



Research

Five Reforms to Modernize the Lifeline Subsidy Program

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Introduction:

At one point in Alice’s Adventures in Wonderland, the eponymous character is lost in the woods, leading to her famous exchange with Cheshire Cat. After the Cat asks Alice where she wants to go, she explains, “I don’t much care where,” and finally she resigns saying, “So long as I get somewhere.” The Cat retorts, “Oh, you’re sure to do that, if only you walk long enough.” The Federal Communication Commission’s (FCC) Lifeline subsidy is also wandering without care for goals or a destination. Now that changes are being considered by the FCC, a more robust review of the program is needed.

Internet access is a key component in our rapidly advancing economy. While incredibly valuable, 15 percent of Americans remain disconnected, mostly by choice.^[1] To expand broadband adoption, the FCC plans to extend the Lifeline program to subsidize its purchase by low-income households. Given current eligibility and a lack of targeting mechanisms, we project the program to cost as much as \$4.6 billion per year.

The agency should look towards broader and much needed reforms for the program before implementing this expansion. In particular, the FCC should:

- Define the problem that Lifeline aims to solve;
- Cap the budget;
- Reform eligibility requirements;
- Reconsider the current contribution method, which is harmful to the poorest families; and
- Implement an economically rigorous evaluation.

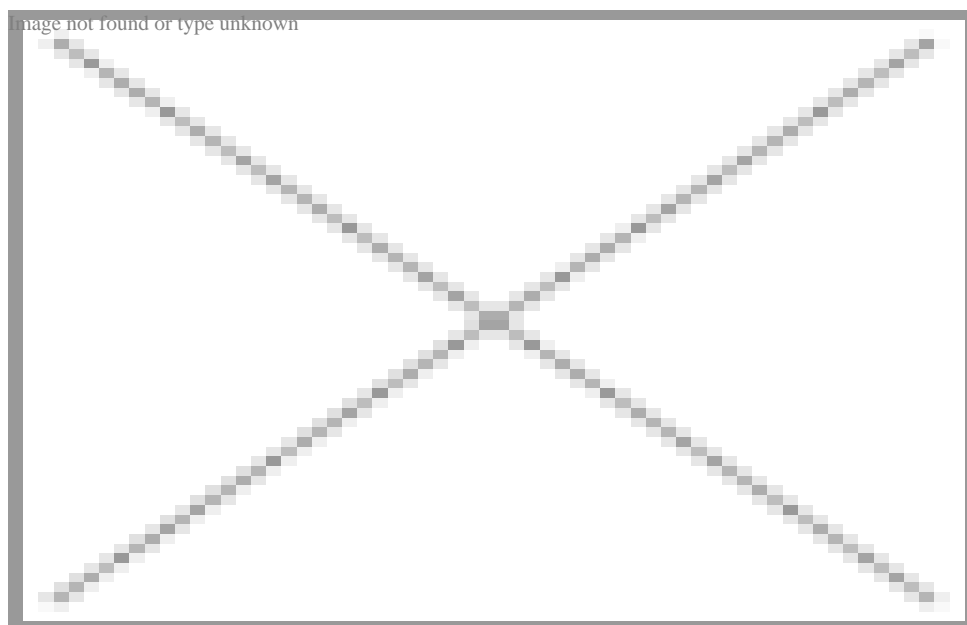
Overview Of The Lifeline Program

New broadband subsidies surely will extend the cost of the program. Although the Commission has committed to expanding Lifeline to include broadband, this expansion should have faced much broader skepticism. As a recent Government Accountability Office report noted, “the Lifeline program, as currently structured, may be a rather inefficient and costly mechanism to increase telephone subscribership among low-income households.”^[2]

Lifeline is very much a program rooted in another competitive landscape. Shortly after the AT&T system was broken up, the Lifeline subsidy program was put into place to help low income families afford telephone services. In the years before the breakup, universal service became synonymous with service for all, even though no such provision was written into the original 1934 Communications Act. A decades-long back and forth beginning in the 1930s between federal regulators and state regulators culminated in local costs being shifted to long distance service. The FCC pulled apart some of these geographic cross subsidies in the 1980s with the imposition of new charges.[3] Simultaneously, a reconceptualization of government’s role in society and communication policy argued that ubiquitous communications infrastructure would contribute to the national unity and opportunity. Both provided reasons for the creation of Lifeline.

