

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

In the Matter of)	
)	
Technology Transitions)	GN Docket No. 13-5
)	
AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition)	WC Docket No. 12-353
)	

Comments of AARP

March 31, 2014

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Attachment A: Topographic Maps of the Carbon Hill Wire Center

Summary

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 broadband networks. AARP is keenly interested in this technology transition. Telecommunications technologies play a growing role in the lives of older Americans, i.e., those in 50+ households. The impact of broadband technologies is only beginning to be felt. The pervasive availability of high quality and affordable broadband connections—both fixed and mobile—can enable new applications and services, including new methods of delivering healthcare and support for independent living.

Overview of AT&T’s Wire Center Trial Plan

AARP finds points of agreement with AT&T’s Wire Center Trial Plan (hereinafter “AT&T’s Plan”).¹ AARP believes that the selection of the Kings Point wire center has the potential to appropriately allow the evaluation of the impact of technology transition on older Americans, and the Carbon Hill wire center will allow for the consideration of some issues associated with rural areas. AARP also believes that AT&T’s Plan contains a proposal with some promising elements for outreach to the disability community. AARP finds that AT&T’s Plan acknowledges that it is critical to leave no customers unserved as a result of the technology transition, and AARP looks forward to working with AT&T and the Commission to guarantee that all customers have access to affordable, reliable, and high-quality broadband networks following the technology transition.

¹ AT&T’s submission consists of a narrative document titled “AT&T Proposal for Wire Center Trials,” and a more detailed document titled “AT&T Wire Center Trial Operating Plan.” AARP will refer to the former as the “AT&T Proposal,” and the latter as the “AT&T Plan.”

However, the problems with AT&T's Plan are many, and AARP cannot recommend that the Commission approve the plan until its significant problems are corrected.² Key deficiencies of AT&T's plan include:

- AT&T indicates that the Wireless Home Phone service that it proposes to offer as a replacement has performance shortfalls that it is seeking to remedy, indicating that the proposed technology fixes will be available at an unspecified later date. Thus, AT&T cannot at this time inform the Commission of the performance of the technology that it proposes will replace TDM-based services in the trials. Unknown factors include the level of performance associated with 911 services, alarm systems, and medical monitoring devices.³
 - AT&T also indicates that it will not commence Phase I of the trials until the performance shortfalls associated with the Wireless Home Phone service are remedied. This may suggest an extended delay associated with the start of the trials, making AT&T's application untimely.
- AT&T's Plan overlooks the provisioning of backup power at cell sites. Given the reliance of AT&T's Plan on wireless-only alternatives, network reliability will decline from current levels during the trials.
- AT&T's Plan will eliminate wireline-based DSL broadband for customers in the trial wire centers. However, *AT&T does not even specify the wireless "catch product" for current DSL customers.*⁴ Furthermore, to the extent that current DSL customers are migrated to wireless data plans, AT&T provides no projections of the price impact of the elimination of DSL service. It is clear, however, that wireless data plans are measured-rate and more costly than DSL-based wireline broadband.
- AT&T's Plan does not adequately address the impact of the technology transition on prices and customer bills for non-DSL customers. The Commission should require any trial proposal, including AT&T's, to provide information that would enable a clear understanding of the price impact on representative customers.
- AT&T selected the trial wire centers to be located in states where state authority over matters associated with the trials has been eliminated.⁵ As a result, these trials will not

² AARP is aware that AT&T filed an *ex parte* presentation on March 26, 2014 that provided information in response to FCC Staff questions. Based on AARP's preliminary review of the heavily redacted document filed by AT&T, it appears that the FCC Staff has raised questions similar to some of the questions contained in these comments. AARP is seeking to gain access to the confidential version of the *ex parte* response, and may address that information in reply.

³ AT&T indicates that it will have that information at some point in the future. See AT&T Plan, p. 15.

⁴ AT&T Plan, Exhibit E, "DSL Direct" and "DSL Line Share" sheets.

⁵ "Frank Simone, AT&T assistant VP—federal regulatory, said that state regulatory requirements 'actually was one of the questions we were considering as we decided' which locations to choose for the proposed trials." "Mr. Hultquist said that AT&T will be meeting with state officials in Florida and Alabama. However, he added, 'we do

reflect the experience in any state where state authority over matters associated with a trial, such as carrier of last resort obligations, is ongoing.

- The demographics of the trial areas are more white and less Hispanic than the national average.
- The trials do not include any critical national security or public safety locations, such as those serving Department of Defense or Federal Aviation Administration facilities.
- Customer notice and outreach proposed by AT&T are inconsistent across the two proposed trial wire centers.
- AT&T's Plan does not include adequate data reporting, nor does it specify the "control" wire centers required by the Commission in the *Trials Order*.

As discussed above, AT&T's plan does not contain important information that is required by the *Trials Order*. As a result, the parties have been placed in the awkward position of being asked to respond to an incomplete plan—with the actual details emerging at unspecified later dates. If the Commission does not reject AT&T's Plan, AARP believes that this Commission must amend the timeline associated with the *Trials Order* to enable further comment on details of AT&T's plan as those details become available.

Recommendations if AT&T's Plan is not rejected outright by the Commission

Given the numerous problems associated with AT&T's Plan, AARP makes the following recommendations. However, it should not be construed that by making these recommendations that they provide a sufficient remedy for the problems outlined above, and discussed below in more detail. There are simply too many "known unknowns" at this point for AARP to endorse AT&T's proposal. However, should the Commission move forward with the plan:

- AT&T should be required to remove the confidential designation of the dates associated with the trials. AT&T should also remove the confidential designation of any "confidential" information that AT&T has discussed publicly. In general, AT&T should strive to be as transparent as possible regarding information associated with the trials.

not believe that these trials require any filings in these states,' given their statutory and regulatory frameworks." "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

- The Commission should utilize an independent third-party to verify the performance of AT&T's Wireless Home Phone service prior to granting final approval for any trial, and the Commission should confirm that there is no service quality degradation associated with the use of that platform, as required by the *Trials Order*. This includes ensuring that backup power is properly provisioned at cell sites involved in the trials.
- For any wireless replacement service included in a trial, the Commission should verify, using an independent third-party, that wireless signal strength is sufficient for indoor coverage throughout the trial areas. This is especially important given the more complex topology associated with the Carbon Hill wire center.
- Before authorizing any trial that involves wireless services, the Commission must establish that AT&T's wireless service operates during commercial power outages in a manner similar to the current level of reliability of TDM services. Given that AT&T indicates that the *wire centers* that deliver TDM services involved in these trials currently have fixed backup generators, as well as battery backup,⁶ the antenna located in the cell sites involved in the trials should be similarly provisioned to ensure that wireless services deliver similar levels of reliability.
- AT&T should explain to the Commission whether its Wireless Home Phone service is an IP-based service.
- AT&T should be required to identify the price impact, based on representative current customer bills, of the services to which AT&T proposes to migrate customers during the trials. The Commission should not approve the trial unless there are no increases in customer bills, or decreases in service functionality.
- AT&T should be required identify the catch product for DSL customers who will be migrated to wireless broadband alternatives during the trial. The Commission should not approve the trial unless there is no increase in the bills of former DSL customer's broadband bills, or decreases in service functionality resulting from the wireless broadband migration envisioned by AT&T.
- The Commission should require AT&T to better explain its plan for the four percent of living units in the Carbon Hill wire center, customers currently served by AT&T's TDM platform that AT&T indicates that it cannot make a "business case"⁷ to serve with either its wireline or wireless options. Under no circumstances should these customers lose service as the result of a trial.
- AT&T's Plan calls for the sunset of services once the trials begin. The Commission should not accept AT&T's sunset timeline as submitted, and should remind AT&T that any initial grant of 214 authority for interstate services is temporary.⁸
- AT&T should be required to use a uniform customer-outreach approach in trial wire centers, not the disparate approach described in its plan.
- AT&T should be required to provide customer notice that clearly explains the price impact of participating in a trial, as well as any differences in service level. Customers should be informed that as part of the trials, AT&T intends to seek relief from Eligible

⁶ AT&T Plan, p. 32.

⁷ "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

⁸ *Trials Order*, ¶179.

Telecommunications Carrier obligations, and that this could translate into AT&T refusing to serve customers in the future.

