

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

In the Matter of)	
)	
Accelerating Wireline Broadband Deployment by)	WC Docket No. 17-84
Removing Barriers to Infrastructure Investment)	

Comments of AARP

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Executive Summary

The Commission should be consumer-focused on matters of IP transition

How consumers experience the inevitable IP transition will influence the successful adoption of new technologies, and will have far reaching effects on technological progress. The legacy TDM-based network has provided reliable and affordable service for over a century, and while many consumers have voluntarily adopted new technologies, not all consumers have robust and affordable alternatives to legacy services. Additionally, many consumers continue to depend on technologies that ride “over-the-top” of legacy network facilities, limiting their ability to quickly switch to next-generation technology.

With its *2014, 2015, and 2016 Technology Transitions Orders*,¹ based on extensive record evidence, the Commission adopted procedures for IP transition. AARP participated in these proceedings, and encouraged the Commission to place a strong emphasis on the interests of consumers.² While AARP finds the Commission’s recent trio of *Technology Transition Orders*

¹ *In the Matter of Technology Transitions, AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, Connect America Fund, Structure and Practices of the Video Relay Service Program, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Numbering Policies for Modern Communications*, GN Docket No. 13-5, GN Docket No. 12-353, WC Docket No. 10-90, CG Docket No. 10-51, CG Docket No. 03-123, WC Docket No. 13-97. Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, January 31, 2014. Hereinafter, *2014 Technology Transitions Order*.

In the Matter of Technology Transitions, Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers, Special Access for Price Cap Local Exchange Carriers, AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services. GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, August 7, 2015. Hereinafter, *2015 Technology Transitions Order*.

Technology Transitions, GN Docket No. 13-5, *USTelecom Petition for Declaratory Ruling That Incumbent Local Exchange Carriers Are Non-Dominant in the Provision of Switched Access Services*, WC Docket No. 13-3, *Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers*, RM-11358, Declaratory Ruling, Second Report and Order, and Order on Reconsideration, July 15, 2016. Hereinafter *2016 Technology Transitions Order*.

² See, Comments of AARP in GN 12-353, filed January 28, 2013; Reply Comments of AARP in GN-12-353, filed February 25, 2013; Comments of AARP in GN Docket No. 13-5, filed July 8, 2013; Comments of AARP in WC Docket NO. 13-150, Comp. Pol. File No. 1115, July 29, 2013; Comments of AARP in PS Docket No. 14-174, et seq., filed February 15, 2014; Comments of AARP in GN Docket No. 13-5, et seq., filed October 26, 2015.

to be less than perfect, AARP believes that the orders at least struck a balance between the interests of consumers and service providers, and laid out a workable framework to address technology transition issues. As noted by AT&T, with those orders “the Commission has established the rules of the road for the IP transition.”³ Now, with no reasonable justification, the *NPRM* proposes to rewrite the rules of the road. As will be discussed below, most of the *NPRM*'s proposed modifications are a step in the wrong direction. While proposing dramatic changes to the existing rules associated with copper retirement and customer notice, the *NPRM* does not identify credible benefits associated with the proposed changes, with the combined impact of the *NPRM*'s notice and copper retirement proposals being increased risk for consumers, and harms to competition.

Like Chairman Pai, AARP believes that fiber holds the most promise for the IP transition

In his dissent in the *2015 Technology Transition Order*, Chairman Pai stated:

The IP Transition represents opportunity for all Americans. *Fiber is the fastest, most reliable way to transport data, whether across a city or around the world. Fiber networks transmit data at the speed of light and fail at only one-eighth the rate of copper networks.* Next Generation 911, telemedicine, and distance learning will all be delivered over IP networks. This means that the most resilient emergency communications, the highest-quality medical images, and the best educational conversations are within our reach. The all-IP future brings with it exactly *the high-quality, high-speed technologies and services that consumers are demanding.*⁴

AARP agrees with Chairman Pai that the IP transition should be linked to the deployment of fiber optic cable, and that next generation services must deliver high speeds and high quality.

What concerns AARP, however, is the likelihood that carriers, especially those that provide both

³ Letter from AT&T's Ola Oyefusi to Marlene Dortch, January 19, 2017. Re: Technology Transitions, GN Docket No. 13-5; AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, GN Docket No. 12-353. AT&T's final report on the Carbon Hill and West Delray Beach technology trials.

⁴ Dissent of Ajit Pai in *2015 Technology Transition Order*, emphasis added.

wireline and wireless services, will seek to migrate consumers to wireless offerings, rather than investing in fiber-to-the-premises (FTTP). The Commission now has substantial evidence regarding consumer views of wireless-only options. In the case of Verizon’s attempt to migrate consumers and businesses in Fire Island, New York, to its wireless “Voice Link” product, the public backlash resulted in Verizon ultimately deciding to deploy the FTTP that consumers demanded.⁵ Similarly, AT&T has now concluded its technology trials in Carbon Hill, Alabama, and West Delray Beach, Florida. As will be discussed later in these comments, most consumers in those market areas did not choose to leave their TDM-based services in favor of a wireless-based alternative. This experience suggests that the transition to next-generation networks must include the fiber-based future that Chairman Pai envisions. Care must be exercised to ensure carrier requests to withdraw service are consistent with this vision.

In the *2014 Technology Transitions Order*, the Commission noted that “Technology transitions mark progress and are a good thing – sometimes even a triumph.”⁶ For these aspirational objectives to be achieved, consumers must be fully informed and have time to respond to proposed changes. This is true for both voice and data services that may be provided over legacy networks. The changes proposed in the *NPRM* do not lend support to these objectives, and instead create the potential for service discontinuance and technology retirement that will generate customer confusion, place vulnerable communities at risk, and interfere with a smooth technology transition.

⁵ *Ex Parte* letter *In the Matter of Application of Verizon New Jersey Inc. and Verizon New York Inc. To Discontinue Domestic Telecommunications Services*, WC 13-150 from Maggie McCready to Marlene Dortch, September 11, 2013. See also, “Verizon Backing Off Plans for Wireless Home Phones,” *New York Times*, September 12, 2013. <http://www.nytimes.com/2013/09/13/nyregion/verizon-abandons-plans-for-wireless-home-phones-in-parts-of-new-york.html>

⁶ *Technology Transitions et al.*, GN Docket No. 13-5 et al., Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, 29 FCC Rcd at 1439, para. 15.

The *NPRM*'s proposals are at odds

The instant *Notice of Proposed Rulemaking, Notice of Inquiry, and Request for Comment*

(hereinafter, *NPRM*) indicates that its objective is to “better enable broadband providers to build, maintain, and upgrade their networks.”⁷ While AARP is supportive of these goals, AARP finds that the *NPRM* contains conflicting proposals which undermine the objective of a technology transition that is not disruptive and harmful to consumers. On the one hand, the *NPRM* addresses entry barriers facing new broadband providers associated with pole attachments, as well as state and local laws that may impede competition. AARP agrees that these are important entry barriers, the removal of which could play a part in improving broadband competition, which is currently very limited. However, other elements of the *NPRM* address issues that are not related to market entry, and which have significant consumer impact—copper retirement, notice requirements and processes associated with the discontinuance of TDM-based services, and the “functional test” standard. On these matters, AARP finds significant disagreement with the proposals offered in the *NPRM* as they place consumers at increased and unnecessary risk during the technology transition. Furthermore, there is a disconnect between the *NPRM*'s general themes of “remove entry barriers” and “expedite copper retirement and service discontinuance.” The connection that the *NPRM* misses is the glaring lack of competition in broadband markets. This fact necessitates strong consumer protections during the IP transition.

The lack of competition in broadband markets necessitates strong consumer protection during the technology transition

If there was robust competition in broadband markets, consumers would have many choices for alternatives to legacy TDM-based technology. If competition was robust, market forces would offer consumers protection from the actions of any one firm. Unfortunately, broadband markets

⁷ *NPRM*, ¶2.

are not competitive. The fact that the *NPRM* finds the need to address pole attachments and state and local laws inhibiting broadband entry provides clear evidence that entry barriers persist in last-mile broadband markets.

When it comes to broadband services, there is substantial evidence that competition is weak or non-existent. The FCC's most recent report on fixed broadband shows that broadband is delivered almost exclusively by legacy telephone companies and legacy cable companies.⁸

Telephone companies have refrained from competing against other telephone companies, and cable companies have refrained from competing against other cable companies. Under the best of circumstances, for most consumers, the result is a duopoly market—two choices for a broadband connection. Other evidence shows that for higher speed broadband, monopoly market conditions exist for most consumers.

For example, a 2016 study based on FCC Form 477 data, filed in a California Public Utilities Commission investigation into the status of competition in that state, found that most California households face a duopoly market for broadband service at any speed. Furthermore, the study also found that for broadband at speeds above 25 Mbps downstream, the overwhelming majority of California households face monopoly market conditions.⁹

The county-level information summarized in the following tables is from the 2016 California study of consumer choice at the Census Block level in California's 15 largest counties and two

⁸ "2016 Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the United States." Federal Communications Commission Office of Engineering and Technology and Office of Strategic Planning & Policy Analysis, December 1, 2016.

⁹ Prepared Testimony of Trevor R. Roycroft, Ph.D. *CPUC Investigation I.15-11-007. Order Instituting Investigation into the State of Competition Among Telecommunications Providers in California, and to Consider and Resolve Questions raised in the Limited Rehearing of Decision 08-09-042.* Filed on behalf of The Utility Reform Network (TURN), June 1, 2016. The study is based on June 2105 Form 477 data.

smaller, more rural, counties. Combined, 83.5% of California’s population resides in these counties. Table 1 shows consumer choice for broadband at any speed. Table 2 shows choice for broadband at the FCC's 25/3 Mbps benchmark.

