

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

In the Matter of)	
)	
Lifeline and Link Up Reform and Modernization)	WC Docket No. 11-42
)	
Telecommunications Carriers Eligible for Universal Service Support)	WC Docket No. 09-197
)	
Connect America Fund)	WC Docket No. 10-90
)	

COMMENTS OF NEW AMERICA’S OPEN TECHNOLOGY INSTITUTE

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Table of Contents

Executive Summary..... iii

I. INTRODUCTION.....1

II. LIFELINE’S MINIMUM STANDARDS SHOULD ENSURE EQUITABLE, HIGH-QUALITY, AND TRANSPARENT BROADBAND SERVICE2

 A. Lifeline Providers Should Offer Standalone Service3

 B. Lifeline Providers Should Adhere to Robust Open Internet Standards, Subject to Oversight of Interconnection and Usage-Based Pricing Practices6

 C. Lifeline Providers Should Disclose Data in a Standardized, Customer-Friendly Format....9

III. THE COMMISSION SHOULD STRENGTHEN COMPETITION AND11

CONSUMER CHOICE IN THE LIFELINE MARKETPLACE11

 A. The Commission Should Empower Lifeline Customers by Minimizing Switching..... 12

 Costs 12

 B. Community Networks Should be Permitted to Provide Lifeline-Supported Services 13

 C. Networks Relying on Unlicensed Spectrum Should be Eligible to Provide Lifeline-Supported Services 15

IV. THE COMMISSION SHOULD NOT CONSTRAIN THE PROGRAM’S BUDGET 16

V. LIFELINE CUSTOMER DATA SHOULD BE SUBJECT TO THE STRONGEST PRIVACY AND SECURITY PROTECTIONS18

 A. To Limit Opportunities for Compromise of Sensitive Application Information, Any National Verifier Established by the Commission Should Accept Application Documents Directly from Consumers 19

 B. Any Party with Access to Lifeline Eligibility Applications Should Have Robust Privacy, Data Security, and Breach Notification Obligations 20

VI. DIGITAL LITERACY IS A CRITICAL COMPONENT OF SUCCESSFUL BROADBAND ADOPTION.....22

VII. CONCLUSION.....23

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Executive Summary

Despite wide recognition by policymakers, economists, and social scientists that gaps in broadband connectivity create achievement gaps in communities, the digital divide between wealthy and low-income Americans continues to exist.

Eliminating this divide requires a multifaceted approach that leverages government, industry, public interest, non-profit, and local stakeholders. No single entity can solve the problem in isolation, but the Federal Communication Commission is uniquely situated to address one of the biggest barriers to ubiquitous broadband adoption: cost. By modernizing the 30-year-old Lifeline program to support standalone broadband, the Commission can bring the longstanding goal of universal access into the modern communications age.

Doing so will require a thoughtful balance of reforms that increase competition within the fund; ensure access to reliable, high-quality, and unfettered service for low-income consumers; protect user privacy; and provide sustainable support that ensures no eligible user is left behind.

OTI respectfully submits the following recommendations as the Commission considers Lifeline reforms: (1) the program should ensure equitable, high-quality, and transparent broadband service by offering a standalone product that is comparable to what is available to non-Lifeline consumers, devoid of onerous data caps, and subject to robust Open Internet protections; (2) the program should be an ecosystem of robust participation and competition, with minimal switching costs and space for diverse, innovative broadband providers; (3) the program should not be subject to a capped budget, particularly amidst successful, cost-saving reforms; (4) the program should protect applicants' sensitive information; and (5) the program should contemplate the role of digital literacy as a component of meaningful broadband adoption.

I. INTRODUCTION

A digital divide persists across the United States, with low-income communities adopting broadband at rates dramatically behind the rest of the country.¹ As Pew notes, “[a]dults living in households with an annual income of at least \$75,000 a year are the most likely to use the Internet, with 97% of adults in this group currently reporting they are Internet users. Those living in households with an annual income under \$30,000 a year are less likely to report Internet usage, with 74% of adults doing so now.” The divide is particularly stark for communities of color. Recent data on broadband adoption reveals “a 12 percentage point overall gap between whites and blacks in the U.S., and suggest even greater disparities along lines of age and education: only 30% of African Americans over the age of 65 and 39% of African Americans with a high school degree or less have home broadband access.”² The gap between the digital haves and have-nots has dramatic secondary effects that limit access to needed government services, perpetuate income inequality, and dampen economic growth across all socioeconomic strata.

The Federal Communications Commission’s Universal Service Fund (“USF”) is the key federal policy mechanism for closing this divide by connecting the underserved. In conjunction with the E-Rate program’s efforts to connect libraries and schools and the Connect America Fund’s role in promoting build out to rural areas, Lifeline is the only federal program designed to address the challenge of getting low-income communities online. While Lifeline cannot remove

¹See Andrew Perrin and Maeve Duggan, “Americans’ Internet Access: 2000-2015,” The Pew Research Center (Jun. 26, 2015), *available at* <http://www.pewInternet.org/2015/06/26/americans-Internet-access-2000-2015/>

²See Aaron Smith, “Detailed Demographic Tables: Internet use and broadband adoption,” The Pew Research Center (Jan. 6, 2014), *available at* <http://www.pewInternet.org/2014/01/06/detailed-demographic-tables/>

every barrier to broadband access and adoption, it has the potential to evolve into a significant mechanism for broadband connectivity.

