

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

In the Matter of	)	
	)	
Connect America Fund: A National Broadband Plan for Our Future High-Cost Universal Service Support	)	WC Docket No. 10-90
	)	
ETC Annual Reports and Certifications	)	WC Docket No. 14-58
	)	
Telecommunications Carriers Eligible to Receive Universal Service Support	)	WC Docket No. 09-197
	)	
Connect America Fund – Alaska Plan	)	WC Docket No. 16-271
	)	
Expanding Broadband Service Through the ACAM Program	)	RM-11868
	)	

**COMMENTS OF VANTAGE POINT SOLUTIONS  
ON NOTICE OF INQUIRY**

October 23, 2023

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### **Executive Summary**

All successfully deployed infrastructure requires ongoing operating support. Support to help recover the costs of deploying and **maintaining** networks and delivering an evolving level of services over these networks at affordable rates will be essential to achieve the mission of universal service not only today but for years to come.

While some parties believe the current influx of funding will be the finish line, we expect during the next five years that more studies and evidence will be added to the record with the Vantage Point study that will assert the total cost to finish building wireline and wireless infrastructure will be much higher. Stopping the important support to sustain investment would be a disastrous public policy approach.

We believe that in order to meet future needs, a full service network is not achieved unless and until a fiber connection is provided to the broadband serviceable location. With some states intending to use other platforms in the highest cost areas of their states, we will experience a regional evolution to full service network status.

All entities whose business models depend on – indeed, would not exist without – the Internet have a vested interest in the Internet’s ubiquitous availability throughout the United States. It thus is reasonable to expect those entities – in particular, those entities that have the greatest means to contribute and, arguably, benefit the most from the broadband-enabled economy – to contribute their fair share to support universal broadband deployment and adoption.

In the NOI, the Commission correctly discusses the need for sustainability. We agree. No rational legislator or regulator would purchase an automobile and then refuse to purchase gas, oil, and maintain the vehicle to ensure that it will continue to function properly. Just as these “rules of the road” make sense, so do policies that maintain the broadband infrastructure in the country. All networks, whether constructed before the Act or after the Act, require ongoing maintenance. Current and future USF programs play a significant role in enabling and sustaining broadband performance.

## **Introduction and Background**

Vantage Point Solutions, Inc. (“VPS”)<sup>1</sup> submits these comments in response to the Notice of Inquiry<sup>2</sup> (“NOI”) adopted by the Federal Communications Commission (“Commission”) in the above-captioned proceeding.

As the Commission notes at paragraph 154, this proceeding “*seeks to build a record to help the Commission explore methods to ensure universally affordable and available fixed broadband services into the future.*” VPS notes that this NOI covers some of the same issues as the 2021 Notice of Inquiry.<sup>3</sup> Both the instant NOI and the earlier NOI are interested in how the policy direction for the future of the Universal Service Fund (“USF” or “Fund”) will be influenced or impacted by the significant \$65 billion investment made in broadband in the United States in the Infrastructure Act.<sup>4</sup>

Vantage Point is well-positioned to offer a valuable perspective of the broadband challenge in the rural and remote areas of the country. We are pleased to share a perspective from an on-the-ground view of an engineering and consulting partner with nearly 800 broadband providers in the U.S. and provide comments in the docket as the Commission pursues its objectives of achieving universal deployment and affordability for broadband in the U.S. The Commission should be guided by a north star that the job of meeting **the universal service obligation does not have an expiration date**. While the current infusion of federal infrastructure funding represents an unprecedented investment in American broadband, **none of the Commission objectives are sustainable without ongoing support**.

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<sup>1</sup> VPS provides engineering and consulting services to carriers across the United States. These companies provide a full suite of rural broadband services in some of the most rural and remote towns, communities, and villages in the United States.

<sup>2</sup> *Connect America Fund, et al.*, Report and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, WC Docket Nos. 10-90, 14-58, 09-197, 16-271, RM-11868, FCC 23-60 (rel. July 24, 2023) (“Report and Order”), (“NPRM”), (“Notice of Inquiry”, “Notice”, or “NOI”).

<sup>3</sup> *Report on the Future of the Universal Service Fund*, Notice of Inquiry, WC Docket No. 21-476, FCC 21-127 (rel. Dec. 15, 2021)(NOI on Future of USF) (Any citations in this filing from the earlier NOI comments or reply comments will indicate NOI on Future of USF). With the Commission now at a full five Commissioners, and with new staff members in key roles on the 10<sup>th</sup> floor and at the Bureau level, we refresh some of the key arguments from the rural and remote carrier perspective.

<sup>4</sup> Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (“Act” or “BEAD program”).