Table 1: Percent of California households and number of wireline broadband (any speed) provider choices

County	No Provider	One Provider	Two Providers (Duopoly)	Three Providers	Four Providers	Five Providers
Alameda	1.23%	2.44%	58.21%	38.12%	0.00%	0.00%
Contra Costa	1.94%	2.07%	63.34%	28.20%	4.46%	0.00%
Fresno	5.61%	12.10%	82.28%	0.01%	0.00%	0.00%
Humboldt	18.84%	11.51%	69.34%	0.31%	0.00%	0.00%
Kern	5.84%	14.42%	79.74%	0.00%	0.00%	0.00%
Los Angeles	0.28%	3.24%	78.82%	15.82%	1.72%	0.12%
Orange	1.40%	5.74%	87.86%	4.89%	0.12%	0.00%
Riverside	2.61%	6.47%	90.81%	0.12%	0.00%	0.00%
Sacramento	2.45%	4.52%	64.43%	27.26%	1.34%	0.00%
San Bernardino	3.85%	10.60%	83.00%	2.55%	0.00%	0.00%
San Diego	2.90%	3.68%	90.35%	3.06%	0.00%	0.00%
San Francisco	1.99%	0.18%	9.10%	40.79%	37.68%	10.26%
San Joaquin	4.22%	5.77%	89.98%	0.03%	0.00%	0.00%
San Mateo	2.22%	2.02%	41.42%	33.63%	17.53%	3.19%
Santa Clara	2.86%	4.86%	67.97%	24.13%	0.18%	0.00%
Shasta	8.53%	20.19%	71.28%	0.00%	0.00%	0.00%
Ventura	1.18%	5.71%	93.07%	0.04%	0.00%	0.00%

County	No Provider	One Provider (Monopoly)	Two Providers	Three Providers	Four Providers	Five Providers
Alameda	2.51%	53.30%	39.94%	4.25%	0.00%	0.00%
Contra Costa	2.85%	56.97%	33.31%	6.46%	0.40%	0.00%
Fresno	14.88%	75.60%	9.53%	0.00%	0.00%	0.00%
Humboldt	24.57%	75.12%	0.31%	0.00%	0.00%	0.00%
Kern	13.81%	77.86%	8.33%	0.00%	0.00%	0.00%
Los Angeles	0.47%	65.93%	33.03%	0.57%	0.00%	0.00%
Orange	2.97%	78.68%	18.32%	0.04%	0.00%	0.00%
Riverside	3.74%	48.21%	48.05%	0.00%	0.00%	0.00%
Sacramento	5.29%	59.95%	29.86%	4.84%	0.07%	0.00%
San Bernardino	6.97%	50.09%	42.94%	0.00%	0.00%	0.00%
San Diego	4.45%	85.69%	9.87%	0.00%	0.00%	0.00%
San Francisco	2.13%	9.71%	45.18%	30.90%	10.16%	1.92%
San Joaquin	7.86%	83.10%	9.04%	0.00%	0.00%	0.00%
San Mateo	4.07%	38.82%	36.59%	18.90%	1.57%	0.05%
Santa Clara	4.92%	63.60%	28.98%	2.49%	0.01%	0.00%
Shasta	26.08%	73.92%	0.01%	0.00%	0.00%	0.00%
Ventura	2.47%	58.20%	39.33%	0.00%	0.00%	0.00%

The results of the study show that California households face limited competition and choice for wireline voice and broadband service at any speed.¹⁰ For higher speed broadband, a substantial majority of households face a monopoly market—only their cable company provides broadband with download speeds above 25 Mbps. Summarizing the information shown in Tables 1 and 2:

	No Provider	One Provider (Monopoly)	Two Providers (Duopoly)	Three Providers	Four Providers	Five Providers
Any Broadband and Voice						
Percent of all households	2.06%	4.97%	76.42%	13.67%	2.42%	0.46%
Broadband at 25Mbps/3Mbps						
Percent of all households	3.83%	63.82%	29.39%	2.50%	0.40%	0.07%

¹⁰ These results are also consistent with the FCC's 2016 report on fixed broadband, which shows fixed broadband markets as being dominated by telephone and cable companies.

The lack of competition in California and across the nation has significant implications for matters associated with copper retirement and service discontinuance. The *NPRM*, acknowledges, through its proposals associated with pole attachments and state laws, that entry barriers persist. However, the *NPRM* jumps the gun on service discontinuance and copper retirement. Consumers do not have a sufficient level of choice to be protected by “market forces.” Furthermore, copper retirement may reduce competitive choices.

Copper retirement may diminish competition

Copper retirement has the potential to remove a source of supply for business and residential broadband. For residential customers, the elimination of copper facilities may remove their only wireline broadband alternative, or reduce choice for wireline broadband to a single supplier. Thus, copper retirement has the potential to reduce competition, and to eliminate a technology platform that supports a variety of complementary technologies.

There may be an additional impact, especially in the business market, if copper retirement eliminates facilities that CLECs rely upon to deliver broadband services to business customers, including Ethernet over copper services. As noted in the *2015 Technology Transition Order* copper retirement may have far-reaching implications for business and government, *and the individuals who are served by business and government:*

Competition provided by competitive carriers that often rely on wholesale inputs offers the benefits *of additional choice to an enormous number of small- and medium-sized businesses, schools, government entities, healthcare facilities, libraries, and other enterprise customers.* We therefore take these actions to protect consumers, preserve the extent of existing competition, and facilitate technology transitions. These actions will benefit the public by ensuring that as technology transitions proceed, end users do not lose service and continue to have choices for communications services. *We are not today protecting competitive carriers; rather, we act to preserve their contributions to the*

*market, which can include lower prices, higher output, and increased innovation and quality.*¹¹

Competition is lacking in broadband markets, and the resulting lack of choice has a direct impact on the need for a well-managed technology transition. If consumers had many choices for home broadband and voice services, then the retirement of ILEC copper, or the elimination of legacy services, would likely be less disruptive. The fact is, however, most residential broadband markets are duopolies or monopolies. The lack of competition points to the need for regulatory oversight of the technology transition. When legacy services are eliminated, consumers do not have many alternative choices, and “market forces” are unable to afford consumers the protection that they need.

On notice and copper retirement, the *NPRM* is a step on the wrong direction

As will be discussed in these comments, the *NPRM* proposes to dramatically reduce notice requirements associated with the withdrawal of legacy services, including data services with speeds of 25 Mbps “or even higher.”¹² High-speed broadband technologies play a growing role in the lives of older Americans, i.e., those in age 50 and above households. Home broadband is

¹¹ *2015 Technology Transition Order*, ¶101, emphasis added.

¹² *NPRM*, ¶79.

now utilized by those in the 50-64 age group at a rate that is nearly identical to that of younger

% of U.S. adults who are home broadband users, by age

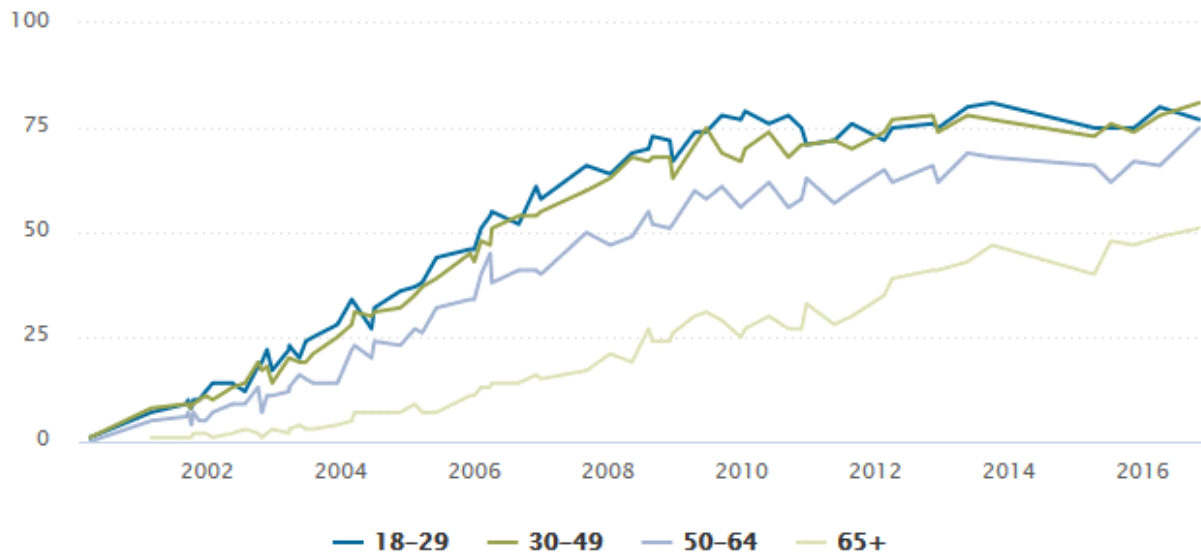


Figure 1: Percent of Households by Age Group with Broadband

demographics. Figure 1 shows 2017 information from the Pew Research Center.

As the current 50-64 demographic ages, the future “65+” group will likely merge with the other age groups as well. In addition to applications with wide appeal, such as access to over-the-top video, the ability of broadband to enable distance learning, telehealth, and aging-in-place applications will further motivate older Americans to utilize broadband, and to demand affordable and high-quality broadband connections.¹³

The *NPRM* does not offer any compelling rationale for the reduction in existing notice and grandfathering timeframes that will affect existing broadband connections, and AARP believes

¹³ “Seniors also place a high value on the importance of home broadband service, according to a survey conducted by the Center in 2017. The vast majority of adults ages 65 and older say they believe having access to high-speed internet at home is either essential (42%) or important (49%). This puts older Americans on par with Americans of other ages when it comes to the importance of home broadband service.” “Tech Adoption Climbs Among Older Adults,” Pew Research Center, May 17, 2017. <http://www.pewinternet.org/2017/05/17/tech-adoption-climbs-among-older-adults/>

that consumers will be harmed unless there is adequate notice of the potential for service elimination. In addition, the *NPRM* does not reasonably address the parameters associated with replacement services, and opens the door for broadband services that millions of households currently find to be affordable to be replaced by carriers with less reliable and more expensive wireless services. The net impact of the *NPRM*'s proposals would be to threaten broadband adoption and usage, and to harm consumers, especially those who reside in areas where alternatives to legacy services are limited. AARP urges the Commission to stand by its existing “rules of the road” on matters of notice and copper retirement.

