



# **Examining the Role of State Regulators as Telecommunications Oversight is Reduced**

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Report No. 15-07

August 2015

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## Acknowledgments

The author thanks **Robin Ancona**, Michigan Public Service Commission, **Greg Doyle**, Minnesota Department of Commerce, and **Rebecca Beaton**, Washington Utilities and Transportation Commission for their input to this paper. She also thanks her colleagues, **Ken Costello**, **Tom Stanton**, and **Dan Phelan**, and our Executive Director, **Raj Barua**, for their assistance in completing this paper.

## Executive Summary

This paper examines the status of deregulation across the country in 2015 and explores the safeguards put in place by state regulators to ensure that communications users continue to have access to affordable and reliable service, including basic telephone service, regardless of where they live or the technology they select. The paper addresses the question of how state regulators can continue to support the public interest mandate of ensuring that consumers receive the service they need, at prices they can afford, and with the reliability and resiliency necessary to meet public safety goals in an unregulated environment. It focuses on four key areas of commission concern: carrier of last resort obligations, service availability and reliability, the definition of "substitutable services," and the way in which states are addressing the question of withdrawing traditional landline service as technology transition moves forward.<sup>1</sup>

By July, 2015, 36 states had passed legislation deregulating retail telecommunications in all or in part. After two earlier attempts, Kentucky passed a deregulation bill in 2015. The passage of Kentucky House Bill 152 completed the deregulation of all of the states where AT&T was the primary incumbent provider when the Telecommunications Act was passed in 1996.

Deregulation has proceeded more slowly in the states where Verizon is the primary incumbent carrier. In some of these states, the public utility commission has taken the initiative to continue oversight only in areas where a lack of competition or other conditions require it to do so. In 2015, public utility commissions in Pennsylvania and New Jersey reduced regulation on Verizon where services or geographic areas were found to be competitive. These actions have brought the total number of states eliminating or limiting oversight of retail telecommunications to 38.

In the CenturyLink footprint, bills limiting the regulation of incumbent carriers failed in Iowa, Minnesota, and New Mexico.

Finally, although the deregulatory trend has continued for nearly 10 years, no state has yet attempted to reinstitute or increase regulation once legislation limiting oversight has been passed.

Other legislation passed in 2015 further insulated IP-enabled services from regulation, reduced COLR requirements in areas with effective competition, reduced commission oversight of rates for basic local service, and directed state commissions to review the process for withdrawing traditional wireline copper service as the technology transition continues. Idaho, North Dakota, and West Virginia passed legislation prohibiting the oversight of VoIP.

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<sup>1</sup> We use the term technology transition throughout this paper to refer to the move away from traditional time division multiplexed (TDM) voice service and to newer technologies such as VoIP, texting, over the top voice applications, and fixed wireless.

State legislatures in Maine and Texas took an opposite approach to the oversight of IP-enabled services, proposing bills that would redefine VoIP as a telecommunications service. The Minnesota Public Service Commission also addressed the status of VoIP telephony, ruling that cable VoIP is a "telecommunications service", and may be regulated as such. Although neither bill passed, their introduction and the Minnesota decision may provide early evidence that state legislatures may consider bringing VoIP under the same regulatory umbrella as other retail services as the technology transition continues.

To that end, legislation in Maryland and Ohio directed the state commissions to determine how to manage the transition to IP and wireless services, including identifying areas where customers without access to competitive providers must be protected. Michigan will also review the process for transitioning customers from traditional services to IP-based and wireless services. These studies will result in guidelines for the withdrawal of traditional services, including identifying and protecting those areas where consumer choice is so limited that it will continue to require oversight.

As deregulation continues, the role of State public utility commissions in ensuring the universal availability and reliability of basic telecommunications services has become increasingly challenging. In the deregulated states, public utility commission oversight is generally limited to intrastate access, wholesale services, and, to some extent, the availability and reliability of emergency services. Despite these limitations, state commissions have identified ways to use their remaining regulatory tools to protect consumers and ensure a smooth transition to new services. California, Colorado, the District of Columbia, and New York began or continued studies to evaluate the state of competition, service quality, the status of the traditional copper network, and the availability of competitive suppliers. Colorado continued the process of identifying specific areas of the state where competition may substitute for regulation.

As New York staff's 2015 telecommunications status study points out,

The challenge of future regulatory oversight [in the 21st century] will be to accommodate new technologies, support industry investment and [the] expansion of advanced networks, and incent competition where possible, while maintaining consumer protections as network transitions take place.<sup>2</sup>

State public utility commissions may meet this goal by focusing their efforts in four key areas:

1. Participate actively in the technology transition
2. Define and identify products that may substitute for traditional services
3. Evaluate the true extent of competition in the state by location, service type, and transition requirements

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<sup>2</sup> New York Public Service Commission, Case 14-C-0370 - In the Matter of a Study on the State of Telecommunications in New York State, Staff Assessment of Telecommunications Services, June 23, 2015 available at <http://media.syracuse.com/news/other/2015/06/23/TelecomWhitePaper.pdf>

4. Take the initiative to propose legislation, where states have the authority to do so.

The role of the state public utility commission has changed but not necessarily diminished as deregulation has removed traditional oversight. By working together with carriers, consumers, and the FCC, state regulators may continue to ensure the availability of reliable, affordable, and ubiquitous telecommunications services regardless of the technology used to provide them.

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# Examining the Role of State Regulators as Telecommunications Oversight is Reduced

## I. Introduction

By July, 2015, 36 states had passed legislation deregulating retail telecommunications in all or in part. One state, Kentucky, passed legislation in 2015. In addition, two state commissions (Pennsylvania and New Jersey) issued orders in 2015 significantly reducing oversight of the states' largest incumbent telecommunications providers.<sup>3</sup> These actions have brought the total number of states that have reduced or eliminated regulatory oversight to 38, including all of the states where AT&T was the primary incumbent provider when the Telecommunications Act was passed in 1996.

As State legislatures and commissions continue to expand the deregulation of telecommunications, the role of State public utility commissions in ensuring the universal availability and reliability of basic telecommunications services has become increasingly challenging. In the deregulated states, the public utility commission continues to oversee intrastate access, wholesale services, and, to some extent, the availability and reliability of emergency services, but has limited authority over other key retail telecommunications measures such as service quality and customer complaints.<sup>4</sup> In these states, the public service commission establishes standards for, and oversees the quality and reliability of, only the limited set of essential telecommunications services generally referred to as Basic Local Service (BLS), and then, only in those areas without competitive providers.<sup>5</sup>

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<sup>3</sup> These commission orders reduced oversight of Verizon in those areas of the state (and for products) where competition has expanded customer choice to the extent that it is seen as constraining the potential for monopoly behavior.

<sup>4</sup> State regulators continue to oversee wholesale service quality, arbitrate interconnection agreements, and resolve disputes, but even these responsibilities are changing. See, for example, Indiana Utility Regulatory Commission, Cause No. 44558, In The Matter Of CenturyLink's Verified Petition for Forbearance of the Operating Support System ("OSS") Performance Requirements of IURC Cause No. 41324, Proposed Order, March 6, 2015, available at <https://myweb.in.gov/IURC/eds/Guest.aspx?tabid=28>. See also, Nevada House Bill, SB 112, making wholesale performance standards optional, available at <https://legiscan.com/NV/text/SB112/id/1201804/Nevada-2015-SB112-Engrossed.pdf>

<sup>5</sup> Basic service is generally defined as a single line providing 2-way voice communications without additional features and functions. See, for example, Idaho Code, Section 62-603, "Basic local exchange service" means the provision of access lines to residential and small business customers with the associated transmission of two-way interactive switched voice communication within a local exchange calling area.

Although some of the deregulated states continue to require that carriers of last resort (COLRs) provide basic service throughout their territory, these services can now be deployed using any technology, including voice over internet protocol (VoIP) and wireless. Many state regulators have limited jurisdiction over these technologies, despite the number of consumers dropping their traditional wireline services to move to VoIP, fiber, or wireless.<sup>6</sup> In these states, regulators must now rely on competition and negotiation to ensure that citizens receive the services they need and expect. In addition, these regulators must address how the Technology transition will affect telecommunications in their states over the long term, including how they will manage the discontinuance of traditional wireline service.

This paper examines the status of deregulation across the country in 2015 and explores the safeguards put in place by state regulators to ensure that communications users continue to have access to universally available and reliable service, including basic telephone service, regardless of where they live. The paper addresses the question of how state regulators can continue to meet the public interest mandate of ensuring that consumers receive the service they need, at prices they can afford, and with the reliability and resiliency necessary to meet public safety goals in an unregulated environment. It focuses on four key areas of commission concern: carrier of last resort obligations, service availability and reliability, the definition of "substitutable services," and the way in which states are addressing the question of withdrawing traditional landline service as the Technology transition moves forward.

**Part I** of this paper is this paper is this introduction.

**Part II** of this paper reviews 2015 legislation limiting commission oversight of telecommunications services. It also addresses changes to previous legislative mandates, including legislation mandating commission "studies" of competition, the availability of basic local service (BLS), COLR requirements, and the withdrawal of service.

**Part III** reviews the actions that state commissions have taken to reduce or eliminate oversight in areas and for products deemed competitive. This section addresses decisions in New Jersey and Pennsylvania reducing oversight of the largest ILEC based on the availability of substitute services and the increase in competition. It also reviews the Minnesota Public Utility Commission's decision defining fixed cable VoIP as a telecommunications service.

**Part IV** reviews key commission concerns, including carrier of last resort and universal service obligations, service availability and reliability, and the definition of "substitutable services" as the predicate for deregulation. This section also addresses the way in which states

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<sup>6</sup> Wireless services are regulated only by the FCC except in a handful of states that review the terms and conditions of wireless service contracts. Iowa and Minnesota have asserted jurisdiction over VoIP, with the former including VoIP providers in CPCN requirements and the latter requiring fixed VoIP providers to follow the same regulations as traditional wireline companies. Jurisdiction remains less clear in other states and at the federal level. See, Lebens, Nancy, Commerce Dept.: PUC ruling means VoIP providers must follow Minn. Law, MPR News, May 10, 2015, available at <http://www.mprnews.org/story/2015/05/10/voip-vote>.

are examining the process for the phase out of existing services as a result of the transition from traditional copper-based services to IP.

**Part V** provides conclusions and recommendations for state regulators as the deregulation of traditional telecommunications services continues.

As deregulation continues to expand across the country and the shift of consumers away from traditional landline service accelerates, state regulators are focusing more effort on identifying how they can preserve service availability, quality, and reliability in a deregulated environment. The goal of this paper is to provide insight into those concerns and potential answers to the question of the role of the state commission as the Technology transition continues to sweep customers from traditional, regulated service to new options with less oversight.

## **II. 2015 Legislation**

The deregulation juggernaut slowed in 2015 as the large carriers shifted their focus to the Technology transition and to procedural deregulation via changes to alternate form of regulation (AFOR) agreements and other non-legislative processes. Legislation in 2015 eliminated commission oversight in only one state, Kentucky, bringing the number of legislatively deregulated states to 36. With the passage of KY HB 152, all 22 states where AT&T was the primary incumbent provider when the 96 Telecom Act was passed have achieved some degree of regulatory reform or deregulation. In addition to Kentucky, legislation created a path to deregulation in Maryland, while New Jersey and Pennsylvania reduced oversight through commission decisions. Addition of these three states to the list of states that have significantly reduced or eliminated commission oversight of wireline communications brings the total to 38.

Figure 1 shows the states where regulation has been eliminated or significantly reduced.



offering "discretionary and competitive services," while continuing to oversee basic local service.

VoIP deregulation continued to be another key focus of state legislation in 2015. In addition to bills directly addressing the Technology transition, five states addressed the question of limiting oversight of VoIP and other IP-enabled products. Bills in Idaho, North Dakota, and West Virginia removed commission jurisdiction over VoIP and other IP-enabled services.

The Maine and Texas legislatures considered extending oversight to IP-enabled products. Maine bill LD 992 would have brought broadband and wireless providers under commission jurisdiction. Texas bill HB 2630 would have extended commission oversight to all providers "that hold themselves out to provide a telecommunications service." Both bills failed. It is too early to tell whether the definition of VoIP as a "telecommunications service" as provided in these bills will be considered in other states.

Other states updated existing legislation, including revising rules for basic local service (BLS). North Dakota removed restrictions on price increases for basic local service. Wyoming fine-tuned its deregulation rules, adding a new definition for effective competition and making changes to the state's universal service fund.

Finally, the Maine legislature addressed the question of requirements for carriers of last resort (LD 1502).

We discuss this legislation briefly in the following paragraphs. We focus on the key issues facing state commissions: service withdrawal, competition, and requirements for BLS-in Part IV.

