



COMMONWEALTH OF PENNSYLVANIA

February 9, 2024

**E-FILED**

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

**Re: Rulemaking to Amend 52 Pa. Code §§ 63.161—63.171 (relating to Universal Service) / Docket No. L-2023-3040646**

Dear Secretary Chiavetta:

Enclosed please find Comments, on behalf of the Office of Small Business Advocate (“OSBA”), in the above-captioned proceeding.

If you have any questions, please do not hesitate to contact me.

Sincerely,

*/s/ Steven C. Gray*

Steven C. Gray  
Senior Supervising  
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Attorney ID No. 77538

*Enclosures*

cc: Joseph Gillian

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Rulemaking to Amend 52 Pa. Code §§** :  
**63.161—63.171 (relating to Universal** : **Docket No. L-2023-3040646**  
**Service)** :

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**COMMENTS OF THE  
OFFICE OF SMALL BUSINESS ADVOCATE**

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**Introduction**

The Office of Small Business Advocate (“OSBA”) welcomes this opportunity to address the Pennsylvania USF (“Pa. USF”) and to recognize the fundamental changes that have occurred in the telecommunications industry in the 25 years since the Commission first established the fund. As we explain below, we believe it is well past the time for incremental reforms to the Pa. USF (such as those suggested by the detailed questions of Appendix A to the NPRM).

In our view, the Commission should terminate the existing USF as fundamentally obsolete and ineffective in the wireless/broadband world of today. As such, the primary focus of our Comments is on the threshold questions posed by Commissioner Coleman:<sup>1</sup>

- 1) Does the Commission have the authority to eliminate the Pa. USF?
- 2) What are the benefits and drawbacks of eliminating the Pa. USF?
- 3) If eliminated, should it occur through a hard-stop termination at the end of a fund year or gradually through a phase-out?
- 4) If through a phase-out:
  - a. Over what period should a phase-out occur?
  - b. How should a phase-out be structured in terms of reducing contribution and support amounts to the point of elimination of the fund?

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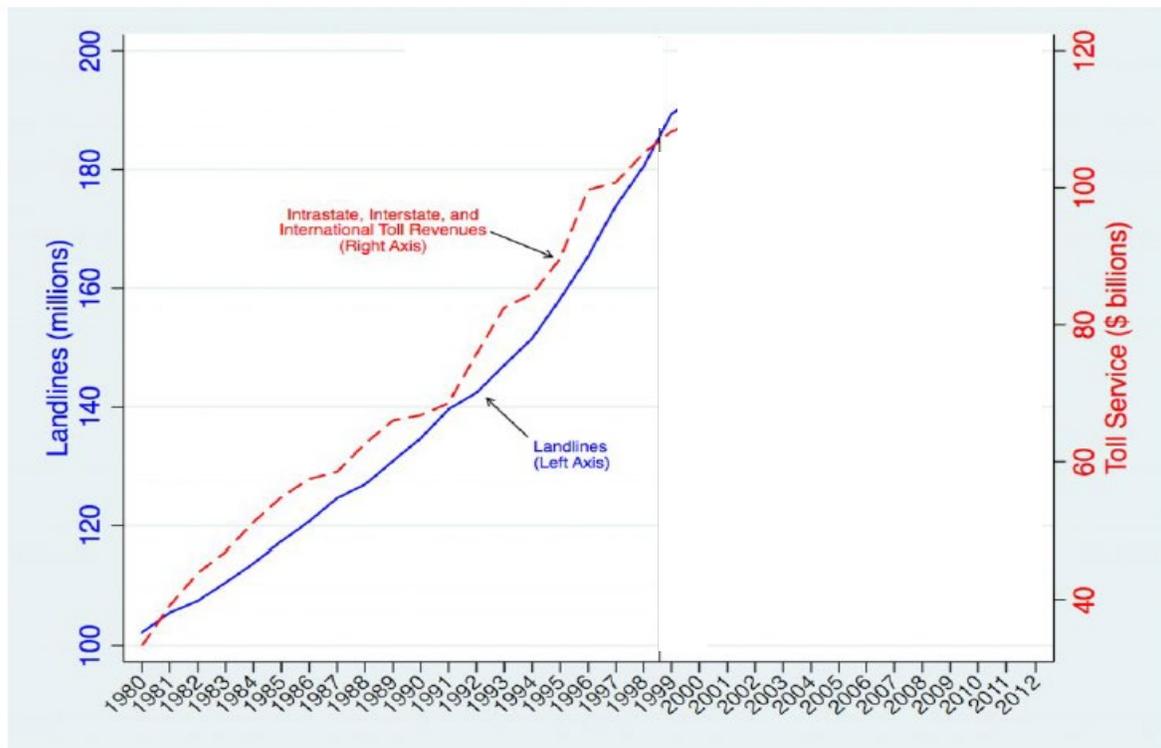
<sup>1</sup> Statement of Commissioner John F. Coleman, Jr., at 7021-22. Because our conclusion is that the existing fund should be terminated, the detailed questions listed in Appendix A to the NPRM are not relevant. We recognize there *may* be a need for a future fund to complete gaps in federal broadband funding, but that need (if it exists) should be addressed in a future rulemaking after the full implementation of the federal programs. If such a rulemaking proves necessary, then some of the issues identified in Appendix A may resurface and we would address those questions at that time.