Additional key points contained in these comments:

- Section 214 of the Telecommunication Act continues to be a valid statutory requirement, regardless of its vintage, or new provisions introduced by the 1996 Telecommunications Act.
- According to the *2016 Rand Study*, conducted on behalf of the Commission, wireline voice and broadband services are viewed as essential. Millions of households continue to view wireline voice as their most important service. 75 percent of households subscribe to wireline broadband.
- The *NPRM*'s proposals to reduce the public comment period for “grandfathering” both low-speed and higher-speed data services are inappropriate. The reduced public comment period will increase the likelihood of customer confusion, and increase risks associated with the technology transition.
- The *NPRM* contains sympathetic language associated with an NTIA request addressing the special needs of government agencies during the technology transition. Residential consumers have some characteristics similar to government agencies, such as constrained budgets and dependence on legacy technologies. Like government agencies, residential consumers also require full information and adequate time to adjust to the technology transition.
- The *NPRM*'s proposal to reduce notice periods for both dominant and non-dominant carriers to 10 days is inappropriate. Millions of consumers continue to rely on services provided by dominant carriers, and the lack of competition in broadband markets leaves these customers few choices when services are withdrawn. The 30-day notice period continues to be appropriate.
- The *NPRM*'s proposals to reduce the “auto-grant” periods, to reduce periods for grandfathering, and to expedite discontinuance further in cases where no comments are received are inappropriate. Consumers deserve adequate notification to prepare for the

technology transition, and the Commission must verify that adequate replacement services are available.

- Comparability of alternative services must address affordability and prices, data speeds, quality, and service quality. Consumers should not be migrated to services that have more restrictive data caps.
- The *2015 Technology Transition Order's* conclusion that ILECs should notify both wholesale customers and the retail customers of the wholesale customer continues to be appropriate.
- The *NPRM's* proposal to eliminate the Section 214 discontinuance process entirely, should alternative fiber, IP-based, or wireless service “overlap” with the legacy service area is inappropriate, especially so for proposals where wireless is identified as the alternative service. The Commission must ensure, consistent with Chairman Pai’s vision for technology transition, that high-quality fiber alternatives are available.
- Older Americans and individuals with disabilities are more likely to rely on wireline services. Copper retirement has the potential to have a negative impact on these individuals. A measured transition is essential for these communities, and the Commission has recently recognized that services such as Real Time Text (RTT) for the hearing impaired do not have wireline equivalents.
- The connection between reduced notice and investment in next generation technologies implied by the *NPRM* is not clear. However, facilities-based entry has been demonstrated to increase incumbent telephone- and cable-company investment. Unfortunately, entry by facilities-based providers like Google Fiber has been very limited.
- The “functional test” associated with the Commission’s *2014 Technology Transitions Order* continues to be appropriate. The Commission’s 50-year history of promoting innovation at the network edge, which began with its *Carterfone* decision, will be undermined if the functional test is abandoned.

Introduction

AARP respectfully submits these Comments for the FCC’s consideration, and thanks the Commission for the opportunity to participate in this important proceeding regarding the transition to all IP broadband networks. The *NPRM* proposes dramatic changes in customer notice associated with copper retirement and service discontinuance. AARP is opposed to the proposed changes, and sees no reason for the Commission to walk back the more balanced approach that it adopted, based on extensive record evidence, over the past three years. These comments address some of the points raised in the *NPRM*, but AARP does not address all issues raised by the Commission. AARP’s silence on any issue should not be interpreted by the Commission as agreement, and AARP may address additional issues on reply. To repeat, AARP does not believe there is any evidence to support reversing current Commission rules associated with copper retirement and/or service discontinuance. As discussed below, the likely outcome of the proposed changes will be harms to consumers and competition.

***NPRM* proposals increase technology transition risks**

Government users have parallels with residential users

The *NPRM* sympathetically notes that government users deserve special consideration as they transition from legacy services to next generation technology.¹⁴ The *NPRM* indicates that federal government agencies face challenges due to budget and procurement constraints.¹⁵ The *NPRM* also indicates agreement with statements made by NTIA in a petition that was filed with the Commission in October of 2016. Specifically, the *NPRM* states that the transition from legacy technologies to new “must not disrupt or hamper the performance of mission-critical activities,

¹⁴ *NPRM*, ¶82.

¹⁵ *Id.*

of which safety of life, emergency response, and national security are the most prominent examples.”¹⁶ The *NPRM*’s evaluation of challenges facing government agencies offers parallels with the challenges faced by many residential consumers. Like government agencies, households also face budgetary challenges, and rely on technologies that have been designed to work with a household’s legacy systems. While national security matters are likely beyond the scope of daily activities of residential consumers, it is indisputable that access to emergency services, which offer critical protection to life and property, depend on legacy facilities. Furthermore, other technologies, including personal safety and security technologies, depend on legacy TDM-based systems. The caution that the *NPRM* expresses regarding government agencies is equally applicable to residential legacy services.¹⁷

Section 214 Discontinuance

The *NPRM* notes that carriers allege that Section 214(a) discontinuance provisions are “among the very most intrusive forms of regulation.”¹⁸ The *NPRM* also points to the vintage of Section 214(a), which originated during World War II to protect communities from the loss of telegraph service arising from mergers of telegraph companies, as indicating obsolescence of its principles.¹⁹ The *NPRM* references changes in the law associated with the 1996 Telecommunications Act as diminishing Section 214(a)’s usefulness. AARP notes, however, that if Congress believed that Section 214(a) was no longer appropriate, it certainly had the opportunity to remove that section during the 1996 rewrite. Congress did not make that change, suggesting that Congress did not believe that technological change had made discontinuance practices any less important. This statutory provision reflects the objectives of Congress to

¹⁶ *NPRM*, ¶82.

¹⁷ *NPRM*, ¶¶83-84.

¹⁸ *NPRM*, ¶71, citing, in footnote 101, to CenturyLink Comments.

¹⁹ *NPRM*, ¶93.

protect communities, or parts of communities, from the withdrawal of vital telecommunications services.

Grandfathering, auto-grant periods, and applications to discontinue previously grandfathered legacy data services

The proposals in the *NPRM* reduce or eliminate the reasonable protections that the Commission has previously implemented. For example, the *NPRM* proposes to reduce the public comment period for “grandfathering” both “low speed”²⁰ and “higher speed”²¹ services from 30 days to 10 days.²² A 10-day comment period is excessively brief, and provides little time for affected customers to respond. It is not clear what public benefits would arise from this truncated timeline, and risks of the public not being informed of important changes in time to respond are increased with such a short period. The proposal is unbalanced and increases risks for consumers who must be fully informed, and have a reasonable opportunity to respond to proposed changes. It is difficult to imagine much impact on expanded deployment of new services would arise from this reduction in the comment period.

Broadband discontinuance raises complex issues and requires adequate notice

Residential fixed broadband services are subscribed to by about 75 percent of U.S. households.²³

According to the Commission’s most recent data, residential legacy broadband data services make up 27.1 percent of residential broadband connections.²⁴ Thus, the potential retirement of legacy data services has the potential to affect millions of U.S. households. The *NPRM* makes wide-ranging proposals that address service grandfathering, and discontinuance of previously

²⁰ *NPRM*, ¶73.

²¹ *NPRM*, ¶75.

²² *NPRM*, ¶73. “Grandfathering” occurs when services are no longer made available to new customers, with remaining customers allowed to continue to subscribe. However, grandfathering is often then associated with a withdrawal of the service from those existing customers at a later date.

²³ *2016 Rand Study*, p. 20.

²⁴ Internet Access Services: Status as of June 30, 2016 Industry Analysis and Technology Division Wireline Competition Bureau, April 2017, Figure 11.

grandfathered services.²⁵ For example, the *NPRM* proposes to unify the notice requirements to grandfather legacy low-speed data services regardless of whether the applicant is a dominant or non-dominant carrier.²⁶ As discussed earlier, residential customers do not experience competitive markets for broadband services, and the grandfathering of services may further diminish consumer choice. As a result, the 30-day notice timeframe associated with dominant carriers continue to be appropriate—the proposed 10-day period should not be adopted.

The *NPRM* goes on to propose a 10-day notice period for higher speed data services;²⁷ AARP also finds this proposal to be inappropriate. Legacy broadband services, such as DSL, may deliver speeds of 10 Mbps, 25 Mbps, or even higher, as implied by the *NPRM*.²⁸ Data speeds in this range continue to be widely subscribed. The most recent Akamai *State of the Internet* report shows an average download speed by broadband subscribers in the United States of 18.7 Mbps.²⁹ Thus, the *NPRM* proposal to allow streamlined discontinuance targets legacy data services with data speeds that are “mainstream,” and would impose an inappropriate discontinuance time frame for services that large numbers of consumers continue to utilize.

The *NPRM* proposes to streamline the auto-grant period from the current 60-day period to 25 days. Combined with the 10-day notice requirement, this proposal would lead to service grandfathering in 35 days. AARP does not believe that such a timeline is appropriate. Given other proposals in the *NPRM* that could lead to the proposed timelines to apply to both low-speed and higher-speed legacy data services, existing timelines continue to be appropriate. Ironically,

²⁵ *NPRM*, ¶¶73-81.

²⁶ *NPRM*, ¶73.

²⁷ *NPRM*, ¶75.

²⁸ *NPRM*, ¶79.

