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REDACTED – FOR PUBLIC INSPECTION

May 24, 2016

Accepted / Filed

MAY 24 2016

Federal Communications Commission
Office of the Secretary

BY HAND DELIVERY & ELECTRONIC FILING

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

Re: *Connect America Fund, High-Cost Universal Service Support*
WC Docket Nos. 10-90, 05-337

DOCKET FILE COPY ORIGINAL

Dear Ms. Dortch:

The enclosed filing by Alaska Communications refers to certain information submitted by General Communication, Inc. ("GCI") in this proceeding that is marked as Highly Confidential Information under the Second Protective Order in the above-captioned dockets.[1] Accordingly, Alaska Communications has marked each page of the Stamped Highly Confidential Document with the legend required in the Second Protective Order and indicated that, because the document contains Highly Confidential Information, copying is restricted. Simultaneously herewith, Alaska Communications hand-delivered to your office one copy of the Stamped Highly Confidential Document, plus two copies addressed to Katie King in the Wireline Competition Bureau. One copy is being served on GCI, the Submitting Party.

Please find herewith two copies of the Alaska Communications filing that have been redacted for public inspection (the redacted version also is being filed via ECFS in the above-captioned dockets).

Please direct any questions regarding this matter to me.

Very truly yours,

Karen Brinkmann
Counsel to Alaska Communications

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[1] *Connect America Fund, High-Cost Universal Service Support,* Second Protective Order in WC Docket Nos. 10-90 and 05-337, DA 12-92 (Wireline Competition Bur., rel. Feb. 10, 2012).

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Federal Communications Commission
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Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Connect America Fund et al.*, WC Docket Nos. 10-90, 05-337, 14-58, 07-135, WT Docket No. 10-208, and CC Docket No. 01-92

Dear Ms. Dortch:

Alaska Communications hereby responds to the recent letters filed by the Alaska Telephone Association ("ATA") and Alaska's largest broadband provider, General Communication, Inc. ("GCI"), proposing performance standards for Alaska's rate-of-return local exchange carriers ("ROR LECs") and competitive eligible telecommunications carriers ("CETCs") in exchange for Connect America Fund ("CAF") support.[1] While ATA members now provide more information about their broadband deployment plans than they previously have done, their proposed commitments remain inadequate to meet the requirements of the Communications Act that all Americans have access to reasonably comparable services at affordable and reasonably comparable rates.[2]

One in seven Alaskans live in the Bush. Alaska Communications' LEC affiliates serve 49 Bush communities that have little or no access to high-capacity middle mile facilities (fiber or microwave) today. Therefore, the company has a direct stake in the outcome of this proceeding. Alaska Communications believes that, with modest improvements, the ATA-GCI proposal can

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1 Letter from Christine O'Connor, ATA, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90 (filed May 12, 2016) (filing performance and available middle mile infrastructure information for ROR LECs) ("ATA May 12 Letter"); Letter from Christine O'Connor, ATA, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90 (filed May 9, 2016) (filing performance commitments in connection with proposed CAF support for ROR LECs and CETCs) ("ATA May 9 Commitments").

2 *See* 47 U.S.C. §254(b)(3).

guarantee far greater benefits for the public, and enhance competition in Alaska far more effectively.

As described below, Alaska Communications has identified three discrete areas where safeguards are needed to ensure that support is used for the purpose for which it is intended, and to maximize the consumer benefit of the proposed support, while avoiding the creation of a publicly-subsidized, unregulated monopoly. The record demonstrates that, if the FCC adopts the ATA-GCI proposal, it also should adopt appropriate conditions that will better ensure that the resulting high-cost support will expand broadband availability to the farthest extent possible based on adequate middle mile in Alaska.

First, however, Alaska Communications provides its analysis of the recently revised Brattle Group study of middle mile costs in Alaska.

