December 3, 2015

Ex Parte Letter Filed via ECFS

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

Attn:  Wireline Competition Bureau

Re:    Connect America Fund
       WC Docket No. 10-90

Dear Ms. Dortch:

On behalf of Smith Bagley, Inc. (“SBI”), this letter addresses issues relating to the Commission’s pending consideration of policies and rules for the Connect America Fund Phase II (“CAF Phase II”) competitive bidding process.

Many consumers on Tribal lands lack sufficient access to advanced broadband services. Because of this, the Commission’s universal service policies should continue to seek ways to promote the deployment of mobile wireless networks that serve Tribal areas, since these networks are an efficient means of bringing advanced broadband to these areas. The Commission can take an important step to advance this objective by opening up the CAF Phase II competitive bidding process to mobile broadband service providers. Such a step is appropriate because, due to the prohibitive costs associated with deploying wireline broadband in many remote Tribal areas, wireline broadband providers have little incentive to use Phase II support to bring service to Tribal lands.

The Commission should reject proposals for CAF Phase II broadband bidding preferences that would erode any meaningful opportunity for mobile broadband carriers to compete for Phase II funding. A preference favoring fiber to the home (“FTTH”) services, for example, would disserve consumers on Tribal lands and throughout rural America, because a greater number of these consumers would gain access to advanced broadband if mobile broadband providers are given a realistic opportunity to compete for Phase II funding.

Advanced Broadband Has Bypassed Many Tribal Lands

Five years ago, the Commission found that “[t]hose [consumers] living on Tribal lands have very low [broadband] adoption rates, mainly due to a lack of available infrastructure. What
little data exist on broadband deployment on Tribal lands suggest that fewer than 10% of residents on Tribal lands have terrestrial broadband available.”¹ The following year the Commission observed that “communities on Tribal lands have historically had less access to telecommunications services than any other segment of the population[,]” that “Tribal lands are often in rural, high-cost areas, and present distinct obstacles to the deployment of broadband infrastructure[,]” and that “greater financial support therefore may be needed in order to ensure the availability of broadband in Tribal lands.”²

The Commission was correct in anticipating the need for greater financial support. As the National Congress of American Indians has explained, there is an “ongoing lack of broadband coverage on tribal lands and … this lack of coverage continues to impact tribal healthcare and social services, education, economic development, public safety, small business development, tribal governance, and emergency management services.”³ Moreover, the Commission determined earlier this year that “25 Mbps/3 Mbps [broadband] capability is unavailable to 8 percent of Americans living in urban areas, compared to … 63 percent of Americans living on Tribal lands[,]” and that “[t]his disparity between urban … and Tribal lands exists at all speed tiers.”⁴

The availability of advanced broadband services is particularly important to Tribal communities because access to broadband is one means of assisting these communities in their efforts to overcome economic adversities. For example, as SBI has previously indicated, 38 percent of households on Navajo Tribal lands in Arizona, New Mexico, and Utah are below the poverty line,¹⁰⁸

¹ Omnibus Broadband Initiative, FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN (Mar. 16, 2010), at 23 (footnote omitted).
⁴ Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN Docket No. 14-126, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, 30 FCC Rcd 1375, 1378 (para. 6) (2015) (footnotes omitted). The Commission found that “broadband is not being deployed in a reasonable and timely fashion because it is not yet available to the majority of rural and Tribal Americans and not becoming available quickly enough.” Id. (footnote omitted). This finding was made pursuant to Section 706 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996), as amended by the Broadband Data Improvement Act, Pub. L. No. 110-385, 122 Stat. 4096 (2008), as codified in Title 47, Chapter 12, of the United States Code.
and 21.9 percent of residents on these lands are unemployed.\(^5\) The U.S. median household income level is nearly double that of people living on Navajo lands.\(^6\)

Permitting mobile broadband providers to compete for CAF Phase II support will be an important step in providing consumers on Tribal lands with access to advanced broadband services and in promoting efficient investment of program funds.