To that end, New America’s Open Technology Institute (“OTI”) respectfully submits these comments in response to the Federal Communications Commission’s *Second Further Notice of Proposed Rulemaking* in the above-captioned dockets.³ The *Notice* seeks comment on a proposal to “rebuild the framework of the Lifeline program,” including a modernization effort that would let participants use their Lifeline subsidies to purchase broadband Internet service.⁴

OTI has long supported Lifeline’s transition to broadband and applauds the Commission’s efforts to ensure that every American has access to robust and affordable Internet service. Accordingly, OTI recommends that: (1) the Lifeline program be modernized to support standalone broadband service; (2) the Commission take concrete steps to maximize the range of eligible broadband providers and minimize any switching costs between providers; (3) the program remain uncapped, particularly in the midst of successful reforms; (4) the Commission implement mechanisms for protecting users’ most sensitive information; and (5) digital literacy is a contemplated component of the broad efforts toward meaningful broadband adoption.

II. LIFELINE’S MINIMUM STANDARDS SHOULD ENSURE EQUITABLE, HIGH-QUALITY, AND TRANSPARENT BROADBAND SERVICE

As part of Lifeline’s transition to a more flexible, broadband-inclusive program, the Commission seeks to establish minimum levels of service that providers must offer as

³ *In the Matter of Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, *Second Further Notice of Proposed Rulemaking*, FCC 15-71 (rel. Jun. 22, 2015) (“FNPRM” or “Notice”).

⁴ FNPRM at ¶ 9.

participants in the Lifeline program.⁵ OTI supports the establishment of baseline standards and encourages the Commission to create robust goals within the program that are reflective of Congress’ directive that high-quality services “be available at just, reasonable, and affordable rates”⁶ and enable users “to originate and receive high-quality voice, data, graphics, and video.”⁷ The minimum standards should *not* be a double standard that produces two tiers of broadband — one for low-income Lifeline customers, and another, faster tier for everyone else. The Commission should ensure that Lifeline customers receive a reasonably comparable service to that which is available to the majority of Americans. The standards should also respond proactively to emerging trends. Ideally, every Lifeline provider should meet and exceed this minimum level of service.

Specifically, OTI urges the Commission to incorporate minimum standards that (1) guarantee the availability of low-cost standalone broadband service targeted at a level consistent with the Commission’s evolving definition of broadband, (2) adhere to strong Open Internet protections that include oversight over interconnection and usage-based pricing, and (3) disclose service information in a clear and consumer-friendly manner.

A. Lifeline Providers Should Offer Standalone Service

OTI supports the Commission’s proposal to require eligible providers to offer data-only broadband service.⁸ This standard should apply to both wireline and wireless providers. Bundled packages should remain an option for Lifeline customers, but a standalone requirement would ensure that Lifeline customers are not forced to purchase services they may not want. Standalone

⁵ FNPRM at ¶ 28.

⁶ 47 U.S.C. § 254(b)(1).

⁷ Telecommunications Act of 1996, Pub. LA. No. 104-104, §706 (c)(1), 110 Stat. 56 (1996).

⁸ FNPRM at ¶ 31.

services are increasingly popular as many consumers abandon bundled voice and video services in favor of more affordable broadband-only plans.⁹ The cost savings realized by these so-called “cord cutters” only exist if their provider offers a standalone service. This option should be available to all consumers, including Lifeline customers.

Consumer demand may prompt providers to expand their standalone broadband offerings, but industry incumbents have historically resisted the idea. In 2012, the Commission fined Comcast a record \$800,000 for concealing its standalone broadband service from customers, despite a merger condition that required Comcast to offer non-bundled service.¹⁰ AT&T faced similar accusations in 2007 after it agreed to offer standalone Internet service as a condition of a merger approval.¹¹ This history indicates that the Commission should codify standalone broadband service as a minimum standard for Lifeline providers. Importantly, this standard should include a requirement that the service is marketed to consumers in a *clear and visible* manner. Ultimately, this standard would give Lifeline customers more freedom to choose how to use the subsidy.

Moreover, broadband offerings under the Lifeline program should not perpetuate the existing digital divide by creating a “second tier” offering for low-income households. The Commission has, over the past year, adopted two standards for wireline broadband. In December 2014, the Commission required recipients of Connect America Fund support to provide speeds of

⁹ See “Consumers are Cutting the Cord to Gain Choices and Pay Less,” *The New York Times* (Aug. 21, 2015), available at <http://www.nytimes.com/2015/08/21/opinion/consumers-are-cutting-the-cord-to-gain-choices-and-pay-less.html>.

¹⁰ See Federal Communications Commission, *FCC Resolves Investigation Of Comcast-NBCU Broadband-related Merger Conditions; Ensures Consumer Access To Reasonably Priced Broadband Internet Service*, News Release, (rel. Jun. 27, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-314879A1.pdf.

¹¹ See Jacqui Cheng, “AT&T offers \$20 naked DSL, if you know where to look,” *Ars Technica* (Dec. 31, 2007), available at <http://arstechnica.com/uncategorized/2007/12/att-offers-20-naked-dsl-if-you-know-where-to-look/>.

at least 10 Mbps for downloads and 1 Mbps for uploads.¹² Then, when determining whether advanced broadband services are being deployed in a timely matter in the 2015 Broadband Progress Report, the Commission defined broadband as 25 Mbps/5 Mbps.¹³ Citing unreliable data, the Commission took a slightly different approach for mobile broadband, analyzing services “offered at the fastest tier for which there is a significant amount of data service at or above 10 Mbps/768 kbps.”¹⁴

While the 2015 Broadband Progress Report does not impose binding service requirements on carriers, the implementation of the 25 Mbps definition reflects the increasing needs and evolving standards for home broadband connections. Download speeds of 25 Mbps should be the Commission’s target for all Americans, including low-income households receiving broadband support. At a minimum, the Commission should extend the 10 Mbps/1 Mbps definition of broadband used in the Connect America Fund Order to any wireline broadband offerings under the Lifeline program.