The Pa. USF is a relic of a bygone era, adopted to address the historic question as to “how carriers balanced their business models between access revenue flowing from intrastate toll traffic and ratepayer subscription revenue.”<sup>2</sup> While there may have been a linkage between intrastate toll revenues and the affordability of local rates in the (distant) past, that is no longer the case. Voice service has moved from wireline to wireless service, while providers deploying wireline networks now focus on broadband infrastructure that provides voice (using trivial levels of capacity), internet access and video. The assumed “balance” between access and subscriber revenue is not relevant to either business model.

### Voice Traffic has Effectively Shifted to Wireless Service

The Pa. USF was adopted during (what turned out to be) the beginning of the end for wireline networks as the principal technology for voice service. Consider the graph below that tracks the number of wireline (then better known as “landline”) phones and toll revenues through 1999 when the Pa. USF was adopted.

**Figure 1: Landline Phones and Toll Revenues Up to 1999**



(<https://techpolicyinstitute.org/wp-content/uploads/2017/03/landlines-and-ld-revenues.jpg>)

<sup>2</sup> NPRM at 7705.

As Figure 1 so clearly shows, at the time the Commission was crafting the Global Order,<sup>3</sup> it may have been reasonable to assume that “wireline was forever” and that the number of phones, and the importance of toll revenues, would continue to increase each and every year. The 1999 Global Order is unambiguously based on this assumption, going so far as to not even *contemplate* a world where access lines declined:

... the [Pa. Universal Service] fund adjusts annually to account for access line growth of Pa. USF recipients. The formula does not take declines in access line numbers into account. That is, the size of the Pa. USF pool ratchets up, never down.<sup>4</sup>

This fundamental assumption of the Global Order – *i.e.*, that access lines and toll revenues would continue to increase – was about to be reversed by two transformative events. The first had already occurred at the time of the Global Order, but its effects had not yet been realized. In May of the prior year (1998), AT&T introduced its “One Rate” wireless plan that eliminated roaming and long-distance charges,<sup>5</sup> ultimately leading to wireless pricing that compared favorably to the traditional phone services of landline telephone companies.

The long-term effect of the AT&T One-Rate Plan is illustrated by Figure 2 (that continues the data of Figure 1 through 2012) exposing the dramatic reversal in the traditional growth of landline phones and toll revenues. By the mid-late 2000’s, each of the wireless carriers had introduced unlimited calling plans, virtually eliminating the usage pricing of wireless service.<sup>6</sup> This pricing change transformed the wireless phone from being a modest luxury to its widespread adoption, initiating a persistent erosion of both traditional local and long-distance phone services.