#### **A. Kentucky: The Third Time's a Charm**

After two previous attempts, Kentucky passed HB 152 (Kentucky Acts Ch, 002), An Act Relating to Telecommunications, in March, 2015. The bill deregulates retail telecommunications services in areas with more than 15,000 housing units, removes tariffing requirements for all retail services, limits quality of service oversight, and prohibits oversight of VoIP. Most importantly HB 152 modifies COLR and basic service requirements to allow carriers to provide service using any technology, including VoIP and fixed wireless, and to determine when and how they will provide service to locations where they did not previously provide service. The success of HB 152 follows two unsuccessful attempts to deregulate retail services in the state. The bill completes the deregulation of the states where AT&T is the primary incumbent carrier.

The Kentucky legislature initially introduced a bill deregulating retail telecommunications in the state in 2013. Kentucky's Senate Bill 88 limited telecommunications oversight to traditional wireline services, removing oversight for VoIP and IP-enabled services. The bill also eliminated nearly all traditional telecommunications regulation, including most COLR obligations, in areas with greater than 5,000 housing units. KY SB 88 would have amended the Kentucky code to:

eliminate Public Service Commission regulation of terms, conditions, rates, and availability of service, except basic local exchange service; require . . . utilities to continue to offer basic local exchange service to existing customers in some exchanges; [and relieve the basic service obligation] if there is alternative service available; . . . remove commission jurisdiction over . . . consumer complaints and end commission authority to develop standards for eligible telecommunications carriers<sup>11</sup>

SB 88 failed, primarily as a result of concerns about the effect of this legislation on the provision of wireline service in the most rural parts of the state.

The Kentucky legislature again introduced a bill deregulating retail services in 2014. SB 99 modified the language in SB 88 to preserve COLR obligations in areas with limited or no competition, and continued some commission oversight of service quality and consumer complaints. SB 99 maintained carrier of last resort requirements in areas of the state with fewer than 15,000 housing units, an expansion from the 5,000 unit cutoff proposed in the 2013 bill. Despite these changes, SB 99 died in committee.

In its third attempt at deregulation, the legislature introduced SB 152 in 2015. The bill, which made minor changes to previous bills, passed and was signed into law in March 2015. The bill addresses concerns about COLR requirements by limiting deregulation of retail services to areas of the state with greater than 15,000 housing units.<sup>12</sup> In those areas, Commission oversight is relaxed and the requirement to offer wireline BLS is modified. In these areas, the incumbent carriers may offer retail voice service (a category distinct from BLS) using any technology.

In exchanges with fifteen thousand (15,000) or more housing units as of January 1, 2015, based on United States Census data current as of January 1, 2015: (a) the commission shall not impose any requirements or otherwise regulate the terms, conditions, rates, or availability of any retail service . . . In response to a request for service at a location to which the modifying utility or any predecessor in interest has not installed landline facilities necessary to provide basic local exchange service, the modifying utility shall offer voice service either directly or through an affiliate. The modifying utility is not obligated to offer basic local exchange service at the location.<sup>13</sup>

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<sup>11</sup> KY SB 88, available at <http://www.lrc.ky.gov/record/13RS/SB88.htm>.

<sup>12</sup> The bill does not discriminate between occupied and unoccupied units.

<sup>13</sup> Kentucky Acts Ch.002, House Bill 152, An Act Relating to Telecommunications, Section 1(3)(a) and (4)(a), available at <https://legiscan.com/KY/bill/HB152/2015>

Carriers serving areas with greater than 15,000 housing units are obligated to offer BLS only in locations with previous wireline service.<sup>14</sup> In other locations, the carrier may offer voice service using any technology, including wireless and VoIP.

The PUC retains jurisdiction over carriers serving areas with fewer than 15,000 dwelling units. Carriers must continue to provide wireline basic local service in these areas.

SB 152 allows customers to "trial" alternate types of service for 60 days, increased from the 30 day notice proposed in 2014.<sup>15</sup> At the end of that period, customers who no longer want the alternate service must provide written notice of their decision. After such notice, the carrier must provide the customer with wireline, basic local service. The Commission retains the right to enforce such requests. Customers who do not provide notice within the 60 day period may no longer request BLS.

If the customer does not give written notice that the service is no longer wanted within sixty (60) days, the modifying utility shall offer voice service, either directly or through an affiliate, at the requested location. The modifying utility shall not be obligated to offer basic local exchange service at that location. The commission shall not impose any requirements or otherwise regulate the terms, conditions, rates, or availability of the voice service.<sup>16</sup>

HB 152 maintains the responsibility of deregulated carriers to comply with FCC rules regarding service quality for existing facilities. In addition, the Commission "may assist in the resolution of customer complaints."<sup>17</sup>

The bill protects VoIP and other IP-enabled services from commission oversight, but as with wireline service, gives regulators some authority over consumer complaints.

"The commission may **assist** in the resolution consumer service complaints."<sup>18</sup>

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<sup>14</sup> This presents an interesting question for dwelling units that change hands over time. Will a unit where a customer chose to accept VoIP or wireless service go back into the pool of units that can order BLS once the first tenant leaves?

<sup>15</sup> Ohio legislation includes a requirement that the Commission and carriers engage in collaborative discussions to determine areas where only wireline service is available. We discuss this legislation in Part III.

<sup>16</sup> Id. at (4)(c)(5) The bill does not address whether or how the Commission may respond to a customer who fails to act within the 60 day window.

<sup>17</sup> Id Section 2(4) HB 152 amended the statutory language to change "the commission **shall** retain jurisdiction" to "**may** assist." (emphasis added)

## **B. Other 2015 Legislation**

During the 2014-2015 legislative sessions, the deregulated states continued to refine the rules governing telecommunications oversight. North Dakota and West Virginia passed legislation eliminating commission jurisdiction over VoIP, while Texas and Maine introduced legislation that would have revised existing rules to bring these services under commission jurisdiction. North Dakota gave carriers the flexibility to increase basic local service rates. Wyoming revised its rules to clarify the definition of competition and restructure the state USF, and Maine addressed carrier of last resort obligations. Finally, legislation in Nevada made wholesale metrics optional, the first state to seek to revise the rules governing oversight of wholesale services.<sup>19</sup>

We discuss these actions briefly below.

### **1. VoIP**

During 2015, state legislatures continued to eliminate oversight of VoIP and other IP-enabled products. Legislation in North Dakota and West Virginia defined VoIP as an interstate service and exempted it from commission jurisdiction. These bills brought the total number of states with no (or significantly limited) jurisdiction over VoIP to 38.<sup>20</sup>

North Dakota HB 1385 provides that

Notwithstanding any other law, a state entity or political subdivision of the state may not by rule, order, or other means directly or indirectly regulate the entry, rates, terms, or conditions for internet protocol-enabled or voice over internet protocol service.<sup>21</sup>

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<sup>18</sup> Id Section 3(4) Oversight of VoIP was removed in Kentucky in 2004 and previous tariffs voided. Prior to HB 152, however, the commission retained jurisdiction to "investigate and resolve" consumer complaints.

<sup>19</sup> See Nevada House Bill, SB 112, available at <https://legiscan.com/NV/text/SB112/id/1201804/Nevada-2015-SB112-Engrossed.pdf>. In its original version, this bill removed the metrics requirement entirely. The bill was amended to make metrics optional based on the requirements of TA96.

<sup>20</sup> States with limited VoIP oversight can address public safety and universal service issues such as emergency service (for example, Colorado), ETC designation (California), and USF contributions (for example, Wyoming and South Carolina).

<sup>21</sup> North Dakota House Bill 1385 (March 12, 2015), AN ACT to create and enact a new section to chapter 49-21 of the North Dakota Century Code, relating to voice over internet protocol service and internet protocol-enabled service; available at <https://legiscan.com/ND/text/1385/2015>



HB 1385 removes commission oversight of VoIP services but makes them subject to state high cost fund contributions, emergency service assessments, and taxes, bringing the costs of VoIP more in line with traditional wireline services.

West Virginia SB 576 "preempt[s] Public Service Commission jurisdiction over internet protocol-enabled service or voice over internet protocol-enabled service." <sup>22</sup>

The commission shall not have jurisdiction of internet protocol-enabled service or voice over internet protocol-enabled service. <sup>23</sup>

Bills in Idaho and Iowa also sought to remove jurisdiction over VoIP. Both bills failed but will presumably be re-submitted during the next legislative session.

Idaho Bill S1105 would have eliminated all commission oversight of VoIP by specifying that the

Internet and all of its applications are regulated at the federal level and . . . prohibiting the state or political subdivisions from regulating certain Internet services with exceptions. <sup>24</sup>

S1105 also added language to previous regulations to extend the deregulation of IP-enabled services to data and video communications, language not found in other state laws.

Idaho S1105 would not have eliminated all consumer protections. The law would have made VoIP providers subject to emergency service, telecommunications relay service (TRS), Lifeline, and universal service assessments. The services would also remain subject to state consumer protection rules.

Iowa is one of the few states that exert regulatory authority over VoIP. Iowa Bill Senate Study Bill 1157 would have made changes to Iowa law similar to those in North Dakota and West Virginia. Iowa statutes currently require VoIP providers to obtain CPCNs and follow the rules associated with voice service in the state. SSB 1157 would have exempted VoIP and other IP-enabled services from this oversight but would have retained protections against consumer

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<sup>22</sup> West Virginia SB 576, A Bill to Amend the Code of West Virginia relating to internet protocol-enabled service and voice over internet protocol-enabled service, Summary, available at <https://legiscan.com/WV/text/SB576/id/1144814>. The bill also removes oversight of transactions between entities of a telephone company under common ownership.

<sup>23</sup> Id. §24.2.1 (b)(7)(d)

<sup>24</sup> Idaho SB 1105, available at <https://legiscan.com/ID/text/S1105/2015>

fraud, and other acts prohibited under IUB rules. In addition, the bill would have directed VoIP providers to pay emergency services assessments and contribute to the TRS fund.<sup>25</sup>

While the majority of states were focused on ensuring that providers of VoIP and other IP-enabled services remain unencumbered by regulation, two states, Maine and Texas, sought to bring these new services under commission oversight in some limited circumstances. Although neither bill passed, they may signal emerging questions about the treatment of VoIP as the Technology transition continues.

In Maine, LD 879 would have redefined a voice service provider to include any provider that

Offers its subscribers the means to initiate or receive voice communications using the public switched telephone network.<sup>26</sup>

LD 992 would have allowed the PUC to establish service quality standards for wireless and broadband providers, fine providers for violations of service quality rules, and adjudicate customer complaints.

Notwithstanding any other provisions of this Title, the commission may by rule establish service standards for mobile telecommunications service providers and broadband service providers investigate consumer complaints and impose a penalty . . . for a violation of the adopted standards.<sup>27</sup>

In Texas, HB 2650 would have added VoIP providers to the services regulated by the PUC. The bill would give the commission the authority to

regulate rates, operations, and services so that the rates are just, fair, and reasonable and the services are adequate and efficient, the commission has exclusive original jurisdiction over the business and property of a telecommunications utility, **a Voice over Internet Protocol service provider**, and any other entity, service, or provider to the extent that the provider holds itself

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<sup>25</sup> Iowa Senate Study Bill 1157, An Act exempting internet protocol-enabled service and voice over internet protocol service from specified regulatory authority; available at <https://legiscan.com/IA/text/SSB1157/2015>

<sup>26</sup> Maine House Bill 879, An Act to Ensure High-quality Telecommunications Services for Maine Consumers and Businesses, available at <https://legiscan.com/ME/bill/LD879/2015> The bill also addressed the elimination of COLR requirements by 2021.

<sup>27</sup> LD 992, An Act to Regulate Standards of Service for Mobile Telecommunications Services and Broadband Services, available at <https://legiscan.com/ME/text/LD992/2015>

out to the public as a provider of telephone service in this state subject to the limitations imposed by this title. [Emphasis added]<sup>28</sup>

Presumably, once these providers are considered telecommunications companies, they may petition the commission for deregulation in competitive areas.

## 2. Basic Local Service and COLR Requirements

Bills in North Dakota and Maine addressed basic local service and carrier of last resort requirements.

North Dakota HB 1375 removed restrictions on price changes for basic local service and removed the ceiling on the price of these services. Prior to the new law, the price for basic local service for carriers with more than 50,000 lines was capped at \$18.00. HB 1375 allows carriers to adjust prices to cover increases and decreases in government-imposed surcharges and removes the price cap.<sup>29</sup>

Maine LD 1302 provides a path to eliminating COLR requirements by 2021. LD 1302 amends Maine Statute 35-A MRSA §7201, sub-§7, to define provider of last resort service as

a flat-rate service with voice grade access to the public switched telephone network; local usage within the basic service calling areas of incumbent local exchange carriers as of January 1, 2012; dual-tone multi-frequency signaling or its functional equivalent; single-party service or its functional equivalent; access to emergency services; access to operator services; access to interexchange service; access to directory assistance; and toll limitation for qualifying low-income customers.<sup>30</sup>

This section of LD 1302 revises the language governing COLRs enacted in 2011. It removes the requirement that COLRs provide line powered service,<sup>31</sup> opening the door for cable, VoIP, and wireless providers to become COLRs.