Yet, the FCC has never tried to evaluate just how successful the program is. Even after countless GAO reports suggested this big change, the agency has held that the structure of the program “makes it difficult to determine a causal connection between the program and the penetration.”[4] A growing literature since Garbacz & Thompson (1997) contradicts the official agency view.[5] Independent studies have been conducted of the program for nearly as long as its existence, and almost universally it is found to be economically inefficient and ineffectual in achieving its stated goals.[6] Moreover, previous broadband expansion projects have an unfortunate history of waste, fraud, and abuse. The experience of the Rural Utilities Service serves as an example, where billions of dollars were mishandled and half of the projects they outlined were never finished.[7]

The logic of the subsidy is simple, as the price decreases, consumption goes up. For broadband, the offer of lower prices via the Lifeline program will be fighting forces within the market, which have pushed down prices because of competition. As the market for Internet has developed and prices have dropped, consumers naturally find themselves more willing to buy Internet access. One method to understanding this change are so called price elasticity of demand studies, which estimate how a 10 percent increase in price will affect a change in demand. Below is a chart that shows the trend in these projections over the last 15 years. In the 1990s, a 10 percent change in price would alter demand by nearly 3.5 percent. By 2014, the demand decreased by around .5 percent for a 10 percent increase in price. In all, consumers are becoming less sensitive to price changes.



Various Sources[8]

As the market has developed to become less elastic, the effectiveness of broadband subsidies has greatly diminished. While these price inducements might have been effective a decade ago when the technology was new, Lifeline will increasingly become ineffective as time passes.

Lifeline Reforms

Now that the FCC has decided to reform the Lifeline Program, five major changes need to be pursued. First, the problem that Lifeline aims to solve needs to be defined. Second, the budget needs to be capped. Third, the eligibility requirements require reforms. Fourth, the current contribution method needs to be debated further and reconsidered, as it is harmful to the poorest families. Fifth and finally, Lifeline needs an economically rigorous evaluation process.

Defining the Purpose of Lifeline

As explained in the recent Notice of Proposed Rulemaking,

“The 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. The program’s real success will be evident by the stories of Lifeline beneficiaries who move off of Lifeline because they have used the program as a stepping stone to improve their economic stability.”^[9]

Even though the ostensible aim of the program is to ensure that those who cannot pay for the service are able to do so, the FCC has never formally backed up these aims with targets. Only when these two work together can a program effectively operate. Will the program be aimed at reducing the digital divide? How many people are being targeted with the program? Which demographic characteristics would be best suited for this program at making it effective? By which metrics will we know that Lifeline has been a success? How will we separate these program effects out from market shifts?

In various proposals from the White House and the FCC, the problem has mainly been portrayed as a divide between the rich and the poor. However, AAF analysis of Pew data suggests that the real digital divide is between the old and young, which demands a rethinking of the proposed programs and of Lifeline.

