

May 18, 2015

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

**RE: Lifeline Broadband Pilot Participation of Nexus Communications, Inc.,  
WC Docket 11-42**

Dear Secretary Dortch:

Nexus Communications, Inc. (“Nexus”) hereby refiles the attached report on its participation in the Commission’s Lifeline broadband pilot program. It had previously filed this report on March 9, 2015 in redacted form as well as a confidential version that was subject to a confidentiality request. It is publicly filing the unredacted version today in order to provide Commission staff with further support in the record demonstrating that out-of-pocket costs are a very significant barrier to broadband adoption by low income Americans.

Sincerely,



Danielle Frappier  
*Counsel to Nexus Communications, Inc.*

March 9, 2015

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

**RE: Lifeline Broadband Pilot Application of Nexus Communication, Inc.  
WC Docket 11-42**

Dear Secretary Dortch,

Nexus Communications, Inc. (“Nexus”) hereby provides the following report on its participation in the Commission’s Lifeline broadband pilot program in the above-captioned proceeding (“Broadband Pilot Program”). This program provided a field test of strategies for the Lifeline program’s support of broadband adoption.<sup>1</sup> Nexus’s pilot project, which operated in eight states, studied how broadband subscription rates were affected by three variables: varying subsidy amounts, usage limits, and access to digital literacy training. The results suggest that low-income subscribers receive significant benefits from broadband service, but that cost is a significant obstacle to their signing up. While Nexus’s data shows that a low-risk introduction to broadband service can successfully overcome low-income subscribers’ most significant

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<sup>1</sup> See *Lifeline Reforms Saved More than \$210 Million in 2012, Beating Target: FCC Announces 14 Pilot Projects to Increase Broadband Adoption Using a Portion of Savings from Lifeline Reform*; Public Notice, WC Dkt. No. 11-42, 27 FCC Red. 15842 (WCB rel. Dec. 19, 2012).

concerns, it also suggests that widespread adoption is unlikely without a truly low- or no-cost service offering that is long-term and paired with digital education.

## I. OVERVIEW OF NEXUS'S PILOT PROJECT

Nexus's pilot project launched in May 2013 (following a delayed start date for the Broadband Pilot Program by the Commission) and ran through October 2014, for a total of 18 months. As described in its application,<sup>2</sup> Nexus offered broadband services in its service territory in Ohio, and in Detroit, Las Vegas, and Des Moines, as well as other cities within its wireless territory. Nexus partnered with Connected Nation in order to provide pilot program subscribers (except those in a control group) with digital literacy training.

Nexus explained in its application that Connected Nation's ability to provide free, in person digital literacy and training programs was time-limited due to the end of funding for its program in September 2013.<sup>3</sup> Unfortunately the delayed launch of the Broadband Pilot Program reduced to only a few months the period during which Nexus could offer broadband service and Connected Nation could simultaneously provide in person digital literacy training.

Overall, Nexus signed up 274 subscribers over the 18-month span of its pilot project. Nexus received far fewer applications for broadband service than it anticipated. Because of this, it took special interest in understanding the reasons why so many potential customers declined to sign up. Its conclusion is that three factors inhibit low-income customers from becoming broadband subscribers: cost, duration of service, and lack of experience with the Internet.

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<sup>2</sup> See *Application of Nexus Communications, Inc.*, WC Dkt. No. 11-42, filed July 2, 2012 (“*Application*”).

<sup>3</sup> See *Application* at fn. 8.

The vast majority (78%) of low-income subscribers who were eligible for Nexus's pilot had never subscribed to broadband before. The results of surveys that Nexus conducted among its broadband subscribers suggest that the most significant reasons for non-adoption can be overcome through a no-cost introduction to the benefits of broadband service. While many broadband subscribers expected to use the service with a smart phone, the services these subscribers wished to access with broadband suggest that they might see greater benefits when service is paired with a portable large-screen device such as a laptop or tablet.

## **II. ANALYSIS**

Nexus's pilot project set out to analyze the effects of three variables on broadband adoption: varying subsidy amounts, usage limits, and access to digital literacy training. During the project, Nexus also collected data about the participants, including their age, household size, and prior broadband experience. Finally, Nexus gathered information about the type of devices that applicants planned to use with their broadband service.