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<sup>28</sup> Texas Bill HB 2650, Relating to the authority of the Public Utility Commission of Texas to regulate any entity that holds itself out as a telephone service provider, available at <https://legiscan.com/TX/text/HB2650/2015>.

<sup>29</sup> North Dakota House Bill 1375 (March 15, 2015), AN ACT to amend and reenact section 49-21-01.3 of the North Dakota Century Code, relating to price increases for essential telecommunications services, available at <https://legiscan.com/ND/text/1375/id/1177882>.

<sup>30</sup> Maine Bill LD 1302, An Act To Increase Competition and Ensure a Robust Information and Telecommunications Market, available at <https://legiscan.com/ME/bill/LD1302/2015>.

<sup>31</sup> Copper based services provide power from the central office during power outages. Fiber, cable, and wireless services depend upon commercial power sources or back up batteries at the customer premise.

Most importantly, LD 1302 makes significant changes to COLR requirements. First, COLR service would be required only in areas where 94% of the households in the area are **not** served by multiple providers, including one voice network service provider in addition to the incumbent and one mobile service provider. The PUC would determine the areas where COLR service is required. Second, the bill releases the incumbent service provider from its COLR requirements effective December 31, 2015. After that date, the commission may designate a COLR in areas without local competition. The designated provider may refuse to accept the designation.

As an incentive to providing service, only carriers of last resort will be eligible for universal service funding.

In order to encourage voice network service providers to provide provider of last resort service in potential provider of last resort service areas, the commission may make available and provide [state universal service] funds . . . to providers of provider of last resort service.<sup>32</sup>

The requirement that the ILEC act as the state's COLR sunsets 12/31/2021. In the interim, LD 1302 requires the commission to study COLR service and determine how regulations could be modified to begin the phase out of this service.

### **3. Universal service and wholesale oversight**

Other 2015 legislation continued to refine and extend the definition of competitive services, change the conditions for providing universal service support, and further limit state oversight of competitive services.

#### **a. Universal Service**

Wyoming Enrolled Act 26 revised the rules governing basic local service to require carriers to offer BLS only in areas without "essential services competition." The Act defines competitive areas as those parts of the state where 75% of customers have access to service from two unaffiliated suppliers,

Including, but not limited to, wireless providers, **satellite providers**, [and] cable providers offering voice services, voice over internet protocol or any other providers utilizing telephone numbers to provide voice services in the relevant market. (Emphasis added)<sup>33</sup>

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<sup>32</sup> Op cit §7221-2.C.(2)

<sup>33</sup> Wyoming Enrolled Act 26, available at [legisweb.state.wy.us/2015/Enroll/SF0043.pdf](http://legisweb.state.wy.us/2015/Enroll/SF0043.pdf)  
Enrolled Act 26 broadens the definition of competition to include satellite providers. It also includes voice services offered as part of a bundle.

Enrolled Act 26 also amends the rules for state universal support to provide funds only in areas without effective competition.

Limiting state USF support to non-competitive areas represents a continuing trend across the country.<sup>34</sup> The savings from the reduction in support are often applied to broadband development.

In Vermont, for example, H0117 diverts a portion of universal service funding to broadband development. The bill creates a

Connectivity Fund for the purpose of providing support to the High-Cost Program . . . and [implementing] the Connectivity Initiative established [by this law]. Funds shall be apportioned equally as follows: 45 percent to the High-Cost Program and 55 percent to the Connectivity Initiative.<sup>35</sup>

Incumbent local exchange carriers must petition the Public Service Board to be designated as ETCs in order to receive USF funds.

If an incumbent local exchange carrier does not petition the Board for VETC designation, or is found ineligible by the Board, the share of funds it otherwise would have received under this section shall be used to support the Connectivity Initiative.<sup>36</sup>

#### **b. Wholesale oversight**

In the past, deregulation efforts have been focused on retail services. State commissions retain oversight of intrastate access and wholesale services, including rules for ordering and provisioning the unbundled elements used to create CLEC services. Sections 251 and 252 of the Act govern the interconnection between incumbent carriers and CLECs and define requirements for providing equivalent service.

All incumbent local exchange carriers (ILEC) must (1) negotiate, in accordance with Section 252, in good faith to accomplish the obligations imposed on all LECs . . . and provide (2) upon request, for interconnection with the LEC's equipment for the transmission and routing of telephone exchange service and access, at any technically feasible point within the carrier's network, **at a quality comparable to that provided to itself, a subsidiary, or an affiliate**, and at rates,

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<sup>34</sup> See Lichtenberg, Sherry, Ph.D. State Universal Service Funds 2014, National Regulatory Research Institute, Report 15-05, June 2015, available at <http://nrri.org/download/nrri-15-05-state-usf/>

<sup>35</sup> Vermont Act 41 (H117), An Act Relating to Telecommunications, available at <https://legiscan.com/VT/text/H0117/2015>

<sup>36</sup> Id. p. 22. The impact of the diversion of funding from the SUSF to broadband expansion has not been determined.

terms, and conditions that are just, reasonable, nondiscriminatory, consistent with the agreement, and in accordance with Section 252.<sup>37</sup> [Emphasis added]

State commissions and wholesale customers have generally tracked the quality of wholesale services via a set of wholesale metrics negotiated between the competitive providers (CLECs) and the ILEC. Nevada Senate Bill 112, Chapter 233, makes these metrics optional.

Existing law requires the [PUC] adopt regulations which establish: (1) standards of performance and reporting requirements regarding the provision of interconnection, unbundled network elements and resold services to encourage competition and discourage discriminatory conduct in the provision of local telecommunication services; and (2) penalties and expedited procedures for imposing those penalties upon a telecommunication provider for actions that are inconsistent with the standards of performance . . . [T]his bill amends existing law to make the adoption of those regulations discretionary rather than mandatory.<sup>38</sup>

The Commission has not yet moved to rescind the current metrics requirements. Should they do so, it is likely that the ILECs will petition other states to implement language providing equivalent flexibility in tracking performance metrics.

### **c. Broadband**

Broadband availability continued to be a key issue facing state regulators during 2014-2015. Bills to extend broadband availability were proposed in Connecticut (SB572), Nebraska (LR319), New York (A02118), North Carolina (HB762), Minnesota (HF1437) and Vermont (H0117).

In Connecticut, SB 572, proposed the creation of an "Office of Broadband Advocacy" to

Facilitate the availability of broadband access to every state citizen and to increase access to and the adoption of ultra-high-speed gigabit capable broadband networks. The Office . . . may work in collaboration with public and nonprofit entities and state agencies, and may provide advisory assistance to municipalities,

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<sup>37</sup> Florida Public Service Commission, FPSC Staff Summary, Section 251 - Telecommunications Act of 1996, Section 251, Interconnection, available at <http://www.psc.state.fl.us/publications/telecomm/trilogy/intercon/sum-251.aspx>

<sup>38</sup> See Nevada House Bill, SB 112, Chapter 233, Legislative summary available at <https://legiscan.com/NV/text/SB112/id/1201804/Nevada-2015-SB112-Engrossed.pdf>. The initial draft of this bill removed the metrics requirement completely. The bill was amended to reduce regulation while still meeting the requirements of the Act.

local authorities and private corporations for the purpose of maximizing opportunities for the expansion of broadband access in the state . . .<sup>39</sup>

A similar bill in Vermont, H117, created the Vermont Department of Telecommunications Access, which will use a portion of state universal service funds to encourage the development of broadband networks in unserved and underserved areas of the state.<sup>40</sup>

In New York, A02118, the Omnibus Telecommunications Reform Act of 2015, would create a broadband authority and fund

To advance the availability of, and promote the physical and social access to, broadband and other advanced communications services to all consumers, including those in low income, rural, insular, and high cost areas at rates that are reasonably comparable to those charged in high-density urban areas and/or in the area of the state where such services are most competitively priced; and to increase access to, and the ubiquity of, advanced telecommunications services available to the public in an equitable and nondiscriminatory manner.<sup>41</sup>

Nebraska Bill LR 319 directs the Public Utility Commission to study "policy options and the role of legislation in promoting the availability and adoption of affordable broadband Internet Services in all regions of the state."<sup>42</sup>

In North Carolina, HB 349 would have directed the

Office of the State Chief Information Officer to develop a broadband connectivity plan to increase access to broadband throughout the State and expand the service area that broadband service providers are permitted to provide telephone service to their broadband customers.<sup>43</sup>

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<sup>39</sup> Connecticut Senate Bill 572, An Act Establishing an Office of Broadband Advocacy, available at <https://legiscan.com/CT/text/SB00572/2015>.

<sup>40</sup> Vermont Act 41 (H117), An Act Relating to Telecommunications, available at <https://legiscan.com/VT/text/H0117/2015>

<sup>41</sup> See New York Assembly Bill A02118, Omnibus Telecommunications Reform Act of 2015, available at <https://legiscan.com/NY/text/A02118/2015>. A02118 is one of six telecommunications bills pending in the New York legislature as of August 2015.

<sup>42</sup> See Nebraska Bill LR 319, Interim study to examine certain issues under the jurisdiction of the Public Service Commission, available at <https://legiscan.com/NE/bill/LR319/2015>.

<sup>43</sup> North Carolina, House Bill 349, available at <http://www.ncga.state.nc.us/gascripts/bills/summaries/billssummaries.pl?Session=2015&BillID=H349>

In Minnesota HF 1437 provided a onetime appropriation of \$10,588,000 in fiscal year 2016 for deposit in the border-to-border broadband fund account created under Minnesota Statutes, section 116J.396. This is a onetime appropriation and is available until June 30, 2017. The appropriation in HF 1437 builds on the approximately \$20,000,000 in broadband grants awarded in 2014.

Finally, after trying for three years to enact a bill to increase broadband penetration, Iowa passed HB 641. The bill will increase broadband penetration in rural areas of the state by providing property tax incentives, a broadband grant program, and a broadband fund.<sup>44</sup> The bill specifically targets areas of the state, including farming districts,

Within which no communications service provider offers or facilitates broadband service at or above twenty-five megabits per second of download speed and three megabits per second of upload speed.<sup>45</sup>

The bill also specifically recommends public-private partnerships as a way to increase broadband availability. This recommendation is similar to that proposed in Connecticut and North Carolina, and, when combined with the requirement that the targeted areas be unserved by high speed providers, may have reduced pushback from commercial providers.

#### **4. Technology transition**

During the 2014-2015 legislative sessions, the Technology transition became a key issue for both state legislatures and state public utility commissions, particularly in terms of the discontinuance of traditional TDM or copper-based services.

Bills in Ohio and Maryland addressed the state commission's role in determining whether or how to phase out TDM basic local service as the transition away from copper and to IP-enabled service continues. Ohio Bill HB 64 allows ILECs to abandon basic local service in areas where competition provides customers with other service options. The bill requires the commission to determine how to evaluate abandonment requests and to establish a collaborative process to create rules for the process. Maryland House Bill 472 calls for the state commission to engage in a similar study. We discuss these bills in detail in Section IV of this paper.

### **III. State Commissions Address Competition and Retail Oversight**

As state legislatures continue to deregulate traditional wireline telecommunications services, state commissions are faced with the question of how to ensure that service remains reliable, affordable, and available to all citizens, after traditional oversight tools have been withdrawn. To ensure a measured response to reducing regulation, some state commissions have

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<sup>44</sup> HB 641, a bill for an act relating to and providing for the coordination and facilitation of broadband access in targeted areas of the state, available at <https://legiscan.com/IA/bill/HF641/2015>

<sup>45</sup> Id.



begun to proactively examine existing regulations and to reduce or eliminate oversight in specific areas and for specific products. By addressing the question of deregulation from an "expert agency" perspective, these states have been able to structure the reduction of oversight in such a way as to preserve the commissions' ability to protect service availability and quality, particularly in those areas where competition is limited. Proactive examination of the competitive landscape and deregulation where appropriate, will ensure that the transition to new services and the withdrawal of existing services is successful.

This section reviews two such proactive examinations in New Jersey and Pennsylvania to reduce oversight of the states' largest ILEC based on the availability of substitute services and the increase in competition. The resulting decisions in these states turn on the definition and evaluation of competitive alternatives to the ILEC's basic local exchange service. Neither state completely withdraws commission oversight; rather, both craft new rules directed toward continuing to ensure the availability of basic wireline service and to protect consumers who require these services, while reducing regulation in areas with competition. Although both decisions have generated controversy, they may provide a model for ways in which regulators and the (formerly) regulated can work together for the benefit of consumers.<sup>46</sup>

This section also reviews the Minnesota Public Utility Commission's finding that fixed VoIP is a telecommunications service and thus subject to the same SUSF contribution and oversight requirements as traditional providers. Although a single commission decision does not create a movement toward bringing non-traditional services into alignment with traditional services, it suggests that where state commissions are not bound by specific statutes forbidding oversight of IP services, equal treatment may become the rule rather than the exception.