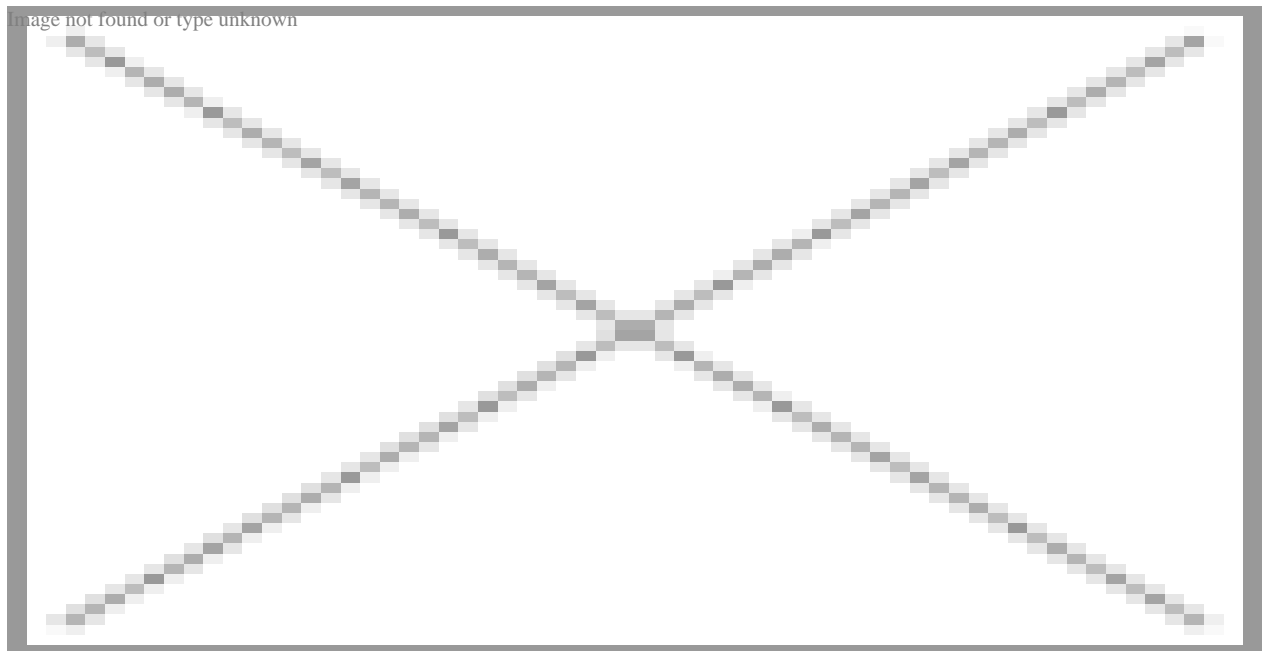
In a post arguing for the expansion of Lifeline, FCC Chairman Tom Wheeler explained:

“While more than 95 percent of households with incomes over \$150,000 have broadband, only 48 percent of those making less than \$25,000 have service at home. A world of broadband ‘haves’ and ‘have-nots’ is a world where none of us will have the opportunity to enjoy the full fruits of what broadband has to offer.”^[10]

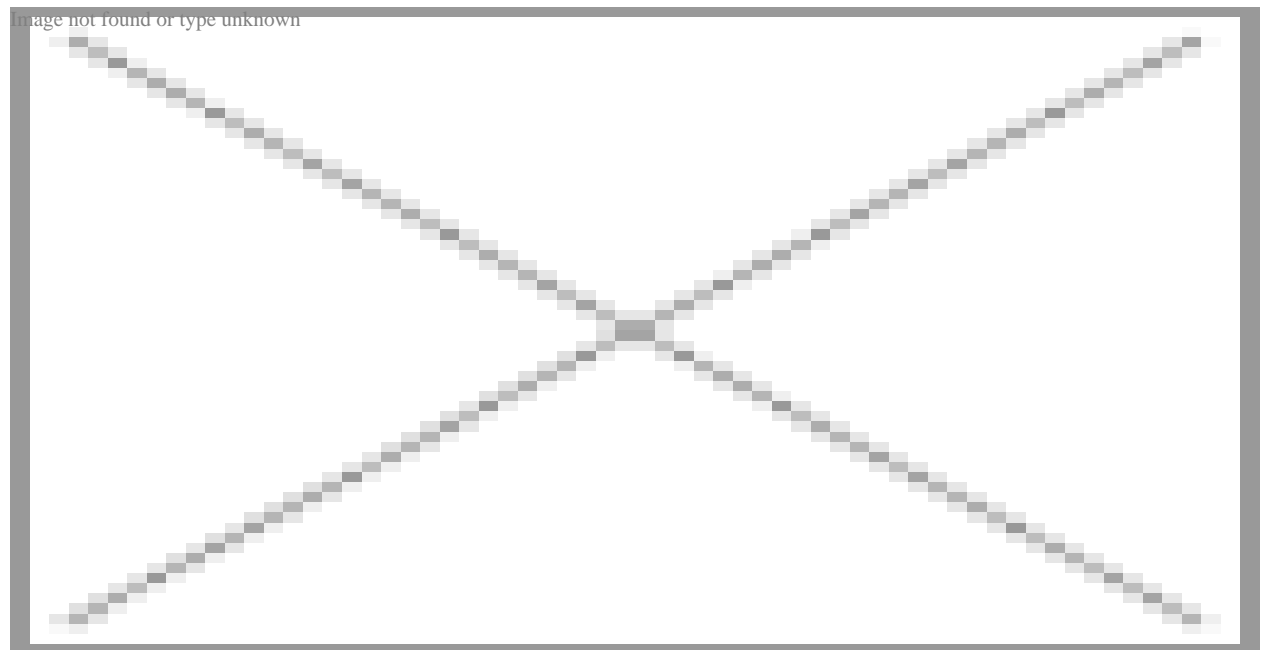
Similarly President Obama’s proposal, known as ConnectHome, aims to connect more low-income communities to high-speed Internet.^[11] While it is undeniable that Internet adoption is higher in households with more income, it is worth investigating what the most significant factors behind non-adoption are. In other words, is the digital divide really a chasm of income?