However, OTI recognizes that an overly strict speed standard could exclude some broadband services on which low-income households currently rely. Therefore, while we urge the Commission to make clear that its definition of broadband remains the metric for all broadband services and accurately reflects the very real needs of consumers, the Commission need not bar providers who cannot meet this target from participation in the Lifeline program.

¹² *In the Matter of Connect America Fund*, WC Docket No. 10-90, Report & Order, FCC 14-190 (rel. Dec. 18, 2014), at ¶ 13.

¹³ *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 14-126, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, FCC 15-10 (rel. Feb. 4, 2015) (“Broadband Progress Report”) at ¶ 26.

¹⁴ Broadband Progress Report at ¶ 72. Note also that while the Commission assesses the availability of mobile and satellite broadband services, it does not use those services in its calculations to determine whether or not advanced broadband service is being timely deployed for the purposes of the report. Broadband Progress Report at ¶ 9.

The Commission has various mechanisms available to allow providers who cannot meet a 10 Mbps/1 Mbps definition to offer Lifeline-supported broadband service; the Commission could (1) grant a grace period during which the broadband target would apply but would not have any exclusionary effect; (2) allow broadband providers to request a waiver from any targets are baseline standards imposed, particularly in areas where there are no available offerings that meet established targets; or (3) adopt different — yet still evolving — standards that accommodate innovative technologies such as Wireless Internet Service Providers, or WISPs, that use unlicensed spectrum.

B. Lifeline Providers Should Adhere to Robust Open Internet Standards, Subject to Oversight of Interconnection and Usage-Based Pricing Practices

Lifeline customers should be able to rely on the program as a clearinghouse for consumer-friendly plans that protect participants from onerous practices and hidden fees they cannot afford. Accordingly, the Commission should establish minimum standards regarding Open Internet obligations. In addition to compliance with the Open Internet Order, eligible providers should be subject to close scrutiny of any business practice that jeopardizes the consumer's ability to access a free and open Internet, including (1) access tolls related to interconnection arrangements and (2) usage-based pricing (particularly on wireline service).

Interconnection

The Commission's minimum speed requirements should take into account the methods by which a broadband provider exchanges traffic with the rest of the Internet — a process known as “interconnection.” Recent network congestion patterns indicate that several large broadband

providers have strategically manipulated their interconnection points to extract fees from transit companies. These practices have harmed millions of broadband customers who are not getting the speeds for which they paid; in some cases, speeds have fallen to nearly unusable levels for months on end.¹⁵ In the wake of this conduct, the Commission has recognized the need for interconnection oversight in both the Open Internet Order¹⁶ and its review of the AT&T/DirecTV transaction.¹⁷

The Commission should not allow providers that receive Lifeline subsidies to further monetize their offerings by extracting access tolls at the point of interconnection. Moreover, providers should be required to periodically disclose information about their interconnection practices to ensure compliance. This requirement would protect customers from interconnection abuse and help ensure that providers are delivering the broadband speeds they advertise. The Commission must also closely scrutinize any provider that suffers from prolonged interconnection congestion.

Usage-Based Pricing

The Commission should also closely scrutinize any Lifeline provider that seeks to impose usage-based pricing (also known as “data caps”) on Lifeline customers — especially wireline

¹⁵ See “ISP Interconnection and its Impact on Consumer Internet Performance,” Measurement Lab (Oct. 28, 2014), available at http://www.measurementlab.net/static/observatory/M-Lab_Interconnection_Study_US.pdf; see also “Beyond Frustrated: The Sweeping Consumer Harms as a Result of ISP Disputes,” Open Technology Institute (Nov. 2014), available at https://static.newamerica.org/attachments/386-beyond-frustrated-the-sweeping-consumer-harms-as-a-result-of-isp-disputes/OTI_Beyond_Frustrated_Final.pdf.

¹⁶ *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Report & Order, FCC 15-24 (rel. Mar. 12, 2015) (“2015 Open Internet Order”) at ¶ 203.

¹⁷ *Applications of AT&T Inc. and DIRECTV For Consent to Assign or Transfer Control of Licenses and Authorizations*, MB Docket No. 14-90, Memorandum Opinion & Order, FCC 15-94 (rel. Jul. 28, 2015), at ¶ 7, 214-219, 396.

providers. OTI recently released a report documenting the widespread concerns about usage-based pricing, noting that “data caps, especially on wireline networks, are hardly a necessity, and instead appear to be primarily motivated by a desire to further increase revenues from existing subscribers and protect legacy services (such as cable television) from competing Internet services. There is little technical rationale for data caps, especially since congestion occurs in moments of peak demand, while data caps discourage usage at all times, even during off hours, when the network has plenty of capacity.”¹⁸

Data caps have a disproportionate impact on low-income consumers, who are more likely to opt for more affordable plans with lower data allowances.¹⁹ Broadband providers are notoriously opaque about how much data is consumed by any given online activity, which makes data usage very difficult to monitor for even the most vigilant consumer. As OTI’s recent report explained, this can lead to “suboptimal purchasing decisions such as buying too much or too little data.”²⁰ Moreover, data caps jeopardize online security by decreasing the likelihood that capped customers will download important security updates. This increases the proportion of Internet users using outdated software, which is a major cause of data breaches.²¹

¹⁸ See Danielle Kehl and Patrick Lucey, “Artificial Scarcity: How Data Caps Harm Consumers and Innovation,” New America’s Open Technology Institute (Jun. 2015) (“Artificial Scarcity”), available at https://static.newamerica.org/attachments/3556-artificial-scarcity/DataCaps_Layout_Final.a7ef6b9029da4dd29324757e57110b903.pdf.