- Prior to granting final approval to AT&T's Plan, AT&T should be required to identify the proposed "control" wire centers, and should be required to provide side-by-side comparisons of the characteristics of the control and trial wire centers, including their service quality performance over the twelve months prior to AT&T's application.
- The Commission should modify the data collection and reporting component of AT&T's plan—as presented, this aspect of AT&T's plan is unacceptable. Some of the improvements the Commission should require include:
 - AT&T should provide real-time information regarding the progress of trials, and summarize that information in monthly, rather than quarterly, reports.
 - AT&T should report performance information based on customer class.
 - AT&T should provide comparable metrics for the performance of wired and wireless technologies; if IP- and non-IP services are deployed in any trial, their performance should also be reported in a manner consistent with side-by-side comparisons of performance.
 - Detailed data on individuals with disabilities should be collected during the trials.
 - Customer surveys in the trial and control areas should be administered by independent third parties.
 - Voice quality should be verified by independent third-party testers.
 - All service outages associated with trials should be reported. AT&T's proposal to report only those that meet the NORS thresholds is unacceptable.

AARP will now turn to a more detailed review of AT&T's proposal.

Introduction

As noted by the Commission in its recent order authorizing AT&T's technology trials, predictable benefits will arise from a properly implemented technology transition:

Modernizing communications networks can dramatically reduce network costs, allowing providers to serve customers with increased efficiencies that can lead to improved and innovative product offerings and lower prices.⁹

This critical observation justifies moving forward with trials. However, it is also reasonable to take steps to ensure that the outcomes of the trials are consistent with the expectation of improved and innovative product offerings and lower prices. While innovative services may result from technology trials, it is also reasonable to expect that customers should not face higher bills for the use of a new technology—consumers use telecommunications services to satisfy basic needs, and the opportunity to use a new technology platform may be of little consolation if higher bills result from satisfying the same need. Consumers should experience lower prices, or at a minimum, not face price increases. Similarly, service quality must at least be maintained at pre-trial levels. While network costs will undoubtedly be reduced as a result of the IP transition, the availability of benefits to consumers will depend both on market forces, which vary by geography and customer class, and on the actions of this Commission and other regulatory bodies. This Commission must support only those trials that are consistent with the reasonable expectations identified by the Commission associated with service improvements, service quality, and prices. The Commission should also require that trials are consistent with the regulatory framework outlined in the *Trials Order*.

⁹ *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, ¶2. Hereinafter *Trials Order*.

The *Trials Order's* regulatory framework

Based on its review of the *Trials Order*, AARP believes that any applicant must provide sufficient information to the Commission for findings to be made on the key components of the regulatory framework outlined in that order. The *Trials Order* identifies numerous factors that the Commission indicates must be part of an experiment. Components of the regulatory framework developed in the *Trials Order* include (but are not limited to): continuation of reliable 911 services;¹⁰ a demonstration of the security of the IP-based infrastructure;¹¹ the ability for the Commission to evaluate any changes in the speed, latency, or jitter of the Internet access services offered in the experiment area, and any differences in the price or usage capacities associated with those offerings;¹² compliance with the truth-in-billing rules, which are intended to address both slamming and cramming, and the Commission's other anti-slamming rules;¹³ an evaluation of key attributes of IP-based services, such as network capacity, call quality, device interoperability, service to persons with disabilities, system availability, 911 and PSAP service, cybersecurity, call persistence, call functionality, and service coverage;¹⁴ and the reporting of high-quality data, including a "control group" by which to evaluate the performance of the "experimental group."¹⁵

Should the applicant for a trial not provide the Commission with sufficient information regarding the proposed trial's compliance with these and other requirements, AARP believes that the Commission must reject the application. As discussed below in more detail, AARP believes that AT&T's application falls short of the requirements contained in the *Trials Order*.

¹⁰ *Trials Order*, ¶39.

¹¹ *Trials Order*, Appendix B, ¶19.

¹² *Trials Order*, Appendix B, ¶33.

¹³ *Trials Order*, Appendix B, ¶41.

¹⁴ *Trials Order*, ¶74.

¹⁵ *Trials Order*, ¶74.

AT&T's confidentiality claims are inappropriate

The Commission summarized the purpose of this proceeding in the *Trials Order* as follows:

The proceeding we initiate today is designed to position all the players – innovators (including those in existing lines of business), legacy service providers and manufacturers, government regulators and the general public – to prepare for, maintain, and facilitate the momentum of technological advances that are already occurring.¹⁶

Given the potential impact of the technology transition, it is important for this Commission to be informed by a broad cross-section of interested stakeholders. The general public will be affected by the details of how the TDM-to-IP transition will unfold, and the public has the right to know relevant details associated with technology trials. The *Trials Order* also specifies that for consumers, participation in the trials should be voluntary.¹⁷ This too suggests that consumers should be fully apprised of the structure and details of a trial, so as to enable informed choice. The AT&T Plan, however, is less than transparent on some basic issues. By alleging confidential status for foundational information associated with the trials, AT&T has undermined the public's ability to participate in this proceeding, and has also hindered all interested parties' ability to fully understand AT&T's proposal. Some of AT&T's claims regarding the confidential nature of material are puzzling to AARP. For example, AT&T alleges that the proposed dates associated with the availability of solutions for the current shortcomings of its Wireless Home Phone service are confidential. This is a key bit of information that the general public would benefit from in understanding the timing of the transition, and the potential for obsolescence of existing technologies. Even more troubling is the alleged confidential nature of the "Consumer Timeline," which identifies the dates on which the trials will commence, and the dates on which services will be grandfathered and/or removed from service.¹⁸ Consumers must ultimately become aware of these timelines, and it is not clear why AT&T has refused to make this

¹⁶ *Technology Trials Order*, ¶2.

¹⁷ *Technology Trials Order*, ¶6.

¹⁸ AT&T Plan, Exhibit D, "AT&T's Proposed Service Transition Timeline."

information available up front. By cloaking this proceeding in claims of confidentiality, AT&T has undermined this Commission's ability to develop the record. AARP recognizes that certain information may be competitively sensitive and thus deserve confidential treatment. However, some of the information over which AT&T has asserted confidential status stretches any reasonable interpretation of the nature of proprietary information, and undermines the Commission's objectives associated with technology trials.

AT&T's Plan does not Adequately Address Current Limitations of its Wireless Home Phone Service

In the *Trials Order*, the Commission expressed its concern regarding potential deleterious effects of technology transition on existing technologies that rely on the TDM platform:

For proposed network changes, we expect the Commission should be able to evaluate in detail the impact of those changes on devices and services that are enabled by the provider's legacy network, even if the provider itself does not market or control those devices or services. For example, many customers have purchased and use fax machines, burglar alarms, medical monitoring devices, credit card readers, and other devices and related services that rely on the functionality of legacy copper networks. We will be interested to learn how a proposed experiment would affect such devices and services, including an enumeration of the types of devices and services that may not work equivalently well during the experiment.¹⁹

AT&T provides a table that purports to report "Device and Service Application Compatibility."²⁰

At first glance, AT&T's representation appears to show that those consumers who are migrated to AT&T's Wireless Home Phone solution will experience service that is virtually identical to TDM-based service. For AT&T's Wireless Home Phone, AT&T's table places a "Y" for "yes"

¹⁹ *Trials Order*, Appendix B, ¶5.

²⁰ AT&T Plan, p. 14.

Table 1: Restatement of AT&T's Summary of Wireless Home Phone Service Performance (Yellow indicates cells where AT&T's table said "Y" but really actually reflect current incompatibility.)				
Application/Devices	TDM Voice	U-verse Voice	Wireless Home/Business Phone	Wireless Home/Business Phone with Internet
E-911 with Address	Y	Y	N	N
Alarm Monitoring	Y	Y	N	N
Medical Alert	Y	Y	N	N
411	Y	Y	Y	Y
DVR Services	Y	Y	N	N
Credit Card/Merchant Services	Y	Y	N	N
800 # Service	Y	N	N	N
3 rd Party Pay Per Call	Y	N	N	N
Calling Cards using IVR (8xx platforms)	Y	Y	Y	Y
Dial-around calls	Y	N	N	N
Abbreviated Dialing Codes	Y	Y	Y	Y
Live Operator via "0"	Y	N	N	N
Collect Calls	Y	N	N	N
Fax	Y		N	N
Dial-up Internet	Y		N	N
Correctional Facility Ankle Bracelets	Y	Y	N	N
TTY-Assistive Technology	Y	Y	N	N
Elevator Phone Service	Y	N	N	N

to confirm that its Wireless Home Phone service will provide functionalities associated with E911, Alarm Monitoring, Medical Alert, TTY-Assistive Technology, and Credit Card/Merchant services. However, in a series of footnotes to the table entries, AT&T indicates that in most cases, the compatibility is an *anticipated enhancement* that will be introduced at some unspecified date in the future.²¹ In Table 1 above, AARP corrects AT&T's table, and has highlighted the cells showing the service characteristics where AT&T's original table might be interpreted as suggesting compatibility. For those service characteristics, consumers will, absent equivalent solutions offered by AT&T, face service limitations due to AT&T's Plan.

