper by Tony Clark, former Chairman of the North Dakota Public Service Commission and Monica Martinez, a former Michigan Public Service Commissioner, recently found, “The policy ramifications of [the Rural Digital Opportunity Fund] are significant. Among the implications that should be clear is the following: when the ILEC is no longer receiving support and the FCC has sanctioned a new company to serve in its place, the ILEC should be relieved of all federal *and* state obligations to provide service in such areas.”⁶⁶ These transition issues will be essential to the success of the program.

The immediate provision of voice support in the supported area will be the most essential item for the Commission to address. As regulatory analyst Joe Gillan states in his review of the CAF II Auction, “[t]he broadband networks funded by the CAF II Auction will largely cause the parallel narrowband networks of the price cap ILECs to be duplicative, unnecessary, and almost certainly uneconomic to serve these areas. The CAF II Auction (and the CAF III Auction to follow) will accelerate the IP transition in high cost areas. It is not possible to embrace the goal of universal broadband—a goal that necessarily obsoletes the existing narrowband network—without simultaneously addressing the issues that arise as the traditional network is replaced.”⁶⁷ This transition will involve both the Commission and states reexamining their rules given the joint oversight of ILEC obligations.⁶⁸ Carol Matthey, former Deputy Chief of the Wireline

⁶⁶ Tony Clark and Monica Martinez, *The More Things Change, The More Things Need to Change: Why New Rules Realities Require New Rules*, 2 (Sep. 20, 2019) available at <https://www.ustelecom.org/wp-content/uploads/2019/09/More-Things-Change-Report.pdf> (Clark/Martinez Transition Paper).

⁶⁷ Gillan NRRI Insights Report at 2. The CAF III Auction has instead been replaced by the Rural Digital Opportunity Fund.

⁶⁸ See Clark/Martinez Transition Paper at 4 (“The 1934 Act contemplated that states would retain jurisdiction over and implement comparable mechanisms governing intrastate rates and universal service obligations. Section 2(b) of the Act, codified as Section 152, provides that, in most cases, “nothing in this Act shall be construed to apply or to give the Commission jurisdiction with respect to . . . charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service by wire or radio of any carrier.” States

Competition observes that, “as universal subsidies are increasingly provided to non-incumbent service providers, it’s time to confront the policy implications of managing the IP-transition and reform traditional regulatory constructs applicable to incumbent carriers. States will need to examine their carrier-of-last-resort policies as non-incumbents increasingly receive subsidies”⁶⁹ The Clark/Martinez Transition Paper finds that “[w]here a new entrant underbids the incumbent provider and wins the subsidy for a specific territory, the COLR obligations for that territory should automatically transfer to the new provider.” USTelecom urges the Commission, as well as the States, to act quickly to ensure adequate mechanisms are in place to address how the transition from an ILEC ETC to a non-ILEC ETC will function, consistent with the statutory obligation of “specific, predictable and sufficient . . . mechanisms to preserve and advance universal service.”⁷⁰

A. Price Cap ILECs No Longer Have Certain Service Obligations Upon Authorization and Funding of a Replacement ETC

The Rural Digital Opportunity Fund’s competitive auction may displace price cap ILECs as the ETC responsible for voice and broadband services in areas that heretofore have been part of the ILECs’ CAF II territory. Voice remains the supported service of the Rural Digital Opportunity Fund with additional broadband performance obligations that are based upon the provider’s winning application.⁷¹ Upon authorizing and funding of the new ETCs, the

therefore continue to assert ratemaking authority in connection with the provision of intrastate services, and generally impose comparable universal services requirements in the form of Carrier of Last Resort (“COLR”) obligations.”) (citations omitted).

⁶⁹ Carol Matthey, *Reaction to Joe Gillan’s Paper, “Lessons from the CAF Phase II Auction and Implications for Rural Broadband Deployment and the IP Transition,”* NRRI Insights at 9 (Apr. 2019) <https://pubs.naruc.org/pub/9F958420-E885-F843-1AEC-4D290DC9A28E>.

⁷⁰ 47 U.S.C. §254(b)(5).

⁷¹ See *supra* n. 43 (citing the *CAF/ICC Transformation Order’s* recognition of voice as the supported service). The Notice throughout refers to voice and broadband service obligations of prospective ETCs.

Commission has made clear that incumbent ETCs are relieved of their voice service responsibilities.⁷² And, of course, price cap ILECs do not have an obligation to continue to provide broadband services beyond the CAF Phase II Model Program’s term of support. Yet the Commission seeks comment on a proposal “that support recipients complete construction and commercially offer *voice* and broadband service to 40% of the requisite number of locations in a state by the end of the third year of funding authorization, and an additional 20% in subsequent years, with 100% by the sixth year.”⁷³ As worded, the Commission’s proposed service obligation schedule could inadvertently imply a gap exists between the date the incumbent’s voice service obligations end and the date the winning bidder’s voice obligations begin. If the winning bidder lacks the facilities to offer ubiquitous voice service throughout its ETC service area or otherwise fails to make arrangements to offer it, consumers could be without ETC provided voice service when the winning bidder is authorized to receive support; as many as 60% of the winning bidder’s locations could still be without it at the end of Year 3; and 20 percent of the area won in an auction could be left without voice service until the end of year six of the Rural Digital Opportunity Fund.

