Towards a More Efficient Lifeline Program

Comments Submitted In the Matter of Lifeline and Link-Up Reform and Modernization WC Docket No. 11-42

By

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I. Overview and summary

For the past three decades, the Lifeline universal service program has subsidized telephone subscriptions for low-income households. Economics research finds that the program has increased low-income access telephone service, but at a high cost: subsidies flowing to many consumers who would have subscribed even without a subsidy.[1] Now, proposed reforms would allow Lifeline subsidies to be used for broadband service. Given the increasing importance of broadband as a primary conduit of communications, applying Lifeline to broadband has appeal. In these comments, we argue that the program can become more efficient by:

- Better targeting those who would not have service without a subsidy.
- Providing subsidies directly to consumers and allow them to use their subsidy with any broadband provider.
- Imposing a budget.
- Learning from private sector initiatives.
- Setting program goals and incorporating program evaluation.

The balance of our comments explain each of these points in greater detail.

II. Identify Consumers that Would Not Subscribe Without a Subsidy

The introduction to the NPRM which proposes to reform the Lifeline program explains that:

> [t]he purpose of the Lifeline program is to provide a hand up, not a hand out, to those low-income consumers who truly need assistance connecting to and remaining connected to telecommunications and information services.[2]

In other words, the program is intended to target people who would not subscribe to a broadband network without a subsidy. To date, Lifeline has not performed well on this metric. Reforms provide an opportunity to better focus on those who truly require a subsidy.

In Lifeline's early days, to be eligible at least one household member had to participate either in food stamps (now SNAP) or Medicaid.[3] Later, the FCC expanded the eligibility criteria to include seven Federal welfare programs and an income criterion.[4] Today, a household is eligible if one household member participates in at least one of eleven welfare Federal programs, in one of several

[1] See Ross C. Eriksson, David L. Kaserman, and John W. Mayo, "Targeted and Untargeted Subsidy Schemes: Evidence from Postdivestiture Efforts to Promote Universal Telephone Service*," *The Journal of Law and Economics* 41, no. 2 (October 1998): 477–502, doi:10.1086/467398; Christopher Garbacz and Herbert G. Thompson, "Estimating Telephone Demand with State Decennial Census Data from 1970-1990," *Journal of Regulatory Economics* 21, no. 3 (May 2002): 317–29; Olga Ukhaneva, "Universal Service in a Wireless World" Working Paper (2015); Daniel A. Ackerberg et al., "Low-Income Demand for Local Telephone Service: The Effects of Lifeline and Linkup," *International Journal of Industrial Organization*, no. 37 (2014): 84–98.

[2] Federal Communications Commission, "In the Matter of Lifeline and Link Up Reform and Modernization | Telecommunications Carriers Eligible for Universal Service Support | Connect America Fund," June 22, 2015, para. 1, https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-71A1.pdf.

[3] See Federal Communications Commission, "Universal Service Monitoring Report, CC Docket No. 98-202," December 1998.

[4] See Federal Communications Commission, "Universal Service Monitoring Report, CC Docket No. 98-202," May 2005.

state welfare programs (where applicable),[5] or meets an income criterion. In 2005 the FCC expanded the subsidy to include prepaid wireless service in addition to landline service and wireless service with contracts.

On the one hand, increasing the range of eligible services and the number of ways a household can demonstrate its financial hardships made it more likely that any household that truly needs a subsidy would be able to get one. On the other hand, these changes also made it more likely that subsidies would flow to people who would subscribe anyway (i.e., "inframarginal" subscribers). And, indeed, research suggests that the program subsidizes a large number of infra-marginal subscribers.

Ukhaneva (2015)[6] finds that only one out of eight households that are enrolled in Lifeline for either wireless or wireline service, subscribes to telephone service because of the subsidy while the other seven are inframarginal subscribers. Out of twenty households that receive the subsidy for wireless service, only one subscribes to telephone service because of the subsidy, and the other nineteen are inframarginal subscribers.