AARP does not believe that AT&T's Plan should be approved by the Commission until it is clear that the functionality specified in the *Trials Order* is available, and is robust as that associated with TDM-based technology. For example, AT&T states:

*AT&T is developing upgrades to the 911 capability of Wireless Home Phone by adding an ALI function to emulate the customer's experience with wireline TDM service. To emulate the wireline 911 experience in a mobile offering, we are developing enhancements that will allow AT&T to send MSAG information to the appropriate PSAP while the device is at a registered service address.*²²

However, in the *Trial Order*, the Commission states:

In the 911 Network Reliability R&O, the Commission adopted rules requiring "Covered 911 Service Providers" to certify annually that they have implemented certain industry-backed best practices or taken reasonable alternative measures to provide reliable 911 service. Applying this definition to proposals for experiments, we expect each applicant that provides 911 service as defined in the 911 Network Reliability R&O to meet these requirements throughout the duration of the experiment. To the extent an applicant aims to demonstrate adherence to the certification elements by implementing an "alternative measure," it will be important for the Commission to understand the measure and its reasonableness given the parameters of the experiment.²³

²¹ But not in all cases. For example, consumer 800 services will not be possible with AT&T's Wireless Home Phone service. AT&T Plan, p. 15. Whether elevator phone service will be addressed at all is not clear given that AT&T indicates that it believes that there are no elevators in the trial wire centers. AT&T Plan, p. 14.

²² AT&T Plan, p. 21.

²³ *Trials Order*, Appendix B, ¶14.

In footnote 10 to this paragraph, the Commission notes “The term “Covered 911 Service Provider” is defined to include any entity that provides an element of 911 service (e.g., 911 call routing, ALI) directly to a PSAP, notwithstanding the technology used to provide the service.” Thus, at this time, AT&T cannot explain to the Commission how its Wireless Home Phone service will comply with these requirements. As a result, AT&T’s Plan should not receive final approval until such a demonstration can be made, and parties must have the ability to comment on the technology solutions that AT&T ultimately reveals.

As a result of AT&T’s proposal to rely on wireless technology for a substantial portion of the trial population, and due to the lack of details regarding the functionality of the wireless replacement, AARP has significant concerns regarding AT&T’s Plan. Absent unspecified technological fixes that AT&T admits are needed:²⁴

- AT&T’s Wireless Home Phone service will jeopardize public safety because it (1) does not satisfy the 911 conditions of the *Trials Order*, (2) is incompatible with medical alert systems and security systems, (3) relies on the less reliable wireless network, and (4) has embedded geographic information that would not “update” were customers to bring their Wireless Home Phone devices with them when they relocate to other residences.
- AT&T’s Wireless Home Phone service is incompatible with a host of other applications and technologies that current ride “over-the-top” of the TDM-based network.
- AT&T’s Wireless Home Phone service is not compatible with TTY services, and will thus adversely affect individuals with disabilities.

AARP does not believe that this is a reasonable path forward for the technology trials. Before any trial is approved, AT&T should demonstrate, and the Commission should independently confirm, that the solutions to the current limitations of AT&T’s Wireless Home Phone service are technologically viable, and do not result in service degradation.

²⁴ AT&T Plan, p. 15.

AT&T's plan will have a negative impact on network reliability

With regard to network reliability, the *Trials Order* states:

We presume that experiments will maintain current levels of network reliability, including the ability to place phone calls and to function during commercial power failures, and maintain security from external attack.²⁵

AT&T fails to address potential differentials in reliability associated with the migration of consumers from TDM-based wireline services to wireless services. With regard to reliability, AT&T's Plan indicates that as a "Covered 911 Service Provider," AT&T will comply with the FCC's *911 Reliability Order*.²⁶ However, the *911 Reliability Order* only addresses a subset of wire centers, and *does not address the facilities that feed those wire centers*. Given that making a wireless call, including a call to 911, requires that cell sites are capable of carrying a call during commercial power outages, the reliability of AT&T's Wireless Home Phone service may be compromised due to the lack of sufficient backup power at cell sites. AT&T indicates that its Wireless Home Phone product has battery backup in the customer device,²⁷ however, AT&T fails to address the issue of backup power at the antenna serving the cell sites in the trial areas.²⁸ Given that AT&T is proposing to provision customers in both trial wire centers with wireless-only alternatives, with 55 percent of the Carbon Hill wire center having only the wireless option,²⁹ AT&T's failure to address wireless antenna backup power issues in the trial wire centers is a fatal flaw.

²⁵ *Trials Order*, ¶47.

²⁶ See, *Improving 911 Reliability; Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket Nos. 13-75, 11-60, Report and Order, FCC 13-158, Dec. 12, 2013. Hereinafter, *911 Reliability Order*.

²⁷ AT&T Plan, p. 33.

²⁸ AT&T does mention its backup power strategies associated with its IP-based U-Verse product, noting that the more distributed power arrangements in last-mile IP networks requires battery backup and standby generator capabilities. AT&T Plan, p. 33.

²⁹ "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

Before authorizing any trial that involves wireless services, the Commission must establish that AT&T's wireless service operates during commercial power outages in a manner similar to the current level of reliability. Given that AT&T indicates that the TDM-based wire centers involved in these trials currently have fixed backup generators, as well as battery backup,³⁰ the cell sites involved should be similarly provisioned to ensure that wireless antenna reliability delivers reliability comparable to the current wireline technology.

Wireless-only service raises important questions about service quality and coverage areas

AT&T's Plan includes a proposal for the migration of customers in both wire centers to wireless-only alternatives, and indicates that a majority of living units in Carbon Hill (55 percent) will only be served by AT&T's wireless alternatives.³¹ Based on review of topographical maps of the area, the terrain in the Carbon Hill area appears to be challenging, thus potentially presenting problems with the delivery of wireless services inside residential structures. AARP has prepared Attachment A, which shows the terrain characteristics in the area around Carbon Hill.³² As can be seen in Attachment A, the terrain is generally flat near the town of Carbon Hill, but is characterized by steep hills and valleys outside of the town center. This suggests that wireless reception may be compromised for some customers, even if they are in AT&T's ostensible wireless footprint. Measures must be taken to ensure that the wireless alternative is available indoors for all participating customers during the trial. To that end, third-party verification of

³⁰ AT&T Plan, p. 32.

³¹ "Mr. Hultquist said that only about 20% of the living units in the Carbon Hill wire centers subscribe to AT&T's POTS service. Of the 5,000 living units in the wire center, 41% would have a choice of either wireline IP service (U-verse Voice-over-IP) or wireless service (Wireless Home Phone) from AT&T under the proposal, while 55% would only have a wireless 4G LTE option. There is "no business case" for reaching the remaining 4% by any means other than POTS lines, he said." "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

³² While the geographic area shown in Attachment A does not match the Carbon Hill wire center boundaries exactly, AARP believes that it is a reasonable representation of the terrain conditions within that wire center. The rectangle containing the crossing lines centered in the town of Carbon Hill in Attachment A is about 170 square miles. According to maps provided by AT&T, the Carbon Hill wire center is 172 square miles, which is approximately centered at the town of Carbon Hill. AT&T Plan, p. 4 and Exhibit A.

service availability should be utilized by the Commission. Customer locations should be tested to ensure that wireless signal strength is sufficient indoors, and that voice and data performance is consistent with the Commission's objectives. In a properly designed trial, it should not be incumbent on customers to be the guinea pig with regard to coverage, and then face service quality problems, placing them in a situation where their service fails to perform in a manner similar (or superior) to the wireline TDM-based alternative. Rather, AT&T should deliver service to customers *at the start* of any trial that is consistent with the Commission's presumptions associated with network reliability.³³ That is, that there is no reduction in the overall quality of service³⁴ should be established prior to *the start of any trial*.

