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Use Your Lifeline: Lifeline and the Lifeline Broadband Pilot Program Can Support the IP Transition

by

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One of the most important challenges the Federal Communications Commission must confront over the next year is how to further the ongoing IP transition. The FCC took a positive step toward promoting an “[all-IP future](#)” by [approving](#) voluntary experiments testing the impact of technology transitions in January. These trials are necessary to determine the impact of new technologies on consumers. As the Commission proceeds, the existing Lifeline program and the recently-launched [Lifeline Broadband Pilot Program](#) can be used to complement the technology transition trials by filling in service gaps where they exist and by gathering data.

The transition from analog narrowband communications services to digital broadband Internet Protocol services is a fundamental shift in technology that has the potential to unleash new investment, improve service quality, and connect more consumers and communities than previously possible. The IP transition is already well underway, and the competitive marketplace environment is providing improved, more cost-efficient communications service to most Americans.

At the end of 2011, 99.9% of the population was served by at least one mobile broadband provider, 98% of all consumers in the United States had access to at least two providers, and 90% had access to three or more according to the FCC’s latest [Wireless Competition](#)

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[Report](#) released in March 2013. U.S. consumers are increasingly choosing wireless voice and broadband services over traditional wireline networks. According to the Centers for Disease Control’s [Wireless Substitution Survey](#) released in December 2013, 39.4% of U.S. homes reported having at least one wireless device and no landline telephone – and this number continues to grow. In other words, two in every five American homes had *only* wireless phones as of the first half of 2013.

In limited instances where communications services are lacking, there is a targeted role for the Commission to play in ensuring universal service. By using the [Lifeline Broadband Pilot Program](#) and the existing Lifeline program and to determine and meet the changing needs of qualified recipients, the Commission can support and expedite the IP transition and trials. Those who cut the cord are predominantly the poor and minority groups – often the same groups who rely on the Lifeline program for communications services. A majority of adults living in poverty (54.7%) lived in a wireless-only household, versus 47.5% living near poverty and 35.3% of non-poor adults, according to the [CDC](#).

New regulations and subsidies are unnecessary, and will swiftly be outpaced by marketplace changes. Further, various proposals to maintain or reassert legacy regulatory foundations will only delay the inevitable retirement of outdated TDM networks and investment in upgrades and new build-out. Such a go-slow approach, inevitably, will impose unnecessary costs on service providers and consumers alike.

The Lifeline program can provide subsidized service to eligible low-income consumers to provide a universal service backstop in the IP-world. The Commission still needs to reform the USF program by capping the high-cost fund, reducing available subsidies, establishing a sunset period for ending high-cost fund subsidies, and curbing waste, fraud, and abuse of the Lifeline program. But the Lifeline program and the Lifeline Broadband Pilot Program should be utilized to meet consumer needs and fulfill fundamental communications network functions like public safety and universal service during the IP transition and beyond.

The IP Transition is Well Underway

The Commission recognized the profound importance and impact of broadband service in its 2010 [National Broadband Plan](#). The plan characterized broadband deployment as “*the* great infrastructure challenge of the early 21st century.” Although the Commission has been slow to react to this fundamental shift, in recent months Congress and the FCC have given the transition from time-division multiplexed (“TDM”) facilities to IP-based alternatives greater attention.

In October 2013, the [House Subcommittee on Communications and Technology](#) held a hearing on [The Evolution of Wired Communications Networks](#). The FCC initiated a proceeding concerning the TDM-to-IP transition and [approved](#) voluntary experiments testing the impact of technology transitions in January 2014. In its [Order](#), the Commission noted:

We must act with dispatch. Technology transitions are already underway. These ongoing transitions have brought new and improved communications services to the marketplace ... The proceeding we initiate today is designed to position all the players – innovators

(including those in existing lines of business), legacy service providers and manufacturers, government regulators and the general public – to prepare for, maintain, and facilitate the momentum of technological advances that are already occurring.

Consumers have been increasingly abandoning traditional wireline telecommunications services in favor of next-generation alternatives for over a decade. As of December 2012, more than 89% of Americans had mobile broadband subscriptions – this compared to only 62% of consumers in [OECD](#) countries. According to the FCC’s latest [Wireless Competition Report](#) released in March 2013, at the end of 2011 99.9% of the population had available at least one mobile broadband provider. And, 98% of all consumers in the United States had access to at least two wireless providers, and 90% of consumers in the U.S. had access to three or more. There were 142.1 million subscribers to mobile Internet access services at speeds exceeding 200 kbps in at least one direction, an increase from the 97.5 million that were reported for the end of 2010, and more than double the 56.3 million reported for year-end 2009.