The Pew Research Center recently released its 2000-2015 study on Internet adoption that provides some fascinating data for answering this particular question. Below is a chart created using Pew data that examines the advances made in Internet adoption by income bracket over the last 15 years. While incredible strides have

been made, gaps remain between the rich and poor.



However, this graph alone doesn't tell the whole story. As has been widely documented, age also correlates strongly with Internet usage and may be a confounding variable in the analysis.[\[12\]](#)

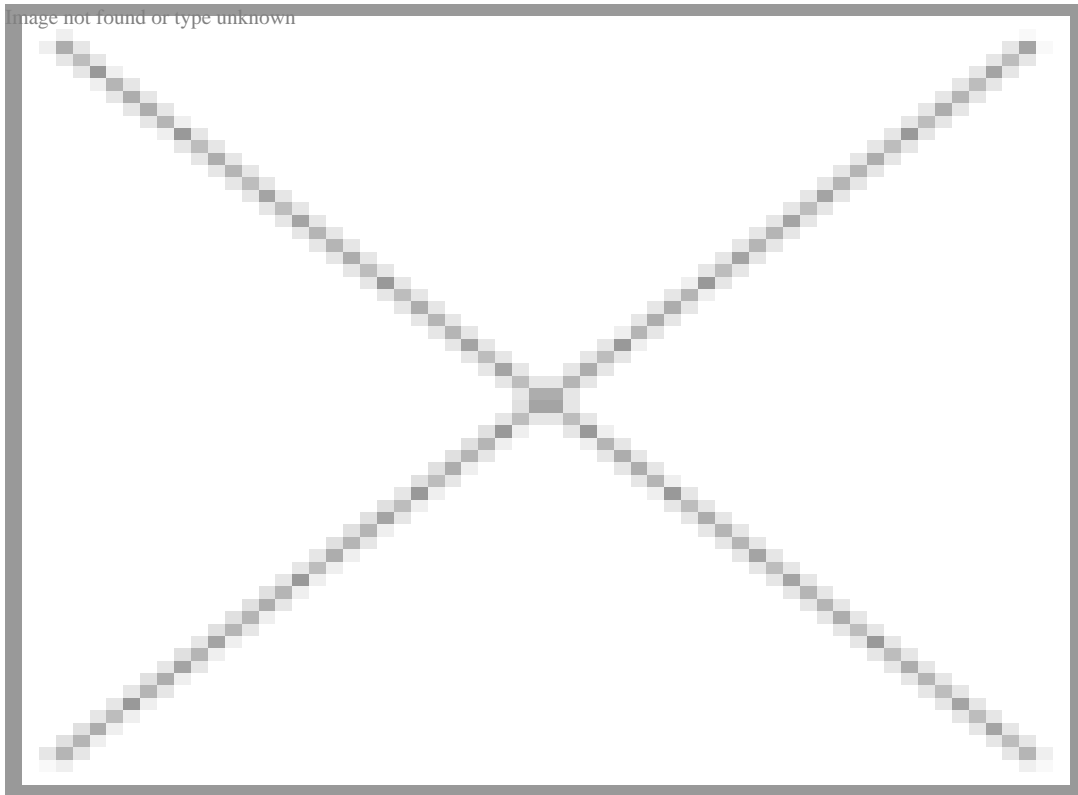


AAF analyzed Pew data to further break down the relationship between age, income, and Internet adoption. As we restricted the age range of the analysis, we found that the income brackets were slowly converging. When looking only at the age range of 18-29, Internet usage is near universal regardless of income bracket.