The Commission should clarify that auction winners have an obligation to offer voice services as an ETC beginning in the first month that USAC disburses Rural Digital Opportunity Fund support to them. This is consistent with section 214(e)(1)(A) of the Act and the

⁷² See *2014 CAF II Order*, Report and Order, 29 FCC Rcd at 15663 para. 51 (“[W]e now conclude that it is in the public interest to forbear, pursuant to section 10 of the Communications Act of 1934, as amended (the Act) from enforcing a federal high-cost requirement that price cap carriers offer voice telephony service throughout their service areas pursuant to section 214(e)(1)(A) in three types of geographic areas: (1) census blocks that are determined to be low-cost, (2) all census blocks served by an unsubsidized competitor, as defined in our rules, offering voice and broadband at speeds of 10/1 Mbps to all eligible locations, and (3) census blocks where a subsidized competitor –i.e., another ETC –is receiving federal high-cost support to deploy modern networks capable of providing voice and broadband to fixed locations.”) (citations omitted).

⁷³ Notice at para. 28 (emphasis added).

Commission’s rules governing obligations of an ETC, which, “shall, throughout the service area for which the designation is received . . . offer the services that are supported by the federal universal service mechanisms under subpart B of this part and section 254(c) of the Act, either using its own facilities or a combination of its own facilities and resale of another carrier’s services. . . .”⁷⁴ Potential bidders will have ample notice of this requirement and if they do not already have facilities of their own in place, they can negotiate commercial arrangements with existing voice infrastructure providers to resell that other carrier’s service or lease existing facilities until their own facilities are operational, factoring the costs of doing so into the bid. As part of the short-form application process, the Commission should evaluate any potential bidder’s plans to provide immediate voice service throughout the bidder’s proposed ETC service area. Taking this step is sound as a matter of law because it acknowledges and plans for the ILEC’s automatic grant of forbearance upon installation of a new ETC and USAC’s disbursement of Rural Digital Opportunity Fund funding to the new ETC. It is also sound as a matter of policy as it imbues a basic matter of fairness regarding funding commensurate with obligations.⁷⁵

Similarly, the *Notice* does not explicitly discuss the transition from one broadband provider to another and the implications of a six-year buildout period. The Rural Digital Opportunity Fund represents the first transition of a program with explicit broadband support, and as such will likely represent the first time the Commission pays a carrier to construct facilities in an area where it had previously funded other broadband facilities, or where other

⁷⁴ 47 C.F.R. § 54.201(d)-(d)(1). *See also* 47 U.S.C. § 214(e)(1)(A).

⁷⁵ *See* Clark/Martinez Transition Paper at 7 (“It is critical that the Commission clarify that any regulatory obligations place on a service provider in a particular territory no longer apply to that provider when it stops receiving an associated subsidy. A ‘winner takes all’ approach to the RDOF auction should mean the winner does, in fact, take ‘all.’”).

providers may have offered services. Under those circumstances, once a broadband recipient's service term ends, it no longer has any obligation to continue offering broadband service and once the Commission starts paying it to another provider to enter an area, it can no longer require the existing carrier to continue providing broadband or voice services. To this end, the Commission should ensure that existing providers faced with this scenario are not bound by Section 214 discontinuance processes once a new high-cost ETC is funded in an area.

B. Where There is No Winner in an ILEC ETC's Territory or an Auction Has Not Yet Occurred by the End of the CAF II Model Program, the Commission Must Continue to Offer Support for Services

i. The Commission Should Offer the Existing CAF Phase II Model ETC Continued Funding for Services in Areas Not Won in Auction

Not all areas currently served by a price cap carrier receiving CAF Phase II Model support will necessarily be won in an auction. While the contemplated Phase II Rural Digital Opportunity Fund auction may rectify the situation eventually, in the near-term the high-cost rural area will be left without a supported ETC providing voice and broadband absent Commission action. The Commission should move to remedy this by offering the existing price cap ETC the option of continuing to serve those areas in exchange for continued funding. Because the price cap ETC is no longer, under the terms of the CAF Phase II Model program, required to offer broadband, the Commission should decide at the outset of the Rural Digital Opportunity Fund whether it will continue to fund (and therefore require) broadband services or whether it wishes to support only voice services at a lower support level until the next phase of the auction (or whenever the locations are won in auction).

In 2011, the Commission specifically contemplated that an auction may not take place by the end of the CAF Phase II Model program. The guidance is instructive both in the cases where an auction winner does not replace the price cap carrier, as well as in the situation where no

auction has taken place or no winner has been authorized by the end of 2021 (when the seventh year of funding for CAF Phase II Model Support ends). As the Notice acknowledges, “In 2011, the Commission also indicated that if a competitive bidding mechanism had not been implemented by the end of CAF Phase II model-based support term, the [ILEC] receiving such support would ‘be required to continue providing broadband with performance characteristics that remain reasonably comparable to the performance characteristics of terrestrial fixed broadband service in urban America, in exchange for ongoing CAF Phase II support.’”⁷⁶ Thus, the Commission should make the policy choice based upon existing precedent to preserve the broadband infrastructure from its CAF Phase II Model investment in exchange for providing a willing price cap ILEC continued funding between the Phase I and Phase II auctions, in exchange for continued obligations to offer retail broadband service. Any such requirements must be associated with clear terms and obligations, willingly undertaken, and sufficient funding. Alternatively, the Commission could choose to make use of the CAM to determine the operating expenses associated with the 10/1 Mbps network and offer to support the existing ETC in that fashion in exchange for continued 10/1 Mbps service to previously supported locations in the supported area. One final alternative would be for the Commission to offer funding to the existing ETC to continue to offer voice services throughout the supported territory,⁷⁷ which would expand upon the Commission’s proposal to continue providing disaggregated legacy support if no replacement ETC is determined in the Rural Digital Opportunity Fund.⁷⁸

⁷⁶ Notice at para. 100, n. 190 (citing the *USF/ICC Transformation Order*, 26 FCC Rcd at 17726-27, para. 163).