I. The Brattle Group Study Does Not Alter the Conclusion That Support Should Be Targeted to Affordable and Accessible Middle Mile Infrastructure

In February 2013 GCI filed a study by the Brattle Group containing cost estimates related to deploying mobile broadband services in rural Alaska.[3] Alaska Communications cited the study in April 2016,[4] following the disclosure by ATA and GCI of the amounts of support they are requesting on a company-specific basis.[5] At that time, the record contained almost no evidence as to the intended use of the nearly $1 billion in CETC support proposed under the ATA-GCI plan. In particular, the record did not indicate how much of the CETC support might be available for middle-mile deployment, which the ATA members and ACS all agree is sorely lacking in remote parts of Alaska. GCI now comes forward, in May 2016, with a new Brattle Group study.[6]

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3 Letter from John Nakahata, Counsel to GCI, to Marlene Dortch, FCC Secretary, WT Docket No. 12-187 (filed Jan. 21, 2013), *attachment,* The Brattle Group, "Alaska Mobile Broadband Cost Model."

4 Letter from Karen Brinkmann, Counsel to Alaska Communications, to Marlene Dortch, FCC Secretary, WC Docket Nos. 10-90, 05-337, 07-135, 14-58, WT Docket No. 10-208, and CC Docket No. 01-92 (filed Apr. 29, 2016) ("ACS April 29 Letter") at 4.

5 *See* Letter from Christine O'Connor, ATA, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90 (filed March 21, 2016) ("ATA March 21 Letter").

6 Letter from John Nakahata, Counsel to GCI, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90, WT Docket No. 10-208 (filed May 10, 2016), *attachment,* The Brattle Group, "Modified Alaska Mobile Broadband Cost Model" (hereinafter "Modified Brattle Group Study").

The record supports the conclusion that broadband-capable last-mile wireless facilities can be both deployed to unserved locations in Remote Alaska and operated for ten years for less than $200 million.[7] Even in the revised Brattle Group model, the present value of the cost to deploy and operate the necessary cell sites over the next ten years is just $250 million.[8] Not surprisingly, at least not from the perspective of Alaska Communications, the Brattle Group concludes that fully 84 percent of the costs associated with providing 4G LTE in all the Remote Alaska census blocks targeted in the ATA-GCI plan would be costs associated with *backhaul* – in other words, *middle mile costs*.[9]

Thus, Alaska Communications proposed that, even with a margin for error and unspecified operating costs, more than $700 million of CETC support could be devoted to essential middle-mile facilities that could benefit *all* Alaskans not currently able to access advanced services, rather than a mere subset of existing CETC customers.

The revised Brattle Group study contains a number of other changes from the previous study. GCI states that it asked the Brattle Group to recalculate the cost of mobile wireless deployment in rural Alaska excluding the areas served by AT&T Wireless and Verizon Wireless – a refinement since the original study was commissioned in 2012. However, the Brattle Group also significantly altered its model in other ways that impact the estimated cost of providing broadband service to Bush communities.

One major change was to include **[REDACTED]**

.[10] A second major change was to increase the modeled bandwidth requirements for terrestrial backhaul from **[REDACTED]**
.[11] Third, the modified model significantly reduces the monthly cost of both terrestrial and satellite backhaul without explanation. For middle mile provided via satellite, the per-MHz cost of satellite transponders was reduced from **[REDACTED]** .
For terrestrial backhaul, the cost per 1-Mbps unit of transport over the TERRA network was reduced from **[REDACTED]** per

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7 *See* ACS April 29 Letter at 3.

8 Modified Brattle Group Study at 16 (Table II-1).

9 *Id.* at 4.

10 *See id.*, table, "Present Value of Terrestrial Backhaul Cost for FCC Eligible Areas with 2G or 3G Sites" (list of areas included in the study).

11 *See* Modified Brattle Group Study, Table VI-4. Although improved, even this speed falls short of the Commission's requirement to deploy service offering 10 Mbps downstream and 1 Mbps upstream.

month.[12] This appears to assume a purchase of [REDACTED] or more – an amount of capacity for which there is virtually no demand in Alaska. Alaska Communications finds that pricing under a three-year contract for a 50-MB Ethernet circuit between an edge location such as Bethel and one of three hubs (Anchorage, Fairbanks or Juneau) using terrestrial backhaul capability would cost $372,400 per month under the terms made available on GCI's website.[13] This works out to over $7,000 per 1-Mbps. Thus, the Brattle Group model's reduction in the cost of backhaul using existing facilities either grossly understates the cost of existing technology or supports the conclusion that GCI is charging itself only [REDACTED] per Mbps on TERRA while it charges everyone else over $7,000 – or both.