#### **A. New Jersey**

The New Jersey Board of Public Utilities opened Docket TX11090570 in 2011 to determine which Verizon retail services should be classified as competitive and, therefore, be subject to reduced regulation, under the terms of a 1992 statute.<sup>47</sup> New Jersey statutes define a competitive utility service as one "that is characterized by the existence of a number of purveyors, the availability of like or substitute service, ease of market entry, and such other standards as may be adopted by the board."<sup>48</sup> The BPU "shall not regulate, fix, or prescribe the

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<sup>46</sup> The New Jersey and Pennsylvania decisions increase the number of states where retail telecommunications services have been completely or largely deregulated to 38.

<sup>47</sup> New Jersey Board of Public Utilities, In The Matter of the Board's Investigation Regarding the Reclassification of Incumbent Local Exchange Carrier (ILEC) Services as Competitive, Phase II Proceeding, Stipulation on Reclassification of Services as Competitive, BPU Docket No. TX11090570, May 6, 2015, available at <http://www.njslom.org/legislation/bpustipulation.pdf>

<sup>48</sup> See NJ Stat § 48:2-21.25 (2014), available at <http://law.justia.com/codes/new-jersey/2014/title-48/section-48-2-21.25/>

rates, tolls, charges, rate structures, terms and conditions of service, rate base, rate of return, and cost of service, of competitive services."<sup>49</sup>

In Phase I of the Docket (2011), the commission determined that all but four Verizon retail mass market (residential and small business) services were competitive. The commission judged that these four services—residential basic exchange service, single line business basic exchange service, basic service installation charges, and directory assistance charges—did not face the level of competition necessary to qualify for reduced regulation and thus should remain regulated pending additional study.

The BPU re-examined these four services from 2011 to 2015 in Phase II of the docket. The BPU and Verizon ultimately agreed to a settlement that defined the four services as competitive and reduced the level of oversight necessary to ensure that mass market consumers continue to receive reliable services at reasonable prices. The settlement caps the price of basic local service for a five year transition period in order to protect consumers from rapid rate increases. It retains Lifeline pricing at current levels, and continues special programs for disabled or ill customers, including providing free directory assistance calls for consumers with visual or physical impairments, discounts for hearing impaired customers, and repair priority for customers with serious illnesses or physical disabilities.<sup>50</sup>

The settlement retains service quality rules for three years, a requirement often missing from deregulatory legislation.

The Signatory Parties agree that the service quality standards set forth by prior decisions of the Board will continue to apply to residential basic local exchange service and single line business basic exchange service for three years. At the close of year three, the Board will then determine whether these service quality standards should apply for the remaining two years.<sup>51</sup>

In addition to maintaining oversight of service quality, the Verizon Settlement allows the BPU to investigate changes in the competitive landscape that might require the re-regulation of some or all of the four services deregulated as part of the agreement.

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<sup>49</sup> See NJ Rev Stat § 48:2-21.19 (2014), available at <http://law.justia.com/codes/new-jersey/2014/title-48/section-48-2-21.19/>. The BPU retains the authority to re-regulate competitive services if levels of competition change.

<sup>50</sup> Verizon Settlement at 17. The New Jersey Rate Counsel has filed an appeal with the State court to overturn the settlement, charging the BPU with violating its rules by negotiating in private rather than conducting a full proceeding. See NEW JERSEY -- Rate Counsel calls on BPU to investigate Verizon fiber transition, TR's State Newswire, June 29, 2015

<sup>51</sup> Id. at 20. In its petition, the New Jersey Rate Counsel points out that quality of service oversight for services previously determined to be competitive is phased out immediately. See New Jersey Rate Counsel, Objections to the Stipulation Entered Into Between the Board of Public Utilities and Verizon New Jersey Inc.; Phase II Docket No. TX1090570

Despite these assurances, the settlement has raised concerns from both consumer organizations and the New Jersey Rate Counsel regarding the risks to users of basic service, primarily due to a perceived lack of consumer involvement in the decision. According to a May 14, 2015 article in New Jersey Spotlight,

Stefanie Brand, director of the New Jersey Rate Counsel . . . believes the deal will cause "significant rate increases" for basic landline subscribers. She is also concerned the agreement will remove the BPU's oversight authority of service quality standards. "Maintaining the copper wire is a concern," Brand said. "We are hopeful, (but) we certainly hope that people don't start losing their ability to access their landlines ... without reporting requirements and BPU oversight."<sup>52</sup>

Verizon has disputed this characterization of the Board's decision, stating that

The deregulation of these services would not affect consumers because there are competitive alternatives in the marketplace that will keep prices down. Nothing in this proceeding would alter any of the existing board regulations governing service quality, duty to furnish service, or customer-service standards."<sup>53</sup>

On June 29, 2015, the New Jersey Rate Counsel appealed the BPU's decision to the New Jersey Supreme Court – Appellate Division. Whatever the final outcome, the New Jersey settlement may provide states facing the same challenge with a guide for the ways in which state commissions might work with carriers to forge agreements that both deregulate competitive services and maintain safeguards for consumers.

## **B. Pennsylvania**

Pennsylvania has also used a commission proceeding to evaluate how best to reduce regulation of basic local service. In 2015, the Pennsylvania Public Utility Commission (PAPUC) addressed the questions of competition and the level of regulation necessary for competitive services in response to Verizon's petition to reduce the regulation of basic local service in specific wire centers where competition may be substantial enough to substitute for regulation. The PAPUC approved Verizon's request in part by reducing regulation in areas with effective competition. In making this decision, the commission examined competition across the state and proposed methods for ensuring that basic local services would remain available, reliable, and affordable, even where direct oversight has been withdrawn.<sup>54</sup>

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<sup>52</sup> Johnson, Tom, State Quietly Cuts Deal to Let Verizon Deregulate Basic Telephone Service, NJ Spotlight, May 14, 2015, available at <http://www.njspointlight.com/stories/15/05/13/state-quietly-cuts-deal-to-let-verizon-deregulate-basic-phone-service/>

<sup>53</sup> Op cit

<sup>54</sup> See Pennsylvania Public Utility Commission, Opinion and Order, Joint Petition of Verizon Pennsylvania LLC And Verizon North LLC for Competitive Classification of all Retail Services in

As the Commission carefully points out in its Order, the decision to declare BLS competitive responds to market conditions but does not relieve Verizon of its COLR responsibilities or grant the company permission to discontinue service in the deregulated wire centers. It simply provides Verizon with the flexibility to price BLS at market rates and eliminate some quality of service requirements in favor of allowing customers to "vote with their feet" and switch to another provider if service deteriorates.

Under its Petition, Verizon does not seek to abandon any of its service offerings, and we grant no such permission. Likewise, Verizon has not presented any plans to cease operation of its legacy copper network. If Verizon sought to do so, it would be required to comply with applicable requirements of federal law. These requirements include providing public notice of any plans to abandon and allowing the opportunity for any interested party to comment on any proposed copper network abandonment.<sup>55</sup>

We discuss the process and standards used by the PAPUC to identify competitive services in the following paragraphs. The process provides a tool that other commissions may use to make similar decisions regarding the availability of competitive services and the need to retain BLS.

In 2004, Pennsylvania Act 183 (Chapter 30, Alternative Form of Regulation of Telecommunications Services) reduced regulation of competitive telecommunications services in the state. The Act deferred the decision on which services are competitive to the state commission.

Chapter 30 provides that the Commonwealth's telecommunications policy should

(1) Strike a balance between mandated deployment and market-driven deployment of broadband facilities and advanced services throughout this Commonwealth . . . (2) Maintain universal telecommunications 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>56</sup>

In implementing this policy, the legislature also determined that competition may be strengthened by equalizing regulations among competitive carriers, finding

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Certain Geographic Areas and for a Waiver of Regulations for Competitive Services, Cases P-2014-2446303 and P-2014-24463604, February 26, 2015.

<sup>55</sup> Order, p.6 Citations omitted. Verizon must petition the FCC for permission to discontinue service under Section 214 of the Act.

<sup>56</sup> Pennsylvania Statutes Chapter 30 (Act 183), Alternative Form of Regulation of Telecommunications Services, 2004, §3011, available at <http://www.legis.state.pa.us/WU01/LI/LI/CT/HTM/66/00.030..HTM>

That the regulatory obligations imposed upon the incumbent local exchange telecommunications companies should be reduced to levels more consistent with those imposed upon competing alternative service providers.<sup>57</sup>

Section 3016(a) of the Public Utility Code directs carriers to petition the Commission to determine whether and where specific services are competitive and may qualify for reduced regulation.

A local exchange telecommunications company may petition the commission for a determination of whether a protected or retail noncompetitive service or other business activity in its service territory or a particular geographic area, exchange or group of exchanges or density cell within its service territory is competitive **based on the demonstrated availability of like or substitute services or other business activities provided or offered by alternative service providers.**<sup>58</sup>  
(Emphasis added)

In its 2014 filing, Verizon petitioned the commission to declare its basic local exchange service (BLS), including the ordering, installation, repair, and disconnection of access lines, competitive in 194 of its 504 wire centers in Pennsylvania (encompassing primarily the five largest urban and suburban areas served by the Verizon ILEC). Verizon's petition cited the presence of cable, VoIP, and wireless competitors as sufficient for determining that BLS is competitive, based in large part on the number of customers switching to alternative suppliers.<sup>59</sup> It pointed out that ILECs in Pennsylvania have steadily lost access lines over time and, according to recent FCC statistics, serve fewer than half the lines they did when the list of competitive services was developed.<sup>60</sup>

Much of the discussion in this proceeding turned on the definition of competition and substitutable services, a key question commissions are facing as more states deregulate telecommunications and more consumers move away from traditional landline service to VoIP, cable voice service, and wireless products. The Pennsylvania PUCs evaluation of this issue is particularly instructive as the Technology transition moves forward.

In its petition, Verizon argued (in part) that VoIP, cable voice, and other services may substitute for each other based on consumer perceptions; that is, if consumers "think" VoIP is a substitute for BLS, and treat it as such in their own purchasing decisions, it is a substitute. The Commission agreed.

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<sup>57</sup> Id.

<sup>58</sup> Id. at §3016(a)(1)

<sup>59</sup> BLS generally includes only local dial tone and intra-exchange calling. Prior to the 2014 petition, the Commission had classified all other Verizon services as competitive, as well as services offered as part of bundles.

<sup>60</sup> Order at III.1.a.i.1

The credible evidence is that customer demand in the Verizon's service territories for communication services, including basic local exchange service, is being met by other carriers using other technologies. . .<sup>61</sup>

Based on the foregoing, [the Commission is] of the opinion that the credible evidence proves that in the eyes of consumers, the voice services offered by competing providers, including cable telephony and wireless providers in the wire centers subject to the Petition, fulfill the same functions as Verizon's basic local exchange service. We conclude that these competing services are similar enough that consumers are willing and able to switch to them. Therefore, we find these services to be "like" or "substitute" services to basic local exchange service . . .<sup>62</sup>

The Commission defined competitive areas as those in which 97% of households have access to two wireless service providers, a cable company, and the ILEC.

Based on the availability of substitute services, the Commission granted Verizon's petition to reduce regulation of BLS in wire centers where the market forces exerted by competing carriers may serve to constrain pricing and ensure service quality. As the Order points out,

Regulation does not exist for regulation's sake. Rather, regulation seeks to produce a competitive result where there is no competition to do the same. Where sufficient competition exists, regulation is not needed and should be reduced or perhaps even discontinued.<sup>63</sup>

In keeping with this view, the Commission eliminated only those regulations where the outcomes could actually be achieved by the consumer choices possible through competition. It maintained jurisdiction over the service quality standards necessary to ensure "the safety, adequacy, reliability and privacy of telecommunications services and the ordering, installation, suspension, termination, and restoration of any telecommunications service."<sup>64</sup>

The Commission also retained Verizon's COLR requirement throughout its ILEC service territory, including in the competitive wire centers and created reporting requirements to ensure that service quality, availability, and affordability do not suffer.<sup>65</sup> The Order directs Verizon to

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<sup>61</sup> Order p. 34

<sup>62</sup> Order, p. 36

<sup>63</sup> Order, p. 75

<sup>64</sup> Order, p. 125

<sup>65</sup> This decision differs from that of states like Colorado, which eliminated the COLR requirement in areas with "effective competition."