### **A. Effect of Subsidy Amounts**

Nexus tested the effects of different subsidy amounts by offering one group of subscribers \$20 in subsidy, and second group \$15 in subsidy, and a third group no subsidy. The resulting prices of Nexus's service offerings were as follows:

Plan	Data Allowance	Non-discounted Rates (Control Group) <sup>4</sup>	Discounted Rates (Test Group I-- \$15.00 Pilot Subsidy)	Discounted Rates (Test Group II-- \$20.00 Pilot Subsidy)
Basic	200 MB	\$24.99	\$10.00	\$5.00
Intermediate	500 MB	\$29.99	\$15.00	\$10.00
Medium	1 GB	\$39.99	\$25.00	\$20.00
Large	2 GB	\$49.99	\$35.00	\$30.00

Figure 1: Broadband Plans Offered by Nexus during Pilot Project

In general, subscribers gravitated toward cheaper plans. This matched Nexus's expectation that low-income customers who were relatively unfamiliar with the benefits of broadband would be reluctant to pay much, if anything, out of pocket for the opportunity to try broadband. The fact is that these subscribers have very little disposable income available each month. Most, it appears, are not willing to commit their limited resources to broadband service when its benefits, though great, may not be apparent until subscribers have had a chance to learn how to use it. The distribution of subscribers among the plans was as follows:

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<sup>4</sup> See footnote 4 of Nexus' application for the explanation of the one-cent difference between its commercial rates and its control group rates.

Plan	Data Allowance	Non-discounted Rates (Control Group)	Discounted Rates (Test Group I -- \$15.00 Pilot Subsidy)	Discounted Rates (Test Group II -- \$20.00 Pilot Subsidy)
Basic	200 MB	19	39	74
Intermediate	500 MB	8	9	86
Medium	1 GB	0	4	17
Large	2 GB	7	4	7

Figure 2: Distribution of Subscribers among Available Broadband Plans

## B. Data Limits

As can be seen in Figure 2 above, while data limits appear to have had some impact on subscribers' choice of service package, generally price was a more important consideration. That said, many of the subscribers who were offered the maximum subsidy amount were willing to pay slightly more out of pocket to upgrade from the lowest data usage allowance to the mid-level. Nexus believes that overall, subscribers' willingness to pay out of pocket for more data will increase if (i) the entry price for broadband service is reduced; and (ii) subscribers become comfortable enough with using broadband to engage the more data-intensive uses of the service. Overall, however, customer survey responses indicate that while 19% of subscribers expected to use broadband service for relatively bandwidth-intensive uses like streaming music and videos, the vast majority of subscribers planned to use broadband for important day-to-day activities that require less capacity.