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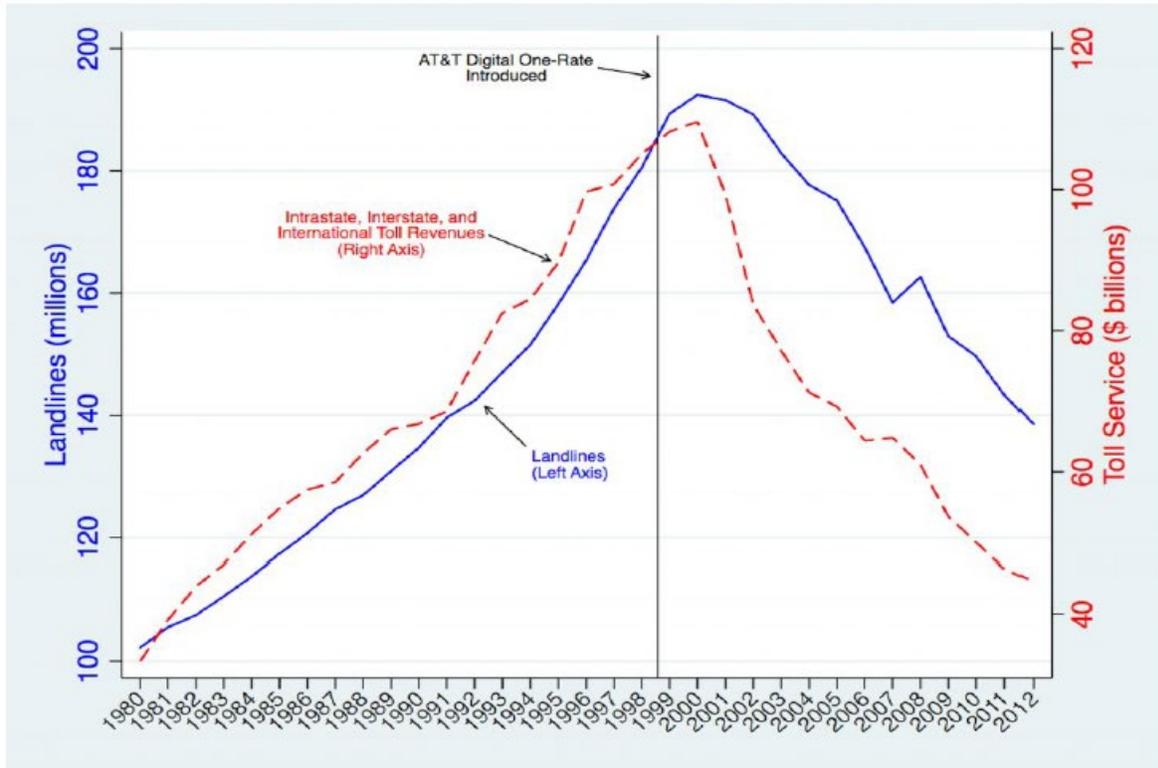
<sup>3</sup> Joint Petition of Nextlink Pennsylvania, Inc., et al., Docket Nos. P-00991648, P-00991649, Order entered September 30, 1999, at 246—249, 196 PUR 4th 172, 279-80 (Global Order), *aff’d*, *Bell Atlantic-Pennsylvania, Inc. v. Pa. Pub. Util. Comm’n*, 763 A.2d 440 (Pa. Cmwlth. 2000), vacated in part sub nom. *MCI Worldcom Inc. v. Pa. Pub. Util. Comm’n*, 844 A.2d 1239 (Pa. 2004).

<sup>4</sup> NPRM at 7010.

<sup>5</sup> <https://techpolicyinstitute.org/2017/03/21/is-this-datas-one-rate-moment/>

<sup>6</sup> *See*, for instance, Twelfth Report, *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 Commercial Mobile Services*, Federal Communications Commission WT Docket No. 07-71, rel. February 4, 2008 at ¶ 113 and Fourteenth Report, WT Docket No. 09-66, rel. May 20, 2010 at ¶ 88.

Figure 2: Access Lines and Toll Revenues 1980-2012



(<https://techpolicyinstitute.org/wp-content/uploads/2017/03/landlines-and-ld-revenues.jpg>)

With calling “free” on a wireless phone, households began eliminating their landline phone. The Pa. USF was built on an assumption that wireline phones and toll revenues would continue to increase, but within a couple of years of its adoption, the market reality was the exact opposite condition.

The Centers for Disease Control conducts a biannual survey that tracks how consumers have substituted wireless service for traditional phones service over the years. In January 2004, when the CDC first conducted its survey, over 36% of the adults lived in households in the United States that did not have any wireless service and the percentage of adults in households with *only* a wireless phone was less than 4%. Today, however, the wireless phone is typically the only phone in over 70% of American households (see Table 1 below).