Collect and report annually, for a period of two years, data under two categories: (1) Affordability of Basic Service; and (2) Quality of Service as further directed by the Commission.<sup>66</sup>

Although it remains to be seen how this decision will affect competition and service availability in the competitive wire centers, it provides an excellent framework for evaluating and addressing the need for regulation where competition may provide an adequate substitute for oversight.<sup>67</sup>

### C. Minnesota

In May 2015, the Minnesota PUC ruled 5-0 that Charter's fixed interconnected VoIP service is a telecommunications service under Minnesota law and thus subject to the same rules and requirements as those imposed on other telecommunications carriers. The decision resulted from a complaint initially brought by the Department of Commerce (DOC) in September 2014. We discuss that complaint and the Commission's decision here as an example of the way in which state commissions continue to evaluate and respond to key customer issues despite the trend toward deregulation.<sup>68</sup>

In March 2013, Charter Fiberlink, a certificated competitive local exchange carrier (CLEC) in Minnesota transferred its customers to its un-certificated VoIP affiliate, Charter Advanced Services, without first seeking approval from the PUC for the transfer, as required under the public utility statutes. At the same time, Charter filed a Section 214 request with the FCC to discontinue service in Minnesota and four other states (California, Tennessee, Texas, and Wisconsin), stating that the certificated Charter service no longer had customers in these states and thus was seeking permission to discontinue offering service.

After a review of both Charter's actions in Minnesota and the FCC filing, the Minnesota Department of Commerce (DOC) filed a complaint against Charter in September 2014 alleging that the customer transfer violated Minnesota law because it was made with neither notice nor commission approval and appeared to be an attempt to avoid its duties as a certificated carrier, including the universal service requirements to collect and remit fees to support the state

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<sup>66</sup> Order, p. 126

<sup>67</sup> Two commissioners, James Cawley and Gladys Brown, dissented from the Commission's Order, based on their concerns that the reduction in oversight would increase prices and reduce service quality in the affected wire centers. See Dissenting Statement of Commissioner James H. Cawley, available at [http://www.puc.state.pa.us/about\\_puc/search\\_results.aspx](http://www.puc.state.pa.us/about_puc/search_results.aspx), and Dissenting Statement of Commissioner Gladys M. Brown, available at [http://www.puc.state.pa.us/about\\_puc/search\\_results.aspx](http://www.puc.state.pa.us/about_puc/search_results.aspx)

<sup>68</sup> Minnesota has not deregulated telecommunications, although bills proposing removing regulation have been submitted in each legislative session. The question of the commission's authority over VoIP providers remained unsettled until this proceeding.

telecommunications relay fund and low income assistance program.<sup>69</sup> The DOC complaint alleged that Charter Advanced Services was providing telecommunications services to its customers and thus should be required to follow the rules established by the Commission for all telecommunications providers.

On or around March 1, 2013, the Charter Fiberlink Companies assigned the rights to serve their residential customers, including customers participating in the TAP program, to the Charter Advanced Services Companies. The customers of the Charter Fiberlink Companies were transferred to the Charter Advanced Services Companies without prior Commission notice or approval. The Charter Advanced Services Companies do not have, and have not sought, a certificate of authority from the Commission to provide telecommunications service in Minnesota.<sup>70</sup>

Charter responded that the VoIP service provided by Charter Advanced Services is an "information service" rather than a telecommunications service and thus not subject to Commission rules.

The federal Communications Act preempts state regulatory agencies from imposing their own state-specific public utility regulations on "information services." And extensive legal authority supports the proposition that fixed Interconnected VoIP services such as Charter's competitive retail voice offering are information services to which such preemption applies. Indeed, state regulatory agencies around the country—whether by court order or legislative

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<sup>69</sup> The DOC complaint stated that it is Charter's position "that the Commission has no jurisdiction over the fixed interconnected VoIP services provided by the Charter Advanced Services companies," resolution of consumer complaints; protections concerning price discrimination; protections concerning terminating service to customers; requirements that allow other carriers to physically connect to its network; consumer protections laws on disclosure, anti-slamming and cramming; notices for price increases and significant changes in the terms and conditions of service; protections with respect to services provided to other carriers, including the disconnection of services that impact end use customers; protections that enable a customer to terminate service and switch to another carrier, including termination of liability assessments that unreasonably lock the customer in to a service they no longer want; protections intended to protect low income consumers, including making the telephone assistance program (TAP) available; requirements for the collection and remittance of fees pertaining to the TAP and Telecommunications Access Minnesota fees; approval for the change in either the ultimate control of the company or the operating company serving the customer.

<sup>70</sup> Minnesota Department of Commerce, Public Formal Complaint of the Minnesota Department Of Commerce, Docket No. P6716, P5615/C-14-383, available at <https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=eDocketsResult&userType=public#{05E69D72-BEC2-48BD-8E88-FFC67B75FC34}>



intervention—are routinely precluded from imposing precisely the sorts of state-specific regulations that the Department seeks to apply to Charter here.<sup>71</sup>

The Commission evaluated the parties' positions and determined that the fixed interconnected VoIP service provided by Charter is a telecommunications service and thus subject to Commission jurisdiction.<sup>72</sup>

As Commissioner Dan Lipschultz put it during the Commission hearing,

It's clear that state law gives us authority over the telephone service . . . . The only question is whether federal law preempts our state law authority and I do not think that it does. . . The service that Charter offers has the core characteristics of a telecommunications service. It allows customers to use a traditional phone, dial a traditional phone number, and communicate with another person using a traditional phone. (Internal quotation marks eliminated.)<sup>73</sup>

While this decision does not signal a trend to the return of oversight, it shows the ways in which expert state agencies are continuing to ensure that customers receive adequate communications services and that all carriers adhere to state regulatory requirements, as permitted under state law.<sup>74</sup>

Charter has appealed the Commission decision.

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<sup>71</sup> Charter Reply Comments and Motion to Bifurcate, January 15, 2015, available at <https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=eDocketsResult&userType=public#{05E69D72-BEC2-48BD-8E88-FFC67B75FC34}>

<sup>72</sup> Minnesota Public Utilities Commission, In the Matter of the Complaint of the Minnesota Department of Commerce Against the Charter Affiliates Regarding Transfer of Customers, DOCKET NO. P-6716,5615/C-14-383, Order Finding Jurisdiction and Requiring Compliance Filing, July 28, 2015, available at <https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=viewDocument&documentId={86D70470-5C85-4307-A00A-43106FC2483F}&documentTitle=20157-112779-01&userType=public>

<sup>73</sup> DeLeon, Carrie, Minnesota PUC asserts jurisdiction over fixed interconnected VoIP service, TR's State Newswire, May 10, 2015

<sup>74</sup> The FCC's Net Neutrality decision bringing broadband internet access service (BIAS) under Title II may encourage more states and state commissions to move in this direction. As noted previously, both Texas and Maine proposed bills in 2015 to include VoIP services in the state commission's regulatory portfolio.

## **IV. Key telecommunications decisions remain with the states**

Although deregulation has reduced direct state oversight of telecommunications in some areas, it has not eliminated the need for state commissions to ensure that communications users retain access to reliable and affordable service, regardless of the technology used to deliver that service. To that end, as the telecommunications network transitions from traditional time division multiplexed (TDM) services to IP-enabled products, and from traditional copper networks to fiber and wireless, state commissions are beginning to address significant questions regarding the next steps in the evolution of the network, including determining when (or if) traditional services may be discontinued, evaluating the requirement for basic service (including carrier of last resort responsibilities), and addressing changes in quality of service requirements based on the migration of consumers to new technologies.

The Commission decisions in New Jersey, Pennsylvania, and Minnesota described in Part III of this paper, as well as proposals for studies of service availability, competition, and quality underway or proposed in Maine, Maryland, Ohio, and New York show that despite a reduction in their formal roles as telecommunications regulators, State commissions continue to hold a key place in determining the way in which telecommunications issues will be addressed going forward.

This section reviews three key issues facing state commissions

1. Defining and adopting a process to determine when (or if) traditional TDM and copper services may be phased out;
2. Redefining carrier of last resort requirements, including assessing the need for wireline basic local service in light of competition and the development of new products;
3. Determining how to ensure universal service availability and acceptable quality in a deregulated environment.

The need to address these questions will continue even as deregulation continues to reduce direct oversight of telecommunications.

### **A. Discontinuing TDM and copper service**

There has been much discussion concerning the question of when and how traditional TDM and copper service may be discontinued as the Technology transition continues. Embedded in these discussions have been questions about how to define service withdrawal (e.g., must transition imply an end to a specific service or could it simply mean a change to the type of service offered?), the requirement that ILECs continue to serve as carriers of last resort in

their service territory, and whether (or if) carriers will simply stop serving areas of the country that they deem too expensive or otherwise not part of their business plans.<sup>75</sup>

Parties as diverse as the electric and gas utilities, CLECs, and ILECs have weighed in on the question of service discontinuance, raising concerns about notification (to both consumers and businesses), the continued availability of the wholesale inputs required for competitive service, and the definition and role of competition and "substitutable services" in determining where traditional services are no longer required. Consumer groups and telecommunications unions have also weighed in on the question, suggesting that Verizon, AT&T, (and potentially other carriers) has been intentionally allowing the copper infrastructure used to deliver traditional services to deteriorate in order to force customers to move to deregulated fiber-based or fixed wireless services.<sup>76</sup>

We discuss the current state of the requirements for discontinuing service and state commission activities in this area in the following paragraphs.

### **1. FCC Rules for Service Withdrawal**

The rules for the withdrawal of interstate service appear in Section 214 of the Communications Act.

No carrier shall discontinue, reduce, or impair service to a community, or part of a community, unless and until there shall first have been obtained from the Commission [i.e., the FCC] a certificate [agreeing] that neither the present nor [the] future public convenience and necessity will be adversely affected thereby.<sup>77</sup>

In addition to providing notification of service discontinuance to competitors, the Act requires Eligible Telecommunications Carriers (ETCs) to seek approval from the State commission before relinquishing this status.

A State commission . . . shall permit an eligible telecommunications carrier to relinquish its designation as such a carrier in any area served by more than one eligible telecommunications carrier. An eligible telecommunications carrier that seeks to relinquish its eligible telecommunications carrier designation . . . shall give advance notice to the State commission . . . of such relinquishment. Prior to permitting a telecommunications carrier designated as an

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<sup>75</sup> This fear is most often seen in the concern that the ILECs are engaging in "de facto" service discontinuance by failing to repair/manage current copper networks. To date, other than the failure to repair service on Fire Island and the New Jersey Barrier Islands, there appear to have been no documented instances of such de facto discontinuance.

<sup>76</sup> See, Buckley, Sean, CWA accuses Verizon of abandoning broken wireline facilities in the Northeast, Fierce Telecom, June 9, 2015, available at <http://www.fiercetelecom.com/story/cwa-accuses-verizon-abandoning-broken-wireline-facilities-northeast/2015-06-09>

<sup>77</sup> 47 USC §214(a)(c)

eligible telecommunications carrier to cease providing universal service in an area served by more than one eligible telecommunications carrier, the State commission . . . shall require the remaining eligible telecommunications carrier or carriers to ensure that all customers served by the relinquishing carrier will continue to be served, and shall require sufficient notice to permit the purchase or construction of adequate facilities by any remaining eligible telecommunications carrier.<sup>78</sup> In practice, requests to discontinue service have focused primarily on business products or the transfer of service from one carrier to another. There have been few instances where carriers have ceased to provide residential service or discontinued wireline basic local service, although requests to discontinue service are expected to increase as the Technology transition continues.

Although AT&T has been at the forefront of raising issues and proposing experiments related to the transition from TDM to IP-based services, Verizon has been the most active ILEC in addressing the withdrawal of copper-based service. For example, Verizon requested permission from the FCC to withdraw landline voice service from parts of three of the New Jersey barrier islands where its copper network was destroyed by Super Storm Sandy, leading opponents to express concerns that the company is intentionally allowing its existing infrastructure to become unusable.<sup>79</sup> The AT&T Technology Transition plan also contemplates discontinuing TDM wireline services to some customers at the end of the trial and replacing this service with fiber, cellular, or fixed wireless service.

The FCC issued an NPRM in 2014 to develop a process for discontinuing service. This rulemaking focused on identifying the processes that will be used to notify customers and competitors of network changes, methods for ensuring the continued availability of competitive services, and the basic requirements for comparable service, including back-up power and compatibility with existing services, such as alarms, health monitoring devices, and other products that currently rely on the TDM network for connectivity.<sup>80</sup>

The FCC's August 2015 Order in this docket modifies the rules for discontinuing service by expanding the definition of copper loops to include not just the loop and sub-loop (i.e., the connection between the central office switch and the terminal), but also the "feeder" portion of the loop that actually serves the customer premise. The Order also extends the required notification period from 30 days to 90 and includes end user customers as well as wholesale

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<sup>78</sup> 47 USC §214(e)(4)

<sup>79</sup> See, for example, DeLeon, Carrie, NEW JERSEY -- Rate Counsel calls on BPU to investigate Verizon fiber transition, TR's State Newswire, June 29, 2015 and Buckley, Sean, CWA accuses Verizon of abandoning broken wireline facilities in the Northeast, Fierce Telecom, June 9, 2015, available at <http://www.fiercetelecom.com/story/cwa-accuses-verizon-abandoning-broken-wireline-facilities-northeast/2015-06-09>

<sup>80</sup> In the Matter of Ensuring Customer Premises Equipment Backup Power for Continuity of Communications, Technology Transitions et al., PS Docket No. 14-174, GN Docket No. 13-5.

providers. Most importantly, the Order includes both the physical disabling and removal of the loop and the rendering of the loop unusable due to neglect.<sup>81</sup>

The NPRM and subsequent order notes that the states continue to play a vital role in protecting consumers as the IP transition and the retirement of copper facilities continues.