⁷⁷ See CostQuest Associates, Connect America Cost Model (A-CAM) Model Methodology, 5 (2014) available at <https://transition.fcc.gov/wcb/Model%20MethodologyACAM10v3.pdf> (“CACM estimates the cost to provide voice and broadband-capable network connections to all locations in the country.”).

⁷⁸ Notice at para. 98 (“Finally, if no long-form applicant is authorized to receive Rural Digital Opportunity Fund support in an area, we propose that the incumbent price cap carrier receiving disaggregated support in that area would continue to receive such support until further Commission action.”).

ii. The Commission Should Make Plans to Offer a Continuation of Support if the Auction Winners Are Not Authorized by the End of 2021.

Whichever choice the Commission makes, there must be clear obligations and funding commensurate with those obligations. If the Rural Digital Opportunity Fund auction is not complete or the winners are not authorized by the end of 2021, the Commission should put a clear plan in place in accordance with its 2011 decision on this matter. USTelecom recommends that such a plan include allowing the CAF Phase II Model support recipient to opt to continue to receive support until a winner has been authorized to provide voice and broadband services in the price cap carrier's supported service area. To the extent the Commission finds the services offered in these areas must be upgraded to a "reasonably comparable" level of broadband beyond 10/1 Mbps, any funding term and amount must be sufficient to match the additional obligation that the ETC will bear, and must be willingly undertaken.

C. The Commission Should Reaffirm that All CAF Phase II Model Recipients Are Entitled to a Full Seventh Year of Funding

An essential component of the commission's transition plan to the Rural Digital Opportunity Fund is to reaffirm its prior conclusion that all CAF Phase II Model Program ETCs are eligible to receive a full seventh year of support. In doing so, the Commission should acknowledge the historical context and rationale for the offer of the seventh year of support. First, the seventh year of support was originally designed as an incentive for price cap ILECs to participate in the CAF Phase II Model Program after the Commission increased the required speed offering for all supported locations to 10/1 Mbps "recognizing that additional funding may be appropriate in particular circumstances in those states where six years of support is insufficient to cover the capital investment necessary to meet the revised 10 Mbps downstream

standard.”⁷⁹ Therefore, the seventh year of funding was designed to meet the Commission’s statutory obligation to provide “sufficient” funding.

Second, the Commission also stated that offering a seventh year of funding “is consistent with the principle established in the *USF/ICC Transformation Order* of “no flash cuts,” in order to afford a provider adequate time to prepare for no longer receiving funding in the supported area.⁸⁰ A CAF Phase II Model support recipient thus was assured of being offered a seventh year of support in areas where it would not continue to be the high-cost ETC after the CAF Phase II Model program, either because it did not win its bid or chose not to bid.⁸¹ Third, the Commission has made clear that a CAF Phase II Model Program ETC may use the seventh year of funding to meet its final build-out milestone deadline to come into full compliance with this milestone.⁸²

Based on the Commission’s prior statements, CAF Phase II Model ETCs factored in being offered a seventh year of support when deciding whether to accept the Commission’s state-level commitment offer. These carriers had a settled expectation of being offered that additional year of support and it would be inequitable and contrary to the Commission’s statutory obligation to have “predictable and sufficient” support mechanisms⁸³ for the Commission to change course at the 11th hour. For these reasons, the Commission should reaffirm that it will offer all CAF Phase II Model ETCs a seventh year of support across their territories.⁸⁴

⁷⁹ *2014 CAF II Order*, 29 FCC Rcd at 15656, para. 32.

⁸⁰ *Id.*

⁸¹ *Id.* (providing “such carriers the option to elect one additional year of support . . . with Phase II support continuing in calendar year 2021 as a gradual transition to the elimination of support.”).

⁸² *Id.* at 15697, para. 148.

⁸³ 47 U.S.C. § 254(b)(5).

⁸⁴ The Notice seeks comment on whether the option for a seventh year of funding should “only be available to a subset of price cap carriers” but does not fully articulate the basis for the question, instead seeking comment on “what criteria [it] should use to determine which price cap carriers should have the option of electing one more year

Finally, for any areas where the ILEC wins its bid and becomes the Rural Digital Opportunity Fund ETC and the new funding amount for the area is greater than the CAF Phase II Model amount, the ILEC's support should be transitioned over to the Rural Digital Opportunity Fund support level immediately. Where the support won by a CAF Phase II Model ETC in an area is less under the Rural Digital Opportunity Fund than it had been under the CAF Phase II Model program, the support should remain at the CAF Phase II level for the remainder of 2021.