The Commission has experience with consumer reaction to a proposed migration to an inferior wireless-based offering from the Fire Island proceeding. Consumers in that area provided compelling reports of the problems that Verizon's technologically-similar Voice Link service generated. While the New York Public Service Commission received more than 1,700 public comments on Verizon's proposal,³⁵ the two provided below are representative:

I am writing this in regards to my Verizon landline telephone. I understand Verizon wants to replace landlines with Voice Link. I live in an area in South Salem NY, for over 40 years, where cell phone reception is very poor and is very unreliable. And telephone thru my cable company goes quickly out and unusable even when there is a minor storm and a light wind. I have a special needs daughter with multiple handicaps and serious seizures and our Verizon telephone is our lifeline out to call for help especially when there are serious storms and all power seizes and cable & cell phone is also out. Our verizon (*sic*) telephone line has always worked and been there for us even thru the worst of storms we have been thru in the last couple years and were without power for more than a week. I just want to say that I am quite afraid to even think what I would do in another storm without my Verizon landline. It makes me fearful to think about it. Please do not let Verizon do away with our landlines....PLEASE!! Thank you.

Sincerely, Marlene Welsch

³³ *Trials Order*, ¶47.

³⁴ *Trials Order*, ¶57.

³⁵ <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=13-c-0197&submit=Search+by+Case+Number>

I am writing to state my objections to substituting Voice Link wireless-based service for the current Verizon landlines.

Cell service is very poor at our home. We have to go outdoors to use our cell phones. Verizon has no plans to install FIOS in our area because of the distance between homes. By losing landline phone connection, we would be at serious risk in emergency situations.

Jean Lewis

There is every reason to believe that the concerns expressed by consumers in Fire Island reflect general consumer attitudes toward their telecommunications services. AARP also strongly believes that the path forward in technology transition must involve the availability of affordable wireline broadband services. Verizon ultimately acknowledged the public outcry, and *invested* in fiber-based broadband services for the affected areas in New York.³⁶ This model for replacement of TDM-based services is far superior to a mandated migration to wireless services which are known to be inferior to existing wireline based service—whether they are based on either TDM or IP.

AT&T does not explain whether Wireless Home Phone service is an IP-based service

While AT&T's Plan purports to deliver "TDM to all-IP trials,"³⁷ AT&T does not describe Wireless Home Phone service as an IP-based service. Rather, according to AT&T, the Wireless Home Phone service is a CMRS service, utilizing the same platform that provides current AT&T wireless offerings:

AT&T Mobility's Wireless Home Phone service is a Commercial Mobile Radio Service (CMRS). Wireless Home Phone uses a mobile base station device to facilitate the use of AT&T's CMRS voice service in the home by allowing a subscriber to connect traditional customer premises equipment (i.e., touch-tone, corded or cordless home telephones) to the Wireless Home Phone base station and thereby allow connectivity to AT&T's

³⁶ <http://newscenter.verizon.com/residential/news-articles/2013/09-10-a-fiber-optic-network-for-fire-island/>

³⁷ AT&T Plan, p. 1.

licensed spectrum—*just like any of AT&T's other CMRS voice network-compatible devices.*³⁸

To deliver IP-based voice service wirelessly, AT&T and other wireless carriers are pursuing “voice over LTE” (VoLTE). AT&T had planned to launch VoLTE in 2013, but has faced delays.³⁹ Key to the transition to VoLTE is device compatibility,⁴⁰ and like all other non-IP-based equipment, the existing AT&T Wireless Home Phone base station device will need to be compatible with VoLTE. If it is AT&T’s plan to deploy an IP-based version of its Wireless Home Phone service in the trial, it should make this clear. As submitted, AT&T’s plan makes no mention of the current availability of IP-based wireless devices for its Wireless Home Phone service. If it is the case that AT&T’s plan is to simply provide customers with a non-IP CMRS-based voice service, AT&T Plan’s will only test again customer attitudes to a migration to CMRS-based wireless-only service.

AT&T’s Plan Undermines Broadband Availability and Competition

While AT&T indicates that it is committed to deploying next-generation broadband facilities, the trials will actually result in wireline broadband facilities being removed from service:

AT&T cannot economically extend its next generation wireline and wireless broadband footprint to reach every corner and customer across its 22-state wireline service area, which is the case in the trial wire centers as well. As discussed above, AT&T designed these trials to ensure that they will provide an opportunity to flesh out the most challenging issues raised by the IP transition. The Carbon Hill wire center, in particular, presents geographic, economic and technical challenges. It is a sparsely populated area located in rural Alabama. These factors make it uneconomic for AT&T to extend its next generation wireline broadband network and services to all existing customer locations in Carbon Hill.⁴¹

³⁸ AT&T Plan, p. 23, emphasis added.

³⁹ “AT&T admits to VoLTE delay, won't offer new launch date,” FierceWireless, February 26, 2014. <http://www.fiercewireless.com/story/att-admits-volte-delay-wont-offer-new-launch-date/2014-02-26>

⁴⁰ “AT&T’s VoLTE Phones Start Trickling Out,” LightReading, January 13, 2014. <http://www.lightreading.com/mobile/volte-rich-communications/atandts-volte-phones-start-trickling-out/a/d-id/707254>

⁴¹ AT&T Plan, p. 43.

As discussed above, for 55 percent of locations in Carbon Hill,⁴² areas where it cannot satisfy a business case to extend U-verse, AT&T's solution is to offer an unspecified wireless broadband services in both trial wire centers, thus removing DSL-based broadband services.⁴³ In its supporting materials (Attachment E) AT&T does not reveal the wireless "catch product" for current DSL customers who would be migrated to wireless broadband as a result of the trial.⁴⁴ The Commission should not approve AT&T's proposal unless AT&T identifies the "catch product" for DSL customers in areas where AT&T indicates that it will not extend its U-verse service, and establishes that it is superior or equivalent to existing DSL service.

The Commission should also note that AT&T's DSL customers could today choose to utilize wireless broadband alternatives, however, they have not done so. This indicates a consumer preference for wireline broadband service prices and performance characteristics. As will be discussed further below, given the price associated with wireless broadband alternatives, it is not surprising to find that DSL is still preferred by some consumers.

As a general proposition, broadband availability and competition will suffer as a result of AT&T's trial proposal. While AT&T indicates that "Our 4G LTE network will provide broadband at speeds up to 12 Mbps – significantly more robust than any of our legacy wireline DSL products,"⁴⁵ the Commission is well aware that wireless broadband services have characteristics that can also result in a broadband experience that is inferior to wireline alternatives. The Commission has noted the following regarding wireless broadband services:

[O]verall mobile broadband network service quality experienced by consumers may vary greatly with a number of real world factors such as the service provider's received signal

⁴² "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

⁴³ AT&T Plan, p. 43.

⁴⁴ AT&T Plan, Exhibit E, "DSL Direct" and "DSL Line Share" sheets for Carbon Hill and Kings Point.

⁴⁵ AT&T Proposal, p. 6.

quality, cell traffic loading, and network capacity in different locations as well as the capability of consumers' devices.

For example, the received signal quality is dependent on the service provider's deployed cell site density, low/high frequency radio wave propagation losses, user locations, indoor obstructions and outdoor foliage or clutter, weather, inter-cell interference conditions, and wireless network optimization parameters. The cell traffic loading or demand is dependent on the overall number of concurrent active mobile broadband users sharing the same cell, which in turn depends on user locations, the day of the week, and the time of the day. The capacity of a provider's wireless network is dependent on the deployed mobile wireless technology, sites and equipment, available bandwidth, and enhanced backhaul connections.⁴⁶

AT&T ignores these complex issues regarding the provisioning of wireless broadband. Unless AT&T addresses the issues identified above, these performance shortfalls and problems will result in a permanent degradation in broadband performance in the areas of AT&T's service area where DSL is eliminated and replaced with a wireless alternative. The *Trials Order* noted that "it will be important for the Commission to understand in detail any changes in the speed, latency, or jitter of the Internet access services offered in the experiment area."⁴⁷ AT&T has failed to provide the information the Commission has requested, and AT&T's plan should not be approved as a result.

Furthermore, for *four percent* of living units in the Carbon Hill wire center, customers currently served by AT&T's TDM platform cannot be served by either wireline or wireless options.⁴⁸ No consumer that currently is served via the TDM-based platform should be left unserved as a result of the technology transition, and AT&T is to be commended for recognizing that this is a key issue that must be addressed prior to TDM retirement:

AT&T has not yet found a viable replacement service for the remaining four percent of locations (in the Carbon Hill wire center), and still is considering its options for those

⁴⁶ *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 11-186, (Terminated), Sixteenth Report, March 21, 2013, ¶293, including footnote 890.

⁴⁷ *Trials Order*, Appendix B, ¶33.