¹⁹ Government Accountability Office, *FCC Should Track the Application of Fixed Internet Usage-Based Pricing and Help Improve Consumer Education*, Report to the Ranking Member, Subcommittee on Communications and Technology, Committee on Energy and Commerce, House of Representatives, GAO-15-108 (rel. Dec. 2, 2014) at p. 19, available at <http://www.gao.gov/products/GAO-15-108>.

²⁰ Artificial Scarcity at p. 9.

²¹ See Marshini Chetty, Richard Banks, A.J. Bernheim Brush, Jonathan Donner, and Rebecca Grinter, “‘You’re Capped!’ Understanding the Effects of Bandwidth Caps on Broadband Use in the Home,” Microsoft Research (May 2012), available at <http://research.microsoft.com/apps/pubs/default.aspx?id=162079>; Sean Michael Kerner, “RSA 2013: Outdated Software Biggest Internet Security Threat,” *eSecurity Planet* (Feb. 28, 2013),

Lifeline benefits should not subsidize services that promote artificial scarcity, weaken online security, and subject consumers to excessive and unnecessary fees. Moreover, the interaction of data caps with Lifeline's one-service-per-household limit may force households to ration their usage to an extreme degree. A family forced to share a single, data-capped mobile data plan would face severely limited access to emergency services, health care, employment, and education services. The Commission should reserve the right to revoke an ETC designation or otherwise limit participation in the program if a provider's data caps function primarily to extract onerous overage fees from Lifeline customers rather than manage networks. Furthermore, Lifeline providers that impose data caps on their networks should be prohibited from exempting any affiliated video services from billing related to the data cap.

Wireless providers should not be immune from scrutiny simply because their networks utilize mobile technologies. Despite the constraints that may accompany such technology, data caps can nonetheless go beyond legitimate wireless network management needs. Low-income Americans are disproportionately likely to rely exclusively on mobile services, which makes wireless data caps especially important in the Lifeline context. The Commission should closely scrutinize any data caps on Lifeline-supported wireless plans.

C. Lifeline Providers Should Disclose Data in a Standardized, Customer-Friendly Format

The FCC's Consumer Advisory Committee, of which OTI is a member, is currently developing a standardized disclosure format that broadband providers can use to comply with

available at <http://www.esecurityplanet.com/network-security/rsa-2013-outdated-software-biggest-Internet-security-threat.html>.

enhanced transparency rules promulgated earlier this year under the Open Internet Order.²² This standardized disclosure form is intended to help consumers understand the myriad services and pricing schemes offered by broadband providers.

The Commission should require Lifeline providers to adopt this standardized format as a minimum service standard. Although this proposal arises from the Open Internet proceeding, it has many beneficial uses for the Lifeline program: standardized disclosures would (1) help the Commission verify compliance with minimum service standards, (2) facilitate the Commission's efforts to collect standardized data on broadband providers, (3) help Lifeline customers compare products, and (4) benefit broadband providers that are already working to comply with the transparency rules by streamlining the disclosure regime. However, use of the disclosure form should *not* grant ETCs "safe harbor" from any Lifeline-related enforcement proceeding.

Although the Consumer Advisory Committee has not yet finalized its recommendation, OTI has proposed a standardized "truth-in-labeling" format that emulates the food nutrition labels familiar to many consumers.²³ The format is designed to enable side-by-side comparisons of broadband service offerings and evaluations of advertised speeds and network practices. We believe this labeling format would function well in the Lifeline program, but urge the Commission to consider adopting whatever format the Consumer Advisory Commission ultimately recommends.

²² 2015 Open Internet Order at ¶ 154-185.

²³ See Emily Hong, Laura Moy, and Isabelle Styslinger, "Broadband Truth-in-Labeling," New America's Open Technology Institute (Jul. 2015), available at <https://static.newamerica.org/attachments/4508-broadband-truth-in-labeling-2/Broadband%20Truth-in-Labeling%202015.c9ecf56cc29149488ad3263779be60b0.pdf>.

III. THE COMMISSION SHOULD STRENGTHEN COMPETITION AND CONSUMER CHOICE IN THE LIFELINE MARKETPLACE

OTI strongly supports the Commission's efforts to "increase competition and innovation in the Lifeline marketplace."²⁴ Robust competition is a necessary feature of a well-functioning market for all telecommunications services, including those participating in Lifeline.

Competition also safeguards against waste, fraud, and abuse. Lifeline participation can wither when the market consolidates, as demonstrated by AT&T's recent acquisition of Cricket Wireless. Shortly after the transaction closed, AT&T announced that Cricket would stop participating in Lifeline, thereby removing a popular service from the Lifeline market.²⁵

Cricket's exit underscores the need to expand the number of providers offering Lifeline services. The Commission should take proactive steps to (1) empower Lifeline customers by keeping switching costs low, (2) allow community-based networks to provide Lifeline services, and (3) encourage providers that rely on unlicensed spectrum to participate in the program.