This approach is entirely consistent with the methodology that the Commission used when transitioning from frozen support to CAF Phase II Model support. In that situation, the Commission “adopted a three-year transition for price cap carriers that choose to accept model-based support that is less than their Connect America Phase I frozen support,”⁸⁵ which is a sizably longer transition period. It also found that when “price cap carriers will be receiving more support in these states than they did in Phase I, . . . it is unnecessary to provide a transition year for these carriers to adjust to receiving Phase II support.”⁸⁶ Thus the USTelecom proposal is grounded in precedent, yet takes into account the Commission's view of “the ‘limited scope and duration’ of the CAF Phase II offer of model-based support.”⁸⁷ The Commission should adopt this proposal.

of support.” Notice at para. 101. USTelecom cannot discern what the policy objective would be for treating classes of price cap carriers differently would be and submits that all should be subject to the same transition mechanism proposed herein.

⁸⁵ *2014 CAF II Order* 29 FCC Rcd at 15678-79, para. 97.

⁸⁶ *Id.* at 15678, para. 96.

⁸⁷ Notice at para. 102.

VI. THE PROPOSED RURAL DIGITAL OPPORTUNITY FUND AUCTION DESIGN REQUIRES MODIFICATIONS

The Commission should adjust its auction design proposals in several respects. These adjustments include funding amounts, eliminating the proposed subscribership metrics, and allowing for more CAF II Model locations to be eligible.

A. \$20.4B Distributed via a Multi-Phase Auction May Not Be Enough Funding to Serve all Unserved Americans

Though the Commission is proposing an unprecedented amount of funding for broadband services in price cap areas, it may find that the size of the proposed budget is insufficient to serve all unserved locations within price cap areas. The Commission proposes to distribute \$16 billion over ten years in Phase I of the Rural Digital Opportunity Fund in order to serve an estimated 3.9 million high cost locations in census blocks that the Form 477 shows as unserved today at 25/3 Mbps⁸⁸ and seeks comment on how to appropriately size the Phase I budget.⁸⁹

As discussed above, USTelecom estimates that there are as many as 5 million unserved locations in partially-served census blocks, locations which are not included in the Phase I auction.⁹⁰ Further, the Commission estimates that “there are 6.3 million locations with costs below the \$52.50 per month benchmark that still lack high-speed broadband (including 3.4 million locations that lack even 10/1 Mbps broadband).⁹¹ Thus the total universe of unserved locations may be closer to 15.2 million⁹² if the Commission were to fund all of the unserved

⁸⁸ *Id.* at para. 16.

⁸⁹ *Id.* at para. 17.

⁹⁰ *See* discussion *supra* at 6.

⁹¹ Notice at para. 51.

⁹² This figure is derived from adding 3.9 million high cost unserved locations + 6.3 million low cost unserved locations + 5 million unserved locations in partially served census blocks. 3.9 million + 6.3 million + 5 million = 15.2 million total unserved locations that could be eligible for the Rural Digital Opportunity Fund depending upon how the Commission crafts its eligible area rules.

locations. It is difficult to predict the exact amount of funding necessary to serve all these locations given different reserve prices and different cost structures associated with the tier of service bid. Still, a simple funding calculation yields \$1,342 per location over the ten-year program.⁹³ Building on the information presented in Table 1 above, Table 2 presents a comparison of how \$1,342 per location compares to the CAF Phase II Auction results:

Table 2: Support Awarded Per Location from the CAF Phase II Auction Compared to Potential Budget Available Per Location in Rural Digital Opportunity Fund

	≥ 25/3 Mbps and High Latency	≥ 25/3 Mbps and Low Latency	≥ 100/20 Mbps and Low Latency	≥ 1 Gbps/500 Mbps and Low Latency	Aggregate CAF II Auction Mix
CAF II Auction 10 Year Support Totals	\$122,494,120	\$197,804,410	\$652,420,690	\$405,413,980	\$1,378,133,200
CAF II Auction Locations	190,595	143,824	241,087	135,883	711,389
CAF II Auction Support/Location total for 10 Years	\$642	\$1,375	\$2,706	\$2,983	\$1,937
Estimated Funding Per Location if Eligible Areas Expanded in Rural Dig. Opp. Fund	\$1,342	\$1,342	\$1,342	\$1,342	\$1,342
Difference of Rural Dig. Opp. Fund support/location and CAF II Auction support/location	\$700	(\$33)	(\$1,364)	(\$1,641)	(\$595)
Percentage Shortfall	N/A	-2%	-50%	-55%	-31%
Location Shortfall	N/A	(364,800)	(7,661,789)	(8,361,783)	(4,670,396)

⁹³ This represents \$20.4B divided by 15.2 million locations.

Support per location becomes insufficient as applied to the Baseline, Above Baseline and Gigabit tiers. This is not to say that \$16 billion is an inappropriate amount for Phase I, but in response to the Commission’s question of whether it “should reassess the adequacy of the total budget after the Phase I auction,”⁹⁴ the answer is undoubtedly yes, particularly if the Commission expands the universe of eligible locations (which it should) and bidders end up prioritizing the Above Baseline and Gigabit tiers in the Rural Digital Opportunity Fund.

B. The Commission’s Proposed Subscribership Requirement is Unnecessary and Misguided

The Commission requests comment on establishing subscribership milestones to address “theoretical concerns” it has with potential Rural Digital Opportunity Fund support recipients not selling broadband service to customers in their funded areas.⁹⁵ As proposed, the subscribership milestones would begin in year three at 28 percent and increase in 14 percent increments until reaching 70 percent at year six. In the event a recipient misses any subscribership milestone, the Commission proposes withholding a corresponding portion of the recipient’s Rural Digital Opportunity Fund funding. For example, if a Rural Digital Opportunity Fund recipient has a 17 percent subscribership by year six, the Commission proposes withholding 53 percent of the provider’s support (70 percent minus 27 percent).⁹⁶ USTelecom strongly opposes this proposal, which will punish carriers for agreeing to deploy broadband in high-cost areas where broadband adoption lags far behind less rural parts of the country and changes the focus of a broadband deployment program to adoption. The Commission has been right to focus CAF support on broadband deployment and it should continue to do so with the Rural Digital Opportunity Fund.