**Table 1: The Changing Nature of Wireless Service**

Category	June 2004 <sup>7</sup>	December 2022 <sup>8</sup>
Adults <i>without</i> wireless service	36.3%	2.1%
Adults with <i>only</i> wireless service	4.4%	71.7%
18-24 years	10.3%	78.8%
25-29 years	9.9%	87.6%
30-34 years	4.4%	88.4%
35-44 years		83.3%
45-64 years	2.3%	71.2%
65 years and older	0.9%	47.8%

Looking in more detail at the CDC data by age grouping demonstrates that most households with a landline phone also have wireless service. The landline-only portion of the market is almost non-existent (at 2%) and even in the most elderly households, less than 7% of the homes have only a wireline phone.

**Table 2: The Dominance of Wireless Technology in the Voice Market - 2022<sup>9</sup>**

Age Group	Wireless-only adults	Wireless-mostly adults	Dual-users	Wireless-Oriented Adults <sup>10</sup>	Landline-mostly adults	Landline-only adults	Landline-Oriented Adults <sup>11</sup>
18–24	78.8%	16.0%	2.1%	96.9%	0.4%	0.3%	0.7%
25–29	87.6%	8.2%	1.5%	97.3%	0.3%	0.6%	0.9%
30–34	88.4%	8.9%	1.0%	98.3%	0.1%	0.1%	0.2%
35–44	83.3%	12.0%	2.1%	97.4%	0.4%	0.2%	0.6%
45–64	71.2%	18.5%	6.2%	95.9%	1.7%	1.2%	2.9%
65 and over	47.8%	17.4%	14.8%	80.0%	11.4%	6.9%	18.3%
Total	71.7%	15.2%	6.1%	93.0%	3.2%	2.1%	5.3%

<sup>7</sup> See Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January – June 2007 by Stephen J. Blumberg, Ph.D., and Julian V. Luke, Division of Health Interview Statistics, National Center for Health Statistics, Centers for Disease Control, Table 2.

<sup>8</sup> Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January-December 2022 Stephen J. Blumberg, Ph.D., and Julian V. Luke Division of Health Interview Statistics, National Center for Health Statistics, Centers for Disease Control, Table 2.

<sup>9</sup> *Ibid.*

<sup>10</sup> Wireless-oriented adults is the sum of “wireless only,” “wireless mostly” and “dual user” respondents. These are CDC-defined categories, with “wireless mostly” being all or almost all calls are on the cell phone and “dual users” are those that respond “some [are] on your cell phone and some on your home phone.”

<sup>11</sup> Landline-oriented adults is the sum of “landline only” and “landline mostly.”

### **Today Broadband Dominates Wireless and Wireline Service**

The second event that redefined the wireless market occurred roughly ten years later. On June 29, 2007, the first iPhone went on sale under an exclusive arrangement with Cingular Wireless (a subsidiary of AT&T).<sup>12</sup> Although Blackberry had revolutionized text-based mobile communication a few years earlier, the iPhone placed a small personal computer/phone/camera in the hand of the average consumer. Mobile wireless expectations – and mobile network capacity requirements – would forever change.<sup>13</sup>

Smartphones now dominate the wireless market, with 307 million users in the United States.<sup>14</sup> Not only have wireless phones replaced wireline phones as the device-of-choice for most households, but data use on those wireless phones have transformed the wireless network from a voice-network to a data (*i.e.*, IP-based) architecture. As recently as 2010 wireless networks were defined by voice traffic, with over 85% of the network capacity carrying voice calls.<sup>15</sup> Today (2022), this relationship is fully reversed, with voice using less than 4% of the wireless network capacity.