The Commission's recent reclassification of broadband Internet access service provides an important mechanism by which providers of standalone broadband service can participate in Lifeline by being designated as Eligible Telecommunications Carriers under §214(e) of the Telecommunications Act. The Commission could also expand participation in the program using other approaches under the Act. OTI encourages the Commission to consider all potential options that could advance the goal of increasing the available offerings for Lifeline participants

²⁴ FNPRM at ¶ 115.

²⁵ See "Lifeline Credit Overview," Cricket Wireless, *available at* <https://www.cricketwireless.com/o/support/account-management/cricket-lifeline-credit/overview.html>.

while balancing the need for oversight through an ETC-designation process or a similar mechanism.

A. The Commission Should Empower Lifeline Customers by Minimizing Switching Costs

Lifeline participants must have the ability to easily switch providers. Switching barriers abound in the broadband and telephony markets, including high exit fees, complex paperwork and procedures, and the time and cognitive costs associated with researching alternatives. Monopolistic behavior tends to occur when barriers to switching are prohibitively high. Ultimately, switching costs can rob consumers of their power to choose the most affordable service that best meets their needs.

The Lifeline marketplace is acutely vulnerable to high switching costs due to the added complexity of systems for eligibility determination, payment, and de-enrollment. These systems should not be unreasonably cumbersome, opaque, or time-consuming for Lifeline customers. Poorly designed systems can undermine competition and consumer choice. The de-enrollment process is particularly important in this context; the process of de-enrolling from an ETC and re-enrolling with an alternative ETC must be consistent across providers and transparent to consumers. The Commission should also ensure that Lifeline customers have access to tools that facilitate comparison-shopping, such as the aforementioned “truth-in-broadband-labeling” proposal that OTI has put forth in the Consumer Advisory Committee. These efforts would protect Lifeline participants from high switching costs and promote competition among providers.

B. Community-Based Networks Should be Permitted to Provide Lifeline-Supported Services

Consistent with our comments in earlier Lifeline proceedings,²⁶ OTI reiterates the valuable role that community-based networks can and should play in the Lifeline program. Across America, local governments and community groups are leading the build out of cutting-edge broadband infrastructure in unserved and low-income communities. A public entity provides some form of retail broadband service in more than 100 U.S. localities.²⁷ As the Commission recognized earlier this year, these public investments are often necessitated by the failure of incumbent telecommunications companies to ensure that every community has access to quality broadband.²⁸

Community networks have proven themselves to be responsible stewards of the public interest and a vital means of closing the digital divide. They increase connectivity in high-need areas, drive local economic growth, and offer some of the fastest and most affordable broadband in the country.²⁹ For example, residents of Lompoc, California can purchase broadband access from LompocNet, a community network managed by the local electric utility, for just \$9.99 per month.³⁰

²⁶ See Comments of New America Foundation, *In the Matter of Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42 (filed April 21, 2011).

²⁷ See “Community Network Map,” Institute for Local Self-Reliance, *available at* <http://muninetworks.org/communitymap>.

²⁸ *In the Matter of City of Wilson, North Carolina, Petition for Preemption of North Carolina General Statute Sections 160A-340 et seq.*, WC Docket No. 14-115 (Feb. 26, 2015); *The Electric Power Board of Chattanooga, Tennessee Petition for Preemption of a Portion of Tennessee Code Annotated Section 7-52-601*; WC Docket No. 14-116 (Feb. 26, 2015).

²⁹ See “The Cost of Connectivity 2014,” New America’s Open Technology Institute (Oct. 2014) (“Cost of Connectivity”) *available at* https://static.newamerica.org/attachments/229-the-cost-of-connectivity-2014/OTI_The_Cost_of_Connectivity_2014.pdf; *see also* “Community-Based Broadband Solutions,” The Executive Office of the President (Jan. 2015.).

³⁰ See LompocNet website, *available at* <http://www.cityoflompoc.com/lompocnet>.

Lifeline should embrace innovative, community-based models that are making broadband an affordable reality for historically underserved populations. Although these networks embody the goals of the Lifeline program, the Commission has not historically given them a path to participate. The Commission should build upon its recent reclassification of broadband as a Title II service and clarify the eligibility requirements for these networks so that Lifeline customers have the option to choose community-based services. This recommendation supports the Commission's longstanding commitment to localism, as well as its interest in removing "specific state or federal regulatory barriers"³¹ that inhibit Lifeline participation.

The Commission has recognized the value of community networks in other programs such as E-Rate, which allows municipal providers to lease dark fiber to schools and libraries.³² The Broadband Technology Opportunities Program ("BTOP") and Broadband Initiatives Program ("BIP") made *all* potential broadband providers eligible to participate, a recognition that "whether a [provider is a] private for-profit carrier or a public entity is irrelevant to the need for expanding broadband availability."³³ There is no reason for the Commission to deny community-based providers the opportunity to participate in Lifeline. Doing so would only foreclose the program from a fast-growing segment of the broadband market.

³¹ FNPRM at ¶ 121.

³² *In the Matter of Schools and Libraries Universal Service Support Mechanism: A National Broadband Plan For Our Future*, GN Docket No. 9-51, *Sixth Report and Order*, FCC 10-175 (rel. Sep. 23, 2010) at ¶ 9.