²⁹ Akamai’s *State of the Internet Q1 2017 report*, Vol. 10, No. 1, p. 24.

<https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/q1-2017-state-of-the-internet-connectivity-report.pdf>

the *NPRM* goes on to propose even more abbreviated auto-grant periods for “discontinuance applications that receive no comments.”³⁰ Reducing comment periods to 10 days will increase the likelihood that consumers will not have time to file comments, thus triggering the potential for an expedited auto-grant. A lack of comments could easily arise from the shortened filing timeline, as opposed to a lack of consumer interest. The *NPRM*’s proposal is not appropriate.

The *NPRM* proposes to allow a streamlined comment period of 10 days for the discontinuance of data services that have been grandfathered for a period of 180 days.³¹ This reduced notification period is not appropriate. The current notice standards should continue to apply. The *NPRM* goes on to question the necessity of the 180-day grandfathering period for legacy data services, and asks whether a shorter grandfathering period is appropriate.³² AARP is opposed to changing both the existing 30-day notice and 180-day grandfathering periods.

In summary, the proposal to reduce the period associated with grandfathering to something less than the current 180-day time frame should also be rejected. Importantly, any combination of a reduced grandfathering period, with a 10-day notice of discontinuance period would result in an expedited process that would disadvantage consumers, and circumvent any reasonable notion of adequate customer notice. As discussed further below, discontinuance should only be approved if alternative services with comparable functionality are available to consumers.

Demonstration of alternatives is essential to discontinue previously grandfathered services

Rather than requiring that the discontinuing carrier demonstrate that consumers have alternatives to the discontinued service, the *NPRM* proposes to require only a statement from the requesting

³⁰ *NPRM*, ¶78.

³¹ *NPRM*, ¶85.

³² *NPRM*, ¶87.

carrier that it had received Commission authority to grandfather the service.³³ This approach is inappropriate as consumers must be certain to have alternatives once a legacy service is discontinued. The NPRM raises questions as to whether the Commission should consider other factors, such as whether alternative comparable data services are available from either the discontinuing provider or a third party.³⁴ Comparability of data services should include data speeds, comparable data allowances, latency, jitter, service quality, and affordability.

Comparable data services must be available for service discontinuance

The *NPRM* raises the question of whether carriers who are subject to the proposed 10-day comment period for the discontinuance of legacy data services should be required to demonstrate the availability of “comparable” data services, either from the requesting provider, or from a third party.³⁵ AARP believes that in all cases of discontinuance, the requesting carrier must show that comparable data services are available. Comparability should be measured in terms of data speeds, prices (stated both in prices for speed tiers and in dollars per Mbps), in terms of performance, as measured by latency and jitter, and by service quality, as measured by metrics such as service availability per month. In addition, comparability of data services must also account for data caps. For example, services that are proposed to be discontinued that are not subject to data caps should be replaced by comparable data services that are also not subject to a data cap.

Treatment under Section 214(a) of carrier-customers’ end users

In the *2015 Technology Transitions Order*, the Commission concluded that both wholesale customers of the carrier requesting discontinuance, and the end-user customers of the carrier’s

³³ *NPRM*, ¶188.

³⁴ *NPRM*, ¶187.

³⁵ *NPRM*, ¶188.

wholesale customers should be notified by the carrier requesting to discontinue service. The Commission found that the statutory requirements associated with Section 214(a) necessitate “a meaningful evaluation of the impact of actions that will discontinue, reduce, or impair services used as wholesale inputs and assess the impact of these actions on end user customers. This meaningful evaluation must include consultation directly with affected carrier-customers to evaluate the impact on those carrier-customers’ end users.”³⁶ The Commission was not swayed by the arguments of some carriers who alleged that it was difficult and costly for them to determine who wholesale carriers’ customer are, and the Commission noted that evidence from some carriers indicated otherwise:

Windstream states that “[w]hen Windstream orders channel terminations for last mile special access services, it must specify the end points of those services” and “[t]he ILEC has those end point locations.” Windstream further asserts that, “[w]ithin a wire center, the ILEC should be able to determine with a high degree of accuracy whether that location is its own switching office, the switching office or point of presence of a third party carrier, a carrier hotel, or an end user premises.” In an analogous context, CenturyLink states that it is able to notify affected telephone exchange service providers of proposed copper retirement by email, “with detailed information, including the Circuit ID, cable and pair numbers, and impacted addresses.”³⁷

Regarding ILEC notice to the end users of wholesale customers, these same methods continue to be available, and AARP sees no reason to reverse the current framework on this matter.

Section 214(a) and Section 251(c)(5)

The *NPRM* also raises questions about the relationship between Section 214(a) and Section 251(c)(5), the latter of which resulted from the modifications introduced by the 1996 Telecommunications Act. The *NPRM* requests comment on the question of whether “Congress signal(ed) its intent that incumbent LECs need only provide notice, not obtain approval, when

³⁶ 2015 *Technology Transitions Order*, ¶114.

³⁷ 2015 *Technology Transitions Order*, ¶118, footnotes omitted.

making changes to wholesale inputs relied upon by competing carriers?”³⁸ There is no indication that the *NPRM*'s speculation is correct. The plain language of Section 251(c)(5) discusses service- and interoperability-affecting *network changes*, not the discontinuance of service:

NOTICE OF CHANGES.--The duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

The *NPRM* requests that commenters provide a reconciliation between Section 251(c)(5) and Section 214(a), to “best eliminate regulatory barriers to the deployment of next generation network and services.”³⁹ AARP believes that reconciliation of these sections is not necessary as they address two clearly distinct matters. Regarding Section 251(c)(5), if Congress had intended to include the retirement of facilities as requiring only “notice” and not “permission,” then language to that effect would have been included. It was not, and the plain language suggests that the withdrawal of network facilities is outside of the scope of Section 251(c)(5). “Changes that would affect the interoperability of those facilities and networks” does not suggest the removal of network facilities. When Congress drafted Section 251(c)(5), it did so with knowledge of Section 214(a), and the revision to the statute that occurred in 1996 made no connection between the two. Congress could have modified Section 214(a) to give Section 251(c)(5) control over procedures to govern the withdrawal of wholesale services, however, it did not. There is no indication that Congress saw the connection that the *NPRM* is attempting to make. AARP believes that the statutory interpretation contained in the *2015 Technology Transitions Order* is correct.

³⁸ *NPRM*, ¶93.

³⁹ *NPRM*, ¶93.

BellSouth Telephone

Similarly, the *NPRM* raises the issue of the *2015 Technology Transitions Order* regarding the *BellSouth Telephone* ruling.⁴⁰ The *NPRM* questions as to whether Section 251(c)(5) supersedes 214(a) in the context of notification of the end-user customers of wholesale providers. Here too, “changes are changes, and discontinuance is discontinuance”—i.e., separate issues. The scope of Section 251(c)(5) does not rise to the level of discontinuance, and the separate provisions of Section 214(a), which the Commission recognized in *BellSouth Telephone* as applying to both end users and wholesale customers,⁴¹ are reasonably associated with service discontinuance. The *2015 Technology Transition Order* correctly addressed the issue.

Other Part 63 proposals—“service availability” and “service overlap”

“Fiber, IP-based, or wireless service availability.” The *NPRM* seeks comment on whether 214(a) applications can be streamlined when “fiber, IP-based, or wireless services are available to the affected community.”⁴² The *NPRM* also requests comment on “what types of fiber, IP-based, or wireless services would constitute acceptable alternatives,” and whether a “demonstration regarding the availability of third-party services satisfy this kind of test...”⁴³ AARP encourages the Commission to refrain from “streamlining” 214(a) applications in this context, as the issue of service availability from alternative fiber, IP-based, and/or wireless services raises complex issues that deserve ample time for public comment and careful review by the Commission. For example, AARP does not believe that it is reasonable for a requesting

⁴⁰ *NPRM*, ¶94, citing to *BellSouth Telephone Companies Revisions to Tariff FCC No. 4*, Transmittal No. 435, Memorandum Opinion and Order, 7 FCC Rcd 6322 (1992).

⁴¹ “BellSouth first argues that Section 214 authorization is not required to discontinue CPN in North Carolina because it is not discontinuing CPN to the public, but only to its carrier-customers. BellSouth is incorrect. . . . Thus, BellSouth must file an application seeking Section 214 authorization before it discontinues CPN in North Carolina. In the proceeding on that application, the Commission will evaluate BellSouth’s arguments for discontinuance and the impact of such discontinuance on end users.” *BellSouth Telephone Companies Revisions to Tariff FCC No. 4*, Transmittal No. 435, Memorandum Opinion and Order, 7 FCC Rcd 6322-6323 (1992).

⁴² *NPRM*, ¶95.

⁴³ *Id.*

carrier to certify the performance or coverage of third-party services. Issues associated with the coverage, stability and reliability, and affordability of third-party services must be verified by the Commission with the benefit of specific information from the third-party service provider that the applicant proposes as the replacement service provider. The Commission should obtain direct evidence from any third-party service provider regarding the functionality, coverage, reliability, and affordability of the services identified as potential replacements.

“Overlap of legacy service areas.” The *NPRM* also proposes to eliminate the Section 214 discontinuance process entirely, should alternative fiber, IP-based, or wireless service “overlap” with the legacy service area.⁴⁴ This approach should be rejected out of hand. What the *NPRM* means by “overlap” is not clear, and whether unserved areas arise due to the discontinuance must be carefully verified. It would be entirely inconsistent with the Commission’s mission if Section 214 discontinuance proceedings rubber stamped the elimination of service from geographic areas that had previously been served.

In the context of service coverage and continuity, for the technology transition to generate benefits for consumers, key issues must be addressed. For example, do the coverage areas of the proposed alternatives ensure that all locations that previously had service continue to have service? Are alternative services operable during emergencies, including power outages? Do the alternative services provide adequate transmission capability, both in terms of bandwidth and data allowances? Are alternative services affordable? AARP believes that the discontinuance process must consider these and other key issues, otherwise, the Commission will establish parameters for the technology transition that will lead to consumer harms.