A reformed Lifeline should focus on better targeting consumers that would not subscribe to voice/broadband without a subsidy, thereby increasing its cost-effectiveness. A perfect targeting mechanism is unrealistic—we cannot know every consumer's preferences. But it should be possible to understand demand well enough that we can improve on the current low level of cost-effectiveness. The FCC can employ several tools to achieve this goal.

Continue Pilot Projects and Study Consumer Demand

First, the FCC should continue its use of experiments and pilot projects to test the effectiveness of different approaches. The FCC is to be commended for facilitating 14 pilot broadband subsidy programs in 2012.[7] These pilots yielded some important lessons discussed below. However, because they explicitly targeted people without connections they were not designed to help identify the marginal subscriber. Additional experiments could shed light on that issue.

Second, the FCC should consider conducting studies of consumer demand to help determine how much different people are willing to pay for different types of services and better identify consumers on the margin. Some of the necessary data may already exist, or could exist with a little effort.

For example, the National Health Interview Survey (NHIS), administered by the Centers for Disease Control, annually collects data on households and their members. Though not intended for this purpose, the NHIS has become the definitive source for information about wireless-only households and has demonstrated the importance of wireless communications to poor households. It includes questions on telephone ownership, Internet usage, and participation in the major Federal

[5] About half of states and territories have additional state-level eligibility criteria. This information was gathered from the Lifeline applications posted on Eligible Telecommunications Carriers' web sites, for example, see http://www.verizon.com/support/consumer/consumer-education/lifeline?CMP=DMC-CVZ_ZZ_ZZ_Z_DO_N_X00363.

[6] Ukhaneva, "Universal Service in a Wireless World," Working Paper, 2015.

[7] Federal Communications Commission, "In the Matter of Lifeline and Link Up Reform and Modernization | Telecommunications Carriers Eligible for Universal Service Support | Connect America Fund," June 22, 2015, para. 30–31, https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-71A1.pdf.

welfare programs (SSI, SNAP, and Medicaid) that have served as the main portals through which most consumers qualify as eligible for Lifeline. Adding just a single question—"Do you receive Lifeline subsidies"—to the survey might help find mechanisms that can better identify Lifeline eligibility.

For (an overly simplistic) example, observing that households that satisfy certain eligibility criteria, have telephone service, but are not enrolled in Lifeline could indicate that the particular eligibility criterion is not suitable for identifying eligible Lifeline recipients.

As another example, existing datasets should make it possible to identify geographic areas such as Census blocks or block groups that have particularly low broadband adoption. People who live in these areas and meet other need-based criteria may be more likely to require subsidies to subscribe than otherwise identical people who live in areas with higher adoption rates. Such a hypothesis could be tested as a pilot before the approach is implemented nationally.

Pilot Projects Show the Difficulties of Encouraging the Non-Connected to Subscribe

Although the FCC Staff Report is hesitant to draw many conclusions from the pilot projects,[8] it is possible to make some generalizations that the FCC should take into account.

Perhaps most importantly, the pilots show how difficult it remains to induce people without broadband connections to subscribe. In its application, Nexus Communications, Inc. noted that it expected to enroll 12,000 people who did not currently have broadband in its trial subsidy programs.[9] Instead, out of 57,296 invitations, only 274 people signed up. Nexus had a higher response rate the larger the subsidy offered, but even so only 1.36 percent of the people invited to receive the larger, $20 per month, subsidy chose to do so. Overall, the program had a response rate of 0.48 percent, or 0.62 percent when excluding offers that included digital literacy training, which a grand total of five people out of the 13,560 invited wanted.