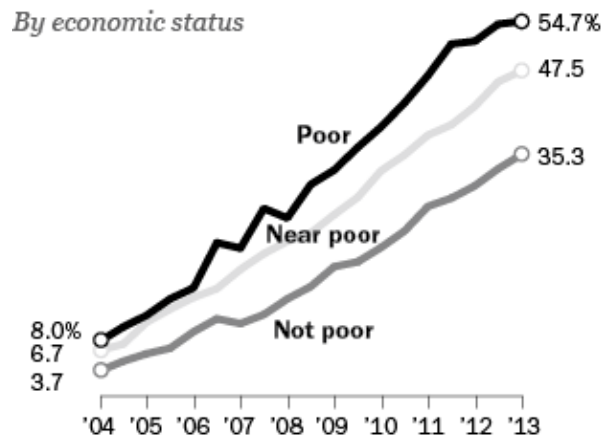
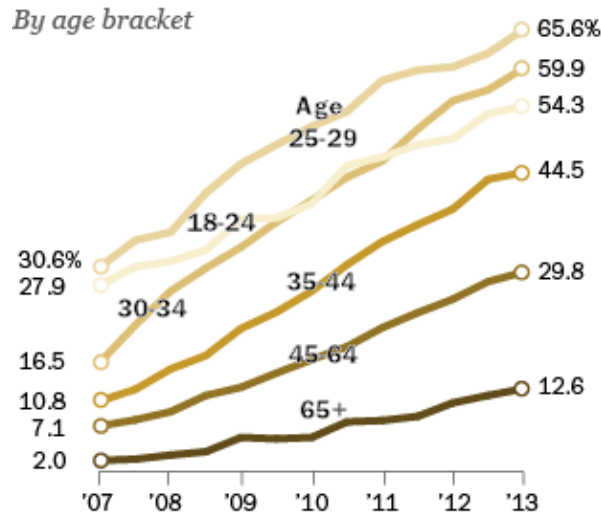
At the same time, there were 298.3 million subscribers to mobile telephone or voice service, up nearly 4.6% from 285.1 million at the end of 2010. Active wireless devices associated with subscriptions or prepaid accounts totaled 326.4 million at year-end 2012; that is equal to 102% of the total U.S. population.

While consumers increasingly adopt broadband, they are also cutting the cord on traditional wireline services. In some states like Arkansas and Mississippi, for example, more than 40% of the population is now “wireless-only,” based on the Centers for Disease Control’s (CDC) [Wireless Substitution 2013 survey](#). According to the CDC’s [Wireless Substitution: State-level Estimates From the National Health Interview Survey, 2012](#) released in December 2013, 39.4% of U.S. homes report having at least one wireless device and no landline telephone – and this number continues to grow. In other words, two in every five American homes had *only* wireless phones as of the first half of 2013.

Those who cut the cord and rely more heavily on wireless voice and broadband services are predominantly the poor and the young. Approximately 38% of adults (99 million) and 45.4% of children (33 million) live in wireless-only homes, based on reports by [CTIA](#) and [Pew Research Center](#). According to the [CDC](#) results from January – June 2013, nearly two-thirds (65.6%) of adults ages 25-29 lived in households with only wireless phones, as did three-in-five (59.9%) 30- to 34-year-olds and a majority (54.3%) of adults ages 18-24.

A majority of adults living in poverty (54.7%) lived in a wireless-only household versus 47.5% of what the CDC terms the “near-poor” and 35.3% of non-poor adults. Other groups that tend to live in wireless-only households include Hispanics, renters, and adults living with roommates. The following graphic, created by the CDC’s National Center for Health Statistics, illustrates the increasing number of wireless-only households, particularly among the young and the poor.

Percentage of Adults Living in Wireless-Only Households



Source: "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January-June 2013", National Center for Health Statistics

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In addition to relying on wireless devices exclusively for voice services, many consumers are increasingly using wireless devices as their on-ramp to the Internet. Hispanics and African-Americans are significantly more likely to use their mobile device to go online. As such, mobile device and mobile broadband service becomes a critical tool for closing whatever “digital divide” may exist since ownership of a home computer among this demographic lags the total population according to [Pew Research Center](#). Overall, 55% of wireless users (and 74% of those under age 50) now use their mobile devices to access the Internet, with aggregate data usage now

exceeding 1.5 trillion megabytes, [CTIA data](#) shows. The chart below, created by the Pew Internet & American Life Project, shows the demographics most likely to rely predominantly on their wireless devices to access the Internet.