In particular, States serve a vital function in safeguarding the values of the Network Compact. As we have recognized on multiple occasions, both “State and federal enforcement tools are needed to protect consumers from fraudulent, deceptive, abusive, and unfair practices. . . .” We believe that these authorities also need to remain informed about copper retirements so that they can fulfill their respective missions with respect to the ongoing technology transitions. We propose requiring that incumbent LECs provide notice of planned copper retirements to the public utility commission and to the Governor of the State(s) in which the network change is proposed, and also to the Secretary of Defense. We expect that ensuring that State authorities receive notice of copper retirements will assist them in fulfilling their vital consumer protection role.<sup>82</sup>

## **2. State review of service discontinuance**

Legislation eliminating or limiting state commission oversight of retail telecommunications services has not completely removed the state commission's role in approving applications to withdraw service. The state role in these decisions will be critical as the Technology transition moves forward. To that end, states are beginning to examine the questions surrounding the elimination of TDM-based and other services provided over copper loops, including the process for notifying customers, states, and others of these changes.

In 2015, legislation in Ohio and Maryland confirmed the state commissions' role in determining how and whether service may be discontinued. Michigan enacted similar rules linking the withdrawal of wireline service to decisions in the FCC Technology Transitions docket in 2014.<sup>83</sup> Legislation in these states directs the commission to evaluate the level of competition across the state, determine what products are "substitutable" for basic local service, and develop customer notification and support processes. We discuss that legislation here as a guide for use by state commissions in their efforts to utilize their continuing authority to ensure that their citizens retain access to critical telecommunications services.

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<sup>81</sup> In the Matter of Technology Transitions, Report and Order on Reconsideration, and Further Notice of Proposed Rulemaking, WC Docket No. 05-25, 8/6/15, available at <https://www.fcc.gov/document/fcc-releases-rules-spur-technology-transitions-protect-consumers>

<sup>82</sup> Id, paragraph 79 States may be less effective in addressing consumer problems in states where legislation has removed the commission's ability to regulate service quality or accept customer complaints.

<sup>83</sup> See Michigan Public Act 52 (52 PA 2014) enacted 3/25/14, available at <http://legiscan.com/MI/text/SB0636/2013>

**a. Michigan**

Michigan Act 52 (2014) specifies the process a company must follow to phase out traditional TDM local voice services. Section 313 of the Act provides that

A telecommunication provider that provides either basic local exchange or toll service, or both, shall not discontinue either service to an exchange unless 1 or more alternative providers for toll service, or 2 or more alternative providers for basic local exchange service, are furnishing a comparable voice service to the customers in the exchange.<sup>84</sup>

The Act defines a comparable voice service as

Any 2-way voice service offered through any form of technology that is capable of placing and receiving calls from a provider of basic local exchange service, including voice over internet protocol services and wireless services.<sup>85</sup>

Under the current rules, carriers that wish to discontinue service must notify the Michigan commission and customers 60 days in advance of the proposed discontinuance. Customers or competitors may petition the commission to investigate the proposed discontinuance to determine whether it is allowed under the rules. The commission has 120 days to resolve the issue.

This process changes 1/1/2017. After that date, Act 52 requires carriers to

adhere to all rules, regulations, and guidelines set forth in the FCC trials order , , , for each of that telecommunication provider's exchanges in [Michigan], whether or not the discontinuance is undertaken pursuant to an official trial under the FCC trials order . . . services.<sup>86</sup>

Act 52 places the burden for ensuring that customers continue to have access to telecommunications services on the commission. Prior to allowing service to be discontinued, the Commission must identify a "willing provider" to substitute for the company abandoning service. The provider may provide service using any technology, including wireless, as long as that service offers "comparable voice service with reliable access to 911 and emergency services." If the Commission cannot identify an alternate provider, it may order the current provider to continue to provide service in that area. The provider will not be required to maintain the existing wireline voice service but may provide service using any technology, including wireless.

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<sup>84</sup> Id.

<sup>85</sup> Id.

<sup>86</sup> Id. Section 103(7)

Although no carrier has petitioned to abandon basic local service under the rules currently in effect, this may change as the trials draw to a close. The key question facing the Michigan commission and others at that point will be how to ensure that no customer is left completely without service. To ensure that this does not happen, the Michigan PUC will examine the level of competition by exchange across the state to identify the availability of alternate providers. These providers would be listed in a data base so that they could be immediately identified should the incumbent carrier propose to abandon service in that area.

The Commission is also considering ways to ensure that consumers understand benefits and limitations of the new technologies, including any need to update 911 location information, requirements, backup power requirements, and whether the new service will work with medical monitoring devices, fax machines, and telecommunications relay services.

## **b. Ohio**

Ohio's FY 2016-2017 budget bill, HB 64, addresses the Technology Transition by directing the commission to examine options for allowing companies to withdraw basic local exchange service.<sup>87</sup> The Ohio bill provides a process similar to that proposed in Michigan.

Current Ohio regulations prohibit the withdrawal of basic local exchange service without commission approval. HB 64 modifies these rules to allow the discontinuance of service provided (1) the ILEC gives notice to customers and the commission, and (2) customers have the opportunity to purchase an equivalent service from another vendor. The rules provided in HB 64 will govern the service withdrawal process pending changes to Section 214 of the 1996 Act to address the Technology Transition.<sup>88</sup>

HB 64 directs the Commission to develop a plan for moving customers from regulated basic local service in areas with competition to a new, post-transition service category, "voice service." According to the bill, voice service has the same functions as basic local exchange service but "is not the same as basic local exchange service." Voice service may be provided using any technology, including VoIP and wireless. The ILEC may offer voice service to

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<sup>87</sup> Id. Ohio deregulated the majority of its retail telecommunications services in 2010 but retained commission jurisdiction over basic local service, intrastate access services, and wholesale requirements. The commission has no jurisdiction over VoIP or other IP-enabled services. Ironically, the PUC retains oversight of service withdrawal but will have little or no jurisdiction once the customer has transitioned to a VoIP or wireless product.

<sup>88</sup> See Telecommunications Act of 1996 (TA96), Pub. LA. No. 104-104, 110 Stat. 56 (1996), available at <http://transition.fcc.gov/Reports/tcom1996.pdf> Section 214 of the Act addresses the process for withdrawing an interstate communications service. The states have jurisdiction over the withdrawal of local exchange and intrastate services.

customers in areas where it has withdrawn basic local service. The commission will have limited (if any) jurisdiction over this product.<sup>89</sup>

The transition plan shall include a review of statutes or rules that may prevent or delay an appropriate transition. The Public Utilities Commission shall report to the General Assembly on any further action required to be taken by the General Assembly to ensure a successful and timely transition.<sup>90</sup>

Ohio law currently requires that carriers provide 120 days notice of service withdrawal to the commission and customers. HB 64 adds an additional safeguard by allowing customers to complain to the commission if they cannot find a "reasonable and comparatively priced" service equivalent to the basic local service offered by the withdrawing carrier.

If the public utilities commission determines after an investigation that no reasonable and comparatively priced voice service will be available to the customer at the customer's residence, the public utilities commission shall attempt to identify a willing provider of a reasonable and comparatively priced voice service to serve the customer.

If no willing provider is identified, the public utilities commission may order the withdrawing or abandoning carrier to provide a reasonable and comparatively priced voice service to the customer at the customer's residence.

The willing provider or the carrier, as applicable, may utilize any technology or service arrangement to provide the voice service.<sup>91</sup>

A commission order requiring the withdrawing carrier to continue to provide service will remain effective for two 12-month periods to allow time for the commission to identify a "willing" alternative provider. An FCC decision providing a process for transitioning customers from wireline to IP-based service will override the rules outlined in HB 64.

If the federal communications commission adopts an order that allows an incumbent local exchange carrier to withdraw the interstate-access component of its basic local exchange service under 47 U.S.C. 214, [these rules will not apply] . . . with regard to any exchange area in which an incumbent local exchange carrier withdraws that component.<sup>92</sup>

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<sup>89</sup> The Ohio commission does not regulate VoIP or wireless service; although it continues ensure the availability of emergency service.

<sup>90</sup> Ohio House Bill 64, Main Operating Budget FY 2016 – FY2017, Sec. 363.20, available at <https://legiscan.com/OH/bill/HB64/2015>

<sup>91</sup> Id. Lines 47674 to 47686

<sup>92</sup> Op cit, Sec. 4927.10, lines 47642 to 47649



HB 64 recognizes the importance of Commission leadership in determining how to manage the transition to IP services. The bill directs the Commission to convene a collaborative workshop composed of ILECs, CLECs, the Ohio Consumer Counsel, cable providers and other interested parties to

Focus on the internet-protocol-network transition processes underway at the Federal Communications Commission and [address] the issues of universal connectivity, consumer protection, public safety and reliability, expanded availability of advanced services, affordability, and competition. The collaborative process shall ensure that public education concerning the transition is thorough.<sup>93</sup>

The collaborative will determine the number and location of basic local service customers in Ohio, study their service requirements, and identify the service alternatives (both wired and wireless) for which these customers may qualify. The collaborative will also proactively identify any areas of the state where customers will be unable to obtain equivalent service at comparable prices. The commission will retain oversight of these areas and may require the ILEC to continue service until a comparable alternative is available.

The Ohio collaborative process should provide a roadmap for other states considering how to manage the withdrawal or abandonment of traditional services.

### **c. Maryland**

Maryland House Bill 472 (Chapter 250) also addresses the question of the terms for discontinuing that service in areas where competition provides customer choice. The Maryland Public Service Commission continues to regulate basic local wireline service under terms of AFOR agreements with the state's major carriers and based on tariffs filed by smaller carriers. Maryland does not regulate VoIP or other IP-enabled services.<sup>94</sup>

HB 472 addresses the process for phasing out current retail technologies (including basic landline services). The bill directs the PUC to:

Study whether and how a telephone company should be authorized to withdraw certain services in the State; . . . make a determination whether certain changes are needed to regulations to ensure that customers are properly and conspicuously notified of certain rate increases; . . . report its findings and recommendations . . . on or before [September 1, 2015].<sup>95</sup>

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<sup>93</sup> Id. Sec. 749,10 (B)

<sup>94</sup> HB 472 amends the rules governing tariffs to remove this requirement for small companies currently covered by an Alternate Form of Service (AFOR) agreement.

<sup>95</sup> Id, HB 472, Introduction

## **B. Basic local service and COLR requirements**

The growth of competition and the migration of consumers to alternative services such as VoIP and wireless have raised questions concerning the continued need for wireline basic local service and the role of the ILEC as the COLR throughout its territory.<sup>96</sup> Prior to the 1996 Act and the initial state actions deregulating retail services, the former Bell companies were generally required to serve as carriers of last resort (COLR) throughout their territory. COLR policies

Typically covered retail service quality standards, like dial tone availability, call blocking rates, outage times, customer complaint rates, response time to complaints, and emergency service continuance plans.<sup>97</sup>

COLR policies included a requirement to offer service to all requestors, regardless of location. Carriers could charge for construction of lines to difficult or expensive to reach locations, but were required to provide wireline service.

The increase in intermodal competition and the transition of customers to new technologies have encouraged incumbent carriers in a growing number of states to dispute the requirement that they provide basic local wireline (copper) service as a condition of their role as a common carrier. As Verizon pointed out in its 2014 FCC petition to discontinue basic local wireline service in parts of New Jersey where the wireline infrastructure was destroyed by Hurricane Sandy, basic local service as it was defined in the past should not be a requirement where other technologies and carriers are available to meet customers' telecommunications needs.

Common carrier regulation does not provide a “guarantee of basic service.” Instead, common carriage regulation addresses the manner in which common carriers must offer telecommunications service, including the requirement to offer the service in an indiscriminate manner to the public, where they choose to provide service. . . . Indeed, Section 214 specifically contemplates that common carriage services may be discontinued, and the Commission has prescribed rules to govern that process. Among other things, those rules provide that discontinuance is permissible when a “reasonable substitute” is available, whether

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<sup>96</sup> Whether or not a COLR requirement exists in any particular state is often not an easy question to answer. In some states, such as Massachusetts, the COLR designation is specifically referenced in prior state commission orders (see for example D.P.U. 1731, IntraLATA Competition, October 18, 1985). In other states, it may be imposed by statute. But there may be other states where it is not provided in regulation or statute (for example, Nebraska).