³³ See Comments of The National Association of Telecommunications Officers and Advisors and New America's Open Technology Initiative, WC Docket Nos. 10-90, 05-337, GN Docket No. 09-51, FCC 10-58 (filed Jul. 12, 2010) at ¶ 2-3.

C. Networks Relying on Unlicensed Spectrum Should be Eligible to Provide Lifeline-Supported Services

OTI applauds the Commission's interest in using unlicensed spectrum to "extend the Lifeline program's reach to as many low-income consumers as possible."³⁴ Expanded access to unlicensed spectrum in bands with a variety of propagation characteristics, including low-band spectrum in the current television bands, has many potential benefits for low-income Americans and broadband competition.

The nationwide availability of a robust supply of TV white space spectrum in every market would foster the development of WISPs and community wireless networks in underserved communities that tend to have a disproportionate share of Lifeline-eligible households. For example, Maryland's rugged Garrett County has partnered with the Appalachian Regional Commission and a private firm to deploy a fixed wireless network that relies primarily on TV white space spectrum. This network will deliver affordable broadband to 3,000 homes and small businesses that previously relied on dial-up or satellite-based connections that provide slow and expensive Internet access.³⁵ Garrett County, like the more than 1,000 private-sector WISP operators across the country, exemplifies the benefits of unlicensed spectrum in areas where access and affordability are often most challenging. These fixed wireless broadband providers should be eligible to offer Lifeline-supported services.

Unlicensed spectrum can also be leveraged to help community anchor institutions provide greater connectivity to their neighborhoods — a service that augments Lifeline-

³⁴ FNPRM at ¶ 130.

³⁵ See "Garrett County, MD RFP for broadband network" (Dec. 7, 2014) *available at* <http://www.muniwireless.com/2014/12/07/garrett-county-md-rfp-broadband-network/>; *see also* Declaration Networks, "DNG Awarded \$800k to Build Out Network in Garrett County, MD" (Jan. 23, 2015) *available at* <http://www.declarationnetworks.com/press/dng-awarded-800k-to-build-out-network-in-garrett-county-md/>

supported services. For example, the Gigabit Libraries Network is using unlicensed access to TV white space spectrum to create satellite library hotspots that extend broadband access miles from the library, even when the facility is closed.³⁶ The Commission should ensure that E-Rate funding is available for innovative, robust WiFi services that utilize unlicensed spectrum to expand the reach of school and library-based broadband.

IV. THE COMMISSION SHOULD NOT CONSTRAIN THE PROGRAM'S BUDGET

OTI opposes proposals to limit the funding allocated to the Lifeline program and shares the Commission's concerns that a budget cap would undermine the program's Universal Service mission.³⁷ The case for blunt austerity measures has not been established. The program's expenditures are on a downward trajectory, plummeting \$600 million between 2012 and 2014 after the Commission implemented efficiency reforms.³⁸ Given this fiscal reality, a budget cap would be an unwarranted intrusion into a program that is successfully connecting Americans to vital services at an increasingly efficient cost. Moreover, a cap could foreclose many eligible households from participating in the program.

Rather than constrain the program's budget, the Commission should focus on its success in cutting program costs. These continued savings present an opportunity to reinvest in the program and expand its reach. The Commission should consider reinvesting any future cost savings back into the Lifeline program rather than redirect the funding to other programs such as the High Cost program. That reinvestment could support expanded services that advance the

³⁶ FNPRM at ¶ 129; *See* Gigabit Libraries Network, "Libraries WhiteSpace Pilot – Phase 2," available at <http://www.giglibraries.net/page-1712342>; *see also* Edward Belnaves, "Libraries as Gigahubs, and other inspiring ideas," *Trends and Issues in Library Technology* (Jul. 2015), available at http://www.ifla.org/files/assets/information-technology/newsletters/tilt_2015jul.pdf.

³⁷ FNPRM at ¶ 56.

³⁸ FNPRM at ¶ 55.

program's Universal Service goals. For example, the Commission could increase Lifeline's broadband subsidy to reflect the actual cost of broadband service in the United States. The current \$9.25 support level for telephony products was based on a study of the cost of provisioning voice service; it appears no such study was undertaken to determine an adequate subsidy for broadband service. OTI's national survey of broadband plans found no wireline service that cost \$9.25 or less; the low-income plans offered by Comcast and AT&T also cost more than \$9.25 per month.³⁹ While the proposed subsidy may significantly discount the cost of broadband connectivity in some markets, many eligible Americans would likely need to contribute additional funds to purchase even the most bare-bones broadband service under the Commission's proposal. The Commission should continue to reassess the subsidy amount, particularly as the fund is modernized to support broadband.

The reinvestment could also support the Commission's interest in providing Lifeline benefits to military veterans.⁴⁰ An estimated 1.4 million veterans currently live below the poverty line,⁴¹ including 900,000 who live in households that receive food stamps.⁴² The Commission could work with programs that support low-income veterans, including the Veterans Pension program, to increase participation rates among this vulnerable community. Broadband

³⁹ See *The Cost of Connectivity*; Comcast Internet Essentials website, available at <https://www.Internetessentials.com/>; *Applications of AT&T Inc. and DIRECTV For Consent to Assign or Transfer Control of Licenses and Authorizations*, MB Docket No. 14-90, Memorandum Opinion & Order, FCC 15-94 (rel. Jul. 28, 2015).

⁴⁰ FNPRM at ¶ 115.