Demographics of cell-mostly internet users		% who mostly go online using their cell phone
<i>Among cell internet users, the % who mostly use their phone to go online</i>		
All cell internet users (n=1,185)		34%
a	Men (n=598)	34
b	Women (n=587)	34
Race/ethnicity		
a	White, Non-Hispanic (n=762)	27
b	Black, Non-Hispanic (n=158)	43 ^a
c	Hispanic (n=157)	60 ^{ab}
Age		
a	18-29 (n=336)	50 ^{bcd}
b	30-49 (n=405)	35 ^{cd}
c	50-64 (n=304)	14
d	65+ (n=109)	10
Education attainment		
a	Less than high school/High school grad (n=333)	45 ^{bc}
b	Some College (n=306)	34 ^c
c	College + (n=541)	21
Household income		
a	Less than \$30,000/yr (n=238)	45 ^{cd}
b	\$30,000-\$49,999 (n=175)	39 ^d
c	\$50,000-\$74,999 (n=171)	30
d	\$75,000+ (n=429)	27
Urbanity		
a	Urban (n=436)	33
b	Suburban (n=571)	35
c	Rural (n=176)	30

Source: Pew Internet & American Life Project Spring Tracking Survey, April 17-May 19, 2013. N=1,185 cell internet users ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on cell internet users is +/- 3.3 percentage points.

Note: Percentages marked with a superscript letter (e.g., "a") indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Clearly, the data shows that consumers are embracing new devices and services and are driving the transition toward an all-IP world. The data also demonstrates that low-income individuals and households, those most likely eligible for Lifeline support, are leaders in cutting the cord and relying exclusively on wireless voice and broadband services. And those groups that still mainly use landline service, including the elderly, can be targeted through the Broadband Pilot Program to determine how to boost broadband adoption and retention. As such, the Lifeline program and the recently launched Lifeline Broadband Pilot Program have a role to play in helping ensure that all Americans remain connected during after the IP transition.

The Commission Should Use the Lifeline Program to Support the IP Transition and Fashion Reforms Necessary to Meet Changing Consumer Needs

The competitive broadband marketplace and the steady transition to all-IP services, for the most part, does not require regulatory intervention by the Commission. Marketplace innovations and changing consumer behaviors require that the Commission take a free-market oriented, “light touch” regulatory approach to ensure the success of the IP transition. In areas where service is lacking or public safety needs are at issue, the Commission has tools it can employ to support the otherwise stable transition to an all-IP world. One way the Commission can act to support and expedite the IP transition and trials is by using the Lifeline program and the [Lifeline Broadband Pilot Program](#) to meet consumer needs.

The Commission should resist calls to slow down the pace of the inevitable TDM-to-IP transition. For example, the NTCA—The Rural Broadband Association’s [petition](#) proposes that the Commission “reassert[]” the legacy “regulatory foundation” while “examin[ing] each brick” of that foundation in the abstract. This scheme would curb the FCC’s ability to utilize its waiver or forbearance authorities and would impose strict regulatory burdens on service providers at all stages of the IP transition.

New regulations and subsidies are unnecessary, and will swiftly be outpaced by marketplace changes. As FSF President Randolph May stated in his testimony at the House Subcommittee hearing on “[Evolution of Wired Communications Networks](#)” in October 2013:

[T]he failure to initiate trials, and if ever initiated to complete them, should not be allowed to delay unreasonably Commission decision-making and deadline setting. In other words, at some point the costs of undue delay in completing the transition will outweigh the benefits of whatever knowledge is anticipated to be gained from trials in a few markets.

And Mr. May noted, “it is easy to see that, absent a firm commitment by the Commission to oversee their timely completion, those who have an interest in delay may use the trials as delaying mechanisms.”

The Lifeline program provides a means to help ensure that consumers remain connected during the IP transition. The Commission has undertaken comprehensive reforms of the Lifeline program, and it also has launched the Lifeline Broadband Pilot Program, which indicates that the Commission plans to continue supporting this worthwhile initiative. Assuming that Lifeline support continues, the Commission does not have an excuse to delay the IP trials, at least based on service disruption [fears](#) or [concerns](#) about communities left behind. The Lifeline program provides targeted subsidies to those in need who meet eligibility requirements, unlike those parts of the USF program that indiscriminately distribute subsidies. Although further reforms are still necessary, the Lifeline program provides a solution to the problem raised by critics of the IP transition trials by connecting low-income individuals and communities that might otherwise be without communications service.

Further, delay of the IP transition trials will divert service provider resources away from network updates and build-outs toward networks consumers are increasingly abandoning. As the [National Broadband Plan](#) notes, "requiring an incumbent to maintain two networks ... reduces the incentive for incumbents to deploy" next-generation facilities and "siphon[s] investments away from new networks and services." Consumers would be better served and Commission resources would be better spent by supporting Lifeline and the Lifeline Broadband Pilot Program than unnecessarily delaying trials, enforcing legacy rules, and attempting to formulate ex ante regulations that are sure to be swiftly outpaced by technological innovations.