⁹⁴ Notice at para. 17.

⁹⁵ *Id.* at para. 40.

⁹⁶ *Id.* at paras. 41-42.

The Commission also cannot simply solve the vexing and complex broadband adoption problem with the stroke of its pen.

The theoretical concerns the Commission expresses in the Notice include spectrum-based Rural Digital Opportunity Fund recipients limiting customer sales to avoid having to add capacity and wireline providers refusing to “run wires from the street to the customer location” absent a per subscriber payment.⁹⁷ To counteract these purported incentives with “better” ones, the Commission proposes to mandate a specific subscribership level. Not only is this proposal unnecessary, as discussed below, but USTelecom believes it is harmful in that it will materially suppress participation in the Rural Digital Opportunity Fund auction if implemented. In fact, it may not just dampen participation, but drive otherwise willing bidders out of the auction altogether.

Broadband adoption continues to be a challenge in rural America and this challenge will not be solved by financially penalizing Rural Digital Opportunity Fund recipients for failing to achieve an unrealistic and unsupported 70 percent subscription rate. Prospective Rural Digital Opportunity Fund bidders need only review the Commission’s own data to see that a 70 percent subscription rate is unlikely attainable in Rural Digital Opportunity Fund-eligible areas. Just a few months ago, the Commission released its *2019 Broadband Deployment Report* detailing the relatively low broadband adoption rates in rural areas of the country. For example, the take rate for broadband service at 25/3 Mbps—the proposed baseline tier for the Rural Digital Opportunity Fund—ranged from 23.1 percent in counties with the lowest rural population rate to 57.7 percent in counties with the highest rural population rate.⁹⁸ Those numbers plummet for 100/20 Mbps:

⁹⁷ *Id.* at para. 40.

⁹⁸ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2019 Broadband Deployment Report, 34 FCC Rcd 3857, at Fig. 13 (2019).

the take rate is just over 10 percent in the most rural counties and increases to only 25 percent in the least rural counties.⁹⁹

The success of the Rural Digital Opportunity Fund, and the success of the Commission’s efforts to close the digital divide, depends upon an adequate number of capable broadband service providers being willing to compete to deploy in areas the Commission has determined are uneconomic to serve. Even with support, the business risks of deploying in such areas are real. Adding obligations unrelated to network deployment would increase this risk; adding unachievable requirements such as the proposed subscription milestones will prevent responsible carriers from participating.

The Commission provides a passing reference to the source of its proposed year six 70 percent subscribership mandate: the Wireline Competition Bureau’s 2014 *CAF II Cost Model Inputs Order*. In that 2014 order, the Bureau adopted a 70 percent subscription rate with an Average Revenue Per User (ARPU) of \$75 “for the purpose of estimating the amount of revenues a carrier may reasonably recover from end-users, and, by extension, the funding benchmark.”¹⁰⁰ By establishing an unrealistically high subscription rate with unrealistically high end-user revenues, the Commission could narrow the number of CAF II-eligible census blocks, which it did by setting the CAF II benchmark at \$52.50 per location. In this context, a 70

⁹⁹ *Id.* The Commission did not provide adoption rates for a gigabit tier in this report yet the take rates for the highest speed tier reported – 250 Mbps down/25 Mbps up – offer a cautionary tale for would-be Rural Digital Opportunity Fund bidders. For that speed tier, the take rates are in the single digits, across all four quartiles of rural county population density.

¹⁰⁰ *2014 Cost Model Order*, 29 FCC Rcd at 4039, para. 177. The Bureau justified selecting such a high figure because the subscription rate included both voice and broadband subscriptions, either standalone or bundled with other services. *Id.* at para. 179. Quoting the Commission’s *USF/ICC Transformation Order*, the Bureau noted that the funding benchmark should “identify those census blocks where the cost of service is likely to be higher than can be supported through reasonable end user rates alone.” *Id.* at 4035-36, para. 171 (quoting *USF/ICC Transformation Order* at para. 167).

percent take rate was just one of several tools the Commission and staff used to shoehorn the CAF II program into its budget. While the Commission should avoid subscription performance requirements altogether, it would be wholly unworkable for it to use that same, artificially high subscription rate from the *CAF II Cost Model Inputs Order*, developed to meet a specific modeling goal, as an enforceable Rural Digital Opportunity Fund obligation.¹⁰¹

More importantly, it makes little sense for the Commission to adopt this punitive requirement to address its stated theoretical concerns without first exploring less onerous options. Most of the Commission's identified concerns relate to alleged capacity and network deficiencies of spectrum-based providers. In the CAF II Auction, the Commission required winning bidders to submit detailed network plans for review and approval. Among other things, the bidder's long form:

must describe in detail a network that fully supports the delivery of consumer voice and broadband service that meets the requisite performance requirements to at least 95 percent of the required number of locations in each state by the end of the six-year build-out period and for the duration of the 10-year support term, *assuming a 70 percent subscription rate by the final service milestone*.¹⁰²

To be sure, USTelecom continues to believe that a 70 percent subscription rate is unrealistic in these areas.¹⁰³ But to the extent a long-form applicant fails to comply with the Commission's network design specifications then the Commission may disqualify the long-form applicant and find that provider to be in default.¹⁰⁴

¹⁰¹ While the Commission does not expressly state that the 70% take rate requirement is for broadband service only, the theoretical concerns it describes as prompting this proposal relate to a carrier's provision of broadband service, not voice service.