<sup>97</sup> See Peter Bluhm & Phyllis Bernt, Carriers of Last Resort: Updating a Traditional Doctrine, Nat'l Reg. Res. Inst. 1 (July 2009), available at [http://www.nrri.org/pubs/telecommunications/COLR\\_july09-10.pdf](http://www.nrri.org/pubs/telecommunications/COLR_july09-10.pdf)

from the provider seeking to discontinue the service or from others serving the community.<sup>98</sup>

State legislatures are also weighing in on COLR requirements. By July 2015, legislation in 29 states had reduced or eliminated the requirement that incumbent carriers serve as the carrier of last resort (COLR) using copper-based wireline service. In these states, carriers are required to offer basic local service/serve as the COLR only in wire centers with limited or no competition. Where carriers must offer basic local service or provide service to all who request it, they may do so using any technology, including (in some cases) fixed wireless. In 2013, NRRI found that in those states where the COLR requirement had been relaxed or eliminated, "no state reported that a deregulated carrier had stopped providing wireline service in areas where it is a provider of last resort."<sup>99</sup> This is still the case today.

A detailed list of state COLR requirements appears in Appendix A.

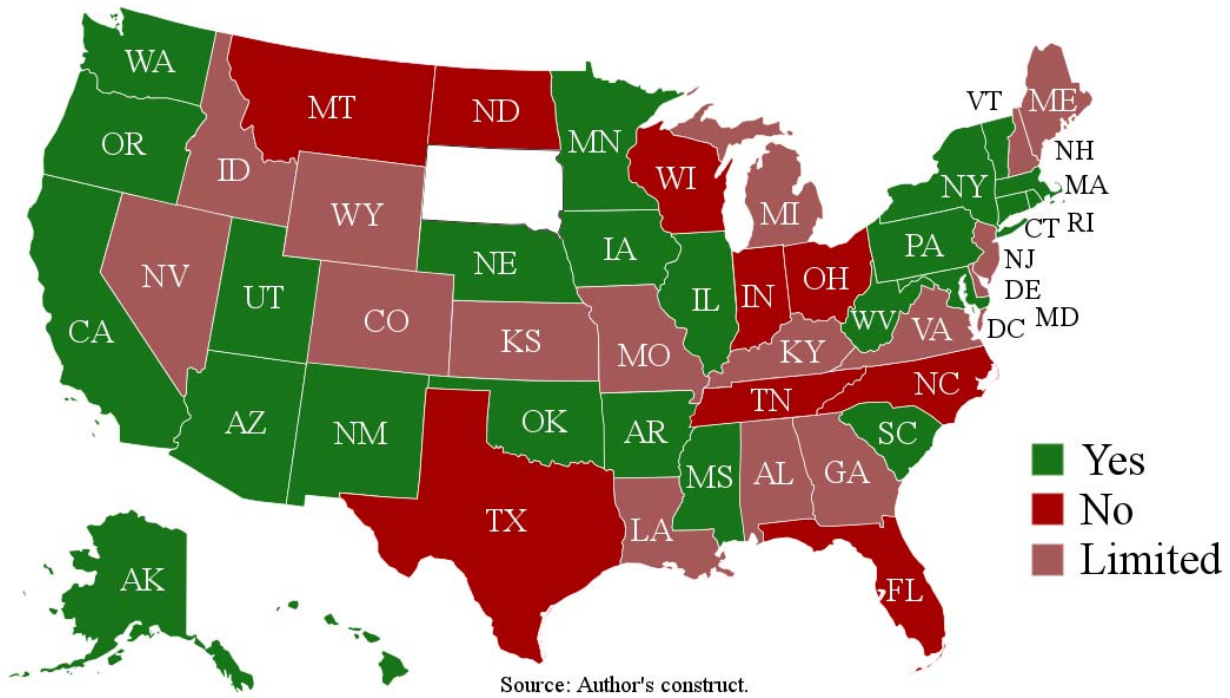
Figure 2 shows the states where COLR requirements have been relaxed or removed.

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<sup>98</sup> McCreedy, Maggie, Ex Parte presentation, Comment Sought on the Technological Transition of the Nation's Communications Infrastructure, GN Docket No. 12-353; Technology Transitions Policy Task Force, GN Docket No. 13-5; Application of Verizon New Jersey Inc. and Verizon New York Inc. to Discontinue Domestic Telecommunications Services, WC Docket No. 13-150, February 3, 2014

<sup>99</sup> Lichtenberg, Sherry, Ph.D., Telecommunications Deregulation: Updating the Scorecard for 2013, National Regulatory Research Institute, May 2013, Report 13-05, available at nrri.org

**Figure 2: COLR/BLS Requirements**



Although deregulation has removed direct commission oversight of competing technologies, it has not totally foreclosed the role of state commissions in ensuring the universal availability of reliable service for all citizens, including determining where COLRs are required and the types of service they may offer to fill this requirement. Indeed, rather than completely closing the door on commission oversight of basic local service, these deregulatory actions have given state regulators an opportunity to create processes for evaluating the level of competition in their states and for determining where product substitution is adequate to eliminate the need for basic wireline local service. This task will become more critical as the states begin to examine how to provide universally available broadband service with or without a voice component.

As the technology transition continues and customers continue to adopt new technologies from a variety of suppliers, the questions of whether the COLR requirement should remain at all and, if so, who should bear it continue. Should the ILEC remain the COLR due to its historical role in providing universal service? Or should this requirement be shared with other carriers? In the long term, this is perhaps the most critical question facing both the FCC and the states.

We discuss these questions and the issue of product substitution in the following sections.

### **1. Defining and preserving basic service**

Maine Public Law 2013, Chapter 600, An Act to Clarify Telecommunications Regulatory Reform, addresses the questions of where carriers should be required to provide basic local service and how this service could be made profitable for carriers and affordable for

consumers.<sup>100</sup> The Act charged the Maine Public Utilities Commission with determining whether basic local service should be required across the state, how such service could be supported financially, and whether the incumbent provider (FairPoint) should be required to provide comparable voice and broadband services to customers in underserved and hard to serve areas of the state. Specifically, the law directed the commission to determine:

1. The areas of the state where FairPoint cannot economically provide basic local service, including the actual cost of service to "uneconomical" locations;
2. Whether (and how) other suppliers serve the locations FairPoint cannot serve economically;
3. The ways in which the state's provider of last resort (COLR) obligation might be changed to reduce the cost of providing such service, including the implications of changing these characteristics with regard to reliability, safety, cost and ease of use of provider of last resort service and the availability and quality of broadband service throughout the State [and] . . . the implications of limiting provider of last resort service to reliable access to emergency services [and not the full capabilities of BLS];
4. The effect of limiting state universal service support to areas of the state where consumers have no competitive options for basic local service.<sup>101</sup>

The Maine commission issued its report on the results of this study, including recommendations on potential changes to basic local service requirements, in January, 2015. The commission and the legislature will use the report to identify areas where telecommunications regulations should be changed to reflect the availability and adequacy of competitive technologies. We discuss that report here as a reference for other state commissions considering questions concerning COLR requirements and limitations on basic local service.

The Commission's first task was to identify areas served only by the incumbent. COLR service (termed POLR service in Maine) would continue to be required in these areas. The commission identified areas with alternate suppliers by using broadband availability information in the National Broadband Map as a proxy for the availability of voice service. As the report notes,

Broadband service availability is a reasonable proxy for voice service availability because cable voice service is available wherever cable broadband is available

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<sup>100</sup> Maine Public Law 2013, Chapter 600, an Act to Clarify Telecommunications Regulation Reform, available at <http://legiscan.com/ME/text/LD1479/id/1005576/Maine-2013-LD1479-Amended.pdf>

<sup>101</sup> See Lichtenberg, Sherry, Ph.D., Telecommunications Legislation 2014: Completing the Process, Report 14-07, National Regulatory Research Institute, June, 2014, available at <http://nrri.org/download/nrri-14-07-telecom-regulation-2014/>

from the same provider, and, likewise, wherever wireless broadband service is available, wireless voice service is available from the same provider.<sup>102</sup>

Once it identified locations with competitive suppliers, the commission evaluated the substitutability of the alternate services for traditional copper-based TDM service, focusing on services provided over the supplier's own network.<sup>103</sup> The MPUC evaluated alternative products on the basis of service quality and availability, including the ability to provide service during power outages, a requirement for COLRs. Because only traditional copper-based TDM service is "line powered" and thus continues to operate during commercial power outages, only the incumbent carrier could meet COLR rules.

In order to increase competition for COLR service, the commission recommended removing the requirement that COLRs provide continuous service during power outages.

Elimination of the requirement that voice service remain uninterrupted during a power outage would tend to make it more likely that a carrier that uses technologies other than those used to deliver traditional wireline service could, if it desired, "compete" to become the designated Provider of Last Resort (POLR) service provider in a particular geographic area.<sup>104</sup>

The Commission determined that eliminating the power requirement would not significantly impact the ability of customers to contact first responders, particularly since few consumers appear to demand back up power.

Although elimination of the requirement that voice service remain uninterrupted during a power outage may have some public safety implications, consumers have become increasingly accustomed to using communications technologies that require periodic recharging of battery power.<sup>105</sup>

In making the recommendation that those COLR requirements no longer include line powered service, the Commission notes that the majority of VoIP and cable providers offer adjunct battery backup units that allow customers to make voice calls for up to 8 hours during a power

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<sup>102</sup> Maine Report, p. 25

<sup>103</sup> Focusing on suppliers with their own networks, including those using unbundled elements to provide last mile connectivity, reduced the potential number of alternate suppliers by eliminating resellers and over the top VoIP providers. Using this methodology provided the most conservative estimate of the availability of alternative suppliers.

<sup>104</sup> Maine report, p. 35

<sup>105</sup> Id, p. 36

outage.<sup>106</sup> It also notes that the new transport networks themselves appear to have survivability characteristics similar to those of the TDM network.

It appears that most fiber-optic and cable-based broadband and VoIP infrastructure currently has survivability built into the network infrastructure, and customer premise equipment is available with battery backup capability of approximately eight hours. Most cellular telephone towers and facilities have back-up power generation and/or battery back-up, and the cellular network will continue to operate during a power outage.<sup>107</sup>

The Maine report offers two unique solutions to providing COLR service. First, the report suggests that providers could compete for the opportunity to be the COLR for a specific area through a reverse auction. Second, the report suggests that the state could give customers in areas where no or only limited service is available a direct subsidy (voucher) to purchase the service they want. The report theorizes that both of these solutions would increase competition and reduce the cost of providing ubiquitous service throughout the state.

Finally, the report proposes that the COLR obligation and funding from the Maine Universal Service fund cease in areas with multiple competitors. This change would mirror State USF changes adopted in other states, including Colorado and Wyoming, but would not affect the universal availability of telecommunications services at comparable rates across the state.<sup>108</sup>

In the absence of a mandated POLR [COLR] service provider, telephone service in non-POLR service areas would cease to be regulated by the Commission. Instead, the telecommunications market (rather than regulators) would determine the availability, price, and service quality for POLR service (or any other type of service) in the areas where sufficient competition or availability is found to exist, and the POLR service obligation is eliminated.<sup>109</sup>

The legislature will consider the Commission's report in the next session and presumably draft rules to implement the changes they support.

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<sup>106</sup> The battery supports voice calling only and so does not provide broadband connectivity. Without such connectivity, customers using over the top VoIP providers will not have calling capabilities. The FCC has ordered carriers to provide customers with the option to purchase batteries that will support voice service for 8 hours. This requirement will increase to 24 hours.

<sup>107</sup> Maine report, p. 38

<sup>108</sup> See, Lichtenberg, Sherry, Ph.D., State Universal Service Funds 2014, National Regulatory Research Institute, Report 15-05, June 2015, available at <http://nrri.org/download/nrri-15-05-state-usf/>

<sup>109</sup> Maine report, p. 43

## 2. Product Substitution

Over the last 5 years, legislation reducing or eliminating oversight of telecommunications has increasingly turned on the level of competition faced by the incumbent as a measure of the need to continue controls over pricing, service availability, or service quality. State legislators and incumbent carriers have pointed to the rapidly declining numbers of ILEC wireline customers, the increase in customers adopting VoIP, and the number of consumers "cutting the cord" and using only wireless services as proof that these products are adequate substitutes for traditional wireline service.

For example, in its petition to reduce regulation on certain "protected services" in Pennsylvania, Verizon pointed to a loss of nearly 50% of wired access lines in its territory, primarily to cable and wireless companies.<sup>110</sup> A 2012 Ohio study made a similar point.

As of December 2011, and for the first time in many years, AT&T had less than 1 million residential access lines. Their subscriber base of 921,000 represents a loss of 67 percent since the peak in 2000. AT&T estimates it has not had so few residential access lines since 1946.<sup>111</sup>

As states begin to implement the rule changes required by legislation, State commissions have taken on the key task of identifying the products that can be substituted for basic wireline service and examining where they are available. We discuss that task here by examining the method used by the Pennsylvania PUC to determine what products may substitute for basic wireline service in response to Verizon's request to eliminate oversight of basic local service in areas with "effective competition."