⁴¹ See "Broken Promise: The Need to Improve Economic Security for Veterans," United State Congress, Report by the Joint Economic Committee (Nov. 2011), available at http://www.jec.senate.gov/public/_cache/files/628ca26b-7433-4fca-8f53-aa713eb3e756/broken-promise--the-need-to-improve-economic-security-for-veterans.pdf.

⁴² See "Cuts Conatined in SNAP Bill Coming to the House Floor Would Affect Millions of Low-Income Americans," Center on Budget and Policy Priorities (Sep. 17, 2013), available at <http://www.cbpp.org/research/cuts-contained-in-snap-bill-coming-to-the-house-floor-would-affect-millions-of-low-income?fa=view&id=4009>.

connectivity can be a literal lifeline for many veterans who take advantage of online-based telemedicine services, of which the U.S. Department of Veterans Affairs is a pioneer. Nearly 700,000 veterans used VA telehealth programs in 2014, accounting for 12 percent of all veterans enrolled in VA health care.⁴³ Broadband is essential for connecting to VA services, which use online forms to apply for benefits, order medication, schedule appointments, and consult with doctors. The Veterans Crisis Line is a compelling example of the power of broadband access for veterans: the program uses an anonymous online chat tool to connect with at-risk veterans and provide lifesaving mental health services and conversations. Since 2009, an estimated 240,000 online chats have been conducted.⁴⁴ These veterans health programs are a microcosm of the essential role that broadband connectivity plays in modern American life, underscoring why the Commission should find smart ways to reinvest in Lifeline rather than constrain the program.

V. LIFELINE CUSTOMER DATA SHOULD BE SUBJECT TO THE STRONGEST PRIVACY AND SECURITY PROTECTIONS

At a time of increasingly high-profile data breaches, customer trust is a critical ingredient for robust Lifeline participation. Lifeline eligibility requires applicants to disclose a significant amount of sensitive, personally identifiable information including income, address, full or partial Social Security Numbers, and status under public assistance programs.⁴⁵ In this regard, Lifeline

⁴³See “VA Telehealth Services Served Over 690,000 Veterans in Fiscal Year 2014,” U.S. Department of Veterans Affairs (Oct. 10, 2014), *available at* <http://www.va.gov/opa/pressrel/pressrelease.cfm?id=2646>.

⁴⁴See “About the Veterans Crisis Line,” Veterans Crisis Line, *available at* <https://www.veteranscrisisline.net/About/AboutVeteransCrisisLine.aspx>.

⁴⁵*In the Matter of Lifeline and Link Up Reform and Modernization, Lifeline and Link Up, Federal-State Joint Board on Universal Service, Advancing Broadband Availability Through Digital Literacy Training*, WC Docket No. 11-42, WC Docket No. 03-109. CC Docket No. 96-

is unlike voluntary commercial transactions in which a consumer has the ability to choose a provider based on its privacy and security practices; Lifeline customers have no choice. Accordingly, the Commission should establish the strongest possible privacy and security protections for applicant data that apply to all parties handling applicant data — including any third-party national verifier.

A. To Limit Opportunities for Compromise of Sensitive Application Information, Any National Verifier Established by the Commission Should Accept Application Documents Directly from Consumers

The Commission proposes to establish a national verifier that would process all applications for Lifeline eligibility. In connection with that proposal, the Commission “seeks comment on how providers and/or consumers should transmit and receive Lifeline applications and proof documentation with a national verifier.” In particular, should consumers be permitted “to directly submit their Lifeline application and supporting eligibility documentation to a national verifier via U.S. Postal Service, fax, email, or Internet upload,” or should “providers submit consumer eligibility documentation to a national verifier”? The Commission appropriately asks about “the data privacy and security advantages and disadvantages of each approach, and how . . . any risk of unauthorized disclosure of personal information [can] be mitigated.”⁴⁶

One of the most important ways to minimize privacy and security threats to sensitive information is to limit the number of hands through which the information passes. If the

45, WC Docket No. 12-23, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 12-11 (rel. Feb. 6, 2015) (“Lifeline Reform Order”) at ¶ 207; *see* NPRM at ¶ 19.

⁴⁶ FNPRM at ¶ 71.

Commission chooses to establish a national verifier, the number of individuals with access to applicant information should be strictly limited; the applications should be funneled through the verifier without requiring consumers or the verifier to share sensitive data directly with providers. The Commission notes that “many consumers are likely unfamiliar with many of the Lifeline application documents and program requirements.” To address this, the verifier should include an educational component that informs consumers about the application and is available to answer questions. Providers should also distribute materials that help potential Lifeline consumers complete the application process, but instruct applicants to submit applications and proof of eligibility directly to the verifier.

B. Any Party with Access to Lifeline Eligibility Applications Should Have Robust Privacy, Data Security, and Breach Notification Obligations

Any party with access to Lifeline applications, such as providers or a national verifier, must be subject to exceptionally robust obligations for privacy, data security, and breach notification. We make recommendations below on all of these points. These parties should be subject to the recommendations for protection of proprietary information outlined in the Notice of Apparent Liability for Forfeiture against TerraCom and YourTel.⁴⁷ Additionally, any national verifier should include a Chief Privacy Officer and undergo periodic privacy and security audits to verify that standards are met and regularly updated.