¹⁰² *Connect America Fund Phase II Auction Scheduled for July 24, 2018 Notice and Filing Requirements and Other Procedures for Auction 903*, Public Notice, 33 FCC Rcd 1428, para. 300 (2018) (emphasis added) (*CAF II Auction Public Notice*).

¹⁰³ See, e.g., AT&T Reply Comments, WC Docket No. 10-90, AU Docket No. 17-182, at 21-25 (filed Oct. 18, 2017).

¹⁰⁴ *CAF II Auction Public Notice* at para. 314.

In order to report a location toward a CAF recipient's location requirement in the Commission's HUBB, the recipient must be able to provide service meeting the relevant public interest obligations to that location within ten business days.¹⁰⁵ These location reports are supported by an officer's certification, made under penalty of perjury, that the information is accurate. If adopted as a Rural Digital Opportunity Fund requirement, which USTelecom supports, this ten-business-day requirement effectively addresses the Commission's alleged concern that a wireline Rural Digital Opportunity Fund recipient may not deploy necessary infrastructure in a timely manner. Additionally, as the Commission notes in its *Notice*, all ETCs have a statutory obligation to advertise the services supported by the Commission's universal service support mechanisms throughout their ETC service areas.¹⁰⁶ To date, the Commission has refrained from issuing advertising guidelines applicable to ETCs but if the Commission is concerned that a Rural Digital Opportunity Fund recipient has an incentive not to comply with the statute in order to minimize its number of subscribers, then USTelecom has no objection to the Commission considering minimum advertising guidelines. For example, the Commission could require Rural Digital Opportunity Fund recipients to advertise the availability of service meeting its public interest obligations in local newspapers (i.e., media of general distribution) covering its Rural Digital Opportunity Fund areas at least once a year. Other reasonable advertising guidelines could include an annual direct mail requirement to each address the Rural Digital Opportunity Fund recipient reports in the HUBB.

Finally, USTelecom recommends that the Commission enlist its state partners to assist with broadband adoption efforts, ideally in collaboration with local non-profit and community-

¹⁰⁵ Notice at para. 44.

¹⁰⁶ *Id.* (citing 47 U.S.C. § 214(e)(1)(B)).

based organizations that have expertise working with populations that data show have lower broadband subscribership rates (e.g., rural Americans), which could complement the Commission’s Rural Digital Opportunity Fund availability-focused program. Given states’ closer proximity to end users and their knowledge of the particular issues that impede adoption in areas where broadband is available, states are uniquely positioned to encourage non-internet users to use the internet and broadband-enabled technologies. Some states have already initiated state broadband plans that include a component to address broadband adoption.¹⁰⁷ Other state and local broadband adoption programs received funding through NTIA’s Broadband Technology Opportunities Program (BTOP)¹⁰⁸ and, of course, the Commission should continue coordinating with federal agencies that have broadband adoption programs and grants. It is also important to note that USTelecom’s members have invested significant time and money to enhance broadband adoption through their own privately-funded initiatives.¹⁰⁹

C. Locations in CAF II Model Program Census Blocks Served at 25/3 Should Be Eligible for Upgrade

In keeping with the Commission’s goal “to ensur[e] that high-speed broadband is made available to all Americans quickly,”¹¹⁰ the Commission should reconsider its proposal for the eligibility of locations in CAF Phase II Model Census Blocks that are currently served at 25/3 Mbps. The Notice proposes that while “census blocks in which the price cap carrier receiving

¹⁰⁷ See, e.g., North Carolina Department of Information Technology, *Broadband Adoption Recommendations, Connecting North Carolina: State Broadband Plan* (offering numerous recommendations to its state and local governments, schools and libraries to enhance broadband adoption in North Carolina), available at <https://www.ncbroadband.gov/connectingnc/broadband-adoption/> (last visited Sept. 12, 2019).

¹⁰⁸ See NTIA, Grants Awarded: Sustainable Broadband Adoption, available at <https://www2.ntia.doc.gov/sustainableadoption> (last visited Sept. 20, 2019).

¹⁰⁹ For example, AT&T has connected with more than 1,000 national, state, and local groups that work with low-income individuals and families to educate potential participants about AT&T’s Access program, which provides inexpensive broadband service to eligible low-income consumers.

¹¹⁰ Notice at para. 13.

model-based support is the only terrestrial provider reporting the deployment of 25/3 Mbps broadband service in that block” would be eligible for Phase I, “[l]ocations reported as served by 25/3 Mbps service in the HUBB would be considered served for purposes of the Rural Digital Opportunity Fund.”¹¹¹ These locations should be eligible for funding if the applicant, which could be the incumbent price cap carrier or a new entrant, bids to provide Above Baseline or Gigabit tier service to such census blocks. These are inherently high-cost locations and it makes little sense to leave certain customers behind if the rest of the census block is to be upgraded to a higher speed.