Currently, terrestrial middle-mile capacity in the Alaska Bush is priced at monopoly levels, at least in part, because a single provider is offering inadequate capacity on an unregulated basis in most locations. And yet construction of more advanced network facilities, such as a combination of fiber and short-hop microwave backhaul (which an efficient provider would use today),[14] that could support competitive alternatives, was not even considered.[15] The Modified Brattle Group Study does not reflect any expected capital expenditure for terrestrial middle-mile capability, but assumes that backhaul for the Bush will continue to be provided over the current, obsolete facilities.

The Brattle Group modeled a combination of terrestrial and satellite middle-mile capacity necessary to provide bandwidth speeds of 2 Mbps/768 kbps to selected end-user locations for

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12 The cost per 1-Mbps unit is multiplied by the number of required units to yield a monthly cost. The number of required units is a function of the the population of an area, bandwidth requirements and oversubscription rates.

13 GCI pricing available on its web site as of May 18, 2016: https://www.gci.com/~/media/images/gci/regulatory/gci_terra_posting_effective_07_29_15_final.pdf?la=en

14 Statewide Broadband Task Force, "A Blueprint for Alaska's Broadband Future" (Oct. 24, 2014), at 27 ("When there were fewer than 300 users on the entire proposed network, microwave was the most viable economic option. But when there were greater than 300 users, fiber optic cable became a viable option to support a larger number of users"), *available at:* http://www.alaska.edu/oit/bbtaskforce/docs/Statewide-Broadband-Task-Force-Report-FINAL.pdf ("Broadband Task Force Report").

15 The Brattle Group states that they only modeled the costs of those technologies that are currently employed. Modified Brattle Group Study at 9. Presumably, the scope of work from GCI did not request any analysis of more advanced or more efficient technology. However, as noted below, fiber, or a combination of fiber and short-hop, high-capacity microwave facilities, would be far more efficient than existing technology. *See infra* notes 18, 31 & accompanying text.

$1.26 billion (expressed as the present value of support distributed over ten years).[16] While the study estimates that the middle-mile cost is the single largest cost component, at 84 percent of the total,[17] the study assumes continued reliance on "old" technology – the existing, monopoly-priced satellite and microwave backhaul capacity that has constrained service in the Alaska Bush until now – to deliver substandard service.[18] The Brattle Group seems unconcerned that the current terrestrial middle-mile facilities serving the Bush are inefficient by modern standards, and will become increasingly inadequate as broadband demand increases. Under the ATA-GCI plan, middle-mile capacity simply would not be sufficient to deliver broadband service meeting FCC standards or to satisfy the expected demand virtually anywhere in the Bush.

The Modified Brattle Group Study has reduced the cost attributable to terrestrial middle mile over the TERRA network by **[REDACTED]** "to reflect the combination of *expected* annual decreases in prices and lower rates due to higher volumes of usage."[19] While such a reduction would be welcome, it does not reflect reality. The price currently available to other providers, and federal universal service payments under the Rural Health Care and E-Rate programs, have not been materially declining.

In the past, GCI led Alaska Communications to believe that the high price of wholesale service on the TERRA system was the result of high operating costs and *severe capacity constraints*. It is difficult to understand why the Modified Brattle Group study proposes construction of *no* new middle mile or backhaul facilities, yet projects falling prices due to expected growth in broadband demand for a fixed quantity of available middle mile backhaul capacity. It would not be reasonable for the Commission to draw conclusions about the cost of middle mile in the Bush based on "expected" decreases in pricing and increases in usage in a facility that is already capacity constrained and operated on a monopoly basis. In short, relying on outdated satellite and microwave middle-mile facilities is an inefficient solution for remote Alaskans.

Alaska Communications believes that the Modified Brattle Group Study underscores the necessity and the reasonableness of funding a comprehensive, competitively-neutral solution to

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16 *See id* at 4.

17 *Id.*

18 The TERRA network relies on microwave "daisy chains" that can reach as many as 15 to 20 hops. GCI, "Terra 2016-2017 Construction," *available at:* http://terra.gci.com/maps-locations/terra-2016-2017-construction (map showing more than two dozen consecutive microwave links covering many hundreds of miles). The FCC has stated that an efficient design would not have more than four. *See* Federal Communications Commission, *The Broadband Availability Gap*, OBI Technical Paper (April 2010), at 82 (recommending four-hop limit), 115 ("Microwave and other terrestrial wireless technologies are well suited in only some situations such as relatively short middle-mile runs of 5-25 miles.").