With respect to privacy, any party handling Lifeline applications should be required to train personnel on the proper handling of applicant information, to refrain from sharing information with outside parties, and to adopt best practices for data minimization. Data

⁴⁷Federal Communications Commission, *TerraCom, Inc., and YourTel America, Inc.*, DA 15-776, Order, (rel. Jul. 9, 2015) at ¶ 60.

minimization best practices include (1) collecting only the minimum personal information necessary from each applicant to establish the applicant's eligibility, and (2) purging that information as soon as it is no longer needed.

With respect to data security, any party handling Lifeline applications should be required to adopt a comprehensive information security plan that incorporates current best practices. A sufficiently detailed information security plan must include: (1) a system that regularly assesses security and anticipates attacks, (2) a method for detecting security failures and attacks in a timely fashion, and (3) a process for redressing security failures swiftly upon discovery.

Strong data security practices are particularly important in the context of a national verifier since such an entity would soon become a large repository of sensitive information. The Commission should anticipate that the verifier would be targeted by malicious attackers hoping to gain unauthorized access to applicant data. As illustrated by recent breaches at the U.S. Office of Personnel Management,⁴⁸ Premera Blue Cross,⁴⁹ and the Internal Revenue Service,⁵⁰ databases that host large amounts of sensitive information are prime targets for malicious attacks. Such attacks could expose Lifeline applicants to much harm, including financial fraud and identity theft.

Finally, with respect to breach notification, any party handling Lifeline applications should be subject to strong breach notification requirements akin to those applicable to carriers

⁴⁸ See OPM, *Information about OPM Cybersecurity Incidents*, available at <https://www.opm.gov/cybersecurity> (last visited Aug. 31, 2015).

⁴⁹ See Jim Finkle "Premera Blue Cross Breached, Medical Information Exposed," *Reuters* (Mar. 17, 2015), available at <http://www.reuters.com/article/2015/03/18/us-cyberattack-premera-idUSKBN0MD2FF20150318>.

⁵⁰ See Karen Damato, "5 Questions About the IRS Data Breach," *WSJ Your Money Blog* (May 27, 2015), available at <http://blogs.wsj.com/briefly/2015/05/27/5-questions-about-the-irs-data-breach/>.

that suffer a breach of customer proprietary network information.⁵¹ Strong breach notification requirements help affected individuals protect themselves against fraud and identity theft, reinforce incentives for holders of sensitive information to abide by data security obligations, and strengthen public accountability.

VI. DIGITAL LITERACY IS A CRITICAL COMPONENT OF SUCCESSFUL BROADBAND ADOPTION

OTI has long approached questions of broadband access and adoption under a “meaningful broadband adoption” framework that looks beyond home subscription rates to a more holistic view that incorporates the public’s comfort with digital tools and the availability, effectiveness, and impact of training resources.⁵² Our research demonstrates that digital literacy training, particularly when provided by a trusted and established community partner, is a key component of successful efforts to bridge the digital divide and connect historically marginalized communities to broadband Internet services.

The obstacles to broadband adoption cannot be solved merely by improving the availability of affordable broadband service. Achieving true universal access requires a commitment to a social infrastructure that supports communities as they adopt broadband services. The Lifeline program provides a clear mandate to reduce the cost of broadband for low-

⁵¹ 47 C.F.R. § 64.2011.

⁵² See Greta Byrum and Seeta Gangadharan, “Researchers Ask: What is meaningful broadband adoption?” New America’s Open Technology Institute (Apr. 17, 2012), *available at* <https://www.newamerica.org/oti/researchers-ask-what-is-meaningful-broadband-adoption/>; *see also* Georgia Bullen and Greta Byrum, “OTI and EveryoneOn release adoption metrics, rubric, and instruments,” New America’s Open Technology Institute (Aug. 28, 2015) (“OTI/EveryoneOn Adoption Metrics”), *available at* <https://www.newamerica.org/oti/oti-and-everyoneon-release-adoption-metrics-rubric-and-instruments/>.

income communities — and is in fact the only federal program currently intended to do so.

Although Lifeline is not inherently designed to address digital literacy, the Commission should nonetheless be mindful of existing community and federal programs, and structure reforms that integrate efforts to promote digital literacy and improve broadband adoption support at community institutions.

In addition, the Commission should continue to improve the data it collects about broadband availability as part of the Form 477 requirements and Universal Service programs. Lifeline reform presents a unique opportunity to expand and refine the data about availability and subscription rates for Lifeline-supported providers and customers. In modernizing its data collection practices, the Commission can look to the work of various organizations that participated in BTOP evaluation to ensure that the data can be analyzed by researchers and add to the growing understanding of meaningful broadband adoption.⁵³

VII. CONCLUSION

After three decades of successfully connecting low-income Americans to vital services and providing a ladder out of poverty, the Lifeline program is ready to evolve with the changing needs of participation in 21st Century America. The time has come for Lifeline's transition to a more flexible, broadband-inclusive program. OTI commends the Commission's latest effort to modernize Lifeline, another prudent step in the program's evolution that began with its creation during the Reagan Administration and continued with the expansion into wireless voice service

⁵³See "Meaningful Adoption Evaluation Instruments," New America's Open Technology Institute, available at https://static.newamerica.org/attachments/9545-oti-and-everyoneon-release-adoption-metrics-rubric-and-instruments/EveryoneOn_Instruments.5e56cc1aec4d4976b7e6d860197afe6a.pdf.

during the George W. Bush Administration. With thoughtful implementation, the Commission can strengthen Lifeline and help bridge America's longstanding digital divide.

Respectfully Submitted,

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