**Broadband sustainability is of equal importance to broadband deployment.**

In the instant Notice,<sup>5</sup> the Commission reiterates its desire to review its universal service objectives as broadband evolves in the U.S. None of the Commission objectives are sustainable without ongoing support. Whether carriers remain on legacy rate-of-return<sup>6</sup>, remain on Alternative Connect America Cost Model<sup>7</sup> (“ACAM I” or “ACAM II”), adopted Enhanced A-CAM (“E A-CAM”), or previously adopted the Alaska Plan<sup>8</sup> and are evaluating the Alaska Connect Fund (“ACF”), all successfully deployed infrastructure requires ongoing operating support.

The common issues between this NOI and the earlier NOI on the Future of USF allow for citations from that NOI to be directly relevant to this proceeding. NTCA<sup>9</sup> stated in its earlier comments, “[S]upport to help recover the remaining costs of deploying and maintaining those networks and delivering an evolving level of services over them at affordable rates will be essential as well to better achieve the mission of universal service not only today but for years to come.”

The next step for USF, for E A-CAM and A-CAM carriers, legacy carriers, and Alaska Plan/ACF carriers is to ensure that the networks deployed are supported and maintained for many years to come. All networks, whether constructed before the Infrastructure Act, pursuant to, or after the Infrastructure Act, require ongoing maintenance. Current and future USF programs play a significant role in enabling and sustaining broadband performance and will need to reach beyond the initial task of network construction. These realities are required for the Commission to continue to be successful with broadband public policy.

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<sup>5</sup> Notice, para. 154.

<sup>6</sup> Legacy carriers appreciate the earlier Commission action this past year to address negative impacts and thus avoid a substantial increase in the Budget Control Mechanism.

<sup>7</sup> While patterned after the ten year price cap models, all rational observers recognize that ACAM carriers will require some form of ongoing support in the upcoming “Year 11” timeframe if the Commission is to meet its universal service objectives for ACAM carriers.

<sup>8</sup> *Connect America Fund, et al.*, WC Docket No 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139 (2016) (Alaska Plan Order). The costs in Alaska, especially for areas that are off the road network, are some of the most extreme in the country.

<sup>9</sup> See NOI Future of USF Comments of NTCA – The Rural Broadband Association, WC Docket No. 21-476, at 36 (Feb. 17, 2022) (NTCA Comments). This builds on earlier statements from its January 20, 2022, ex parte with Chairwoman Rosenworcel: “*the statutory mission of universal service does not and cannot be considered fulfilled simply once a network is built.*” (Emphasis added.)

**A full service network will evolve regionally.**

In the NOI, the Commission asks the question<sup>10</sup> of “*How should we define a full-service network, meaning a network potentially eligible for sustainability support?*”

Before we offer a recommendation on that foundational policy question, we pose two public policy questions for the Commission:

- 1) Is the Commission committed to an evolving definition of broadband for all?
- 2) Does the Commission have a steadfast commitment to bridging the digital divide?

With respect to question 1, we submit that in order to meet future needs, a full service network is not achieved unless and until a fiber connection is provided to the broadband serviceable location. As a contrast, a number of states with high cost areas to serve in the BEAD program will be using a lower cost solution and accept a less reliable and robust approach than a fiber platform. The illusion of broadband being measured by 100/20 Mbps speed standards will prove to be disappointing for future customers, regulators, and stakeholders. The achievement of effective broadband is much different than achievement through definitional finesse. We suggest that until a fiber-to-the-premises connection is in place, the future scalability and reliability will be missing. Deployment of certain technology networks by carriers is not the desired “end state.”

With regard to question 2, the Commission should be methodical in its approach to modifying speed, latency, and data usage targets. If the Commission elects to use performance testing metrics to establish definitional benchmarks for a full service network, periodic updates will be necessary. Customer speed and data usage projections are accelerating, not slowing or peaking. The timing selected by the Commission should focus on the needs of the customer with respect to evolving broadband applications.

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<sup>10</sup> NOI, paragraph 161.

**NOI methodology options require further analysis.**

In the NOI, the Commission begins to explore options<sup>11</sup> including cost modeling, business case analysis, and competitive mechanisms. We address each alternative in the following.

*Cost Modeling:* The Commission's confidence in the results of its recent modeling efforts is recognized by all. We congratulate the Commission and the hard-working Bureau staff on its recent milestone of reaching the acceptance letter completion phase of the Enhanced A-CAM effort. If the Commission intends to move forward with modeling to apply to any sustainability scenario, we recommend focusing initial attention to the need to update capital cost and operating expense cost inputs that are dated for a sustainability application. At a minimum, the contractor selected should analyze the upcoming BEAD buildout data and survey other providers as to current needs in a broadband environment. We close with a simple question: How will one model meet the needs of the entire country? We will examine this question further in the reply comment round due November 21.