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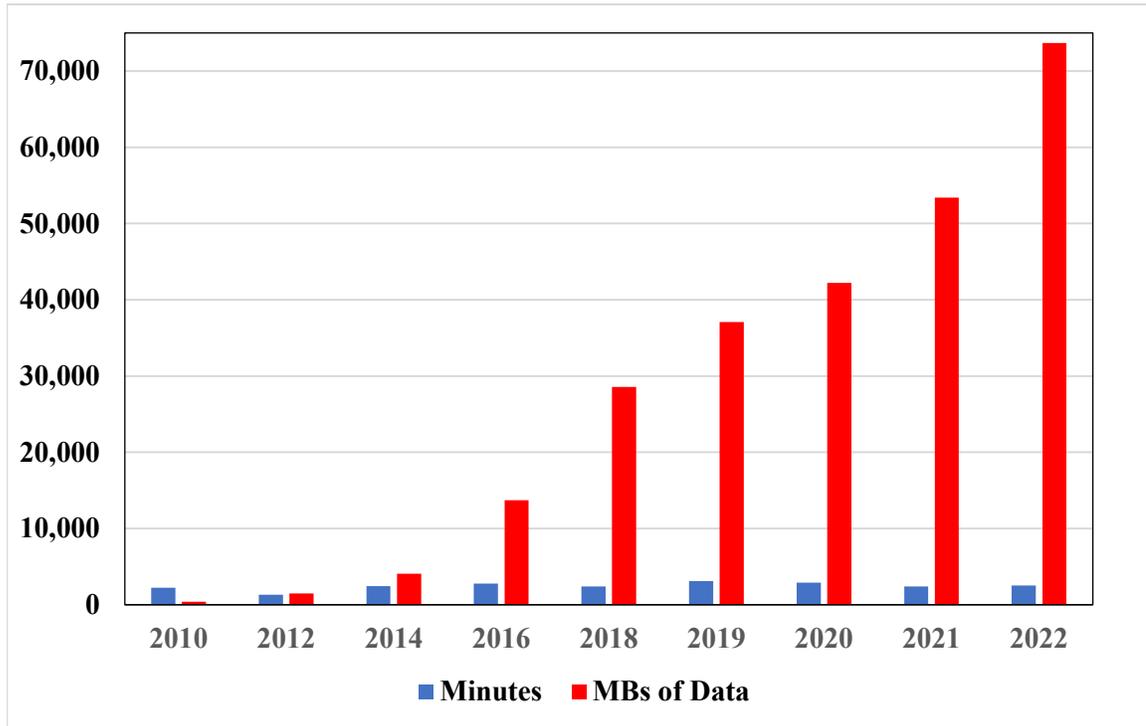
<sup>12</sup> At the time the iPhone was introduced (June 2007), it was still more common for an adult to not have a wireless phone at all than it was to rely entirely on wireless service. *June 2007 CDC Study*.

<sup>13</sup> It is significant to consider the changes brought about by the smartphone. To begin, its very name is misleading as it emphasizes its historic role as a “phone,” when its other uses – as an Internet access device, video player, music player, contact manager, camera, and GPS tracker to name just a few – dominate its use, capacity and capabilities. Despite these added features, however, the “phone” capability remains a threshold requirement for the device.

<sup>14</sup> <https://www.zippia.com/advice/us-smartphone-industry-statistics/>

<sup>15</sup> To simplify the comparison, this statistic assumes that 1 MB/minute of capacity is needed for a wireless call, assuming it is carried as VoIP. This “rule of thumb” applies to a VoIP application using WiFi and, as such, likely overstates the level of capacity required within the typical cellular network. *See* <https://pingme.tel/how-much-data-does-wi-fi-calling-use-per-minute/>.

**Figure 3: Growth of Data and Voice Minutes on Wireless Networks<sup>16</sup>**  
(millions of voice minutes/MBs of Data)



Just as wireless networks have moved from voice to data as the primary design and service objective, an identical transformation is underway in wireline networks. Table 3 (below) compares the number of voice subscriptions in Pennsylvania that are provisioned using traditional access lines and those that today are provided over a broadband IP network.<sup>17</sup>

**Table 3: Voice Connections by Technology – Pennsylvania**  
(millions)

Technology	Dec-08	Jun-22	Change
Mobile	10,214	13,866	36%
Landline Technologies			
Old Technology (Switched Access Lines)	6,560	1,284	
Consumer-grade service	3,764	570	-85%
Business & Government-grade service	2,796	714	-74%
Broadband Technology (VoIP Subscriptions)	888	3,119	
Consumer-grade service	811	1,672	106%
Business & Government-grade service	77	1,447	1,779%

<sup>16</sup> CTIA Annual Surveys. <https://api.ctia.org>

<sup>17</sup> Voice Telephone Subscriptions, FCC, Nationwide and State-Level Data from 2008-Present, available at: <https://www.fcc.gov/voice-telephone-services-report>

The inescapable truth is that – contrary to the core assumption of the Pa. USF that landline access lines (and toll revenues) would continue to grow – the market for voice service has shifted to wireless, and for those wireline connections that do remain, the technology used today (and into the future) is broadband, not the “traditional” telephone network. The Pa. USF is chasing the wrong rabbit down the wrong hole and, as such, it should be terminated.<sup>18</sup>