⁴⁸ AT&T Plan, p. 43.

living units. AT&T recognizes that it is responsible for ensuring that these customers will have an alternative available to them prior to discontinuing TDM services, and is, in all events, committed to working with the Commission, policymakers, and other stakeholders to ensure that this happens.⁴⁹

The critical overlap between the IP transition and broadband universal service objectives must also be addressed by the Commission. AT&T's plan falls short, however, as it provides only an inferior wireless broadband alternative for a substantial portion of the proposed trial areas, and does not include a plan for serving areas that AT&T now indicates that it finds are no longer economical to serve.⁵⁰

AT&T fails to disclose the impact of the trials on broadband prices

With regard to broadband, the *Trials Order* also specifies that “it will be important for the Commission to understand in detail . . . *any differences in the price or usage capacities* associated with those offerings.”⁵¹ AARP is concerned regarding the impact of any trial on the prices that consumers will pay for broadband. AT&T is proposing to replace TDM-based voice and DSL broadband with wireless alternatives, and is also proposing to offer its U-Verse service to consumers as the TDM replacement. AT&T's Plan does not include any projections of what the cost differences of these alternatives will be (as in information regarding the representative impact on customer bills). Nor does AT&T identify the “catch product” for its current DSL customers who will be migrated to wireless broadband.⁵² However, there is ample evidence that wireless broadband has more restrictive usage limits and higher prices. For example, according to AT&T's web site, DSL-based wireline broadband services are available in Carbon Hill, AL for \$29.95 or \$34.95 per month.⁵³ AT&T's wireline broadband services currently have data

⁴⁹ AT&T Plan, p. 43.

⁵⁰ Indeed, AT&T indicates that integral to its plan is the request for relief from Eligible Telecommunications Carrier obligations on the first day of Stage 1 of the Plan. AT&T Plan, p. 39.

⁵¹ *Trials Order*, Appendix B, ¶33.

⁵² AT&T Plan, Exhibit E, “DSL Direct” and “DSL Line Share” sheets.

⁵³ <http://www.att.com/shop/en/internet/internet-service.html#fbid=u8uSsS95oFP>

usage caps of either 150 GB or 250 GB per month, and AT&T indicates that its average wireline broadband customer uses 21 GB per month.⁵⁴ According to information available on AT&T's web site, to purchase 20 GB per month on an AT&T wireless data plan, the consumer would be confronted with a \$150 monthly bill.⁵⁵ Price increases in general, and certainly of this magnitude, must not be a result of the technology trials, or the IP transition. It is not reasonable to allow the TDM-to-IP transition to leave consumers with an inferior and more costly broadband service offering. As will be discussed further below, AARP also notes that the customer notice letters provided by AT&T make no mention of price changes for any service. Price changes must be clearly revealed to customers so they can decide whether or not to participate in these *voluntary* trials, and to express their concerns regarding the impact of the trials and IP transition.

AT&T's Plan does not Provide Sufficient Information on the Price Impact for Wireline Voice Services

AT&T plans to offer current wireline customers the opportunity to purchase U-verse service, in areas where that service is available.⁵⁶ AT&T will no longer offer stand-alone wireline voice services.⁵⁷ AT&T's Plan does not adequately address the impact of the technology transition on prices and customer bills for non-DSL customers. The price data that AT&T does provide for trial "catch products"⁵⁸ indicates that wireline voice customers will be offered wireline bundled services that range in price from \$41 to \$126 per month.⁵⁹ However, data on current average bills of current wireline customers is not provided by AT&T, leaving gaps in the record

⁵⁴ <http://www.att.com/esupport/article.jsp?sid=KB409045&cv=801#fbid=PenptpqMrID>

⁵⁵ <http://www.att.com/shop/wireless/data-plans.html#fbid=u8uSsS95oFP>

⁵⁶ AT&T Plan, Exhibit E.

⁵⁷ AT&T Plan, Exhibit E, catch product descriptions for "Flat Rate Main Station Line Service."

⁵⁸ The "catch product" is AT&T's designated replacement service for the trial.

⁵⁹ AT&T Plan, Exhibit E.

regarding the impact of AT&T's proposal on customer bills. The Commission should require any trial proposal, including AT&T's, to provide information that would enable a clear understanding of the price impact on representative customers.

Data Collection and Reporting proposed by AT&T is Inadequate

The *Trials Order* highlights the importance of data collection and submission:

We seek to foster a robust public discussion about these transitions that is fact-based and data-driven – a dialogue that will deepen our understanding of how our nation's values intersect with its communications technologies. Accordingly, *we intend for these to be "open data" experiments so that data are publicly available, or made available pursuant to protective order against non-disclosure as appropriate.*

. . . [T]he Commission will find useful experiments that collect and provide to the Commission data on key attributes of IP-based services, such as network capacity, call quality, device interoperability, service to persons with disabilities, system availability, 911 and PSAP service, cybersecurity, call persistence, call functionality, and service coverage. For experiments that affect consumers, we will consider the specific methods and metrics that will be used to measure consumers' experiences during the experiment. To ensure high-quality data, we expect each experiment to include a "control group" by which to evaluate the performance of the "experimental group, unless the nature of the experiment would not accommodate a control group. We presume that a control group will be within the same geographic area, such as a wire center, as the experimental group. Use of a robust, statistically informative control group will provide the Commission with valuable information when it is presented with likely future applications to discontinue legacy services under section 214.⁶⁰

AARP believes that AT&T's Plan falls short in the area of data collection and submission.

AT&T's plan calls for reports to be made on a quarterly basis. AARP does not believe that quarterly reporting provides a sufficient interval. Indeed, given advances in technology, AARP believes that the Commission should encourage real-time data reporting that is publicly available for all trials. The real time data can then be summarized in *monthly* reports by the service provider. Prior to the initiation of any trial, AT&T should provide draft copies of reports

⁶⁰ *Trials Order*, ¶¶73-74, emphasis added.

showing the proposed formats, and to the extent that real-time reporting is possible, AT&T should provide access to draft web portals.

As another general matter, AT&T's reporting does not employ any customer surveys, which are suggested in the *Trials Order* as a means to generate information regarding customer satisfaction.⁶¹ Any customer-related data appearing in AT&T's reports will result from situations where customers contact AT&T. It would substantially improve the quality of data if AT&T were to employ a third-party to gather customer feedback using customer surveys.

In the *Trials Order*, the Commission requested that trials utilize a control group to compare to the experimental group.⁶² AT&T's Plan indicates that AT&T will develop control groups, but provides no details regarding the location or nature of those control groups.⁶³ Prior to granting final approval to AT&T's Plan, AT&T should be required to identify the proposed control wire centers, and to provide side-by-side comparisons of the characteristics of the control and trial wire centers. The side-by-side comparisons should include data on service quality performance metrics for the previous 12 months in both the trial and control wire centers, including out-of-service (OOS) trouble reports, OOS per 100 lines, initial OOS intervals, repeat OOS trouble reports, and repeat OOS intervals.

Problems with AT&T's proposed reporting metrics

AT&T proposes the following metrics for reporting:

Quarterly Transition Progress Report

Quarterly Customer Issues Report

Quarterly Defects per Million (DPM) Report

⁶¹ *Trials Order*, Appendix B, ¶50.

⁶² *Trial Order*, Appendix B, ¶51.

⁶³ AT&T Plan, p. 55.

TDM DPM (Total blocked calls/total attempts) x 1M

VOIP DPM (Total blocked/dropped calls/total attempts) x 1M

Wireless Network Performance

Measurement of Accessibility and Retainability, which defines the customer's ability to make and retain a call on the wireless network. Accessibility = percent of attempted calls that are successfully established and allow voice communication to begin while retainability = percent of voice calls that are successfully carried for the duration of the conversation.

Access by Persons with Disabilities

(1) Separately track and report on a quarterly basis complaints to AT&T's Office of the President from the trial wire centers where a customer self-identifies him- or herself as having a disability, or the customer's issue relates to assistive technology; and (2) ask disability organizations that are assisting AT&T with the trial to record and report to AT&T any feedback that they receive in connection with their outreach to persons with disabilities.

Quarterly IP Network Outage Report

Voice Quality Metric

As noted above, for all of these reports, quarterly reporting is not sufficient, and reporting for both the trial and control wire centers should be parallel in frequency and metrics. In addition, AARP has the following comments on the following proposed metrics.