⁴⁴ *NPRM*, ¶96.

IP transition to wireless-only raises complex issues

In his dissent in the *2015 Technology Transition Order*, Chairman Pai noted:

The IP Transition represents opportunity for all Americans. *Fiber is the fastest, most reliable way to transport data, whether across a city or around the world. Fiber networks transmit data at the speed of light and fail at only one-eighth the rate of copper networks.* Next Generation 911, telemedicine, and distance learning will all be delivered over IP networks. This means that the most resilient emergency communications, the highest-quality medical images, and the best educational conversations are within our reach. The all-IP future brings with it exactly *the high-quality, high-speed technologies and services that consumers are demanding.*⁴⁵

AARP agrees with Chairman Pai that fiber optic networks hold immense promise for consumers in the technology transition, and that fast, high-quality, and reliable next-generation services are essential. However, it is no secret that integrated wireline-wireless carriers like AT&T and Verizon may desire to replace legacy services not with fiber, but instead with wireless.⁴⁶

Technology transition to a wireless-only alternative raises significant issues regarding consumer choice, as recent evidence indicates that wireline services continue to be highly valued by consumers. According to the *2016 Rand Study* of telecommunications consumer preferences, about 52 percent of households continue to maintain a wireline telephone.⁴⁷ Similarly, regarding broadband, that same *2016 RAND Study* shows that over 75 percent of households subscribe to wireline broadband. Of course, there are important reasons why consumers do not choose to go wireless only, including, but not limited to the fact that wireless services are measured rate and more expensive than wireline services, and the fact that wireless service is not guaranteed to work anywhere, especially indoors.⁴⁸ These facts indicate that caution should be exercised with

⁴⁵ Dissent of Ajit Pai in *2015 Technology Transition Order*, emphasis added.

⁴⁶ See, for example, AARP Comments in the matter of *AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition; Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution*, WC Docket No. 12-353, January 28, 2013, pp. 9-12.

⁴⁷ *2016 Rand Study*, pp. 20-22.

⁴⁸ For example, AT&T offers the following explanation of its wireless coverage depictions as contained in their coverage maps: "Map displays approximate outdoor coverage and actual coverage may vary. Coverage is not

considering wireless as an alternative to existing fixed services in the context of Section 214(a) discontinuance.

While AARP does not believe that the Commission's existing framework needs to be modified, to the extent that legacy TDM-based connections are replaced by fiber-to-the-premises (FTTP), AARP believes that it is much less likely that harms will arise, and will also provide evidence of good-faith efforts of carriers to advance technology deployment.

Copper retirement and the *NPRM*'s proposed repeal of Section 51.332

Given the ubiquity of copper networks, and the importance of copper networks to a wide variety of technologies and services, procedures surrounding copper retirement are of critical importance to consumers during the transition to next generation networks. The *2015 Technology Transitions Order* provides an approach to notice of impending copper retirement that appropriately weighed the interests of consumers, competitors, and the owners of copper-based networks. These protections were codified in Section 51.332 of the Commission's rules. The *NPRM* proposes to repeal Section 51.332,⁴⁹ and AARP is strongly opposed to this proposal. The *NPRM* asks whether it would be appropriate to return the notice requirement to the previous period associated with short-term changes.⁵⁰ AARP does not see the benefit of abandoning the current rules and taking a step backward. Evidence that the existing notice requirements are impeding broadband investment is lacking, and none is provided in the *NPRM*. While the notice requirements associated with the *2015 Technology Transitions Order* are longer than the

guaranteed and is subject to change without notice. . . . Actual coverage may differ from map graphics and may be affected by terrain, weather, network changes, foliage, buildings, construction, signal strength, high-usage periods, customer equipment, and other factors. AT&T does not guarantee coverage. Our coverage maps are not intended to show actual customer performance on the network or future network needs or build requirements inside or outside of existing AT&T coverage areas." http://www.wireless.att.com/coverageviewer/popUp_legal.jsp

⁴⁹ *NPRM*, ¶58.

⁵⁰ *NPRM*, ¶58.

previous notice requirements, this is entirely appropriate given the anticipation of widespread migration to next generation technologies. Regarding notice, the *2015 Technology Transitions Order* also provides carriers appropriate options. As is pointed out in the *NPRM*, the current approach provides ILECs flexibility when they face special circumstances, such as damage to network facilities, thus enabling a shorter timeframe on a case-by-case basis.⁵¹

Regarding notice requirements, the *NPRM* proposes to either eliminate, or significantly modify the provisions contained in Sections 51.332, including subsections (b)(3), (d)(6)-8, and (e)(3)-(4).⁵² None of the *NPRM*'s proposals are acceptable, and AARP believes that the framework provided by the current Commission rules continues to be appropriate.

Older Americans and individuals with disabilities will be harmed

The *NPRM* requests comment on the impact of the elimination of notice requirements on consumers with disabilities and senior citizens.⁵³ AARP notes that older households are more likely to rely on wireline services. The *2016 RAND Study* conducted on behalf of the Commission⁵⁴ indicates that older households are more likely to be associated with the 20 percent of the population that views landline telephone service as the most important telecommunications service.⁵⁵ This data indicates that millions of Americans continue to rely on legacy TDM technology, and place a high value on the service that it provides. The Commission

⁵¹ *NPRM*, footnote 84, referencing a Frontier Communications filing in WC Docket No. 16-132. In that Frontier filing, Frontier acknowledges that in response to a waiver request surrounding an event associated with network damage, it could replace damaged legacy facilities with next-generation technology.

⁵² *NPRM*, ¶¶63 & 64.

⁵³ *NPRM*, ¶64.

⁵⁴ Craig Bond, Howard Shatz. "U.S. Consumer Preferences for Telephone and Internet Services, Evidence from the RAND American Life Panel," 2016. Hereinafter, *2016 Rand Study*.

http://www.rand.org/pubs/research_reports/RR1382.html

⁵⁵ *2016 Rand Study*, p. 34.

must ensure that this significant portion of the population is not harmed as the transition to next generation networks unfolds.

The *NPRM* also raises the issue of the impact on individuals with disabilities. Disability populations are likely to be more reliant on TDM-based services, and to face consequences should the transition not go smoothly. On the matter of technology transition and individuals with disabilities, the California Public Utilities Commission has informed the FCC:

The administrative vendor for the CPUC's Deaf and Disabled Telecommunications Program (DDTP) has provided anecdotal information to the CPUC regarding customers using captioned telephones. Some users have reported to the DDTP that their service has been changed from TDM to VoIP, and they discover the change when the captioned telephone no longer works, because it is designed to use a TDM connection. In addition, closed captioners with the DDTP have informed CPUC staff that they use TDM lines to transmit closed captioning service to local television stations. These are issues the FCC should address in developing rules for the transition.⁵⁶

The *NPRM* asks about Teletypewriter (TTY) services, and whether individuals with disabilities still rely on this technology. The FCC recently addressed the issue of the transition from TTY to Real-Time Text (RTT), in a December 2016 order.⁵⁷ In that order, the FCC noted that care needed to be exercised. Regarding the transition away from TTY, the FCC found that the record only supported the transition to RTT for wireless services, as RTT standards for wireline services have yet to be developed:

⁵⁶ *In the Matter of Ensuring Customer Premises Equipment Backup Power for Continuity of Communications, Technology Transitions, Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers, Special Access for Price Cap Local Exchange Carriers, AT&T Corporation Petition for Rulemaking of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, PS Docket No. 14-174, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593, Comments of the California Public Utilities Commission, February 26, 2015, p. 16.

⁵⁷ *In the Matter of Transition from TTY to Real-Time Text Technology, Petition for Rulemaking to Update the Commission's Rules for Access to Support the Transition from TTY to Real-Time Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology*, CG Docket No. 16-145, GN Docket No. 15-178 Report and Order and Further Notice of Proposed Rulemaking, December 16, 2016.

While several commenters affirmatively support RTT implementation on IP-based wireline networks, a number of commenters urge the Commission to defer any such requirements, variously claiming that effective alternatives are available to support TTY technology over IP-based wireline voice services, that RTT standards for wireline services have yet to be developed, and that unique technical challenges are involved in implementing RTT over wireline networks. *Based on the record, we conclude that it would be premature at this time to address application of RTT to the wireline environment.*⁵⁸

AARP believes that individuals with disabilities require special attention as networks transition. It is essential that carriers seeking Section 214 discontinuance describe in their applications the specific alternative technologies that are available for individuals with disabilities, if existing technologies will no longer function. It is reasonable to require carriers to demonstrate that any substitute service offered by the carrier, or alternative services available from other providers, will satisfy the needs of individuals with disabilities, including compatibility with existing or substitute assistive technologies. The Section 214 application should also include, if consumers are required to purchase new technologies, the cost per consumer of alternative, compatible equipment. Requesting carriers should be required to work with the appropriate state and/or federal agencies that distribute equipment to qualified individuals with disabilities, and the section 214 application should provide a copy of the carrier's plan, and the specific state and federal agencies that the carrier will be working with on this matter.

AARP believes that the Commission must move with caution given the reliance that individuals with disabilities have placed on legacy services, and that service discontinuance notice requirements should reflect the impact that service discontinuance may have on all members of a community.

⁵⁸ *Id.*, ¶13, emphasis added.

Costs and Benefits

The *NPRM* asks “how do the benefits of notification compare with the costs in terms of slower transitions to next-generation networks?”⁵⁹ AARP encourages the Commission to recognize that notice requirements are part of essential due process associated with the agency charged by Congress with the responsibility of ensuring access to adequate facilities at reasonable charges to “all people in the United States.” The Commission must take steps to ensure that the complex process of technology transition does not generate unnecessary harms by leaving some consumers without service, or facing dramatic rate increases.