These findings would seem to indicate that age is a far more significant factor than income when determining whether or not an individual uses the Internet. Income is, and will continue to be, a contributing factor. But

among the demographic that has grown up with and seen the enormous benefits of the Internet, few are being priced out of the broadband market.

This age-based digital divide also puts the Pew “Who’s Not Online and Why” study into perspective.



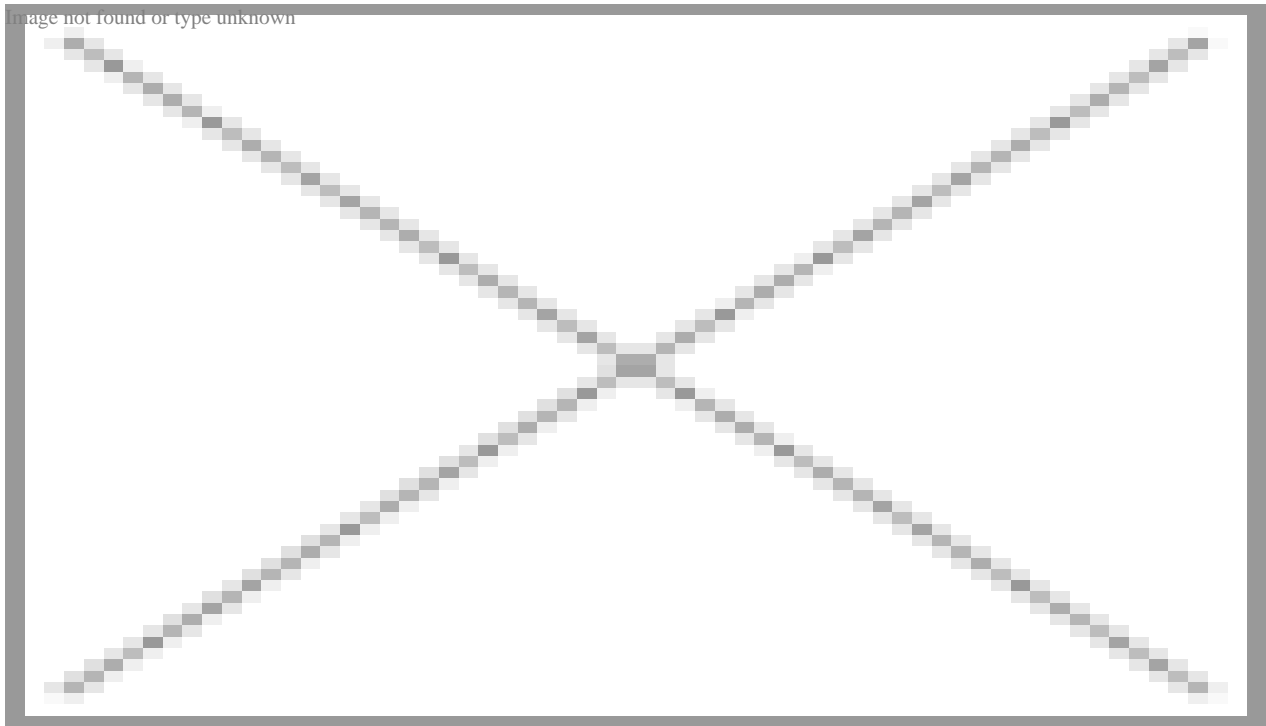
As their report shows, only 19 percent of offline adults listed price as the primary reason for non-adoption.^[13] Meanwhile relevance and usability make up 66 percent,^[14] which are the two areas we would expect to see increased considering who the offline population consists of.

These findings have major implications for public policy. In a world of scarce resources and limited government funding, it is important that we fund the programs that would have the greatest impact on the problems we intend to solve. If our goal is to bridge the digital divide and help more Americans access the Internet, it’s hard to see how offering a subsidy without a solid basis in outcomes is the best use of funds.

The “problem” of broadband is often played up as an issue of affordability, but when considering the underlying factors of age, relevance, usability, and computer ownership, it seems unlikely that a subsidy would have a strong effect on closing the digital divide. The lesson of studies performed on wired and wireless telephony support this general conclusion, as does the FCC’s recent study of broadband adoption. Indeed, that study exemplified the problems endemic at the agency at solving the Internet broadband gap, enrolling just over 7,000 people in the pilot program, which 74,000 were expected. Comcast has shown itself to be effective in getting low income families online, as nearly 500,000 families are connected via their Internet Essentials program. ^[15] Partnering with private companies could help alleviate these issues and go a long way in explaining non-adopters don’t get onto the Internet. Most importantly, the FCC needs explicitly to name those constituencies intended for Lifeline and outline those metrics that will serve to explain when the program has been effective.