19 Modified Brattle Group Study at 13 (emphasis added).

the lack of middle-mile capacity serving rural Alaska. With the adoption of the safeguards described below, designed to encourage the efficient use of the support, and ensure that modern, high-capacity middle-mile facilities are constructed and operated in a competitively-neutral manner, the public will be far more likely to benefit from the proposed CETC support than under the plan as proposed by GCI and the ATA.

If one accepts the Brattle Group's modified analysis, $250 million of the approximately $1 billion in CETC support over a ten-year period would be used to build or upgrade unserved and underserved areas. That would leave nearly $750 million for middle mile. While the modified study estimates that $1.26 billion (present value) would be required to pay for middle mile using existing facilities, Alaska Communications believes that the remaining $750 million would be better spent to build modern, terrestrial (fiber and short-hop microwave) middle-mile facilities that are made available for use by all service providers at prices as close as possible to those found in urban areas. Only in this way could the CETC funds be assured of increasing the availability of advanced broadband capabilities to remote Alaskans.

The ATA-GCI plan should not be used to perpetuate out-of-date technology nor to prop up unregulated private monopolies. Rather, the CETC funds that are being requested should be put to work to stimulate the adoption of advanced capabilities that can be made available for use by all service providers. Alaskans – especially in the Bush – need access to greater capacity at affordable prices, not more of the same services that have been available until now. As explained below, the Commission's rules for CETCs in Alaska therefore should include specific and enforceable conditions for middle-mile capacity that will help ensure the requested support is used efficiently and in a pro-competitive manner to maximize the public benefit.

II. Specific Safeguards Are Needed For AIF CETC Funds

Alaska Communications has identified three specific failings that should be corrected before a plan of this type is adopted by the Commission: First, greater *accountability* for the use of CETC funds should be incorporated into the plan. Second, the plan should incorporate measures to encourage more *efficient* use of CETC funds for the greatest public benefit given the budget under discussion, mainly by apportioning a substantial portion of the support for construction and operation of new middle-mile capability. Third, this program, like other FCC programs, should be administered in a *pro-competitive* manner, not permitting any single carrier to monopolize publicly funded facilities.

As demonstrated by the Brattle Group study submitted by GCI, only a fraction of the requested CETC support is required for the delivery of wireless last-mile service. In order to hold the recipients accountable, therefore, the vast majority of the CETC funds should be targeted toward more efficient and capable terrestrial middle-mile facilities with sufficient capacity to deploy services that meet minimum FCC guidelines. Consistent with the Commission's policies favoring competition, non-discriminatory access for all broadband

providers at equivalent prices, terms and conditions should be required to foster the competition at the retail level that will generate the best selection of services and prices for consumers.

Specifically, the following simple conditions will provide the safeguards necessary to protect the public interest:

1.) Recipients should be required to use 70 to 80 percent of CETC support for deployment and operation of advanced terrestrial middle mile (backhaul) facilities that can provide remote Alaskans with sufficient bandwidth to meet FCC minimum broadband speed, latency and usage standards throughout the proposed ten-year subsidy period.

2.) Carriers constructing and operating middle mile facilities, using CETC support in whole or in part should be required to provide other providers with competitive access to supported middle mile capacity, and should be limited to consuming no more than 50% of the bandwidth on those routes.

3.) Services that use middle mile facilities that are constructed or operated in whole or in part with CETC support must be offered at rates that are reasonably affordable and comparable to the rates for the same services and facilities in urban areas. This obligation should extend to wholesale middle mile capacity sold to competing carriers to ensure that end users receive the benefits of competition.

Continued receipt of CETC high-cost support should be conditioned upon annual reporting and certification that the above conditions have been met, subject to audits and other enforcement measures, similar to the measures adopted in other Connect America Fund programs.