Regarding notice requirements, as discussed above, the *NPRM*'s proposals are extreme, and will have a substantial impact on both the ability of the public to be informed, and to adequately prepare for the technology transition. On the other hand, AARP cannot imagine how the proposed reduction in notice requirements will have a significant impact on the deployment of next-generation technologies, and the *NPRM* does not offer any evidence on this matter. While it may be easier for carriers to develop cost estimates associated with alleged impacts of notice requirements, the benefits of adequate notice ensuring that consumers are properly informed, and have alternatives that offer functional equivalence may be more difficult to quantify. While these benefits may be difficult to quantify, they should be considered. As noted in Executive Order 12866, the Commission should evaluate “qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.”⁶⁰ The benefits of adequate notice in the context of the most significant telecommunications technology transition ever faced by consumers certainly rises to this level of consideration. AARP urges the Commission to assess the benefits of adequate notice

⁵⁹ *NPRM*, ¶64.

⁶⁰ Executive Order 12866, p. 1. <http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf>

broadly, given the critical impact that service disruption would have on the ability of consumers to access first responders, to utilize essential technologies that depend on legacy technologies, and to generally have access to the public network. As Executive Order 13563 explained, when considering regulatory options the Commission should:

“. . . propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (*recognizing that some benefits and costs are difficult to quantify*); . . . and select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (*including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity*). . . .”⁶¹

There is no question that the public safety benefits associated with adequate notice will be substantial, and that access to affordable, high-quality services that offer comparable or superior functionality to legacy service have economic benefits. The distributive and equity factors mentioned are also relevant in the context of potential discrimination associated with replacement services associated with rural or lower-income areas.

Shorter notice requirements did not spur investment

As noted in the *NPRM*, prior to the *2015 Technology Transitions Order*, shorter retirement notices were allowed.⁶² It is quite clear that those shorter notice requirements provided little incentive for ILECs to replace copper facilities with fiber optics. Other than Verizon, which made the business decision to deploy fiber in portions of its service area beginning in 2005,⁶³

⁶¹ Executive Order 13563, p. 1, emphasis added. <http://www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf>

⁶² *NPRM*, ¶58.

⁶³ Most of Verizon’s buildout was completed by 2010, with Verizon pursuing geographically limited roll-outs since. See for example, “Verizon to End Rollout of FiOS,” *Wall Street Journal*, March 30, 2010. <https://www.wsj.com/articles/SB10001424052702303410404575151773432729614>. See also, “Verizon FiOS expands again, but Verizon’s future is still wireless.” *ARSTechnica*, December 12, 2016. <https://arstechnica.com/information-technology/2016/12/verizon-fios-hits-boston-in-first-new-fiber-deployment-in-years/>

incumbent ILECs have generally avoided fiber-to-the-home deployment. On the other hand, it is clear what causes ILECs to expand fiber deployment—facilities-based entry.

Facilities-based entry has encouraged investment

In the limited number of markets where facilities-based entry has occurred (or has been anticipated), incumbent providers are observed to decrease prices and increase investment.

Responses to Google Fiber entry are notable. For example, in a blog post addressed specifically at Google’s recent announcements that it was pulling back from fiber expansion, AT&T’s Senior Vice President of Regulatory Affairs, Joan Marsh, notes:

Building reliable, ubiquitous high-speed broadband connectivity is tough. It takes an enormous commitment of capital and resources and a highly-skilled and capable work force. Yet AT&T has been at it for over 140 years. Between 2011 and 2015, while Google Fiber was cutting its teeth on fiber, AT&T invested over \$140B in its network, building to over one million route miles of fiber globally and deploying ultra-high-speed fiber-fed GigaPower broadband services, reaching over a hundred cities.⁶⁴

These AT&T investments were inspired in part by Google Fiber’s threat.⁶⁵ The fact that Google pursued its fiber experiment provided a long-needed spur to incumbent investment practices, and resulted in lower broadband prices.⁶⁶

AT&T expanded its “GigaPower” fiber offerings in cities where Google either started, or announced its intention to offer service.⁶⁷ Where AT&T directly competes with Google, or

⁶⁴ “Broadband Investment: Not for the Faint of Heart, August 30, 2016.

<https://www.attpublicpolicy.com/fcc/broadband-investmentnot-for-the-faint-of-heart/>

⁶⁵ “In Response to Google Fiber, AT&T Enhances Service.” *Seeking Alpha*, May 14, 2014.

<https://seekingalpha.com/article/2216183-in-response-to-google-fiber-at-and-t-enhances-service>

⁶⁶ Google Fiber has now pulled back from expansion, due in part to the hurdles that incumbents such as AT&T have raised. See, for example: “AT&T and Comcast helped elected official write plan to stall Google Fiber,” *ARS Technica*, September 19, 2016. <https://arstechnica.com/tech-policy/2016/09/att-and-comcast-helped-elected-official-write-plan-to-stall-google-fiber/>. See also, “Why Google Fiber is no longer rolling out to new cities,” *Washington Post*, October 26, 2016. <https://www.washingtonpost.com/news/the-switch/wp/2016/10/26/why-google-fiber-is-no-longer-rolling-out-to-new-cities/>.

⁶⁷ See, for example, “Where in San Antonio is AT&T’s GigaPower Actually Available?” *San Antonio Current*, September 15, 2015. <http://www.sacurrent.com/Blogs/archives/2015/09/30/where-in-san-antonio-is-atandts-gigapower-actually-available>. See also, <http://www.olatheks.org/content/google-fiber-and-att-u-verse-construction>, <http://arstechnica.com/business/2015/11/att-expands-gigabit-fiber-to-23-cities-starting-at-70-or-110/>

believes that Google will soon be entering, AT&T has dropped the price of its GigaPower service by \$40 per month—from \$110 to \$70.⁶⁸ For example, in Kansas City, AT&T announced a \$70 price point for its fiber-based GigaPower service.⁶⁹ Likewise, in Charlotte, North Carolina, another market where Google has a presence, AT&T has announced GigaPower service at \$70 per month.⁷⁰ Identical behavior was observed in Nashville, following the announcement that Google would expand its fiber network in that city—AT&T announced a drop in its fiber-based GigaPower service of 40%.⁷¹ This behavior is not limited to AT&T, as cable companies have been similarly disrupted by competition from Google Fiber. In Atlanta, both AT&T and Comcast have dropped prices and increased investment in light of a Google Fiber announcement that it will enter the market.⁷² Elsewhere, Comcast also has dropped prices to Google’s levels of \$70 per month.⁷³ Alternatively, when Time Warner Cable learned that Google Fiber was exploring expanding service to Charlotte and Raleigh, Time Warner announced “TWC Maxx,” which increased speeds for customers six-fold, *at no additional charge*.⁷⁴

⁶⁸ “AT&T expands gigabit fiber to 23 cities starting at \$70 (or \$100).” *ARSTechnica*, November 10, 2015. <http://arstechnica.com/business/2015/11/att-expands-gigabit-fiber-to-23-cities-starting-at-70-or-110/>. See also, “Google Fiber competition makes AT&T cut cost of gigabit service in some areas,” *PC World*, October 5, 2015. <http://www.pcworld.com/article/2989109/networking-hardware/google-fiber-competition-makes-att-cut-cost-of-gigabit-service-in-some-areas.html>

⁶⁹ “AT&T to match Google Fiber speeds, prices in Kansas City and suburbs.” *The Kansas City Star*, February 15, 2015. <http://www.kansascity.com/news/business/technology/article10441850.html>

⁷⁰ U-verse with AT&T GigaPower Launches Today in Charlotte and Surrounding Areas, AT&T Press Release, June 15, 2015. http://about.att.com/story/uverse_with_gigapower_launches_in_charlotte_area.html

⁷¹ “AT&T drops fiber prices to Google Fiber levels,” *The Tennessean*, September 29, 2015. <http://www.tennessean.com/story/money/2015/09/29/t-drops-fiber-prices-google-fiber-levels/73023434/>

⁷² Google Gets Beaten to the Punch by AT&T on Super-Fast Broadband, *Bloomberg Technology*, April 25, 2016. <http://www.bloomberg.com/news/articles/2016-04-25/google-gets-beaten-to-the-punch-by-at-t-on-super-fast-broadband>

⁷³ “Comcast is afraid of Google Fiber, because Comcast is afraid of competition,” *The Verge*, March 17, 2016. <http://www.theverge.com/2016/3/17/11256318/comcast-is-afraid-of-google-fiber>

⁷⁴ Time Warner Press Release, March 5, 2015. <http://www.timewarnercable.com/en/about-us/press/twc-to-transform-internet-tv-experience-triangle.html>

AARP believes that the most significant impediment to the deployment of next-generation technologies is the lack of competition in last-mile broadband markets, which is a direct result of persistent economies of scale, and other entry barriers. The costs and risks of the shortened notice requirements cannot be reasonably viewed as generating offsetting benefits, given the pervasive lack of competition in broadband markets. If consumers had numerous alternatives, and faced robust price competition, then notice requirements become less important. Given the market power that incumbent providers exercise, notice requirements are essential.

The *NPRM*'s pole attachment provisions are a step in the right direction when it comes to removing some of the entry barriers associated with facilities-based rivals to ILECs and cable incumbents. However, pole attachment reform will not be enough to solve the facilities-based entry problem, it should be clear that the pervasive scale economies associated with last-mile networks⁷⁵ are the dominant factor preventing workable competition in broadband markets. It is unreasonable to expect that competition is “just around the corner” for residential broadband markets. Absent robust market forces, consumers need regulatory protection during the technology transition.

Trials suggest that the technology transition must move at a measured pace

When considering technology transition issues, the Commission also has the benefit of the experience of AT&T with its Carbon Hill and West Delray Beach technology transition trials.