**Opening Up CAF Phase II for Mobile Broadband**

Chairman Wheeler recently observed that one “of the biggest developments of the digital age [is] that … everything is going mobile.”\(^7\) That is no less true for SBI’s customers, who overwhelmingly use mobile devices to access the Internet due in part to the lack of wireline broadband deployment. As the leader of one Tribal community explained:

> [O]ne of the biggest obstacles [to wireline broadband deployment] … is low population density…. This presents a challenge to the provider because the fixed costs of equipment necessary to deploy and maintain a broadband network are high…. [F]ewer customers per square mile raises the per-subscriber costs. Couple low population density with rugged terrain that is typical of tribal lands in many areas and you begin to understand the reason cost to deploy on tribal lands is very high.\(^8\)

The New Mexico Broadband Map that is attached to this letter illustrates why SBI’s customers rely on mobile broadband for access to the Internet. The map shows that New Mexico is dominated by remote and low-population areas, which are ill-suited for wireline deployments. Outside of cities and towns such as Albuquerque, Santa Fe, Farmington, and Gallup, there are few places with fiber to the home, DSL, or cable modem deployments. Investing in wireline infrastructure to serve last mile connections would be an extraordinarily inefficient use of scarce government resources. The better course is to take advantage of existing fiber networks located along major highways and state roads, expand such middle-mile routes, and deploy wireless broadband into remote areas.

In the face of these impediments to wireline broadband deployment in remote Tribal areas, SBI has been actively engaged in building HSPA+ mobile broadband networks to serve consumers

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\(^6\) *Id.* at 4.

\(^7\) Tom Wheeler, FCC Chairman, “Thinking Globally, Acting on Mobile,” FCC Blog (Oct. 1, 2015). Chairman Wheeler referenced two big developments, the other being “that the economy has gone global ....” *Id.*

in these areas. While SBI’s HSPA+ networks have been effective in enhancing its customers’ broadband experience, consumer demand has been increasingly shifting to 4G LTE service. The Commission has explained that, as wireless carriers migrate their networks to LTE, “the networks using this technology will provide more capacity ... per megahertz of spectrum in any given cell than earlier technologies. As in the past, commercial cellular networks experience significant improvements in capacity per megahertz as technology advances, and further improvements are expected with LTE.”

LTE has lived up to its billing, proving to be a substantial improvement over 3G cellular data technology. In addition to substantial increases in speed, LTE also significantly reduces latency and, because 4G LTE is an international standard, “4G LTE devices have the capability of working across any network in the U.S....” The advanced capabilities of 4G LTE enable video streaming, improve access to websites, and facilitate “navigating during travel, connecting on social media, communicating with family and friends, receiving timely news updates, and obtaining entertainment while away from a fixed broadband connection.”

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9 This shift has been occurring generally throughout the wireless industry. See Phil Goldstein, “AT&T: Traffic on HSPA+ Network ‘Has Peaked,’” FIERCEWIRELESS (Nov. 12, 2013), accessed at http://www.fiercewireless.com/story/att-traffic-hspa-network-has-peeked/2013-11-12 (reporting that “traffic on [AT&T’s] HSPA+ network has peaked as more and more customers are using LTE devices”).


Wireless broadband offers unique advantages by permitting public safety, students and doctors to access mobile applications on highway shoulders at accident sites, on the Great Lakes and the Gulf of Mexico, in agricultural and energy fields, on college campuses, forests, and anywhere, anytime.... [A] wireless signal covers an infinite number of outdoor locations in any given area that it serves. The fact that mobile service can provide lifesaving connections in almost any environment represents a significant advantage over the few static connections offered by wired broadband.
LTE is especially important for health and public safety communications because it enables a wide variety of functions, including real-time streaming for various uses (“such as remote medical support and patient monitoring [and] natural disaster rescue missions”13), large file transfers (e.g., videos, satellite images, data files), mapping tools, and “communications for real-time road safety related warnings and information sharing.”14

As the Commission considers whether to permit mobile broadband providers to compete for CAF Phase II support, it should heed its own finding that “[w]hat is important from the consumer’s perspective is the quality of the user experience and the price of the service offering, not the specific technology used to deliver service.”15 From the perspective of consumers, especially those residing on Tribal lands and in rural and remote areas, the importance of advanced mobile broadband can hardly be overstated. In discussing “the increasing importance of mobile broadband services[,]”16 the Commission noted:

From August 2012 to September 2014, the smartphone share of mobile phones in the United States increased from 50 percent to 72 percent. In the same period, the smartphone share of new mobile phone purchases increased from 64 percent to 85 percent. This suggests that the number of Americans with mobile broadband is increasing and that the quantity of mobile data usage is increasing as well. Between 2010 and 2013 the average monthly data usage per subscriber with data capable units increased from 122 Mb to 849 Mb.17

In addition to the consumer benefits described in the preceding paragraphs, several other reasons support permitting mobile broadband providers to compete for CAF Phase II funding. Mobile broadband providers’ participation will make the reverse auction process more competitive.18 Hughes Network Systems, LLC (“Hughes”), for example, recently submitted a CostQuest

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14 Id.