These suggestions are narrowly tailored and well-grounded in Commission precedent. And all of them can be readily implemented and enforced. Including these conditions in the final ATA-GCI plan will maximize the benefits of the proposed CETC support to consumers, and help to meaningfully narrow the broadband gap in Alaska, while lowering the total amount of support needed in Alaska over time, without creating or expanding any unregulated, publicly-subsidized monopolies. They are discussed in more detail below.

A. Accountability for the Use of CETC Funds In Alaska

In a number of prior submissions in the record of this proceeding, Alaska Communications has requested that any funding of CETCs be conditioned in the same manner that the Commission has conditioned LEC support. That is, the Commission should require all recipients of "Alaska Infrastructure Fund" support to make *specific commitments* to deploy

broadband meeting Commission standards for speed, usage/capacity, latency and price, within a specific timeframe adopted by the Commission, with performance to be tested (as it will be for LECs receiving both model-based CAF Phase II support and frozen support)[20] on an end-to-end basis.[21] As documented by the Brattle Group (and unlike most other high-cost support programs), most of the CETC funds proposed in the ATA-GCI plan are expected to be used for backhaul or middle-mile service; it would be irrational to award these funds without requiring specific middle-mile deployment commitments meeting performance standards set by the Commission.

The ATA members other than Alaska Communications have neither proposed this type of specific accountability for the use of CETC support nor explained why CETCs should not be held accountable for such support.[22] Quite the opposite: they have described their *intention* to

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20 In the 2011 *Transformation Order*, and again in the *ROR LEC CAF Order,* the Commission made clear that one of its driving principles in universal service reform is accountability. The Commission seeks to ensure that support – which is a finite resource – is invested prudently and efficiently, targeted only to areas that require public support to enable broadband. *Connect America Fund et al.*, WC Docket Nos. 10-90 *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011) ("*Transformation Order*"), ¶7. In addition, the Commission stated that both carriers and the Commission will be accountable for the use of high-cost support, through clear performance metrics and consequences for failure to meet them. *Id.*, ¶12.

21 In the CAF Phase II Standards Order for price cap carriers, the Bureau adopted specific and enforceable performance requirements to ensure that customers actually experience the levels of broadband service intended by the Commission. For example, the Commission expects 10/1 Mbps everywhere, with speeds expected to increase over time, with latency and usage levels comparable to those in urban areas. *Connect America Fund et al.,* Report and Order, WC Docket Nos. 10-90 *et al.*, FCC 14-190, ¶¶15 *et seq.* (rel. Dec. 18, 2014). A similar set of rules was later adopted for ROR LECs. *Connect America Fund et al.,* Report and Order, WC Docket Nos. 10-90 *et al.*, FCC 16-33, ¶¶23 *et seq.* (rel. Mar. 30, 2016) (including the requirement that carriers provide "at least 25/3 Mbps to a certain percentage" of supported locations). For Mobility Fund recipients the Commission required extension of 3G service or better, and 4G service where feasible, on a minimum of 75 percent of the road miles in each supported census tract (support to be commensurate with the extent of the commitment), with latency sufficiently low for real-time applications such as VoIP. *Mobility Fund Phase I Auction Scheduled for September 27, 2012; Notice and Filing Requirements and Other Procedures for Auction 901*, FCC Public Notice DA 12-641, ¶¶27-28 (rel. May 2, 2012).

22 *See, e.g.,* Letter from Christine O'Connor, ATA, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90 (filed May 6, 2016) (objecting to conditions proposed by Alaska Communications); Letter from John Nakahata, Counsel to GCI, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90, WT Docket No. 10-208 (filed May 3, 2016) ("GCI May 3

invest in infrastructure to deliver new services to Remote Alaska (which they broadly define to include areas already served by CETCs) without committing to any specific deployments. In fact, they *disclaim their ability to meet FCC minimum performance standards* for mobile broadband services. In exchange for almost $1 billion, some CETCs offer to make modest upgrades to their networks, while others make no promises of upgrades whatsoever. According to the proposals on the record, customers may be no better off after receiving the requested support than they are today.