The Commission took a positive step toward expediting the IP transition by [approving voluntary trials](#) in January. And the Commission has explicitly reserved a role for the Lifeline program within the transition trial period. In its [Public Notice](#) seeking comment on the potential technology transition trials, the Commission recognized that conducting trials focused specifically on consumer protection, universal service, and low-income communities – the areas targeted by the Lifeline program – would be important. The [Notice](#) stated:

As the transition from wireline to wireless rapidly progresses, an increasing number of Lifeline participants are selecting wireless as their preferred method of communication. Given these demographic shifts, and building off of the success of the *2012 Lifeline and Link Up Reform Order*, should the Commission conduct trials to collect data on ways to further improve Lifeline program?

The Commission should further support and oversee the efficient completion of the trials by using the existing Lifeline program to support the IP transition, and in doing so, to identify ways to reform the program to better serve an all-IP world.

The Commission has previously reformed other USF programs to achieve the foundational goal of universal service through new and different means that better respond to changes in technology and consumer demands. In its [ICC/USF Transformation Order](#), the Commission recognized that the long-held goal of providing universal service to all Americans means providing not only voice, but also broadband service to consumers and businesses. Today, as discussed above, consumers rely on broadband service, and increasingly favor it over traditional wireline voice or Internet services. The Commission's January 2014 [Order](#) approving IP transition trials referenced this *ICC/USF Transformation Order*, stating, "[w]hile technology transitions usually involve trade-offs, we do not believe reducing broadband access should be among the acceptable costs of network modernization."

The Commission also recognized the role of Lifeline in supporting the IP transition in its [Order](#) approving trials: "We therefore must consider the impact of these experiments on specific populations, such as the elderly, individuals with limited English proficiency (LEP), [and] low-income population," citing its Lifeline proceedings. Further, the Commission adopted a "rebuttable presumption" in its [Order](#) that "service-based experiments will not deviate from any existing universal service rules and policies, and that applicants will continue to be subject to rules and policies regarding both support and contribution obligations In this regard, we

remind applicants that all ETCs must continue to make Lifeline service available to all qualifying consumers.” Clearly the Commission envisioned that the Lifeline program would be used to support the IP transition.

The Commission’s decisions to support mobile services through Lifeline, and to initiate the Lifeline Broadband Pilot Program are positive steps toward reforming the Lifeline program to meet the changing demands of consumers today. As part of the modernization of Lifeline, the Commission allocated \$13.8 million in savings from other Lifeline reforms to launch the broadband pilot program in February 2013. The purpose of the pilot program is to collect data on how the Lifeline program can be structured to increase broadband adoption and retention among low-income Americans. The Wireline Bureau has selected 14 projects to participate in the program, and the participants will provide feedback to the FCC on how to achieve these goals. For example, the FCC has provided \$915,000 to support TracFone and Technology Goes Home in testing the effects of discounted service and hardware on broadband adoption on four diverse test groups in Maryland, Florida, Texas, Washington, Wisconsin, and Maine. The test results will be used to determine pricing and service offerings for Lifeline broadband plans that best meet consumer demands.

Conclusion

Employing the Lifeline program to provide wireless voice and broadband services to low-income consumers would achieve several of the FCC’s objectives. First, it would help ensure that consumers are protected and connected to public safety networks during the IP transition without imposing unnecessary regulatory burdens on networks and without initiating costly new subsidies or pilot programs. Second, it would also allow providers to retire traditional communications networks and invest the savings in updating and building out networks that provide advanced services. Third, running the Lifeline Broadband Pilot Program at the same time as the IP transition trials should efficiently test the impacts of the transition on low-income consumers and provide useful information regarding structuring a Lifeline Broadband Program. Finally, utilizing the existing Lifeline program and implementing the Lifeline Broadband Pilot Program during the IP transition trials will help keep the Commission focused on an important existing program that is still undergoing needed reforms.

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Further Readings

[“Conference Welcome and FCC Former Chairwoman Mignon Clyburn’s Opening Keynote Address,”](#) *Free State Foundation’s Sixth Annual Telecom Conference* (March 18, 2014).

Randolph May, [“Testimony in the Hearing on Evolution of Wired Communications Networks,”](#) (October 23, 2013).

Deborah Taylor Tate, [“Continue Lifeline Reform!”](#) *FSF Blog* (June 25, 2013).

Randolph May, “[A Balanced Look at Lifeline and Its Reform – Part II](#),” *FSF Blog* (April 24, 2013).

Randolph May, “[A Balanced Look at Lifeline and Its Reform](#),” *FSF Blog* (April 10, 2013).

Deborah Taylor Tate, “[FCC’s Lifeline Reforms Should Keep Low-Income Consumers Connected](#),” *FSF Blog* (July 24, 2012).

Deborah Taylor Tate, “[A Vital Lifeline](#),” *FSF Blog* (January 10, 2012).

Randolph May and Seth Cooper, “[Comments of the Free State Foundation, Lifeline Link Up Modernization Proceeding](#),” (August 26, 2011).