*Business Case Analysis:* If the Commission seeks to pursue this course, it may be necessary to modify certain carrier reporting requirements that are not consistent across different carrier groups. While not explicitly stated, this may be one of the intended consequences of the most recent net neutrality effort.

*Competitive Mechanisms:* Sustainability support as described in the NOI language infers a network that is functioning as the equivalent of a provider of last resort platform. To contemplate using any form of reverse auction would work at cross purposes with supporting that level of network commitment and investment. Sustainability of universal service support by definition includes a reasonable level of consistency. With reverse auctions having varying degrees of success<sup>12</sup> for awarding capital expenditure dollars, we strongly encourage the Commission to avoid applying this technique for a sustainable support platform.

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<sup>11</sup> NOI, paragraph 154.

<sup>12</sup> See 22 *Applicants for Rural Digital Opportunity Fund in Default*, Notice of Apparent Liability for Forfeiture, FCC 23-33 (rel. May 1, 2023) (Starry bid in RDOF as Connect Everyone, LLC).

**The term of USF support needs to match the period of intended sustainability. Efforts to “Cap or curtail” USF in a broadband environment will fail as a public policy approach.**

The NOI tees up<sup>13</sup> budget level issues for a sustainable long-term vision. Before we unpack the budget argument, the issue of timing<sup>14</sup> is beginning to emerge as participants begin to process factual data in the field regarding the mechanics and longer timeframe of implementing the Infrastructure Act.

What are the implications if implementing the Infrastructure Act may take longer than “planned”? First and foremost, extending the current universal service mechanisms becomes a higher priority, a necessary bridge to the future when the Infrastructure Act moves from work in process to plant in service.

Next, to fully realize the potential of the funding generated from the Infrastructure Act, it will be important to deploy infrastructure that meets current needs and is scalable as speeds and needs evolve. WTA<sup>15</sup> earlier observed in its comments the importance of “future proofing” networks. The Commission is prudent to emphasize low latency and easily scalable networks. Other industry observers support fiber technology as the best path to achieve “easily scalable.”<sup>16</sup>

As NTCA stated earlier,<sup>17</sup> *the third lesson to be drawn from reforms of the high-cost USF program over the past decade is the peril of aiming too low in establishing deployment targets and service levels*

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<sup>13</sup> NOI at para. 180.

<sup>14</sup> Communications Daily, *Broadband Buildouts Running Headlong into Expected Labor Difficulties*, June 13, 2022. The article quotes Power and Communications Contractors Association Chairman Jerrold Henschel. Referring to the new BEAD program, he states: “*This is going to be very taxing. It is desperately needed, but we need to take a more realistic viewpoint – it is a 10- or 12-year effort . . . not one election cycle.*”

<sup>15</sup> See NOI Future of USF Comments of WTA – Advocates for Rural Broadband, WC Docket No. 21-476, at 6 (February 17, 2022) (WTA Comments): *FTTH networks constitute the superior broadband technology alternative from the standpoint of reliability, availability, resiliency, service quality, scalability, and sustainability. The most compelling FTTH advantage is the scalability that makes it largely “future proof.” Nothing would appear to be more critical when consumer broadband speed demands have risen during a relatively short period from kilobit levels to 4/1 Mbps to 10/1 Mbps to 25/3 Mbps to 100/20 Mbps and above with no indication yet that they are at or near their peak.* (Emphasis added.)

<sup>16</sup> A perspective on “easily” scalable was offered in a recent Fiber Broadband Association, Fiber for Breakfast podcast, January 20, 2022: “*but easily scalable I really think [that] leans pretty heavily on fiber because as we all know the structural capacities in that [technology].*” Presented by Ernesto Falcon, Senior Legislative Counsel, Electronic Frontier Foundation (EFF).

<sup>17</sup> See NOI Future of USF Comments of NTCA at 25-26. This builds on prior statements that the Commission should “*take account of where USF support is also needed to sustain networks and keep services affordable and at a level that keeps pace with evolving consumer demand.*” (Emphasis added) See Letter from Michael Romano, Senior Vice President – Industry Affairs and Business Development, NTCA – The Rural Broadband Association, to Marlene Dortch, Secretary, FCC, WC Docket No. 21-476 et al. (Jan. 14, 2022).



*that satisfy only today's demand. Because network deployment is a prerequisite (but not an end unto itself) in achieving universal service, the networks that are deployed must be capable of meeting an "evolving level" of service. To set performance targets too low now will result in a decade from now the Infrastructure Act being considered an incredible opportunity lost.*

**There are different views on the timing the Infrastructure Act will require. The start of the story cannot be the end of the story. Operating expense support is essential to the long term answer.**

The massive federal investment of \$65 billion focused on broadband infrastructure will achieve considerable progress toward the Commission's broadband objectives. While we have heard some parties believe that will be the finish line,<sup>18</sup> we expect over the next five years that more studies and evidence will be added to the record that will assert the total cost<sup>19</sup> to finish building wireline and wireless infrastructure will be higher. The 2022 VPS study indicates that it will require an additional \$150-\$200 billion beyond the current programs including BEAD to achieve a fiber optic network across the U.S.