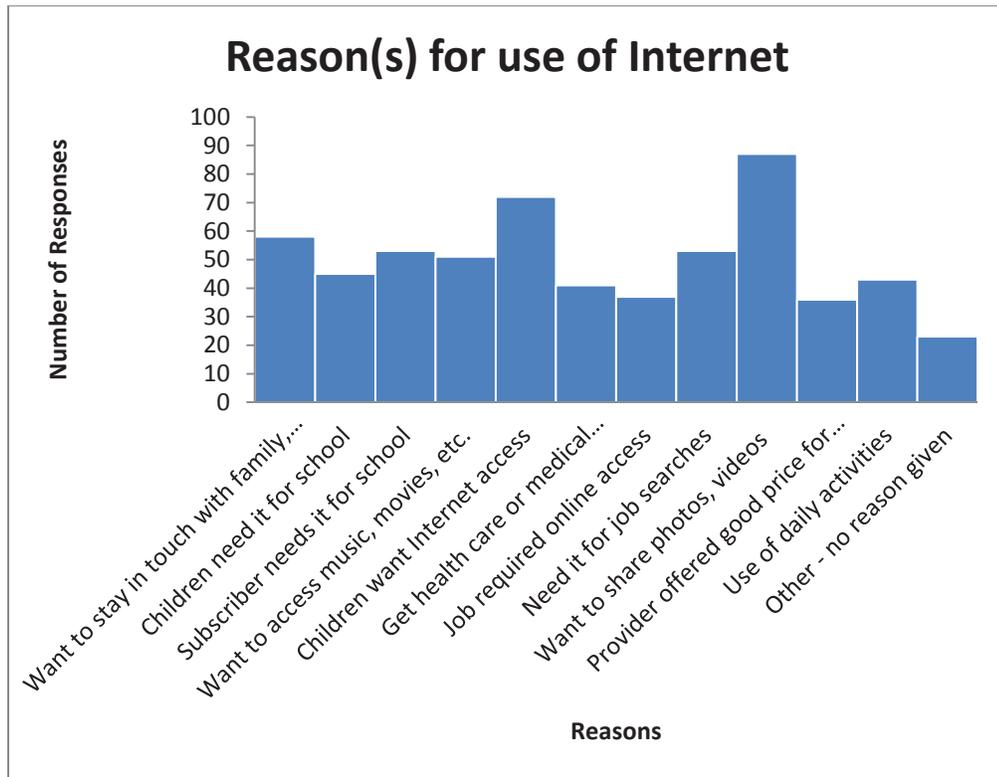


Figure 4: Pilot Project Participants' Intended Uses for Broadband Service

### C. Digital Literacy

Nexus's pilot project was designed to operate in conjunction with in person digital literacy training provided by Connected Nation. This initiative was funded through September 2013, substantially during the time period for which Nexus proposed to operate its pilot project. This partnership was designed to leverage Commission funding with Connected Nation's funding and provide added benefits to both programs. Unfortunately, due to the delay in launching the Broadband Pilot Program, Connected Nation's initiative and its funding were near completion by the time Nexus was able to launch its pilot. Because of this, Connected Nation's in person digital literacy programs were only available to a small percentage of Nexus's broadband subscribers. None of the subscribers for Nexus's broadband services ultimately participated in Connect Nation's digital literacy training.

Because no subscribers participated in the in person digital literacy program, Nexus instead looked at the survey data from those subscribers who did not have the benefit of digital literacy training. The results of these surveys suggest that experience with broadband, particularly through digital literacy training, has the potential to overcome low-income subscribers' initial concerns about the Internet.

A review of the reasons why subscribers had not previously obtained broadband service reveals that the biggest reason for low-income participants' reluctance is discomfort with the Internet. Concerns could take the form of fears about privacy, anxiety about the potential danger for children, or other specific worries.

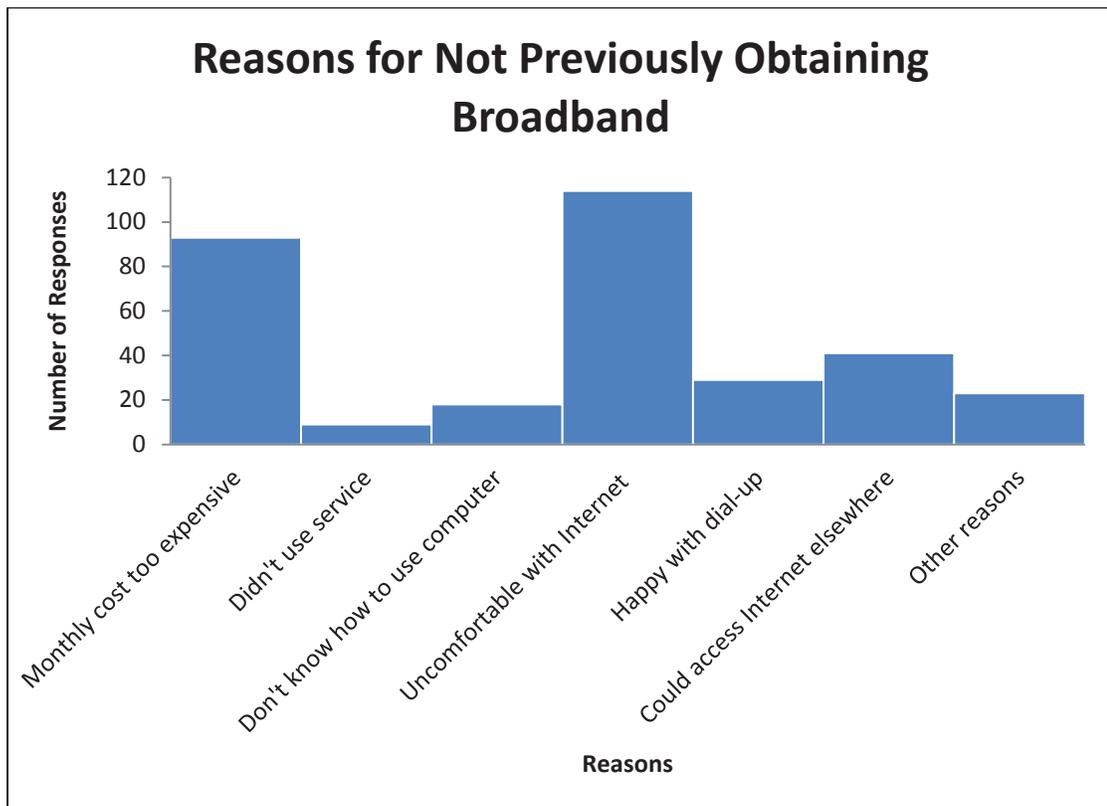


Figure 5: Reasons for Not Previously Obtaining Broadband Service

When Nexus compared these survey responses to the responses of low-income applicants who had previously subscribed to broadband, it found that none of those applicants expressed the same concerns. Instead, their primary reason for dropping service was monthly costs that were too high.