For example, one ATA member indicates that it is "speculatively" forecasting its ability to get to FCC-mandated levels of service for most of its subscribers based on the *possibility* that prices for fiber backhaul will decline over ten years.[23] A number of ATA members indicate that broadband service to their mobile customers will be limited due to their continued reliance on satellite backhaul.[24] Another offers *no speed commitment whatsoever*, noting that it is "constrained from offering mobile broadband due to middle mile cost and availability."[25] Even GCI, with the largest broadband network in the state, while proposing to increase the number of end-users with access to LTE capability, *does not propose to add any fiber backhaul* to expand its LTE capability to communities currently served only by satellite or microwave.[26] This helps explain why GCI states that it does not plan to deliver more than 2 Mbps downstream/800 kbps upstream to any of those customers.[27]

In effect, these carriers want to be eligible for high-cost support for broadband *without making any commitment* to offer truly high-speed broadband ("reasonably comparable service") in any specific areas. This ignores the requirements of the Communications Act. Moreover, it makes no sense when there is sufficient funding, when used more efficiently, for even remote Alaskans to have access to broadband meeting FCC minimum standards.

The record in this proceeding supports a requirement that 70 to 80 percent of the CETC support requested under the ATA-GCI plan be used to deploy and operate high-capacity terrestrial middle-mile facilities serving remote Alaska, in line with the conditions discussed below.

Letter") (same). *See also* ATA March 21 Letter (proposing specific support amounts for ATA plan participants, including nearly $1 billion over ten years for CETCs).

23 ATA May 9 Commitments, *attachment* (Arctic Slope Telephone Ass'n Coop.).

24 *Id.* (OTZ Wireless, TelAlaska Cellular, Inc., Windy City Cellular).

25 *Id.* (Bristol Bay Cellular Partnership).

26 *Id.* (General Communications Corporation).

27 ATA May 9 Commitments, *attachment* (General Communications Corp.).

B. Efficient Use of CAF Funds By Alaska's ROR LEC and CETCs

Consistent with FCC precedent, the Commission should require recipients to use CETC support *efficiently*. Indeed, distributing universal service support "in the most efficient and technologically neutral manner possible" was a driving goal behind the *Transformation Order*.[28] The Commission expected that its CAF reforms would transform the legacy high-cost support programs to an "efficient" system that would "ensure that scarce public resources support the best possible communications services for rural Americans."[29]

In the case of carriers serving the Lower 48, the Commission adopted a model-based calculation of support based on forward-looking costs. Alaska Communications is the first to acknowledge that the Commission's cost modeling is inadequate for Alaska's unique circumstances. Nevertheless, Alaska Communications has offered to serve all of the unserved locations on the Alaska road system that are in eligible census blocks in the FCC's model. This gives the FCC a measure of assurance that CAF Phase II support will be efficiently deployed over thousands of new locations, rather than used to overbuild competitive markets or upgrade existing broadband customers.

Similarly, there should be some measure of efficiency for Alaska CETCs in exchange for ten years' support of nearly $1 billion. The construction of multiple networks serving remote areas of Alaska is highly unlikely in the foreseeable future. It is therefore imperative that limited high-cost dollars be allocated as efficiently as possible not only to meet wireless backhaul requirements but also to serve the high-capacity middle-mile needs of LECs operating in the same areas.

The record supports the conclusion that an efficient provider should be able to deploy new terrestrial middle-mile capacity for less than the amount of CETC support remaining after committing the proposed $250 million in support to the deployment and operation of wireless last-mile facilities to unserved portions of Remote Alaska.[30] Not only are modern middle-mile facilities feasible to deploy with more than $700 million, but they also would be far more efficient than the existing patchwork of microwave and satellite links.[31]

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28 *Transformation Order* ¶1.

29 *Id.*, ¶120.

30 As noted in prior comments, the State of Alaska Broadband Task Force, that included participation by GCI and other ATA companies, estimated that deploying middle mile to connect all Alaskans would cost $640 million. Broadband Task Force Report at 33.

31 The Alaska Broadband Task Force, for example, found that, on a per-mile basis, middle-mile fiber is more cost-effective than microwave where the network will serve at least 300 users. Broadband Task Force Report at 27.

Without that middle-mile (backhaul) capacity, mobile broadband services in the Bush (as well as wireline services to schools, libraries, health centers and other anchor institutions) will continue to be very limited; with it, both mobile and fixed broadband service providers will be able to upgrade their service offerings, benefitting all consumers, both fixed and mobile broadband subscribers, including anchor institutions in Alaska's remote communities.