We complete this section of our comments by refuting prior assertions from parties that have clouded the USF discussion with error and missed the mark or excluded relevant data from their analysis.

Free Press<sup>20</sup> asserts that *"the results of RDOF suggest that when funding is opened to competition our nation's universal service goals could be met at funding levels well below what the Commission currently allocates. . . The Commission cannot let the vestiges of the broadband marketplace of 1996 or 2011 drive its high cost support decisions in 2022 and beyond."* Free Press assumed all RDOF infrastructure was achieved and ignored the major misses in allocating money to entities not able to perform. Blind hope alone does not build infrastructure – it is more complicated than that. The job of meeting the universal service obligation does not have a pause button or an expiration date.

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<sup>18</sup> It is also possible that the overbuilding of existing served areas will inevitably result in some areas without robust broadband services, even after the billions of infrastructure dollars have been placed in service.

<sup>19</sup> Vantage Point's seminal study – *Cost of Bringing Broadband to All*, White Paper Prepared for the ACAM Broadband Coalition, August 1, 2022 (<https://www.fcc.gov/ecfs/search/search-filings/filing/108012327916993>). The industry is beginning to grasp the federal tax impacts of the grants in the Act, and this will impact the level of ultimate buildout. In addition, the impacts of the recent surge in inflation are now measurable and impactful.

<sup>20</sup> See NOI Future of USF Comments of Free Press, WC Docket No. 21-476, at 16 (Feb. 17, 2022). Free Press seeks to reject what works for something that is theoretical and yet to be successfully deployed and sustained.

**Sustainability requires a stable funding base. Sustainable USF requires contribution reform.**

Over the last 15 years, most of the Commission’s effort has been focused to the distribution portion of the USF equation without a solution with respect to the contribution<sup>21</sup> portion of USF. An integral part of this future of USF discussion is how to stabilize the funding base. The time is appropriate to address the glaring need in the contribution mechanism area. We summarize recent recommendations that provide an effective road map to reform:

- a) A broad consensus was placed in the record in the NOI Future of USF comments to include fixed and mobile broadband Internet access revenues<sup>22</sup> as part of the USF contribution base.
- b) The Commission has legal authority to implement this change. As USTelecom<sup>23</sup> noted in its earlier NOI comments: *In its report to Congress, the Commission should explain that it could use its current authority under Section 254 of the Act to broaden the USF base to include BIAS and the revenue of those entities whose services provide telecommunications.*
- c) The Commission should pursue other measures, including Commissioner Carr’s “Big Tech should pay its fair share” concept. AT&T<sup>24</sup> succinctly summarized the rationale for Commissioner Carr’s proposal in its comment filing: *AT&T urges the Commission to, at a minimum, recommend that Congress expand the Commission’s express authority to require fair and equitable contributions to the Fund, which would bring the contribution system in line with the statutory principles codified in Section 254(b) and ensure that the goals of universal service can be met for future generations. All entities whose business models depend on –*

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<sup>21</sup> Contribution reform has been an elusive goal for both Democrat and Republican FCC’s. Consistent statements by Commissioner Carr to increase the base of funding entities indicates an increasing understanding that the beneficiaries of various federal universal service fund programs should assist in maintaining and sustaining the infrastructure that supports those benefits. **We remain hopeful that the current Commission will enact contribution reform during its tenure. This would have more long-term customer benefit than the upcoming net neutrality debate.**

<sup>22</sup> See Future of USF NOI Comments of NTCA at 42. Other supporting commenters in that proceeding include National Rural Electric Cooperative Association (NRECA) at 12, INCOMPAS at 15, the Coalition of Rural Wireless Carriers at 29, and the Wireless Internet Service Providers Association (WISPA) at 29.

<sup>23</sup> See Future of USF NOI Comments of US Telecom – The Broadband Association, WC Docket No. 21-476, at 10. (February 17, 2022).

<sup>24</sup> See NOI Future of USF Comments of AT&T, WC Docket No. 21-476, at 14 (February 17, 2022).

*indeed, would not exist without – the internet have a vested interest in the internet’s ubiquitous availability throughout the United States. It thus is reasonable to expect those entities – in particular, those entities that have the greatest means to contribute and, arguably, benefit the most from the broadband-enabled economy – to contribute their fair share to support universal broadband deployment and adoption.*

**Conclusion**

Effective and sustainable broadband policy is one of the greatest challenges facing the Commission.

We compliment the Commission for continuing an examination of how to sustain the investment.

Respectfully submitted,

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