Perhaps the most important observation of the NPRM is the goal articulated by Chairman DeFrank that:

Anywhere in the state, a Pennsylvanian should be able to pick up a landline telephone and connect to the public switched telephone network to call a neighbor across the street, a loved one across the country, or access emergency services when there is a fire or they need medical attention—all at a high quality and at an affordable rate.<sup>19</sup>

To be clear, we fully agree with the sentiment and the policy expressed above with respect to the end-result (*i.e.*, the ability to call a neighbor across the street, a loved one across the country, or access emergency services... at any affordable rate). However, as drafted, the statement applies 20<sup>th</sup> Century terminology to a 21<sup>st</sup> Century problem. As Chairman DeFrank goes on to note, the complete purpose of Chapter 30 is to:

... maintain universal service at affordable rates while *encouraging the accelerated provision of advanced services and deployment of a universally available, state-of-the-art, interactive broadband telecommunications network in rural, suburban and urban areas.*"<sup>20</sup>

With contemporary technology, however, the *only* way to promote universal service is by ensuring the "... deployment of a universally available, state-of-the-art, interactive broadband telecommunications network in rural, suburban and urban areas." The two directives of Chapter 30 – universal service and universal broadband – are no longer *complimentary* activities, they are the *same* activity. There is no longer a viable technological (not to mention market or economic) distinction between broadband technologies and the historic “public switched network;” the former performs the functions of the latter, while the traditional components of the latter can only be found on eBay or in museums. Universal service and universal broadband are today the same objective.

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<sup>18</sup> Consistent with the analysis in Table 3, between 2007 and 2021, carriers receiving support from the Pa. USF have seen the number of access lines decrease from 1,099,688 to 328,438, a total decrease of 771,250 or 70%. NPRM at 7014.

<sup>19</sup> Statement of Chairperson Stephen M. DeFrank

<sup>20</sup> *Ibid.*

### **The Pa. USF is a Revenue Protection Fund**

We have explained above how technological market changes have rendered the Pa. USF obsolete. We now turn to a change that has *not* occurred, specifically the fact that the traditional regulatory accounting systems – *i.e.*, the cost allocation rules that underlie rate-of-return regulation – have never been updated to allow a state commission to determine the profitability of a Pa. USF recipient. Changes “around the edges” of the Pa. USF simply cannot fix its fundamental flaws.

To begin, there is no question that the Pa. USF is a revenue protection fund established to perpetuate access revenues that were once collected from “long distance” carriers.

In general terms, the Pa. USF was designed to temporarily replace carrier revenue lost to various forms of access charge reductions.... The Global Order recognized that the FCC was concurrently examining interconnection, access charges, and universal service issues. Under the expectation that permanent rules would be forthcoming, the PUC set an endpoint of December 31, 2003, for the interim Pa. USF mechanism it established in the Global Order.<sup>21</sup>

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“...this system approximated access revenues recovery from the various access charge reductions mandated in the 1649 Petition and approved in the [1997] Global Order.”<sup>22</sup>

As noted, recipient ILECs have lost 70% of the access lines they provided in 2007. Nevertheless, the Pa. USF perpetuates the revenues associated with these lines, paying its beneficiaries for calls last made 20-25 years ago, from customers that have moved onto other providers, using instruments (landline phones) now abandoned. If there is any remaining legitimacy to the Pa. USF it is the product of coincidence and happenstance, not the product of sound logic, policy and data.

Moreover, there are no longer cost allocation rules that might identify – even in the roughest terms – a meaningful rate-of-return associated with “phone service” in Pennsylvania because the basic rules have never been updated to reflect the modern economics of broadband (and telephony over broadband) services.<sup>23</sup>

There are two problems. The first is the fixed allocator used to apportion outside plant (for simplicity, loop) costs between the states and FCC. In the early 1980s, the states and the

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<sup>21</sup> NPRM at 7010.

<sup>22</sup> *Ibid.*

<sup>23</sup> To be clear, we do not favor any profitability determination based on jurisdictional cost allocations. Given the shared nature of broadband networks, the only relevant determination is one that considers the total cost of the enterprise and the total revenue from *all* services (voice, data and video) using the shared facility without distortion through allocations or corporate organization (such as the use of affiliates).