Despite ample evidence that new terrestrial middle-mile facilities are necessary for the delivery of high-speed broadband services in the Bush, and that middle-mile service will consume the bulk of CETC funding over the next ten years, GCI objects to *any* requirement to construct new middle-mile facilities or satisfy any middle-mile performance standards, and ridicules efforts to promote good governance and pro-competitive policies.[32] At the same time, GCI does not justify its request for *increased* CETC support over ten years (with zero investment in advanced backhaul capability). While GCI proposes to transfer some customers from satellite-based backhaul to microwave-based backhaul, it proposes *no new fiber* facilities, meaning that none of the residents or institutions of remote Alaska will receive reasonably comparable services, let alone pay reasonably comparable rates. GCI states that it will deliver LTE to some 67,727 locations but it will not deliver more than 2 Mbps downstream/800 kbps upstream.[33] Similarly, according to the most recent filing by the ATA, after spending nearly one billion dollars over 10 years on "improvements in mobile broadband service," only 2% of fewer than 10,000 people will be served by fiber.[34] GCI submits a cost study (without any underlying cost data) that assumes fanciful middle mile-rate reductions but no new middle-mile construction whatsoever, despite increasing demand. In effect, the ATA-GCI plan proposes to perpetuate today's overpriced and inadequate monopoly broadband service model for the next ten years, even as CETCs receive hundreds of millions more in publicly-funded universal service dollars.

The Commission should ensure that CETC support is used efficiently to make available the middle-mile capacity necessary to meet current and future broadband demands at speeds reflecting modern performance requirements. Failure to do so will relegate rural Alaskan consumers to paying super-competitive prices for limited, outdated technology.

C. Pro-Competitive Administration of CAF In Alaska

The third safeguard needed for the ATA-GCI plan is an assurance that support will be used in a manner that furthers rather than hinders the pro-competitive policies of the Communications Act and the Commission. Quite simply, this means that any middle-mile facilities built using the Alaska Infrastructure Fund should be made available to all on an

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32 *See* GCI May 3 Letter at 4.

33 ATA May 9 Commitments, *attachment* (General Communications Corp.).

34 Letter from Christine O'Connor, ATA, to Marlene Dortch, FCC Secretary, WC Docket No. 10-90 (filed May 20, 2016).

affordable basis upon reasonable request – including to competing carriers – without unreasonable discrimination in price, quantity, or other terms or conditions.[35] As the Commission noted, "Rates must be reasonably comparable so that consumers in rural, insular, and high-cost areas have meaningful access to those services."[36]

Reasonable and non-discriminatory access to publicly supported telecommunications services is a basic requirement of all telecommunications carriers, including CETCs, under the Communications Act;[37] but history has demonstrated the need for more explicit requirements to ensure that public funds do not create private, unregulated monopolies.[38]

The Commission should affirm its intention to enforce this requirement specifically in the case of federally supported infrastructure. Such an affirmation could acknowledge that a complaint may be brought under the Communications Act against any CETC that attempts to charge discriminatory prices, impose unreasonably discriminatory terms, or "game the system" to deny access to a competing provider – for example, by selling 100 percent of its capacity on a supported route to a non-carrier affiliate who then denies competitive access to unaffiliated service providers. In the absence of such an affirmation, it will continue to be difficult for would-be competitors to gain access to middle-mile infrastructure, and difficult for consumers to gain the benefits of competitive service offerings in the Bush.

Furthermore, the Commission should make clear that GCI's current practice of pricing middle-mile capacity at levels above the retail price of broadband Internet access service will no longer be tolerated. Instead, middle mile transport that uses facilities constructed or operated in whole or in part with public funds must be made available to competitors on an *affordable* basis. At a bare minimum, therefore, the Commission should condition its adoption of the Alaska Infrastructure Plan on a commitment from GCI to immediately implement a TERRA network price reduction as proposed in the Modified Brattle Group Study. Prices for middle-mile

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35 The Commission adopted as basic goals of reforming its high-cost universal service program: "the universal availability of modern networks capable of delivering broadband and voice service to homes, businesses, and community anchor institutions," and "delivering mobile broadband and voice in areas where Americans live, work, or travel," and all at rates that are "reasonably comparable for voice as well as broadband service, between urban and rural, insular, and high-cost areas." *Transformation Order*, ¶¶51,53, 55.