Further, USTelecom questions the administrability of the Commission’s plan to use HUBB reporting as an identifier of all 25/3 Mbps locations in CAF Phase II Model census blocks. There are well documented problems with entering accurate geocoordinates for specific locations in the HUBB,¹¹² which, combined with a lack of accurate information regarding overall census block location counts,¹¹³ makes it very difficult to practically administer how to exclude certain locations absent the development of a full Broadband Serviceable Location Fabric.

D. The Proposal to Focus First on Census Blocks Lacking 10/1 Mbps Service is Logical But Difficult to Implement

USTelecom understands the policy motivation behind the Commission’s desire to prioritize support to certain eligible areas that entirely lack 10/1 Mbps or better fixed service,¹¹⁴ but if the Commission wishes to do that, the best way to do so is to prioritize expeditious

¹¹¹ Notice at para. 49.

¹¹² See Letter from Mike Saperstein, Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Mar. 28, 2019) (March 28 HUBB Ex Parte); Letter from Mike Saperstein, Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Mar. 6, 2019).

¹¹³ See discussion *supra* at 7.

¹¹⁴ Notice at para. 60.

broadband mapping, which will capture the great majority of locations that lack 10/1 Mbps. Absent mapping, it will be difficult to implement due to ongoing CAF Phase II deployments and other challenges. CAF Phase II Model participants have until the end of 2020 to complete their buildout (to a minimum speed of 10/1 Mbps), with an 80 percent milestone as of the end of 2019.¹¹⁵ Accordingly, up to 20 percent of the 3.6 million CAF II Model Program locations will be built in the year 2020, which equals up to 720,000 locations.¹¹⁶ If the Commission desires to conduct the Phase I Rural Digital Opportunity Fund auction in 2020, it would need to evaluate whether a census block had 10/1 Mbps service before the completion of the CAF Phase II Model deployment cycle, leaving open the distinct possibility that many of the census blocks that did not have 10/1 Mbps service at the beginning of 2020 may be scheduled to receive it as part of that year’s CAF Phase II Model deployment. Accordingly, this knowledge gap would promote overbuilding if the Commission were to not only make these census blocks available, but affirmatively prioritize funding for these areas.

Similarly, the proposal to “target areas lacking 4G LTE mobile wireless broadband”¹¹⁷ also suffers from an insurmountable information gap. The Commission’s Mobility Fund II process is currently frozen. Until such time as the Commission releases its final map identifying eligible areas, it is unclear how the Commission would know which areas to target.

VII. THE COMMISSION SHOULD RECONSIDER ITS LETTER OF CREDIT REQUIREMENTS

The Commission should reconsider its proposals requiring Rural Digital Opportunity Fund winners to obtain Letters of Credit¹¹⁸ because they are an inefficient means of

¹¹⁵ 47 C.F.R. § 54.310(c).

¹¹⁶ These locations would not be reported until March 2021. 47 C.F.R. § 54.316(b)(1).

¹¹⁷ Notice at para. 60.

¹¹⁸ *Id.* at para. 84.

accomplishing the Commission’s goal. While useful to the Commission “to immediately reclaim support from support recipients that are not meeting their [obligations],”¹¹⁹ the costs of the device far outweigh the benefits. The Commission can use a risk-based approach combined with its existing enforcement mechanisms to appropriately insure itself against program nonperformance.

There are substantial costs associated with securing a letter of credit. Recipients are required to obtain letters of credit for not just the current year’s disbursements, but “valued at a minimum of the total amount of money that has already been disbursed plus the amount of money that is going to be provided in the next year.”¹²⁰ The Commission proposes to adopt a “phase down schedule . . . allowing the value of the letter of credit to decrease over time as a support recipient satisfies its minimum coverage and service obligations.”¹²¹ While exact charges vary based upon the borrower, USTelecom estimates three percent as an appropriate representative value for the charge associated with securing the letter of credit. As a hypothetical, if a provider were to receive \$100 million in annual support from the Rural Digital Opportunity Fund, it would end up spending \$7.5 million—7.5 percent—in banking fees over the funding term obtaining a letter of credit. The math works like this:

¹¹⁹ *Id.*

¹²⁰ *Id.* at para. 85.

¹²¹ *Id.* at para. 86. (“[O]nce the auction recipient has met its 60% service milestone, its letter of credit may be valued at 90% of the total support amount already disbursed plus the amount that will be disbursed in the coming year.¹²¹ Once the auction recipient has met its 80% service milestone, its letter of credit may be valued at 60% of the total support amount already disbursed plus the amount that will be disbursed in the coming year.”).

Table 3: The Amounts and Costs of a Letter of Credit Under the FCC’s Current Proposal

	LOC Amount Required							
Support Awarded/Year	Y1	Y2	Y3	Y4	Y5	Y6	Y7	
\$25	\$25	\$50	\$75	\$100	\$125	\$138	\$115	
\$50	\$50	\$100	\$150	\$200	\$250	\$275	\$230	
\$75	\$75	\$150	\$225	\$300	\$375	\$413	\$345	
\$100	\$100	\$200	\$300	\$400	\$500	\$550	\$460	
\$1,600	\$1,600	\$3,200	\$4,800	\$6,400	\$8,000	\$8,800	\$7,360	
	Cost of LOC (3% Rate)							
Support Awarded/Year	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Total Cost
\$25	\$0.75	\$1.50	\$2.25	\$3.00	\$3.75	\$4.13	\$3.45	\$18.83
\$50	\$1.50	\$3.00	\$4.50	\$6.00	\$7.50	\$8.25	\$6.90	\$37.65
\$75	\$2.25	\$4.50	\$6.75	\$9.00	\$11.25	\$12.38	\$10.35	\$56.48
\$100	\$3.00	\$6.00	\$9.00	\$12.00	\$15.00	\$16.50	\$13.80	\$75.30
\$1,600	\$48.00	\$96.00	\$144.00	\$192.00	\$240.00	\$264.00	\$220.80	\$1,204.80