16 Eleventh Broadband Progress NOI, 30 FCC Rcd at 8827 (para. 9).

17 Id. (footnotes omitted).

Associates study showing that “the Commission must ensure that the rules for the CAF Phase II competitive bidding process encourage the broadest possible participation by a range of different types of broadband service providers .... Broader participation will help ensure a more competitive bidding process, lower bids, and fewer customers left without support.”\textsuperscript{19} In addition, making Phase II funding available to mobile broadband carriers will help to alleviate the funding disparities between wireline and mobile wireless broadband technologies that are embedded in the universal service budget adopted by the Commission in the \textit{CAF Order}.\textsuperscript{20}

Enabling mobile wireless broadband carriers to compete for CAF Phase II funding will help to counter the decision of many price cap carriers to forego constructing broadband networks on Tribal lands and in remotely located rural and high-cost areas.\textsuperscript{21}

\begin{footnotesize}
\textsuperscript{19} Ex Parte Letter from L. Charles Keller, Counsel for Hughes, to Marlene Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Nov. 13, 2015) at 3. The letter was submitted to the Commission in unredacted form on November 30, 2015. Ex Parte Letter from L. Charles Keller, Counsel for Hughes, to Marlene Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Nov. 30, 2015).

\textsuperscript{20} For example, $1.8 billion (41 percent of the overall budget) is targeted for price cap incumbents in CAF Phase II and initially reserved for their exclusive use through the right-of-first-refusal mechanism. In contrast, the amount of funding allocated to the Mobility Fund (including the Tribal land set-aside) comprises 11 percent of the overall universal service budget adopted by the Commission, while at the same time wireless providers and their subscribers are paying 44 percent of the funds that support the Commission’s universal service programs. See Rural Wireless Carriers Comments at 39; Letter from Scott K. Bergmann, Vice President, Regulatory Affairs, CTIA, to Marlene Dortch, Secretary, FCC, WC Docket No. 10-90, \textit{et al.} (filed Nov. 16, 2015) (“CTIA Letter”), at 1 (noting that “[w]ireless consumers and providers are the largest contributors to the federal USF, responsible for 44 percent of total annual contributions”).

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support to carriers using different technologies would enable funding to be used more effectively and efficiently.\textsuperscript{22}

**Getting the Most for CAF Phase II Dollars**

In order to ensure that CAF Phase II support is used efficiently and effectively in bringing advanced broadband services to consumers on Tribal lands and in rural and remote areas, the Commission should not adopt fixed broadband bidding preferences that would deprive mobile broadband providers of any meaningful opportunity to compete for funding. The Commission should reject proposals to give bidding preferences to FTTH providers or other fixed broadband carriers,\textsuperscript{23} for the following reasons.

*First,* such an approach would conflict with the Commission’s commitment that “the Connect America Phase II competitive bidding process … will be implemented in a technologically neutral manner to allow the participation of as many entities as possible.”\textsuperscript{24}

*Second,* depriving mobile broadband providers of any realistic opportunity to compete for Phase II support would harm consumers on Tribal lands and in rural and remote areas. There is

\textsuperscript{22} As CTIA has explained, enabling mobile broadband carriers’ participation in CAF Phase II “will help ensure that rural locations receive service using the most efficient technology.” CTIA Letter at 2. CTIA indicates that, “[f]or many areas, wireless will be the most efficient technology. Use of the most efficient technology will ensure that more Americans receive broadband service at a lower cost to the fund.” Id. See CCA Comments, WC Docket No. 10-90, et al. (filed Aug. 8, 2014) (“CCA Comments”), at 17.