Customer Issues Report. AT&T describes the Quarterly Customer Issues Report as follows:

Data will be collected from: direct customer input to trial-specific web sites, calls to AT&T customer care centers and issues identified by AT&T field representatives having customer contact. AT&T will classify issues in a way that is reflective of the type of issues customers are describing, such as: accessibility, product availability or product performance.⁶⁴

While trial-specific web sites are appropriate, so are trial-specific call centers. As part of any trial, AT&T should be required to establish a specific "Trial Hotline" that bypasses AT&T's normal call center queues. AT&T should be required to report the performance of the call centers handling customer issues related to the trials, specifically showing calls offered, calls

⁶⁴ AT&T Plan, p. 54.

handled, holding times, and drop-out calls (calls that drop while in a queue). Furthermore, the “issues” described by AT&T are vague. Rather than “product performance,” AT&T should be required to report specific information on trouble reports, service restoration intervals, and repeat trouble reports. AT&T should also report separately for those customers who are using wireline and wireless facilities. Data should be reported on a customer-class basis, and should be formally reported on a monthly basis.

Quarterly Defects per Million Report. AT&T only proposes to provide aggregated data on this metric. AARP believes that these reports should be prepared on a customer class basis. Differences in the customer experience based on customer class are important for the Commission to understand. Thus, the TDM and VoIP-related performance should be reported separately for business and residential customers.

Wireless network performance. AT&T’s description is not clear as to whether the wireless network performance metric is the only metric for wireless calls, or whether wireless calls are included in the defects per million measure.⁶⁵ AARP believes that defects per million should be separately reported for wireline and wireless calls (on a customer class basis), so that comparable statistics result, allowing the Commission to evaluate performance in the control wire center and to compare that performance with the performance of both the wireline and wireless replacements. Given the lack of clarity in AT&T’s filing as to whether its wireless offering is a VoIP service, AT&T should also separately report data for wireless VoIP and non-VoIP wireless

⁶⁵ AT&T states in its Plan “AT&T is a leader in the measurement of network reliability by adapting the manufacturing model of defects per million (DPM) to the measurement of reliability in its own networks. Through the DPM measurement, AT&T is able to rapidly and accurately determine the root cause of a network outage and to hold the responsible party (e.g., vendor, supplier, process, or business unit) to account with the aim of avoiding similar events in the future.” AT&T Plan, p. 25.

replacements that it offers, and generate defects per million results for those services on a customer class basis as well.

Persons with disabilities. While AARP finds that AT&T's Plan has promising elements with regard to outreach and education efforts directed at individuals with disabilities,⁶⁶ the data collection proposed by AT&T raises questions. With regard to the impact of the trials associated with individuals who have disabilities, AT&T suggests that it will not collect quantitative data, but will instead focus on qualitative data.⁶⁷ AT&T needs to clarify what it sees as the difference, and explain whether or not quantitative measures are automatically associated with the generation of qualitative data.⁶⁸ In addition, AT&T states that tracking of issues associated with disabled customers will be counted if they reach the "Office of the President" and the individual *self-identifies* as being disabled.⁶⁹ It is not clear why the issue must escalate to the "Office of the President" to be counted. Indeed, all contact with disabled individuals during the trials should be reported by AT&T. Likewise, AT&T efforts to seek the disability status of a customer who has contacted AT&T are appropriate as part of a trial. AT&T should better explain how data collection issues for disabled customers will be handled.

Quarterly IP Network Outage Report. AT&T proposes to report outages on a quarterly basis. Specifically AT&T proposes to report outages "that affected voice services in a trial wire center area that were reported to the FCC via NORS, pursuant 47CFR Part 4."⁷⁰ AARP does not believe that AT&T's outage-reporting proposal is sufficient. The Commission's rules associated with outage reporting contain minimum threshold requirements that are not appropriate for wire

⁶⁶ AT&T Plan, pp. 37-38.

⁶⁷ AT&T Plan, p. 55.

⁶⁸ For example, customer complaints from a disabled individual generates the same data point (i.e., a customer complaint), as does a non-disabled individual. Likewise, should specific problems arise with assistive technology due to the trials, there will be a quantitative number of events, in addition to qualitative interpretations.

⁶⁹ AT&T Plan, pp. 55-56.

⁷⁰ AT&T Plan, p. 56.

center trials. The Commission should be informed of all outages that affect both voice and data communications services in the trial and control wire centers.

Voice Quality Metric. While AT&T mentions that it has developed voice quality metrics for TDM, U-Verse VoIP, and its Wireless Home Phone service, it does not specify how the tests will be applied, or how results will be reported. This is another area where third-party testing is appropriate. AARP believes that comparative performance measures that allow the Commission to track voice quality should be reported monthly, and that the information reported should clearly distinguish between the voice platform, and the customer class.

Customer Outreach and Notice are Inconsistent in AT&T's Plan

AT&T's Plan includes two fundamentally different approaches to community outreach. In Carbon Hill, AT&T has already conducted a series of public meetings,⁷¹ and has provided a specific timeline for additional customer outreach:

- April: Meeting with first responders (fire, police, EMS)
- May: Open meeting for customers with questions or concerns.
- June: Meeting with local religious leaders. Possible additional meetings in each of their churches.
- July: Meeting with focus on seniors and senior tech training.
- August: Meeting with local educators (teachers, principals, librarians)
- September: Meeting with economic developers (local business owners/managers)
- October: Meeting focused on introducing new technologies
- November: Open meeting for customers with questions or concerns.
- December: Meeting with health care providers.⁷²

On the other hand, in Kings Point, AT&T provides much less detail regarding its community outreach efforts:

⁷¹ AT&T Plan, p. 18.

⁷² AT&T Plan, p. 18.

AT&T will hold community events at different locations around Kings Point to provide customers information about the trial and transition. AT&T will send direct mail to its customers and run informational advertisements in local media to notify interested parties of these meetings. These events will include meetings with local senior groups, local churches and synagogues, the local chamber of commerce and economic development agencies, first responders, educators and healthcare providers. These include:

- Two to four Listening Tour Meetings with Key Stakeholders and AT&T's state president for Florida within the first 30 days after filing this plan.
- Two to four Town Hall events within the first 45 days, depending on community participation and interest.⁷³

It is not clear to AARP why Kings Point has received a less detailed schedule. AARP believes that outreach associated with the trials should be based on a perspective of applying best practices, and the specifics associated with the Carbon Hill are more in line with a verifiable level of outreach. However, in both cases, AARP is concerned that the timing of customer outreach and education is anchored by the filing of AT&T's application, *rather than the start of the trials*. Given the delay between the application and the start of the trials, AARP is concerned that there will be a potential disconnect with customers as to what the actual status of the trial is. Thus, AARP recommends that AT&T include additional outreach efforts as the start date of the trials approaches, and that consumers and other stakeholders are kept apprised of delays or other factors affecting the execution of the trials.

Customer notice proposed by AT&T is inadequate

AT&T's customer notice plan appears to offer ample opportunity for information flows to the customer, however, the nature of the information is not complete. Specifically, customers should be informed before the first phase of any trial of the impact of the transition on *service prices and service availability*. On this matter, the *Trials Order* states:

[T]he nature of any relevant network changes; whether customers may opt in or opt out of the experiment after it has begun; the timing of any changes; what features of the provider's existing technology will no longer be available on the new technology and

⁷³ AT&T Plan, pp. 19-20.

how that may impact third-party devices and services the customer uses (e.g., medical monitoring services); how the provider's services will change including any differences in prices, terms and conditions; where a customer may go for more information; and any other details regarding the experiment that likely will be of relevance to customers.⁷⁴

AT&T indicates that it knows which customers will only have wireless service options available.⁷⁵ These consumers must be quickly informed of the fact that it is AT&T's plan that wireline voice services will no longer be available. Similarly, all DSL customers who will face a wireless option must be timely informed of this fact. In addition, customers should be informed of the prices (including taxes and fees) of the options that they will have. This is especially important for customers who will have DSL services eliminated. AT&T should be required to present information on wireless data pricing options for various levels of data usage.⁷⁶ Furthermore, the information that consumers receive must also inform them that as part of the trial process, AT&T plans on seeking relief from Eligible Telecommunications Carrier requirements on "the first day of Stage 1 of the trials,"⁷⁷ and that this will mean that AT&T may, should ETC relief be granted, refuse to serve customers at its discretion.

Location of AT&T's Trials Exclude Some Complex Issues

As discussed above, AARP believes that the Kings Point wire center may shed light on technology transition issues for older Americans. AT&T provides other data regarding the demographic characteristics of the two wire centers, which is reproduced below.

⁷⁴ *Trials Order*, Appendix B, ¶46.

⁷⁵ "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

⁷⁶ As discussed above, AT&T estimates that wireline broadband customers utilize about 21 GB per month.

⁷⁷ AT&T Plan, p. 39.