36 *Id.* ¶55.

37 47 U.S.C. §§201(b), 202(a).

38 As previously documented, most of the middle-mile capacity currently deployed to remote parts of Alaska is operated as an unregulated monopoly, despite the receipt of public subsidies to deploy much of that capacity. *See, e.g.*, Letter from Karen Brinkmann, Counsel to Alaska Communications, to Marlene Dortch, FCC Secretary, WC Docket Nos. 10-90, 05-337, 07-135, 14-58, WT Docket No. 10-208, and CC Docket No. 01-92 (filed Mar. 11, 2016) at 3-4 (and sources cited therein).

facilities constructed with public funds should be capped based on prices in the nearest competitive market, rather than simply discounted from today's unreasonable monopoly rates. For example, remote Alaska rates could be expressed as a percentage greater than rates for comparable capacity in the nearest urban area. Those rates should be made available for middle mile service between Anchorage and any point in remote Alaska served by middle-mile facilities constructed or operated in whole or in part with public funds, including CAF and CETC universal service support.

Such a price commitment is appropriate in this case, given that GCI, by its own definition, controls bottleneck facilities and is therefore dominant in the market for middle mile backhaul on the routes it serves in the Alaska Bush. As GCI explained, when Alascom held a monopoly on intrastate middle-mile routes nearly 25 years ago:

> Alascom possesses market power because it has the ability to maintain prices (in Alascom's case its "price" is equal to its cost reimbursement from AT&T) above the competitive level for an extended period – 12 years under the Joint Services Arrangement. Indeed Alascom's "price" is almost double the level of integrated rates for Alaska services. GCI on the other hand must take the market price as it finds it and has no power to raise its price above the competitive level. Alascom has the ability to exploit its market power through cross-subsidy, predation and other anti-competitive activities indefinitely . . . . Because Alascom can price without regard to the competitive level, or its own costs, and GCI cannot, Alascom is classified as a dominant carrier and GCI is classified as a non-dominant carrier.[39]

Today, it is GCI that controls both the terrestrial and satellite middle mile facilities in the Alaska Bush. Accordingly, it is GCI that has the power to maintain prices above the competitive level without regard for its own costs for an indefinite period now reaching many years, that can set its middle mile wholesale prices above those for retail broadband Internet access service, and that can sustain its market power through cross-subsidy, predation, and other anti-competitive activities. Before spending a further $1 billion of public funds to extend and perpetuate that monopoly, the Commission should at least impose the modest public interest safeguards requested herein, to help ensure that Alaskan consumers, and not solely GCI's shareholders, reap the benefits.

III. Conclusion

Affordable middle mile capacity is essential to delivering broadband capability to Alaskans in remote areas. The Brattle Group's analysis of backhaul costs supports Alaska

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[39] *Tariff Filing Requirements for Interstate Common Carriers*, CC Docket No. 92-13, Reply Comments of General Communication, Inc. (filed Apr. 29, 1992) at 2.

Communications' longstanding contention that middle mile is where the most critical need for support lies in Alaska. It is essential to improving services, decreasing prices, stimulating demand, and increasing efficient utilization of all available resources.

While Alaska Communications developed what it believes is a superior approach to solving Alaska's middle mile problem – namely, construction and operation of middle-mile facilities in the Bush via a neutral third-party administrator funded by reallocating existing resources – nonetheless Alaska Communications has set its own plan aside for the moment and suggested in the alternative some targeted conditions for the ATA-GCI "Alaska Infrastructure Fund" plan. These conditions are necessary and appropriate to ensure that the public benefits from the commitment of public subsidies to CETCs for the next ten years.

The Commission should adopt specific and enforceable criteria for the deployment and operation of advance mobile broadband capability in unserved parts of Alaska. The Commission can and should expect *all* companies receiving high-cost support to be held accountable and to operate efficiently – not only LECs but also CETCs. Moreover, the Commission should ensure that its support programs are administered in a manner that further its competitive goals. Appropriate reporting and enforcement tools should be included in any commitment for long-term support. Efficient and affordable broadband can be brought to many more Alaskans if the Commission implements the simple safeguards advocated here.

Please direct any questions concerning this filing to me.

Very truly yours,

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