Part of the reason that the costs are so high is that a provider ends up carrying an additional year of credit while USAC validates that the support recipient has met its service obligations (only then can it decrease the letter of credit in recognition of having achieved the milestone).¹²²

Applying that same three percent to the \$16 billion budget, *\$1.2 billion* of the total budget will be spent on banking fees for letters of credit instead of broadband deployment. USTelecom members report that a year is a typical timeframe with USAC in the CAF Phase II Model context to verify its service obligations, and it is very likely that the Rural Digital Opportunity Fund, with an increased number of participants, could end up taking USAC longer to complete the

¹²² See *id.* (“We also propose that the letter of credit remain in place until USAC and the Commission verify that a Rural Digital Opportunity Fund recipient has met its minimum coverage and service requirements at the end of the six-year milestone.”). Therefore, in the example above, a provider ends up needing to obtain a letter of credit in year 7 even though it has actually substantially completed its build while verification is pending.

milestone review process. The Commission can and should find more efficient means of ensuring program integrity.

One means of doing so is to utilize a risk-based approach whereby universal service fund recipients with a proven track record of meeting their universal service obligations pay less as their risk profile improves. USTelecom proposes that after a participant meets its first and second milestone in *any* Commission universal service program, that participant then qualifies as a lower-risk and therefore can obtain a letter of credit for half of the value otherwise prescribed. The Commission is currently considering auditing universal service programs in a risk-based manner with higher levels of scrutiny based upon the profile of the provider in the Lifeline context, which is in line with this methodology of managing overall risk.¹²³ Further, this process has the benefit of being both technology and participant neutral. As more Commission universal service programs make use of auction formats, and therefore welcome new entrants, any provider can establish its “credit” with the Commission over time through simple performance of obligations. Alternatively, the Commission could consider having the provider put an amount in escrow at the beginning of the funding period, which could either be drawn down or released based on later performance—for example, once the first deployment milestone is reached. The Commission can backstop any of these approaches via its existing enforcement mechanisms.

The combination of these two methodologies will (1) incent performance in order to receive cost

¹²³ *Bridging the Digital Divide for Low-Income Consumers, et al.*, Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FCC Rcd. 10475, 10505 at para. 84 (2017) (“We propose to adjust the process that USAC currently uses to identify which service providers will be subjected to Lifeline audits by transitioning to a fully risk-based approach. We propose to transition the independent audit requirements . . . away from a \$5 million threshold and, instead, to move toward identifying companies to be audited based on established risk factors and taking into consideration the potential amount of harm to the Fund. We propose . . . to allow companies to be selected based on risk factors identified by the Wireline Competition Bureau and Office of Managing Director, in coordination with USAC. This approach allows for adaptable, independent audits that respond to risk factors that change over time. We believe this new audit approach will better target waste, fraud, and abuse in the program and also utilize administrative resources more efficiently and effectively than in prior years.”).

reductions; and (2) free up more funding for broadband deployment, both of which are in the public interest.

VIII. THE COMMISSION SHOULD MAKE CLEAR THAT HUBB GEOLOCATION REPORTING WILL BE SUPERSEDED WHEN THE FABRIC IS DEVELOPED

The Commission should be clear that any requirements related to reporting geocoded locations in the USAC HUBB will be superseded if and when the Commission completes its Broadband Serviceable Location Fabric.¹²⁴ USTelecom has documented its members' experience with reporting geocoordinates into the HUBB based upon their CAF Phase II Model experience, which placed these providers on the leading edge of those required to report in the HUBB.¹²⁵ In essence, providers cannot currently meet their geolocation reporting requirements without relying on commercial geocoders, and the known inaccuracies of geocoders in rural areas has created numerous compliance challenges.¹²⁶

The Commission has proposed in its Digital Opportunity Data Collection to produce a more granular fabric of broadband serviceable locations.¹²⁷ If that proposal is adopted, the resulting product (containing geocoded coordinates for every broadband serviceable location) should be the base map for all Rural Digital Opportunity Fund (and any other universal service fund) reporting—a carrier will simply indicate whether the pre-identified location is served or not in accordance with the program rules. When the Digital Opportunity Data Collection produces more granular reporting upon the location fabric, the Commission should make clear

¹²⁴ See discussion *supra* at 7.

¹²⁵ See March 28 HUBB Ex Parte.

¹²⁶ *Id.*

¹²⁷ Digital Opportunity Data Collection at para. 101 (“We propose to create and integrate a broadband-serviceable location tool into the Digital Opportunity Data Collection.”).

that it will replace HUBB geolocation reporting. The Commission should make clear that in no case should valid deployments be discounted because of geocoding errors.

IX. CONCLUSION

USTelecom members are excited about the opportunities that the Rural Digital Opportunity Fund will enable for rural broadband deployment. As described, USTelecom requests that the Commission proceed with the best available data and consider the proposals contained herein in order to effectively and efficiently target scarce broadband funding and thereby enabling life-changing broadband opportunities in rural America.

Respectfully submitted,

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