	Total	White alone	Black or African American alone	American Indian and Alaska Native alone	Asian alone	Native Hawaiian and Other Pacific Islander alone	Some other race alone	Two or more races	Hispanic or Latino
Carbon Hill, AL	6,594	6,250	275	2	6	0	0	55	6
		95%	4%	0%	0%	0%	0%	1%	0%
Kings Point, FL	64,218	53,715	4,330	59	1,089	0	259	455	4,311
		84%	7%	0%	2%	0%	0%	1%	7%

Figure 1: Racial Demographics of Trial Wire Centers⁷⁸

According to data from the 2012 *American Community Survey*, nationwide, about 73.9 percent of Americans are white, about 12.6 percent are black or African American, and about 16.9 percent are Hispanic.⁷⁹ Thus, the wire centers in the trials reflect a population demographic that is more white and less Hispanic than national averages. While it is understandable that finding wire centers that reflected true averages would be difficult, it is important to note, when considering the usefulness of data generated by the trials, that the snapshot that is provided is biased toward white and non-Hispanic populations.

AT&T notes that the trial wire centers, as far as AT&T can tell, do not have any critical Department of Defense or Federal Aviation Administration facilities.⁸⁰ AT&T indicates that this fact should mitigate concerns raised in the *Trials Order* regarding the potential impact of a trial on the facilities.⁸¹ However, the *Trials Order* did not indicate that these facilities should be excluded:

A transition may impact many dimensions of public safety, law enforcement, cybersecurity, and national security. *Data should measure the transition's impact on*

⁷⁸ AT&T Plan, p. 6.

⁷⁹ ACS Demographic and Housing Estimates, 2012 American Community Survey 1-Year Estimates http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_1YR_DP05&prodType=table

⁸⁰ AT&T Plan, p. 26.

⁸¹ AT&T Plan, p. 26.

*government functions (e.g., police, fire, Emergency Medical Services (EMS), or the Federal Aviation Administration (FAA) or Department of Defense (DoD)). . .*⁸²

Thus, AT&T's Plan will not generate any data regarding the potential impact on these critical facilities, which is another limitation of the proposed trials.

The King's Point wire center has geographic characteristics that are unlikely to provide challenges associated with offering wireless replacement service, as the terrain is generally flat. However, it appears that the Carbon Hill wire center may present a more challenging terrain, for in-home wireless replacement. While the performance of a wireless replacement to TDM-based wireline service is an important issue in any location, the complexity of the Carbon Hill wire center suggests that AT&T will have to take special steps to ensure that typical shortfalls of wireless services related to terrain, foliage, and availability of service indoors will be addressed prior to replacing TDM-based wireline service with the Wireless Home Phone offering in the trial.

AT&T selected the trial wire centers to be located in states where state authority over matters associated with the trials has been eliminated.⁸³ As a result, these trials will not reflect the experience in any state where state authority over matters associated with a trial, such as carrier of last resort obligations, is ongoing.

The Commission should recognize that it cannot generalize the results of these trials as being reflective of the experience of IP transition in states where such authority continues to exist,

⁸² *Trials Order*, Appendix B, ¶55.

⁸³ "Frank Simone, AT&T assistant VP—federal regulatory, said that state regulatory requirements 'actually was one of the questions we were considering as we decided' which locations to choose for the proposed trials." "Mr. Hultquist said that AT&T will be meeting with state officials in Florida and Alabama. However, he added, 'we do not believe that these trials require any filings in these states,' given their statutory and regulatory frameworks." "AT&T Proposes IP Transition Trials for Rural, Suburban Wire Centers," *TRDaily*, February 28, 2014.

where high concentrations of non-white or Hispanic populations are present, or where critical national security or public safety facilities are located.

AT&T's Proposed Timeline for Trials is Uncertain

AT&T's proposed timeline raises important issues with regard to the trials. In the *Trials Order*, the Commission stated that "We wish to begin the experiments as soon as possible."⁸⁴ To ensure this outcome, the Commission established an expedited submission process for the initial round of experiments, but also envisioned the potential for additional future submissions. AT&T's timeline for its proposed trials is not consistent with the spirit of the *Trials Order* vision of quickly beginning a trial. AT&T has publicly stated that the trials are expected to begin in "late 2014 or early 2015."⁸⁵ However, this information cannot be reconciled with information regarding the trial start dates contained in AT&T's application.

Phase I of AT&T's proposed trials begins with "Grandfather Customer Notice & Phase I 214 Filing for Interstate Services."⁸⁶ However, the start of Phase I is contingent on AT&T developing solutions to the numerous technical shortfalls in its wireless home service. AT&T states:

AT&T Mobility's Wireless Home Phone and Wireless Home Phone and Internet services currently are not compatible with analog data devices and services (e.g., home security systems, fax machines, and dial-up Internet service). AT&T understands the importance of some of these capabilities and is therefore developing enhancements to Wireless Home Phone with LTE that will allow this wireless service to work with analog data devices, such as alarm monitoring, medical alert and credit card applications. . . *AT&T will not seek to grandfather its TDM-based voice services until these enhancements are available.*⁸⁷

⁸⁴ *Trials Order*, ¶180.

⁸⁵ <http://ip4carbonhill.att.com/faqs/>

⁸⁶ AT&T Plan, Exhibit D.

⁸⁷ AT&T Proposal, p. 20.

AT&T does not provide a specific date when these enhancements will be available, but the general time frame for the enhancements identified by AT&T is not consistent with its public statements that the trials will begin in late 2014 or early 2015. This suggests an extended delay prior to the start of Phase I. While AARP applauds AT&T for seeking to develop the necessary enhancements to its wireless service, given the time frame projected by AT&T, AARP believes that it is reasonable to conclude that the solution will not be an easy fix, perhaps leading to additional delays in the start of the trials.

Given this lengthy time horizon before the start of the Phase I trial, AARP believes that AT&T is premature in requesting these trials. At this time, AT&T cannot inform this Commission or the affected consumers of precisely when the trials will start, or the precise performance of the technologies will be deployed during the trials. Any consumer information sessions held at this point will be unable to present consumers with the vital information that they need to understand whether or not to participate in the voluntary trials in the first place.⁸⁸ AARP believes that this Commission must reject AT&T's proposal as untimely and inconsistent with the letter and spirit of the *Trials Order*.

AT&T's Planned Sunset of Services is Premature

In the *Trials Order*, the Commission made clear that the sunset of services was part of a two-step process:

We reiterate that no experiment that involves removing, reducing, or impairing a legacy service in favor of an experimental service may proceed under the framework of this Order unless the provider files for and we grant such discontinuance authority as may be required by section 214 of the Act. *Any such grant of section 214 authority would be temporary and for the limited purpose of conducting the experiment.* As a consequence of its temporary nature, a grant of section 214 authority does not extend past the experiment, and at the end of the experiment providers must offer and customers may choose to

⁸⁸ "We believe that making the experiments voluntary for existing customers serves the public interest." *Trials Order*, ¶6.

subscribe to the service that had been temporarily discontinued unless, of course, a permanent section 214 approval had been granted.⁸⁹

AT&T's Timeline presents a process where soon after the start of a trial AT&T will file notice to customers that services will be eliminated. Thus, AT&T's Plan appears to be a proposal for a one-way street for the withdrawal of TDM-based services. The Commission should not accept AT&T's sunset timeline as submitted, and should remind AT&T that any initial grant of 214 authority for interstate services is temporary.⁹⁰

Conclusion—AT&T's Plan Should be Rejected

AT&T's Plan is incomplete and fails to address key issues identified in the *Trials Order*. The problems with AT&T's plan are numerous. As discussed above, there is an extended delay associated with the start of Phase I of the trials, and specific information regarding the performance of proposed replacement products to be offered during the trials is lacking, with only an indication that more information will be available at a later date. As a result, AARP believes that interested parties' ability to fully respond to AT&T's proposal has been compromised. The parties have been placed in the awkward position of being asked to respond to an incomplete plan—with the actual details emerging at unspecified later dates. If the Commission does not reject AT&T's Plan, AARP believes that this Commission must amend the timeline associated with the *Trials Order* to enable further comment on details of AT&T's plan as those details become available.

As a result of these and the other shortcomings discussed above, AARP does not believe that AT&T's Plan is a reasonable technology trial, or one that is consistent with the provisions of the *Trials Order*. Until the missing details are known, and the public has the opportunity to respond

⁸⁹ *Trials Order*, ¶79.

⁹⁰ *Trials Order*, ¶79.

to the entirety of AT&T's plan, the Commission should not issue final approval of AT&T's proposal. Alternatively, the Commission could now reject AT&T's proposal as untimely and instruct AT&T to file for its trial when it can inform the public and this Commission of the actual details associated with the characteristics and performance of the technologies that will be utilized in the trials, and firm dates on which the trials will begin.