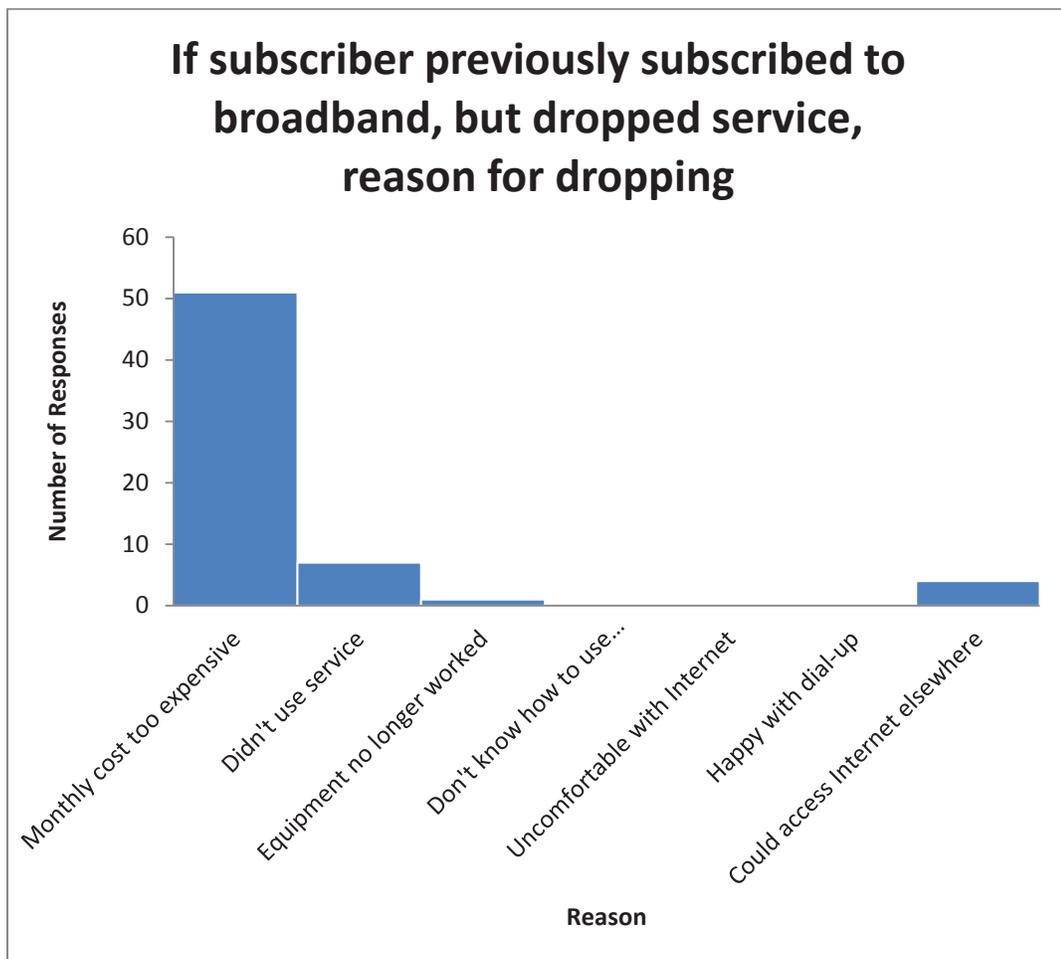


Figure 6: Reasons for Dropping Previous Broadband Service

This suggests that experience with broadband can largely, perhaps even completely overcome the concerns about the Internet that appear to be held by many in the low-income

population, if the service is available at low or no cost. In Nexus's opinion, tailored, no-cost, in person digital literacy training is the best method for providing this experience quickly. The data also suggests that once members of the low-income community have experienced the benefits of broadband service, they are unlikely to give them up if they can be had at low or no cost.