Tracfone's final report redacted all information about its program's results, but the public data combined with Tracfone's application suggest certain conclusions. Its application implies that it intended to invite 30,000 subscribers to participate in its pilot program and expected 3,600 to choose one of the offers.[10] However, Tracfone managed to sign up only 765 new subscribers to its pilot.[11]

Similarly, Virgin Mobile found less interest in its offer than it had expected. In its final report it noted that it invited 254,000 people to take one of four offers and expected 10,000 people to

[8] Wireline Competition Bureau, "Low-Income Broadband Pilot Program," Staff Report, (May 22, 2015), https://apps.fcc.gov/edocs_public/attachmatch/DA-15-624A1.pdf.
[9] Nexus also had a control group that would receive no subsidy, but its application does not predict how many subscribers would take it. See Daniell Frappier and Paul B. Hudson, "Application of Nexus Communications, Inc," July 2, 2012, 10, http://apps.fcc.gov/ecfs/document/view?id=7021982453.
[10] Tracfone Wireless, Inc., "Tracfone Wireless, Inc.'s Third Supplement to Application to Participate in the Broadband Adoption Lifeline Pilot Program," July 2012, http://apps.fcc.gov/ecfs/document/view?id=7022023091.
[11] The FCC Staff Report says that Tracfone had 667 subscribers to its pilot, but the raw data available on the FCC's website reflects the higher number. We do not know what explains the difference. Wireline Competition Bureau. "Low-Income Broadband Pilot Program." Staff Report, May 22, 2015.

participate.[12] "In fact," Virgin found, "participation in all Offers was considerably less – in the hundreds of customers total in any given month."[13]

The pilots are instructive. They tell us that we still do not truly understand why many people choose not to subscribe and, importantly, how to induce them to subscribe. While surveys tell us that the cost of service is important, it turns out to be difficult to convince people who are not connected to subscribe even when offering them a subsidy. In other words, a subsidy was not sufficient to induce many non-connected people to subscribe.

These low takeup rates will further reduce the cost-effectiveness of any program that does not adequately target subscribers on the margin. Surely anyone who already subscribes and is offered a subsidy will accept it, while a fairly small share of eligible people who do not subscribe will. As a result, a program that does not accurately target the marginal subscriber will largely subsidize those who already have service and, therefore, have little effect on broadband adoption.

Why Focusing on the Marginal Subscriber is Important

Some contend that the focus on identifying the marginal consumer is misplaced because Lifeline subsidies benefit poor people who receive them regardless of whether the subsidy affects their communications decisions. We are not unsympathetic to this claim. After all, money is fungible, and an extra $10 per month can be meaningful to low-income people. Nevertheless, the FCC is not supposed to operate general welfare programs and, indeed, there are indications that programs under the universal service umbrella are not even particularly good when judged against a pure welfare-program standard. For example, the Connect America Fund, which subsidizes rural communications companies, benefits large numbers of wealthy people, including the owners of recipient companies and wealthy customers they serve.[14]

Others argue that the focus on cost-effectiveness and identifying the marginal consumer is misplaced because consumers that have service might interrupt it due to financial hardship. According to a survey by the Pew Internet and American Life Project,[15] nearly half (48%) of U.S. smartphone owners had to cancel or shut off their cell phone for a period of time because they could not afford to pay the cost. This phenomenon, however, is not an argument against focusing on the marginal consumer. Such people reflect the very definition of the marginal consumer, and effective targeting mechanisms should include such people as those who require subsidies.

Finally, the subsidies are not costless. Providing the subsidies requires collecting revenues, and currently the collection mechanism—taxes on long-distance and wireless services—fall heavily on low-income people. Additionally, any tax collection causes economic losses. Collecting more funds than are truly needed is economically harmful and the burden falls disproportionately on low-income people.

[12] Elaine M. Divelbliss, "Virgin Mobile USA, LP Participation in Broadband Lifeline Pilot Program, Lifeline and Link Up Reform and Modernization," March 24, 2015, http://apps.fcc.gov/ecfs/document/view?id=60001041375.
[13] Ibid., 2.
[14] See Thomas Hazlett and Scott J. Wallsten, "Unrepentent Policy Failure: Universal Service Subsidies in Voice and Broadband," 2013.
[15] See more details at http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/.