These trials commenced in May of 2014, and continued through September of 2016. AT&T indicates that it conducted numerous customer-information events, with 61 held in Carbon Hill,

⁷⁵ See, for example, Park, E. and Taylor, R. “Barriers to Entry Analysis of Broadband Multiple Platforms: Comparing the U.S. and South Korea,” Paper to be presented at the Telecommunications Policy Research Conference, September 29-October 1, 2006, Washington, DC. See also, Glass, V. and Stefanova, S. “Economies of scale for broadband in rural United States,” *Journal of Regulatory Economics* (February 2012) 41:100–119.

and 48 in West Delray Beach.⁷⁶ AARP commends AT&T for its outreach efforts during these trials, and AT&T's trials illustrate the importance of customer education. However, it is important to note that even with AT&T's extensive educational efforts, relatively few were willing to abandon their TDM service. For "consumer" TDM accounts, AT&T reports a 38% reduction for the combined trials. For "simple business" TDM accounts, AT&T report a reduction of 25%.⁷⁷ Thus, most consumers were not swayed by the opportunity to migrate to the wireless-based next-generation replacement services offered by AT&T. This data does not reveal any urgency on the part of consumers to part with TDM-based services.

AARP is deeply concerned regarding the impact on consumers of a forced migration from legacy TDM-based voice technologies to alternatives that do not deliver comparable quality, reliability, and affordability. The technology transformation should not result in consumer harms and the Commission should not be a party to a forced migration of consumers to inferior and more costly alternatives.

Notice of Inquiry on prohibiting state and local laws inhibiting broadband deployment

Regarding the *Notice of Inquiry*, which proposes the use of Section 253 to preempt state and local laws that inhibit broadband deployment, AARP strongly agrees with the spirit of the proposal. However, given the Sixth Circuit's August 10, 2016 reversal of the FCC's attempt to preempt Tennessee and North Carolina laws that restricted broadband deployment, AARP is not optimistic regarding another attempt on this issue. As noted by Chairman Pai in his dissent in

⁷⁶ Letter from AT&T's Ola Oyefusi to Marlene Dortch, January 19, 2017. Re: Technology Transitions, GN Docket No. 13-5; AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, GN Docket No. 12-353. AT&T's final report on the Carbon Hill and West Delray Beach technology trials, slide 6.

⁷⁷ Letter from AT&T's Ola Oyefusi to Marlene Dortch, January 19, 2017. Re: Technology Transitions, GN Docket No. 13-5; AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, GN Docket No. 12-353. AT&T's final report on the Carbon Hill and West Delray Beach technology trials, slide 10.

the FCC's *City of Wilson* order (which attempted to preempt the Tennessee and North Carolina laws), the Supreme Court has not agreed with preemption authority based on Section 253 in the past:

“But despite the fact that section 253(a) specifically contemplates the preemption of state laws and section 253(d) specifically directs the Commission to preempt state laws that have the effect of prohibiting the offering of telecommunications services, the Supreme Court, in an opinion written by Justice Souter, still concluded that section 253 did not contain the requisite clear statement necessary for the Commission to preempt.”⁷⁸

The Supreme Court ruling raised by Chairman Pai is *Nixon v. Missouri Municipal League*.⁷⁹ The conclusions of the Sixth Circuit on the *City of Wilson* appeal also pointed to the *Nixon* ruling as supporting the proposition that Section 253 does not give the FCC the ability to preempt state laws:

In *Nixon*, a Missouri state statute forbade municipalities from entering the telecommunications market altogether. . . The FCC, under § 253 of the same Telecommunications Act at issue in this case, held that there was no clear statement from Congress to preempt the Missouri law. . . . The Supreme Court agreed with the FCC and held that a clear statement was needed because federal preemption of Missouri’s law threatened “to trench on the States’ arrangements for conducting their own governments.” . . . This case similarly involves Tennessee’s and North Carolina’s arrangements for conducting their own governments: if there is a decision to make, one way for states to conduct their own governments is to make the decision for their municipalities. Any attempt by the federal government to reorder the decision-making structure of a state and its municipalities trenches on the core sovereignty of that state.⁸⁰

Given the slim chances of the Commission prevailing on Section 253 preemption, as well as the lack of competition in broadband markets, and persistence of structural entry barriers,⁸¹ AARP

⁷⁸ *In the Matter of City of Wilson, North Carolina Petition for Preemption of North Carolina General Statute Sections 160A-340 et seq. The Electric Power Board of Chattanooga, Tennessee Petition for Preemption of a Portion of Tennessee Code Annotated Section 7-52-601*. WC Docket No. 14-115 WC Docket No. 14-116, Memorandum Opinion and Order, March 12, 2015, Pai Dissent, p. 102.

⁷⁹ *Nixon v. Missouri Municipal League*, 541 U.S. 125 (2004)

⁸⁰ See, United States Court of Appeals for the Sixth Circuit. *State of Tennessee; State of North Carolina, Petitioners, National Association of Regulatory Utility Commissioners, Intervenor, v. Federal Communications Commission; United States of America, Respondents, Electric Power Board of Chattanooga; City of Wilson, N.C., Intervenor*. Nos. 15-3291/3555. On Petitions for Review of an Order of the Federal Communications Commission. No. 15-25. Argued: March 17, 2016 Decided and Filed: August 10, 2016, p. 18, citations omitted.

⁸¹ I.e., economies of scale.

believes the Commission should focus its efforts on consumer protection during the technology transition. The Commission's existing rules of the road, as laid out in the trio of *Technology Transition* orders provide a reasonable, and enforceable set of protections.

“Functional test” standard *Request for Comment*

The *Request for Comment (RFC)* revisits the Commission's “functional test” that was included in the *2014 Technology Transitions Order*. In AARP's view, this functional test is critical to the Commission's satisfaction of its statutory obligations associated with Section 214 discontinuance requests. When considering Section 214 applications, and applying the functional test:

. . . the Commission looks beyond the terms of a carrier's tariff, and instead it applies a functional test that takes into account the totality of the circumstances from the perspective of the relevant community or part of a community, when analyzing whether a service is discontinued, reduced, or impaired under section 214.⁸²

AARP believes that the Commission's 2014 interpretation is correct, and the instant *RFC* misinterprets the issue of whether the tariff is controlling. There is no indication in the language of Section 214(a) that Congress intended to allow the carrier to define the scope of a discontinued “service” via its tariff. The appropriate scope of evaluation is more broad, as the very nature of telecommunications technology encourages innovation at the edge of the network. As a result, service discontinuance has an impact on more than the tariffed service that may be discontinued. For nearly 50 years, beginning with the *Carterphone* decision, the Commission has recognized that the public benefits of innovation at the network edge are substantial, and should be encouraged.⁸³ Those benefits of innovation to consumers and businesses will be reduced or eliminated if the underlying network technology is withdrawn without the availability

⁸² *2014 Technology Transition Order*, ¶117.

⁸³ *Use of the Carterfone Device in Message Toll Telephone Service, et al.*, Docket No. 16942, et al., Decision, 13 FCC 2d 420, recon. denied, 14 FCC 2d 571 (1968).

of reasonable alternatives. This phenomenon is just as true of TDM-based voice technology as it is with TDM-based broadband technology.

The *RFC* seeks input on reversing this 50-year history of encouraging innovation, and offers an overly-narrow view of the Section 214 discontinuance process. The *RFC* frames the issue of abandoning the “totality of circumstances” perspective with a strict tariff-based evaluation, that looks no further than the service description contained in the carrier’s tariffs.⁸⁴ The immediate problem with such an approach is that tariffs are not a necessary condition for the offering of services that are subject to Section 214 discontinuance requirements. The Commission has granted forbearance of dominant carrier tariffing requirements, but has left carriers subject to other Title II requirements, including Section 214 discontinuance.⁸⁵ Given that carriers that have been granted detariffing status (or were never subject to tariffing) are still subject to Section 214, the overly narrow focus of the *RFC* on the “filed rate doctrine” and “principles of contract law” overlooks the broader context of the Commission’s obligations under Title II to ensure that telecommunications networks support a social mission that is more broad than a tariff or contract might imply. For example, as the Commission noted in the *2014 Technology Transitions Order*:

The value of communications networks derives in significant part from the ability of customers to use these networks as inputs for a wide range of productive activities. Taking such factors into account when determining whether a service change amounts to a discontinuance, reduction, or impairment helps ensure that the Commission’s discontinuance process fulfills the statutory purpose of section 214, including protecting

⁸⁴ *NPRM*, ¶¶116-117.

⁸⁵ *In the Matters of Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services, Petition of BellSouth Corporation for Forbearance Under Section 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services*, WC Docket No. 06-125, Memorandum Opinion and Order, FCC 07-180, October 12, 2007, ¶39. See also, *In the Matters of Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Application of Computer Inquiry and Certain Title II Common-Carriage Requirements, Petition of the Frontier and Citizens ILECs for Forbearance Under Section 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Their Broadband Services*, WC Docket No. 06-147, Memorandum Opinion and Order, October 24, 2007, FCC 07-184, ¶38.

public safety and consumers. This is not a new idea. For example, after Hurricane Sandy substantially destroyed Verizon's circuit-switched copper telephone network in parts of Fire Island, New York and the New Jersey barrier islands, Verizon proposed to replace the destroyed network with a wireless alternative (i.e., a product called Voice Link). Verizon filed a section 214 discontinuance application to discontinue its wireline offering in the affected areas. Many consumers raised concerns about the loss of "certain third-party services or devices that were designed specifically to work with traditional voice services offered over copper facilities [that] may not be compatible with Voice Link. This includes fax machines, DVR services, credit card machines, some medical alert devices, and some (but not all) other monitoring systems like alarm systems." Even if the carrier's tariffs and other materials did not mention such functionalities, the practical impact of the proposed service change in Fire Island and the New Jersey barrier islands is relevant to the analysis of Verizon's section 214 discontinuance application. Others have acknowledged that the ability to use terminal equipment such as fax machines and alarm monitoring systems remain important to many consumers.⁸⁶

In the intervening years, nothing has changed regarding the external benefits that telecommunications networks generate, and nothing has changed regarding the appropriateness and necessity of the Commission considering the "totality of circumstances" associated with Section 214 discontinuance requests. And the Commission should also recognize that the circumstances associated with Section 214 discontinuance requests for broadband data services, which the *NPRM* envisions extending to broadband data services that offer data speeds of 25 Mbps or higher,⁸⁷ will include a rich set of services and applications that run "over-the-top" of those services. Certainly, consumers and communities will be harmed should carriers request discontinuance of broadband data services, and not have alternatives that pass a functional test associated with the performance, reliability, security, and affordability.