#### **D. Devices**

Nexus asked participants in its pilot project about what type of device they expected to use with their broadband service. As illustrated by the chart below, the largest number expected to use a smartphone to access the Internet. However, a large number of participants also expected to use a mobile broadband modem (aircard) to connect a laptop computer or other device to the broadband service.

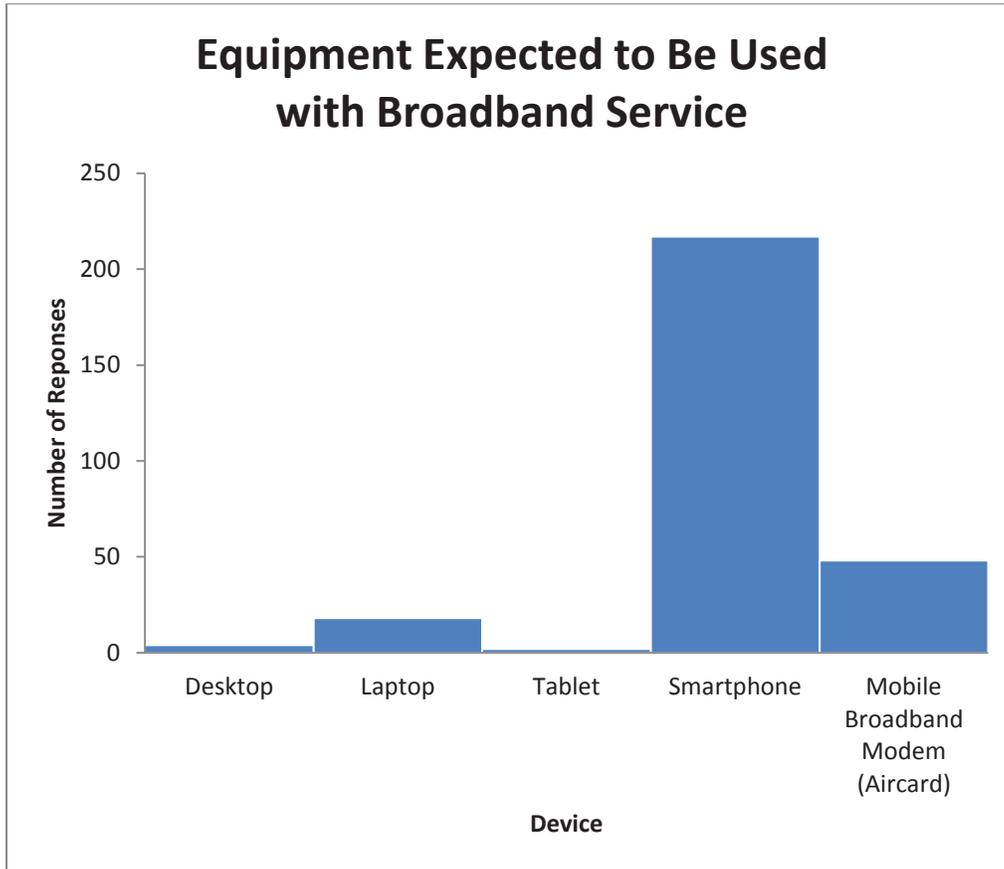


Figure 7: Devices Expected to Be Used with Broadband Service

These results suggest that for low-income broadband subscribers, mobility is key. They also suggest that participation in future broadband initiatives for the low-income population will be most successful if it offers both smartphones and aircards, or at least offers participants a choice between the two.

The dual preference for smartphones and aircards demonstrates that low-income participants have dual needs: (i) the convenient access to broadband on-the-go offered by smartphones, and (ii) portable but full-featured broadband access through a laptop or PC. These preferences track with the survey responses illustrated in Figure 4, which show that the

participants in Nexus’s pilot project planned to use broadband for a wide variety of reasons, but especially for keeping in touch with family and friends (often easiest on a smartphone) and for using the Internet for school, health care, and job needs (best done on a larger screen).