FCC agreed to use a fixed allocator that assigned 75% of the loop cost to the states, with the FCC accepting responsibility for 25%, irrespective of the actual usage of the network. Second, in 2001, the FCC froze the allocations applied to other cost categories, subject to limited opportunities to update these relationships.<sup>24</sup>

The FCC periodically admits to the problems caused by these obsolete rules but has chosen to avoid correction. For instance, in a recent order the FCC extended the separations freeze for a further six years and explained:<sup>25</sup>

The current rules focus on allocating between the interstate and intrastate jurisdictions the costs of circuit switched voice services provided over primarily copper networks. Those rules have largely been *in place since 1969 ...*<sup>26</sup>  
We [the FCC] agree with NARUC that the existing separations rules, which presume circuit-switched, primarily voice networks, require updating to reflect today's network configurations and mix of broadband, video, and voice services. We also share NARUC's ... [and others'] concern that those rules *necessarily* misallocate network costs.<sup>27</sup>

Notably, the specific NARUC comments cited by the FCC provide, in pertinent part:

The current Separations process necessarily misallocates network costs and revenues - attributing 75% of network costs to states based on the inaccurate presumption that networks are still used primarily for intrastate voice services. But voice is no longer the dominant use of telecommunications networks so even assuming the current split of voice traffic remains approximately 75% intrastate and 25% interstate, use of those percentages no longer makes sense. Why? Because voice service use of the common network has been dwarfed by internet and other broadband access services the FCC classifies as interstate. This means, at least with respect to rate-of-return carriers, States bear 75% of the cost of the network facilities, even though the revenues for broadband and other mixed-use services are allocated to interstate services. This apparent cross-subsidization of interstate services hurts consumers and rural America's ability to compete in a global economy.<sup>28</sup>

NARUC further explained how the misinformation produced by these obsolete federal rules could be used to portray a distorted picture of unprofitability:

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<sup>24</sup> See, for instance, *In the Matter of Jurisdictional Separations & Referral to the Fed.-State Joint Bd.*, No. CC 80-286, 2018 WL 6629368, at \*6 (OHMSV Dec. 17, 2018) ("*Continuing Freeze Order*").

<sup>25</sup> This Order did allow rate-of-return carriers that elected to opt out of the freeze but did not correct for the distorting effect of the fixed allocator, which has a larger impact.

<sup>26</sup> *Continuing Freeze Order* at ¶ 26 (footnotes omitted) (emphasis added).

<sup>27</sup> *Id.* at ¶ 43 (emphasis added).

<sup>28</sup> NARUC Comments, Federal Communications Commission Docket CC 80-286, August 27, 2018, at p. 8 (emphasis added).

The misallocation of those network costs are ultimately reflected in the higher rates that the States' consumers and businesses pay for voice services. They skew State and federal universal service programs and provide the basis for arguments that intrastate telecommunications services are "not profitable."<sup>29</sup>

The bottom line is that rate-of-return calculations based on FCC allocation rules are nothing more than a regulatory fiction. Given the market shifts explained above, the only path for a wireline carrier to survive is to become a broadband provider that uses the same IP-network infrastructure to provide broadband and voice, which necessarily means that the overall profitability of the enterprise can only be determined by looking at the revenues from *all* the services using this shared broadband connection. This threshold calculation, however, is not the calculation/information underlying the Pa. USF.

### **Recommendation**

The Pa. USF is hopelessly obsolete. The fund today perpetuates a paradigm of landline phones making long distance calls that simply no longer exists. The customers have largely moved their voice service to wireless, and all providers – wireless and wireline – are replacing narrowband networks with broadband. There is no justification for continuing the fund given today's technologies and market conditions.

That said, we do not claim that there is no area, anywhere in the state, that will never require public support to achieve universal broadband coverage. The *possibility* of this need, however, does not mean that the existing fund is playing a useful role and should be retained. It should not. Given these conclusions, we offer two core recommendations.

The first recommendation is that the Commission take this opportunity to close the current Pa. USF. In our view, the fund has out-lived its usefulness and its basic structure – *i.e.*, as a revenue entitlement to offset access charge reductions on customers and calls that no longer even exist – has so little merit that the Commission should quickly end the system. Given how long recipients have already (unreasonably) benefitted, we recommend a phase-out of the fund over a period no longer than two years.<sup>30</sup>

Second, we recommend that the Commission monitor broadband deployment to determine whether any *future* mechanism is needed, but only *after* fully understanding the consequences of ongoing federal support mechanisms and emergent new technologies. It is simply too early to determine whether such mechanisms and technologies will be sufficient, much less to predict exactly where (or for whom) coverage gaps may remain.