Cap the Budget

Capping the budget of the Lifeline program is a vital. Regardless of how targeted the program ends up being, it would be fiscally irresponsible to leave Lifeline uncapped. Lifeline remains the only USF program without a budget cap and consequently the one with the most historic abuse.^[16] While common objections to doing so usually revolve around funding levels, our analysis estimates four levels of cost of the program for both expected usage and the high-end potential, as well as targeted or non-targeted programs. Given current eligibility and no targeting mechanisms, the program has the potential to cost as much as \$4.6 billion. If the program reduced eligibility and was targeted it could cost as little as \$522 million.



Budget Projections of Expected Usage for Lifeline Subsidies		
	Non Targeted	Targeted
Current Eligibility	\$ 1,524,600,000.00	\$ 786,693,600.00
Reduced Eligibility	\$ 1,022,733,482.76	\$ 522,976,148.48

Budget Projections of Potential Usage for Lifeline Subsidies		
	Non Targeted	Targeted
Current Eligibility	\$ 4,662,000,000.00	\$ 2,383,920,000.00

Reduced Eligibility	\$ 3,099,192,372.00	\$ 1,584,776,207.52
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By outlining eight different scenarios, we can see a range of potential budget options for the program with the three primary factors in the analysis being current or reduced eligibility, targeted or non-targeted, and full or expected Usage. Current eligibility refers to the existing eligibility standards as calculated by the GAO.[17] Reduced eligibility estimates those households under 135% of the poverty line as eligible for subsidies. If no additional methods are used to narrow down the population receiving the subsidy, they are marked as non-targeted, while targeted was determined as only those currently without Internet access among the eligible population receiving the subsidy. Full usage was defined as 100 percent of eligible persons using the subsidies. Expected usage places 33 percent of eligible persons as receiving the subsidies, as reports have suggested that 66 percent of non-adopting households would not subscribe to broadband at any price.[18]

If the Commission is concerned about fluctuations in enrollment due to changing economic conditions, then set a cap that is higher than the expected operating budget. During the 2008 economic collapse, Internet adoption dropped 4 percentage points among households making \$30,000 or less. This, however, occurred when the adoption rate was close to 50%. Setting a cap that is 10 percent higher than the expected operating budget would ensure that Lifeline is able to meet the increased demand for broadband subsidies in the event of another recession, but would only work if the agency is diligent in weeding out those who are abusing the system.

Reform Eligibility Requirements,

Currently, individuals can be eligible for Lifeline if they sit below 135% of the poverty line. However, Lifeline might be available if that person qualifies for Medicaid; Supplemental Nutrition Assistance Program (Food Stamps or SNAP); Supplemental Security Income (SSI); Federal Public Housing Assistance (Section 8); Low-Income Home Energy Assistance Program (LIHEAP); Temporary Assistance to Needy Families (TANF); National School Lunch Program’s Free Lunch Program; Bureau of Indian Affairs General Assistance; Tribally-Administered Temporary Assistance for Needy Families (TTANF); Food Distribution Program on Indian Reservations (FDPIR); Head Start; or any number of State assistance programs. Because many of these programs use different criteria for determining eligibility, the culmination of all these program leads to an eligible population of 42 million households.[19]

This is roughly a third of the U.S. population that would be eligible. Subsidizing such a large population is not only expensive but is also contrary to the basic goal of Lifeline, which is to get those Americans connected that currently are not. One possible cost cutting measure would be to simplify the eligibility system to only include those families who are below 135% of the poverty line. Our analysis indicates this would cut the eligible population down from 42 million to 28 million households. This was labeled in our budget projections as “Reduced Eligibility”.

One of the most important reforms for Lifeline is ensuring that eligibility is not determined by those providing the communication service, also known as the eligible telecommunications carriers (ETC). Fortunately, it appears that the commission is agreed on this point. We applaud the commission for recognizing the perverse incentives this creates since the ETC’s have little reason to limit their Lifeline subscribers and thus potential income from the program. However, as detailed above, the overall spending for Lifeline can be significantly reduced if the eligible population can be meaningfully targeted.