\textsuperscript{23} Utilities Telecom Council has proposed a first bidding stage exclusively for fiber-to-the-home networks and a second bidding stage for 25 Mbps/3 Mbps broadband networks. Ex Parte Letter from Brett Kilbourne, Utilities Telecom Council, to Marlene Dortch, Secretary, FCC, WC Docket No. 10-90 (filed July 6, 2015), at 3. This suggested approach would significantly restrict mobile broadband carriers’ participation in the CAF Phase II auction. See CTIA Letter at 2 (arguing that the Commission should “not adopt bidding categories or criteria that explicitly favor providers using a specific technology—particularly a wireline technology such as fiber”).

\textsuperscript{24} Further Notice, 29 FCC Rcd at 7130 (para. 246). See CCA Comments at 17 (emphasis in original) (arguing that “[t]here is no justifiable basis—and no basis at all in the record—for categorically excluding any technology that can satisfy the Commission’s broadband performance requirements, which are designed to ensure that consumers have access to services that provide a quality ‘broadband’ experience[,]”and that “[a]ny contrary position would be antithetical to the principles of competitive and technological neutrality that have been the cornerstones of the Commission’s universal service policy for decades”); Wireless Internet Service Providers Association (“WISPA”) Reply Comments, WC Docket No. 10-90, et al. (filed Sept. 8, 2014) (“WISPA Reply Comments”), at 10 (arguing that “eliminating other technologies from Phase II competitive bidding will eliminate WISPs … and [other broadband service providers] that may want to bid. This is contrary to the Commission’s objective of encouraging participation. Just as the Commission should not be picking winners and losers when it comes to broadband providers, so, too, should the Commission refrain from determining which one technology should be the nationwide standard at the exclusion of other technologies that can be deployed more cost-effectively and more quickly.”).
strong consumer demand in these areas for 4G LTE broadband. Providing mobile broadband carriers with realistic access to Phase II support will stimulate and accelerate these carriers’ investments in 4G LTE networks.

Third, bidding preferences biased in favor of wireline broadband providers would enable them to obtain virtually all the support available in the Phase II competitive bidding process, yet these providers would likely conclude that the cost of deploying networks in remotely located Tribal areas—even with Phase II support—would be prohibitive.

And, fourth, even if wireline broadband providers were to use Phase II support to deploy networks serving remote Tribal lands, this would not be an efficient use of support.25 Mobile broadband carriers could use the same amount of Phase II funding to bring advanced broadband services to many more homes and businesses on Tribal lands, and in rural and remote areas.

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Pursuant to Section 1.1206 of the Commission’s Rules, this ex parte letter is being filed with the Commission in the above-captioned proceeding via the Electronic Comment Filing System.

Please contact the undersigned if you have any questions.

Sincerely,

David A. LaFuria
John Cimko
Counsel for Smith Bagley, Inc.

cc (via e-mail): Matthew DelNero
Roger Sherman
Ryan Palmer
Alexander Minard
Carol Mattey
James Schlichting

25 See WISPA Reply Comments at 10 (arguing that requiring winning bidders for CAF Phase II support to deploy fiber broadband networks “would preclude use of more cost-effective technologies such as fixed wireless, which can be deployed across a wide area at significantly lower cost than fiber and other wired technologies”).
The New Mexico Broadband Map, showing northern and central regions of the state, is an overlay of maps available at the New Mexico Department of Information Technology (DoIT) Website, accessed at http://www.doit.state.nm.us/broadband/map_statewide.shtml. The New Mexico Broadband Program:

- collects data from Internet Service Providers (ISPs) every six months. The data, which are based on federal reporting standards, are solicited from broadband service providers across the State. The NMBB [New Mexico Broadband] Program submits the validated and processed ISP data to the National Telecommunications & Information Administration (NTIA), also every six months, and the NTIA performs additional validation and processing before using New Mexico’s data for the National Broadband Map. The NMBB Map is then updated to reflect new or revised broadband availability.


It should be noted that the attached New Mexico Broadband Map may overstate wireline broadband coverage. DoIT has explained that:

- [T]he Broadband Map is over reporting data that comes from the Internet Service Provider. In order to safeguard the proprietary infrastructure data of the provider, the [NMBB Program] must “aggregate” these data into U.S. Census Blocks, equivalent to a neighborhood block in an urban area. As a result, if there is one customer in a corner of a “block”, the entire block will be reported as having broadband.