III. Provide Lifeline Subsidy Directly to Consumers, Allow Them to Use Their Subsidy With Any Communications/Broadband Provider, and with Any Communications/ Broadband Plan

In 2012 the FCC implemented reforms that aimed to eliminate fraud and abuse in the program.[16] There were two major causes of waste of program funds. First, no good mechanism was in place that would allow carriers to verify eligibility of the customers willing to enroll in the program. Second, multiple members of the same household were able to enroll in the subsidy despite the one subsidy per household rule; sometimes the same individual received the subsidy from multiple carriers.

To eliminate multiple subscriptions and enforce the one subsidy per household rule, the FCC created the National Lifeline Accountability Database (NLAD). However, if instead of carriers' consumers receive the subsidy that would eliminate need for NLAD, because each consumer would be able to spend only one subsidy. Second, it can help reduce fraud by eliminating the incentive of providers to enroll as many consumers as possible.

Basic economic logic indicates that people derive the highest value from cash transfers, since they can be used for any good or service. As a society, however, we have decided to limit cash transfers and instead help eligible people purchase approved goods and services—food through SNAP, housing through Section 8 vouchers, and, in this case, communications service through Lifeline.

The economic concept that the value of the subsidy grows with its flexibility, however, remains true. Eligible recipients should have the option of spending their subsidies with as many providers as possible, not with just a select group. Providing eligible consumers with a voucher that can be used to purchase service from any broadband provider has several advantages. For example, this reform would enhance consumer surplus by allowing recipients to choose the type of broadband connectivity with the highest value to them. Also, by increasing the number of people shopping among providers and plans such a program could increase competition.

Finally, once a consumer has chosen a carrier, she should be unrestricted in the broadband plan to which the subsidy would apply. Economic research on the willingness of eligible consumers to take the "hand up" offered by Lifeline indicates that the imposition of restrictions on the services for which the Lifeline program subsidy is permitted acts to discourage program participation.[17]

IV. Impose A Budget

[16] See Federal Communications Commission, "Report and Order and Further Notice of Proposed Rulemaking," February 6, 2012, https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-11A1.pdf.

[17] See Mark L. Burton, Jeffrey T. Macher and John W. Mayo "Understanding Participation in Social Programs: Why Don't Households Pick up the Lifeline? *The B.E. Journal of Economic Analysis & Policy*, Volume 7, Issue 1 (Topics), 2007.

Most government programs operate within a budget, and Lifeline should, as well. A budget creates a powerful incentive to focus on cost-effectiveness. The lack of a budget creates the illusion of unlimited and costless funding.

V. Learn from Private Sector Initiatives

The private sector has implemented several initiatives that provide discounts to low-income households for Internet service. Perhaps the most prominent example is Comcast's Internet Essentials. This program provides low-cost broadband service for $9.95 a month for families with at least one child who qualifies for National School Lunch Program. Recently Comcast announced plans to conduct a pilot program for low-income senior citizens in San Francisco.[18]

Since its establishment in 2011, Comcast notes, more than 500,000 families have connected to the Internet through Internet Essentials.[19] These numbers suggest far more success than the FCC had with its Lifeline broadband pilot programs, which, according to the GAO, enrolled only 7,425 consumers rather than the expected 74,000.[20] The pilots and Internet Essentials both made major efforts to target consumers on the margin by making their programs available only to those who did not currently have broadband or had it in the recent past. Yet Comcast appears to have succeeded where the pilots generally did not.

One factor that might have contributed to the success of Internet Essentials may have to do with how the program was marketed. As discussed above, the providers participating in the FCC's Lifeline pilots generally found less interest in their discounted offers than they expected. Similarly, Internet Essential's launch report indicates that "Our early research revealed that our target audience was resistant to direct marketing efforts…." Instead of traditional marketing channels, the report says, Comcast focused on delivering the message through schools, libraries, community centers, and additional nonprofits and agencies that service low-income families.[21]

However, to our knowledge we do not know if that hypothesis has been tested. It would be worth rigorous study as to why Internet Essentials has been successful and other projects were not so that the lessons can be applied more broadly.