Given the numerous problems associated with AT&T's plan, AARP has made recommendations for improvements in AT&T's plan. Should the Commission move forward, it should adopt those recommendations, as discussed in the Summary and Overview section of these comments, above.

Attachment A

Topographic Maps of the Carbon Hill Wire Center

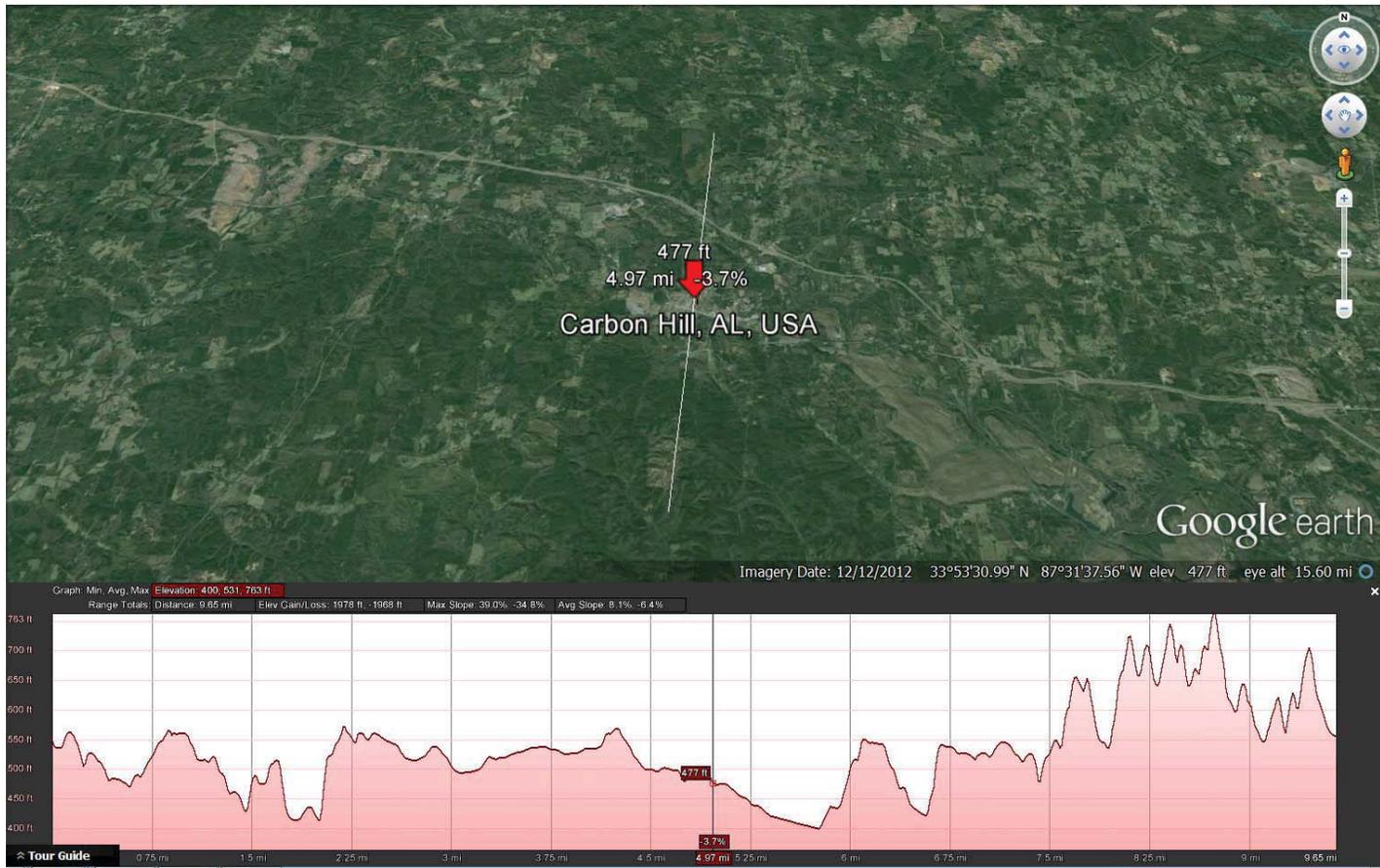


Figure A1: Terrain variation in the Carbon Hill area (on north-south line).

The lower portion of Figure A1 shows terrain variation on the north-south line centered on the town of Carbon Hill. Elevation levels shown range from 400 feet to 763 feet.

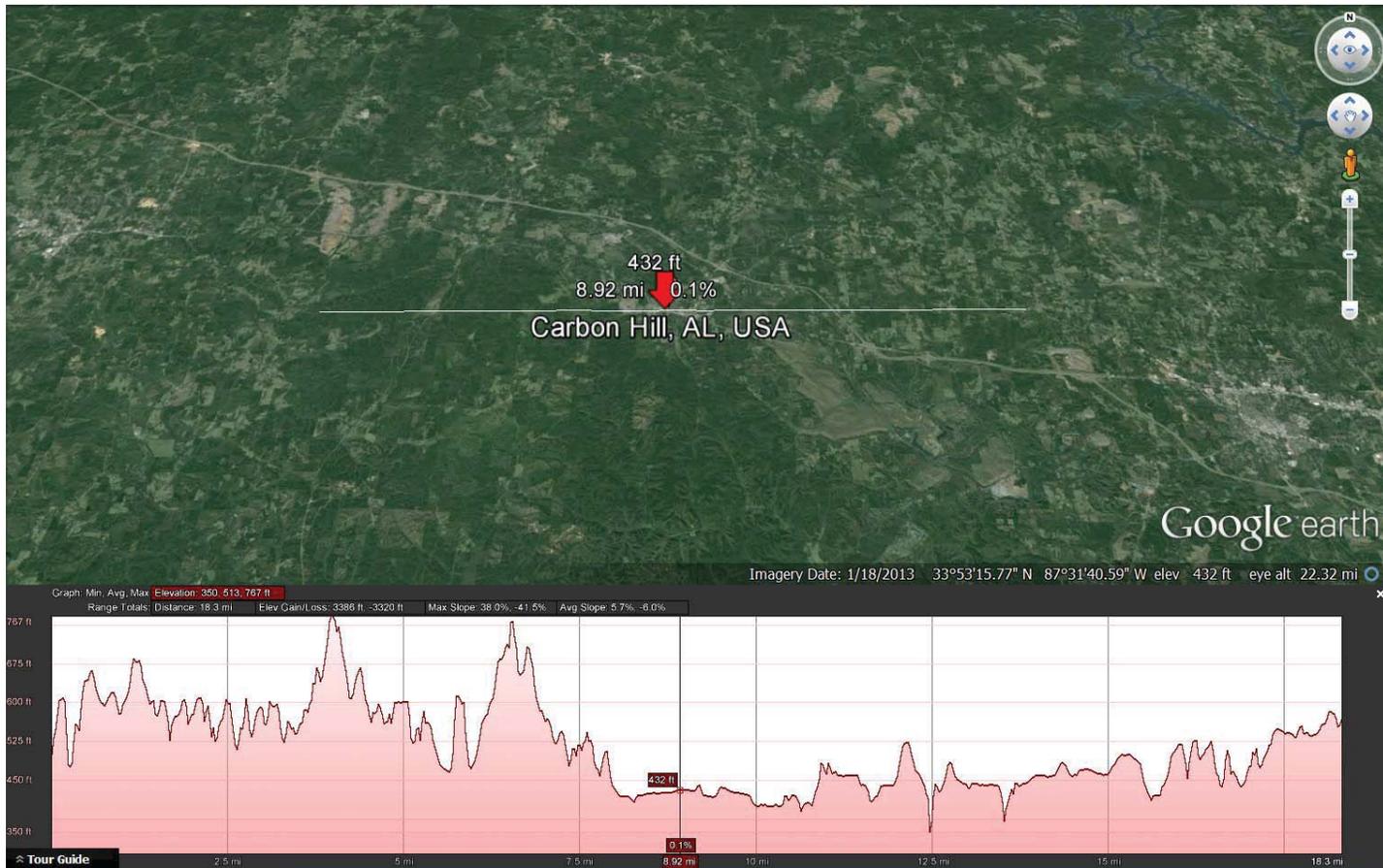


Figure A2: Terrain variation in the Carbon Hill area (on east-west line).

The lower portion of Figure A2 shows terrain variation on the east-west line centered on the town of Carbon Hill. Elevation levels shown range from 350 feet to 767 feet.