**E. Participants**

Nexus also collected data about the low-income subscribers who participated in the pilot project. It includes this data below:

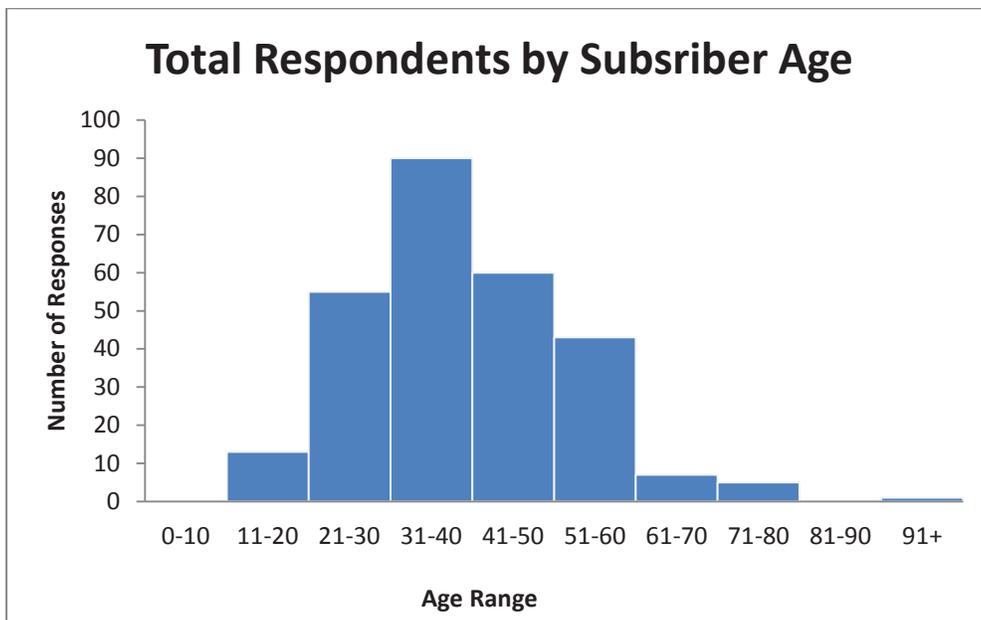


Figure 8: Age of Participants

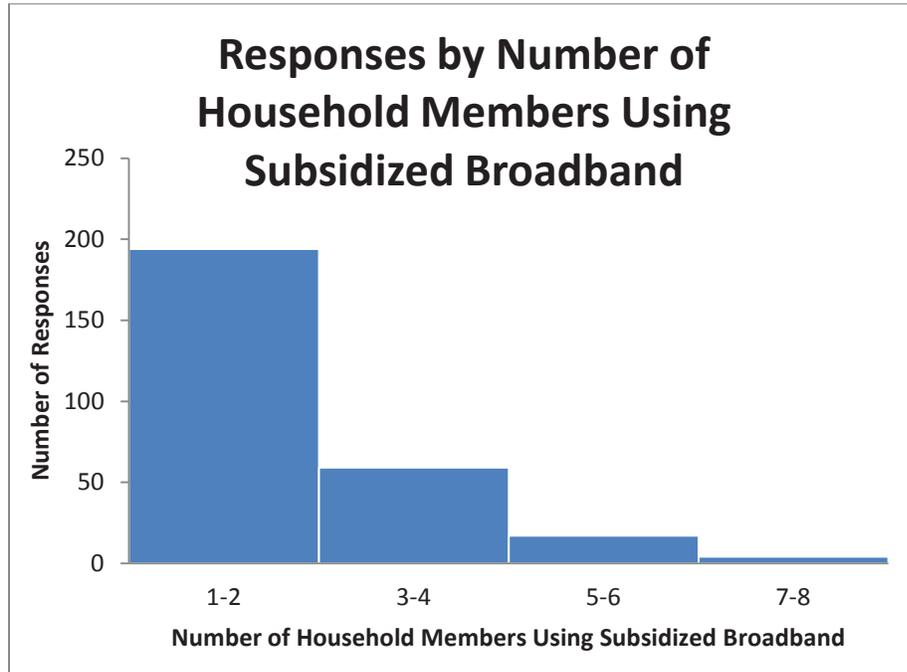


Figure 9: Size of Participant Household

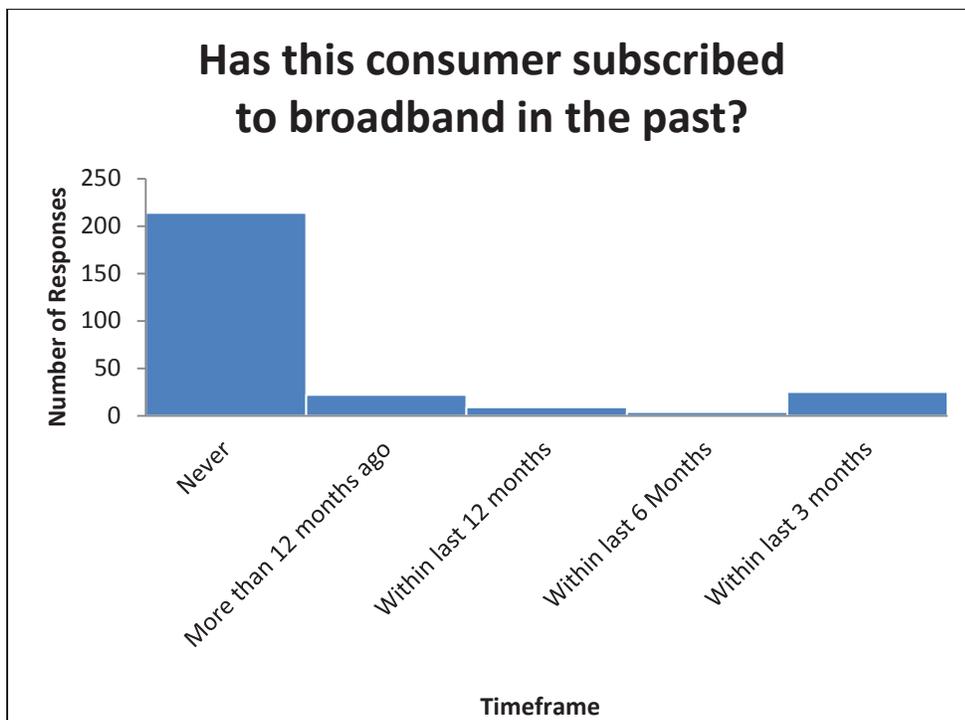


Figure 10: Participants' Prior Experience with Broadband

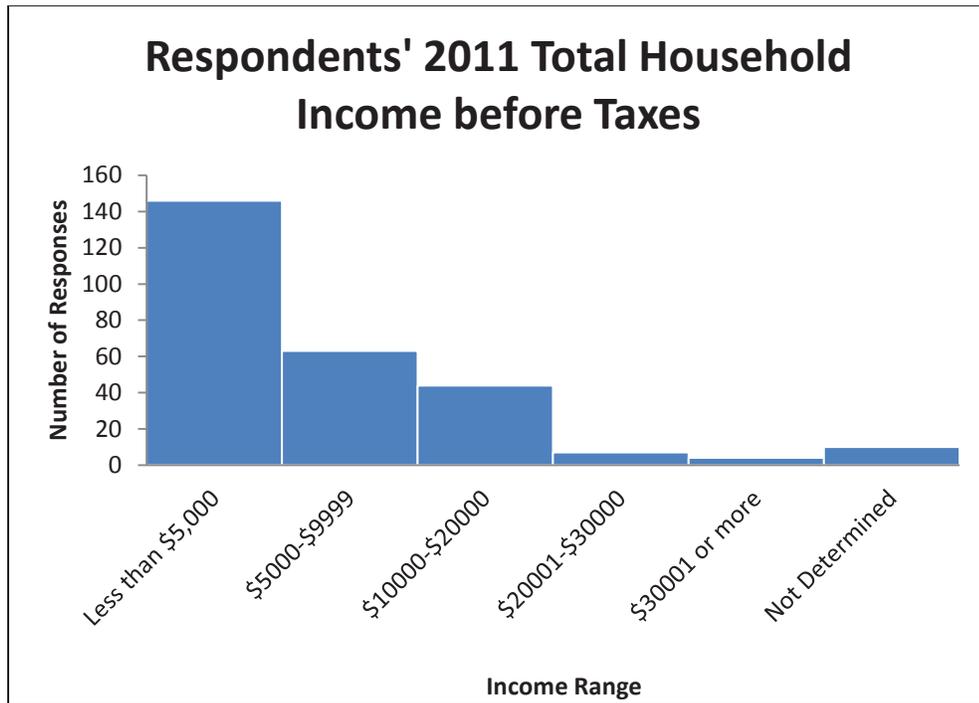


Figure 11: Participants' Total Household Income before Taxes

### III. CHALLENGES

While Nexus was able to gather useful data from its pilot project, the low participation rate made it important to understand the challenges and obstacles preventing the majority of potential low-income subscribers from signing up. Nexus identified three significant hurdles it believes any long-term Lifeline broadband initiative will need to overcome.