VI. Set Program Goals and Incorporate Program Evaluation

To date, the FCC has not established clear goals or efficiency measures of the program even after spending more than $16.6 billion since 1988.[22,23] In the absence of goals or efficiency measures it

[18] http://corporate.comcast.com/news-information/news-feed/comcast-extends-internet-essentials-to-low-income-senior-citizens-in-san-francisco.
[19] See Comcast "Internet Essentials Launch Report," January 2012, p. 46. https://www.internetessentials.com/sites/default/files/reports/launchreport.pdf.
[20] United States Government Accountability Office, "FCC Should Evaluate the Efficiency and Effectiveness of the Lifeline Program," Report to the Chairman, Committee on Commerce, Science and Transportation, U.S. Senate (Washington, DC, March 2015), 33, http://www.gao.gov/assets/670/669209.pdf.
[21] See Comcast "Internet Essentials Launch Report," January 2012, p. 17. https://www.internetessentials.com/sites/default/files/reports/launchreport.pdf
[22] See Federal Communications Commission, "Universal Service Monitoring Report, CC Docket No. 96-45," 2014, Table 2.2, https://apps.fcc.gov/edocs_public/attachmatch/DOC-330829A1.pdf.
[23] Others have also pointed out that the FCC has not rigorously compared the effectiveness of universal service support mechanisms (e.g., see Scott J. Wallsten, "How to Create a More Efficient Broadband Universal Service Program by Incorporating Demand and Cost-Effectiveness Analysis," *Technology Policy Institute Working Paper*,

is probably not surprising that the FCC does not conduct program evaluations of Lifeline. In two recent reports the GAO has recommended that the FCC develop program goals and incorporate program evaluation,[24] as the FCC itself acknowledged in the current NPRM [25]
It is inherently difficult to assess a program after the fact if evaluation is not built into the program in the first place. As the GAO noted with respect to the Lifeline broadband pilots,

> [the] FCC did not adopt our previous recommendation to conduct a needs assessment or develop implementation and evaluation plans prior to establishing the program. Without such planning, FCC now faces difficulties in evaluating the program without established benchmarks for success.[26]

The reforms should, therefore, not just establish performance goals, but also explain how it plans to measure those goals and how it will work to determine causality.

As discussed above, the FCC could leverage existing data sources over time to try to evaluate the effectiveness of the program. Additionally, the FCC could take more seriously independent evaluations, such as those done by the GAO. Self-evaluations are inherently difficult, especially when also subject to pressure to operate the program in particular ways and reach particular conclusions from evaluations.[27] The National Academy of Sciences is another candidate to conduct an evaluation.

VII. Conclusion

The proposed reforms to Lifeline are advertised as necessary because broadband access has become a more important communications tool than simple voice service. But the reforms present an opportunity to dramatically improve the efficiency of the program. We believe the program can be improved by more focus on identifying consumers on the margin, allowing eligible consumers to use their subsidies flexibly and for any available broadband service, continued pilot programs and experiments, imposing a budget, and building evaluation into the program.

2011).

[24] See United States Government Accountability Office, "Improved Management Can Enhanced FCC Decision Making for the Universal Service Fund Low-Income Program," October 2010, http://www.gao.gov/assets/320/312708.pdf. and United States Government Accountability Office, "FCC Should Evaluate the Efficiency and Effectiveness of the Lifeline Program," March 2015, http://www.gao.gov/assets/670/669209.pdf.

[25] Federal Communications Commission, "In the Matter of Lifeline and Link Up Reform and Modernization | Telecommunications Carriers Eligible for Universal Service Support | Connect America Fund," June 22, 2015, para. 157.

[26] Government Accountability Office, "GAO-15-335," 34.

[27] As David Walker, U.S. Comptroller General from 1998 to 2008 wrote (somewhat ironically) about the Government Accountability Office, "In a city full of interest groups with competing agendas, GAO's strength is its ability to provide Congress with professional, objective, fact-based, nonpartisan, and nonideological information when it is needed."David M. Walker, "GAO Answers the Question: What's in a Name?," July 19, 2004, http://www.gao.gov/about/rollcall07192004.pdf.
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