Another way to ensure we are targeting the population that most needs this assistance would be to work with existing ETC’s to determine who already subscribes to Internet (or has within the last 3 months to prevent

gaming the subsidy) and disqualify them from receiving subsidies. This would ensure that we are targeting those who need help crossing the digital divide, not subsidizing those who have already made the leap. We labeled this group as “targeted.” As part of good governance, the FCC should align eligibility with the goals as defined previously.

Reform the Current Contribution Method

The Universal Service Fund (USF) is structured such that the program subsidizes internally those who cannot afford telecommunications services. Each month, these rates change, and last year they averaged to a 5.82 percent tax on wireless carriers.[20] Paradoxically, like many flat taxes, the burden falls disproportionately onto poor families and young people, who are more likely to use wireless as their primary means of Internet access. According to one study, 80 percent of poor households pay into the fund through taxes only to get nothing back in return.[21] In fact, MIT economics professor Jerry Hausman estimates that the each dollar raised via wireless taxes costs the economy between \$0.72 and \$1.12, making the USF program a wash.[22]

As a result of the reclassification of broadband, Internet broadband might soon be considered a USF taxable service meaning that the contribution base could expand dramatically. If this does happen, voices calling for a change in the contribution method of all USF programs might subside. Yet, the mechanism is out of line with prevailing tax logic. The USF is akin to the Supplemental Nutrition Assistance Program, and should be treated as one. Even though the USF is funded via a fee, the money collected doesn’t benefit the group from which the levy is collected, like a toll booth helps to pay for a road. The USF benefits those who are not connected to communication services and thus should be understood as general program, and paid for through the normal tax structure.[23] Although it is not the purview of the FCC to make this kind of change, Lifeline reforms should make the program more explicit and more closely tied to Congressional approval, as it is legally mandated with the power of taxing.

Implement Meaningful Evaluations of Lifeline

The FCC has a responsibility to ensure the programs they institute are having a net positive effect. Due to the inefficiencies of government bureaucracy and the weak effect subsidies will have in the current market, it is vital that the FCC perform a cost-benefit analysis to ensure they are doing more harm than good.

This problem is further complicated when examining the essentially meaningless goal the FCC has set for itself. The GAO report on Lifeline strongly urged the commission to set measurable goals as a concrete way to evaluate the performance of the program. In the 2012 NPRM on Lifeline reform, the FCC claimed to have fixed the problem by setting the goal of increased broadband penetration of low-income consumers. The problem came when the commission decided how to measure this goal:

“As with our first goal, as an outcome measure of the availability of broadband service to low-income consumers, we adopt the broadband penetration rate of low-income consumers, i.e. the extent to which low-income consumers are subscribing to broadband. Progress towards our goal of ensuring the availability of broadband service to low-income consumers will be indicated by a narrowing of the difference between this outcome measure and the broadband service penetration levels of non-low-income consumers in the “next highest income” bracket”. [24]

Without choosing a specific benchmark or threshold of broadband penetration, there is no way the FCC can’t meet the goal. Natural market forces will continue to push up adoption rates at all income levels, and seeing as most income brackets are already at saturation levels, the gap between the low-income bracket and the next

highest income bracket will naturally become smaller over time.

FCC should conduct a basic analytical projection of the proposed broadband program based on current Lifeline adoption levels for wired and wireless telephone service before taking any further steps with the program. In particular, there are number of regressions that could help to pinpoint these targets.^[25] From here, a specific level of broadband penetration above the 3-year average growth of adoption for low-income consumers can be established, thus creating an actionable goal.

Conclusion

The FCC has not done enough to set goals and establish mechanisms for evaluation of the Lifeline program. In particular, the FCC needs to

- Define the problem that Lifeline aims to solve;
- Cap the budget;
- Reform eligibility requirements
- Reconsider the current contribution method, which is harmful to the poorest families; and
- Implement an economically rigorous evaluation.

Only when these changes are implemented will the program truly begin to serve those whom should be receiving Lifeline assistance.

[1] Julia Greenberg, *15 Percent of Americans Don't Use the Internet*, <http://www.wired.com/2015/07/15-percent-americans-dont-use-internet/>