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<sup>29</sup> *Id.* at p. 6.

<sup>30</sup> The Commission may want to consider whether to offer a one-time safety-net procedure that would allow a recipient to petition for limited support after a showing of proven financial need – *i.e.*, a profitability analysis that considers revenues from each of the services using a shared network facility, without regard to jurisdiction or regulatory classification. We are not, at this point, convinced that such a safety-net is necessary or appropriate.

For instance, Congress (and the FCC) have outlined and/or adopted programs totaling nearly \$80 billion in federal support for infrastructure deployment over the next several years.<sup>31</sup> We recognize that it is not yet clear whether each of these federal programs will succeed (or be fully implemented), but the magnitude of the effort is unprecedented and we believe it would be a waste of resources to attempt, at this juncture, to try and design a supplemental scheme.

Not only have the full effects of federal infrastructure programs not yet been realized, there are new emerging broadband technologies that may significantly lessen the need for costly terrestrial networks. Of particular significance is the constellation of low earth orbit (LEO) satellites being deployed by SpaceX. These satellites (as the name suggests) have an orbit sufficiently low to address the latency concerns of other satellite services and, as a result, can support real-time services such as quality voice. Currently, SpaceX has deployed over 5,000 satellites,<sup>32</sup> offers availability throughout Pennsylvania,<sup>33</sup> has over 2 million customers worldwide (including 1.3 million in the United States),<sup>34</sup> and was recently awarded a \$70 million contract to deploy a military version of its commercial network (StarShield).<sup>35</sup> SpaceX's StarLink service is not a theoretical broadband (and voice) option, but a commercially available service that is unaffected by the terrestrial cost barriers, such as density and mountainous terrain, that have limited other options.<sup>36</sup>

We recognize that StarLink can present affordability challenges, particularly with an upfront cost of \$600 for the home terminal and a monthly fee \$120.<sup>37</sup> However, to fill whatever gaps remain after terrestrial networks are deployed using federal funding, targeted support for the few remaining households and businesses would be far less that building additional terrestrial infrastructure. We are not proposing such a system here, but do believe it is an option the Commission should consider in any future rulemaking (after federal funding obligations become certain).<sup>38</sup>

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<sup>31</sup> Federal Funding for Broadband Deployment: Agencies and Considerations for Congress December 26, 2023, Congressional Research Service, R477883.

<sup>32</sup> [https://www.upi.com/Science\\_News/2024/01/29/SpaceX-launches-next-fleet-of-Starlink-satellites/3531706491905/](https://www.upi.com/Science_News/2024/01/29/SpaceX-launches-next-fleet-of-Starlink-satellites/3531706491905/)

<sup>33</sup> <https://www.starlink.com/updates>

<sup>34</sup> <https://www.pcmag.com/news/spacex-starlink-now-has-13-million-customers-in-the-us#:~:text=%E2%80%9CEnabled%20by%20this%20growth%2C%20Starlink,week%2C%E2%80%9D%20the%20company%20said.>

<sup>35</sup> <https://www.airandspaceforces.com/space-force-contract-spacex-starshield/>

<sup>36</sup> Because StarLink offers service using nearby satellites, all that is required is an open sky.

<sup>37</sup> <https://www.starlink.com/>. Quote for residential service at the OSBA office address in Harrisburg. Business rates are higher, but provide higher performance.

<sup>38</sup> Targeting support to individual households and businesses makes sense for a technology such as StarLink because the decision to deploy a satellite in LEO does not consider the circumstances of an individual subscriber or area as the satellite offers service over its entire global orbit.

Finally, the Commission should not pattern any future broadband fund on the Pa. USF. The Pa. USF is fundamentally flawed by two key features: (1) subsidy is fundamentally determined based in a regulated rate decrease unrelated to broadband deployment, and (2) subsidy is available to a single market participant (the incumbent local telephone company) that may not be in the best position to provide the lowest-cost service. These features should play no role in any future broadband mechanism that should be open to competitive bidding and tied to specific deployment obligations.

**Conclusion**

We look forward to reviewing the Comments of other parties and congratulate the Commission for initiating this important reform.

Respectfully submitted,

*/s/ Steven C. Gray*

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For:

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DATE: February 9, 2024