The functional test is also appropriate given the lack of robust competition in both narrowband and broadband telecommunications markets. Consumers are at a distinct disadvantage given the

⁸⁶ 2014 *Technology Transitions Order*, ¶116.

⁸⁷ *NPRM*, ¶79.

paucity of choices they face. Absent choice, consumers frequently face the prospect of having no reasonable alternative, a fact that was made abundantly clear to the Commission with the experience of Verizon customers in Fire Island.⁸⁸

Technology transition decisions should support network reliability and service affordability

Network reliability is a key element of the technology transition

As Chairman Pai noted in 2015, network reliability is a key issue with the IP transition.⁸⁹ With regard to network reliability, AARP has previously explained the importance of an integrated approach to the resiliency of next generation networks,⁹⁰ and stressed that even with the Commission’s CPE backup power requirements, absent robust *network* backup power standards, networks will fail during grid power outages.⁹¹ With regard to elements of network reliability, the Commission developed a reasonable plan in 2007,⁹² however, that plan was never implemented.⁹³ It is not too late for the Commission to promote networks that continue to

⁸⁸ *Comments Invited on Application of Verizon New Jersey Inc. And Verizon New York Inc. to Discontinue Domestic Telecommunications Services*, WC Docket No. 13-150, Comp. Pol. File No. 1115, June 28, 2013.

⁸⁹ Dissent of Ajit Pai in *2015 Technology Transition Order*.

⁹⁰ See, *In the Matter of Improving the Resiliency of Mobile Wireless Communications Networks Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 13-239, PS Docket No. 11-60, Comments of AARP, January 17, 2014, pp. 27-29; see also, *In the Matter of Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, Comments of AARP, May 12, 2014, pp. 8-11; see also, *In the Matter of Technology Transitions Policy Task Force Seeks Comments on Potential Trials*, GN Docket No. 13-5, Comments of AARP, July 8, 2013, pp. 17-20.

⁹¹ Comments of AARP *In the Matter of Ensuring Customer Premises Equipment Backup Power for Continuity of Communications, Technology Transitions, Policies and Rules Governing, Retirement Of Copper Loops by Incumbent Local Exchange Carriers, Special Access for Price Cap Local Exchange Carriers, AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Petition for Declaratory Ruling to Clarify that Technology Transitions Do Not Alter the Obligation of Incumbent Local Exchange Carriers to Provide DS1 and DS3 Unbundled Loops Pursuant to 47 U.S.C. § 251(c)(3)*, PS Docket No. 14-174, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593, WC Docket No. 15-1, February 5, 2015, pp. 4-5, 11-12.

⁹² *In the Matter of Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, EB Docket No. 06-119, WC Docket No. 06-63, Order, June 8, 2007, Appendix B, §12.2.

⁹³ “The Commission, in 2007, adopted—but never made effective—a requirement that CMRS providers supply each of their cell sites with a back-up power supply capable of providing eight hours of service in the event of commercial power loss. . . . The Commission renewed examination of this issue in the 2011 Notice of Inquiry, where it sought comment more broadly on the technical and logistical aspects of provisioning back-up power and on

function when commercial power fails. AARP recommends that the Commission revisit the 2007 rules associated with wireline and wireless service backup power. These rules will address central office backup power requirements at the 72 percent of central offices that were excluded from consideration in the *911 Reliability Order*.⁹⁴ Furthermore, as the 2007 rules addressed cell site backup power, the performance of wireless networks would also improve and contribute to wireless networks playing an important role in providing a fail-safe emergency communications network.

Affordability

AARP strongly urges the Commission to consider the issue of affordability as it considers Section 214 discontinuance requests. Affordability is a key component of the fundamental statutory mission of the Commission:

For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities *at reasonable charges*. . .⁹⁵

The Commission should also keep in mind its own statements from the *National Broadband Plan*:

The mission of this plan is to create a high-performance America—a more productive, creative, efficient America in which *affordable broadband is available everywhere* and everyone has the means and skills to use valuable broadband applications.⁹⁶

whether the Commission should consider forms of back-up power regulation that offer service providers greater flexibility than the eight hours-per-site requirement the Commission adopted previously.” *In the Matter of Improving the Resiliency of Mobile Wireless Communications Networks, Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 13-239, PS Docket No. 11-60, Notice of Proposed Rulemaking, September 27, 2013, ¶62, footnote 86.

⁹⁴ *In the Matter of Improving 911 Reliability; Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket No. 13-75, PS Docket No. 11-60, Report and Order, December 12, 2013, ¶120, footnote 319. (Hereinafter, *911 Reliability Order*.)

⁹⁵ 47 U.S.C. 151.

⁹⁶ *National Broadband Plan*, p. 9, emphasis added.

In 2015, the Commission again reiterated the importance of affordable broadband services:

*Broadband that is more affordable is more likely to be adopted (and contribute to demand) than broadband that is not affordable. In the 2014 NTIA Digital Nation Report, NTIA found that the second highest reason for not subscribing to broadband was the Internet is “too expensive.” . . .*⁹⁷

AARP is in full agreement with Public Knowledge’s statement on the importance of affordability as the Commission addresses the transition to all IP networks:

*Finally, if the goal of “universal service” means anything, it must mean that the service offered is actually affordable enough for users to benefit from it. The Commission should therefore consider the cost of new services offered as replacements for existing basic services. Is the new service more expensive for the same functionality? Is the new service the same price as the existing service, but offers less functionality or requires the user to spend considerable sums on new equipment or battery backup? For users across the spectrum—from individuals to schools to small businesses to government offices—the cost of upgrading to new technologies could be substantial. And especially for low-income communities, replacing the existing service with a newer, “better” service that users cannot afford to buy is not a step forward at all.*⁹⁸

The Commission must recognize that the cost of alternative services proposed in a Section 214 proceeding is a necessary part of the equation. Unaffordable prices for the replacement services qualified by the Commission will have a detrimental impact on consumers, broadband adoption and deployment, and universal service objectives. Based on experience to date, the Commission has already observed that carriers may be disposed to use technology transition as a mechanism to increase revenues.⁹⁹ High and unaffordable prices for replacement services may lead some

⁹⁷ *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 14-126, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, February 4, 2015, ¶147, emphasis added.

⁹⁸ *Public Knowledge, et al. CPE Backup Power Comments*, February 5, 2015, pp. 12-13, emphasis added.

⁹⁹ See, for example, *In the Matter of Ameritech Operating Companies Tariff F.C.C. No. 2, BellSouth Telecommunications LLC Tariff F.C.C. No. 1, Nevada Bell Telephone Company Tariff F.C.C. No. 1, Pacific Bell Telephone Company Tariff F.C.C. No. 1, Southern New England Telephone Company Tariff F.C.C. No. 39, Southwestern Bell Telephone Company Tariff F.C.C. No. 73*. Transmittal Nos. 1803, 71, 254, 498, 1061, and 3383. Petition of Sprint Corporation to Reject and to Suspend and Investigate. December 2, 2013.

consumers to avoid the replacement services, leaving them to rely on alternatives that are less functional and less reliable than legacy services. Alternatively, for those who find that lower quality substitutes are unacceptable, high prices for replacement services will result in negative distributional outcomes—especially for lower income consumers who will be forced to cut back on the consumption of other necessities should essential service prices rise as part of the technology transition. Finally, the lack of competition, with a Section 214 discontinuance request potentially indicating a further reduction in service availability, is not consistent with a policy that ignores the cost of replacement services and their affordability.

AARP urges the Commission to incorporate an assessment of affordability, including the impact on typical customer bills, of Section 214 discontinuance requests. Specifically, the requesting carrier should be required to present data on existing service prices and representative customer bills associated with existing technologies, and identify service prices and projected customer bills under the alternative technology, including the projected impact of data caps, should data caps be associated with proposed alternative services. Section 214 applications should not be approved by the Commission unless the proposed alternative services will not result in increases in customer bills. Affordability must enter the Commission's evaluation of Section 214 alternatives. If this matter is not considered, the transition to an all-IP environment will likely lead to degraded services and higher rates, outcomes that will threaten universal service objectives.

Conclusion

For the transition to all IP networks to be a triumph, the Commission must continue to maintain its focus on fundamental issues such as adequate customer notice, availability of comparable

services, impact on competition, service affordability, and reliability. AARP encourages the Commission to move with caution. AARP is generally supportive of the NPRM's proposals regarding pole attachments and elimination of state laws that may impede broadband competition. However, regarding proposals for notice and copper retirement, AARP is strongly opposed to the *NPRM's* approach. Consumers deserve to be fully informed regarding the retirement of legacy technologies, and the existing notice requirements reasonably serve that purpose. The Commission cannot wish away the complex relationships between legacy TDM technologies and the technologies that are utilized by consumers that depend on TDM services. Consumers must be given a reasonable amount of time to make needed adjustments. Furthermore, the Commission must assure that consumers have functionally similar alternatives, and that the alternatives are affordable and of high quality. The next generation public network must offer affordability and reliability similar to the legacy PSTN, otherwise, consumers and innovation will be harmed.