#### A. Minimum Cost of Plans

Nexus's long experience with low-income customers led it to suggest offering a fully-subsidized broadband plan that would come at no cost to the consumer. It is no secret that the introduction of fully-subsidized Lifeline telecommunications service packages has been critical to the dramatic rise in participation in the Lifeline program over the past few years. This should

surprise no one: low-income subscribers by definition generally have very little discretionary income that must be applied to a wide range of necessities. As numerous commenters have reported, in America, it is expensive to be poor.<sup>5</sup>

The survey results Nexus has collected demonstrate that even more than for telecommunications services, broadband service must be made as low cost as possible if low-income Americans will be able to participate in meaningful numbers. Unlike telephone service, whose characteristics are familiar to virtually every American, the benefits of broadband service only really become apparent after some training and experience, as illustrated by Figures 5 and 6 above. Asking low-income citizens to set aside \$10, or even \$5 a month for a service of unknown value, potential risks, and a high upfront cost for a device appears from the data to be asking too much for too many low-income Americans. A strategy with a much higher chance of success is to pair a no-cost, low-frills broadband service with free basic digital literacy training and a low-cost or free device. This will allow subscribers to try broadband at no cost and with no risk, permitting them to gain experience and confidence with the Internet that can show them the powerful benefits broadband can offer.

## **B. Digital Literacy Training**

A low- or no-cost broadband service package should be accompanied by widely-advertised, in person digital literacy training. Nexus's survey results show that many low-

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<sup>5</sup> See, e.g., Barbara Ehrenreich, "It Is Expensive to Be Poor," *The Atlantic Monthly*, Jan. 13, 2014 (available at <http://www.theatlantic.com/business/archive/2014/01/it-is-expensive-to-be-poor/282979/>); Charles M. Blow, "How Expensive It Is to Be Poor," *New York Times*, Jan. 18, 2015 (available at <http://www.nytimes.com/2015/01/19/opinion/charles-blow-how-expensive-it-is-to-be-poor.html>); DeNeen L. Brown, "The High Cost of Poverty: Why the Poor Pay More," May 18, 2009 (available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/05/17/AR2009051702053.html>).

income citizens harbor concerns about the Internet that may prevent them from signing up for broadband service. The results also show that for almost all subscribers, these concerns are easily outweighed by the benefits of broadband access. Nexus believes that the best way to bridge this gap in experience is to implement a permanent program for basic digital literacy training.

Digital literacy training will allow subscribers to overcome the learning curve associated with broadband services and eliminate any unfounded fears about the safety or usability of the Internet, which appears to be a significant hurdle for many potential, low-income subscribers. Beyond educating users about fundamental concepts of broadband service, digital literacy training can also equip subscribers with the skills necessary to reap the benefits of broadband through the many uses Nexus subscribers identified in Figure 4. In a program such as that offered by Connect America, after completing the basic training in computer basics, Internet fundamentals, and applied Internet use, students can move into a wide array of topics from jobs to education, healthcare, or further computer knowledge.

By the time new subscribers have completed such a program, they will be well equipped to fully engage with the Internet and make the most of their broadband connections. As Nexus's data indicates, once users are familiar with the services, information, and convenience that broadband service provides, they will be very unlikely to abandon service, so long as it is priced affordably.

### **C. Limited Time Offering**

Nexus believes that the number of subscribers to its pilot project was affected by the limited time (18 months) that it was able to offer subsidized broadband service. As with any group of consumers, low-income Americans understand the drawbacks of a service that is only available for a limited time, and are understandably reluctant to make a commitment, especially when the limited service requires an outlay from a limited monthly budget. While Nexus did not offer this information unless asked, if an applicant asked, Nexus informed the subscriber that the subsidy would only be available for a limited time. Knowing that the recurring subsidy would disappear within a matter of months made it difficult for many would-be applicants to dedicate the time and resources necessary to apply for the service, pay the monthly out-of-pocket fee, obtain a computer or other device, and learn how to use the broadband service.

## **IV. CONCLUSION**

As an experienced participant in the Lifeline program, Nexus understands the benefits that broadband service can bring to low-income Americans. It is grateful for the opportunity to share the information it has gathered through its pilot program and is eager to offer its knowledge and experience as the Commission considers how best to re-shape the Lifeline program to support broadband. Nexus is confident that broadband will bring unparalleled benefits to low-income Americans, and reiterates its belief that the best strategy to realize these benefits is to support a variety of ongoing service offerings, including fully-subsidized service packages, that are paired with in person digital literacy training.

Respectfully submitted,



By:

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