As we discussed earlier in this paper, in Pennsylvania Case P-2014-2446303/2446304, the PAPUC responded to a request from Verizon to eliminate basic local service from the list of regulated essential services in wire centers with a level of competition sufficient to warrant this change. In its petition, Verizon asserted that multiple facilities-based companies provide service equivalent to Verizon's copper wireline product in the wire centers where they sought reduced regulation and that customer behavior in choosing these products shows that they are comparable and substitutable.

Each of the 194 wire centers for which it seeks reclassification has the availability of cable telephony and is covered by at least one unaffiliated wireless telecommunications provider, thereby meeting the statutory standard for competitive reclassification. Additionally . . . two-thirds of the households in its

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<sup>110</sup> Pennsylvania Public Utility Commission, Opinion and Order, Joint Petition of Verizon Pennsylvania LLC And Verizon North LLC for Competitive Classification of all Retail Services in Certain Geographic Areas and for a Waiver of Regulations for Competitive Services, Cases P-2014-2446303 and P-2014-24463604, February 26, 2015

<sup>111</sup> Midwest Consumers for Choice and Competition, Incentive to Invest in Ohio Broadband and The Carrier of Last Resort Obligation, prepared by Kleinhenz and Associates, April 2012



Petition Area obtain service from such alternative providers. In Verizon's view, this represents a conservative measure of the actual competition present in each wire center because it does not factor in any evidence of competition from traditional CLECs, or competition from alternative networks other than those of cable and wireless telephony.<sup>112</sup>

Dissenters pushed back on the simple "numbers based" approach to determine whether one product may be substituted for another, arguing that the differences between wireline, cable-voice, and wireless products are sufficient to define them as belonging to separate markets. For example, consumer groups argued that

The alternative services . . . are not comparable to the current protected telecommunications services in terms of availability, quality, reliability, safety, and affordability and therefore must not be considered "like or substitute services."<sup>113</sup>

The dissenters argue further that a price comparison of competitive VoIP services must include the cost of purchasing a broadband connection, not just the addition of one service to a bundled package. Consumer groups and other dissenters also argued that certain features of wireline service, for example, the fact that it is "line powered" and thus will work during a power outage, make the wireline services sufficiently "different" from wireless and VoIP service to render them inadequate substitutes.

The PAPUC reviewed the comments of the parties, held open public and evidentiary hearings, and determined that "the evidence in the proceeding demonstrates that customers have substitutes for basic local service in the market place and are willing to use them."<sup>114</sup>

The credible evidence proves that in the eyes of consumers, the voice services offered by competing providers, including cable telephony and wireless providers in the wire centers subject to the Petition, fulfill the same functions as Verizon's basic local exchange service. We conclude that these competing services are similar enough that consumers are willing and able to switch to them. Therefore, we find these services to be "like" or "substitute" services to basic local exchange service.<sup>115</sup>

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<sup>112</sup> Pennsylvania Public Utility Commission, Opinion and Order, Joint Petition of Verizon Pennsylvania LLC And Verizon North LLC for Competitive Classification of all Retail Services in Certain Geographic Areas and for a Waiver of Regulations for Competitive Services, Cases P-2014-2446303 and P-2014-24463604, February 26, 2015, p.17

<sup>113</sup> Id, p. 30

<sup>114</sup> PA Order p. 36

<sup>115</sup> PA Order, p.36

The Commission also reviewed the safety, reliability, and availability of substitute services and determined that these products are sufficiently available and comparable to basic wireline service to be adequate substitutes. Thus, the Commission determined that in wire centers where both wireline and alternate services are available, competition is sufficient to remove basic local service from the list of regulated products. The commission will continue to monitor performance and pricing on an on-going basis, including collecting data regarding price changes and service availability, to ensure that classifying the services provided in these areas does not make basic local service (or its equivalent) unaffordable.

The PAPUC's decision to reduce oversight on Verizon in those areas deemed competitive did not remove its COLR obligation. The company must continue to provide service throughout their territory and offer basic local service to customers who request it, regardless of their location.

### **3. Colorado: Defining Effective Competition**

Like Pennsylvania, the Colorado PUC is defining wire centers within the state where there is enough competition to reduce regulation. In these areas, the incumbent provider will receive price and service flexibility, including the ability to discontinue basic local service. Once a wire center is determined to be "effectively competitive," carriers will no longer receive State Universal Service Funding (SUSF) for services provided in those wire centers. Monies diverted from the SUSF will go to a broadband fund established by the legislature to increase broadband availability throughout Colorado.

The PUC opened Proceeding No. 14M-0947T in September, 2014 to implement the deregulation requirements ordered by House bill 14-1331. The proceeding will use existing PUC rules to determine those wire centers that are effectively competitive. Commission oversight of basic local service will be reduced in those wire centers, allowing the incumbent carrier (CenturyLink) price and service flexibility.

As in Pennsylvania and other states linking competition to reduced regulation, the Colorado code provides a framework for evaluating effective competition. Chapter 207 of the Code of Colorado Regulations provides a framework for examining the availability and substitutability of competitive products.

In determining whether effective competition for a specific telecommunications service exists, the commission shall make findings, after notice and opportunity for hearing, and shall issue an order based upon consideration of the following factors: (I) The extent of economic, technological, or other barriers to market entry and exit; (II) The number of other providers offering similar services in the relevant geographic area; (III) The ability of consumers in the relevant geographic area to obtain the service from other providers at reasonable and comparable rates, on comparable terms, and under comparable conditions; (IV) The ability of

any provider of such telecommunications service to affect prices or deter competition; and (V) Such other factors as the commission deems appropriate.<sup>116</sup>

The Colorado Commission completed its initial review of the level of competition in the state in 2014; shortly after HB14-1331 was passed. In Proceeding 13M-0422T, the Commission found 56 wire centers to have "effective competition" for basic service, based on the number and type of competitors in those wire centers. The Proceeding found that wireless, cable VoIP, and CLEC voice offerings were substitutable for basic local service offered by the incumbent carrier (CenturyLink).<sup>117</sup>

The Commission based its decision on a review of the

(1) basic services and similar services offered [by the incumbent and other carriers]; (2) the presence of multiple, non-affiliated, facilities-based providers, carriers, or other entities offering such services; and (3) service offerings through traditional wireline, cable-based, interconnected Voice over Internet protocol (VoIP), and wireless technologies [in each of the wire centers under consideration].<sup>118</sup>

Proceeding 14M-0947T is using the same process as the June 2014 review to determine which of the remaining wire centers under consideration meets the test of effective competition.

The Colorado process illustrates the importance of commission input in the determination of where competition is sufficient to allow oversight to be withdrawn. The State commission is best positioned to identify those services that qualify as "substitutes" for basic wireline service and to analyze whether there is sufficient competition in a wire center to protect against predatory pricing, declines in quality of service, or other issues that would militate against reduced regulation. These decisions remain a key component of the Commission's public service duty despite deregulation.

### **C. Service quality, reliability, and availability**

Deregulation has not fully eliminated all state authority over service quality, reliability, and availability. Despite limitations on the direct regulation of competitive services, a

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<sup>116</sup> Colorado Statutes, Section 40-15-207(1)(b)(I) - (V), C.R.S.

<sup>117</sup> AARP filed testimony disagreeing with the decision but withdrew its opposition after the Commission confirmed that the finding of effective competition would not discontinue carrier of last resort requirements in the affected wire centers and that the Commission would retain oversight of consumer complaints. See In The Matter Of Commission Consideration of Effective Competition Areas and the Classification of Basic Local Exchange Service Pursuant To 4 CCR 723-1-2213, Decision No. R14-0190: (1) Applying Recently Enacted Statutes to 56 Wire Center Serving Areas; (2) Vacating Certain Commission Determinations; and (3) Closing The Proceeding, June 11, 2014, ¶18

<sup>118</sup> Op Cit. Decision No. R14-0190

significant number of state public utility commissions continue to review network performance and track key performance standards related to the quality, reliability, and availability of the traditional TDM network, particularly as these standards apply to basic local service. The states also retain oversight of emergency services (access to 911 and E911), whether they are provided using VoIP or the traditional TDM network. The reduction in regulation has not eliminated the ability of states that certify ETCs or provide state USF support to condition this support on ensuring service quality, reliability, and network availability in areas without effective competition. Finally, the states retain oversight of wholesale performance metrics, a key indicator of the health of the network.<sup>119</sup>

### **1. Monitoring service quality**

Recent decisions in New Jersey and Pennsylvania, as well as legislation in Kentucky, illustrate how state commissions continue to oversee at least some aspects of service quality.

Although the New Jersey BPU reclassified Verizon's basic local retail services as competitive (and thus not subject to price or other regulation), the decision includes a requirement to continue monitoring service quality.

The Signatory Parties agree that the service quality standards set forth by prior decisions of the Board will continue to apply to residential basic local exchange service and single line business basic exchange service for three years. At the close of year three, the Board will then determine whether these service quality standards should apply for the remaining two years.<sup>120</sup>

Pennsylvania's reclassification decision is similar. It provides for continued oversight of service quality, particularly as it applies to the ability of customers to reach emergency services.

Our approval of this Petition . . . expressly acknowledges our inherent authority . . . to require any utility to furnish and maintain adequate, efficient, safe, and reasonable service and facilities.<sup>121</sup>

In Kentucky, HB 152 deregulates services provided by the incumbent carrier but retains the Commission's authority to oversee service quality for ETCs (including both VoIP and wireless ETCs) to the extent required by the FCC.

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<sup>119</sup> Nevada SB 112 (passed in 2015) may become the exception to this process. SB 112 makes wholesale metrics optional. See Nevada House Bill, SB 112, Chapter 233 available at <https://legiscan.com/NV/text/SB112/id/1201804/Nevada-2015-SB112-Engrossed.pdf>

<sup>120</sup> New Jersey Settlement at 20

<sup>121</sup> Pennsylvania decision at 5.b

The commission may exercise its authority to ensure that companies that are designated and operate as eligible telecommunications carriers under 47 U.S.C. sec. 214(e), including commercial mobile radio service providers that receive eligible telecommunications carrier status, comply with the Federal Communication Commission's rules in 47 C.F.R. pt. 54, which govern eligible telecommunications carriers, to the extent consistent with federal and state law.<sup>122</sup>

States that retain oversight of basic local service or provide ETC funding have asserted jurisdiction over service quality. For example, California requires ETCs to meet service quality requirements in order to obtain SUSF. Colorado retains oversight of service quality for basic service provided in areas without local competition.

Colorado Statute CRS 40-15-502 defines basic service to include service quality and charges the state commission with oversight of this service.

Basic service is the availability of **high quality, minimum elements of local exchange telecommunications service, as defined by the commission**, at just, reasonable, and affordable rates to all people of the state of Colorado. The commission shall conduct a proceeding no less frequently than every three years to consider the revision of the definition of basic service, with the goal that every citizen of this state shall have access to a wider range of services at rates that are reasonably comparable as between urban and rural areas.<sup>123</sup> (Emphasis added)

## 2. Service quality studies

Despite reduced regulation in most jurisdictions, the State commission remains responsible for ensuring that the traditional TDM and copper network continues to meet the requirements of its users, even as more customers transition to other (often unregulated) technologies.<sup>124</sup> As the technology transition continues, however, consumer groups, the Communications Workers of America (CWA), other labor unions, and other organizations have called upon regulators to examine what they believe is the "de facto" elimination of the copper network due to neglect. These groups have raised questions about what they perceive as the failure of the incumbent carriers to maintain the existing copper network as the number of customers utilizing it declines. These groups theorize that incumbent carriers like AT&T and Verizon are intentionally allowing the quality of the traditional network to decline so that

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<sup>122</sup> Kentucky Acts Ch.002, House Bill 152, An Act Relating to Telecommunications, Section 2(4), available at <https://legiscan.com/KY/bill/HB152/2015>,

<sup>123</sup> Colorado Revised Statutes 40-15-502(2), available at <http://www.lexisnexis.com/hottopics/colorado/>

<sup>124</sup> Commission's jurisdiction in fully deregulated states such as Florida and Wisconsin is more problematic. Florida eliminated all retail regulation in 2010 yet continues to require carriers to participate in the Lifeline program. Wisconsin eliminated regulation in 2010 but continues to designate ETCs for the state Lifeline program and to provide high cost funding.

customers will be forced to move to unregulated services provided over copper, wireless, or other technologies.

Verizon is systematically abandoning the legacy network and as a consequence the quality of service for millions of phone customers has plummeted.<sup>125</sup>

These groups have called on their state commissions to evaluate trends in service quality to determine whether carriers are reducing maintenance as a means of forcing customers to move to the new (unregulated) networks.

Verizon and the other carriers have challenged this assertion, pointing to the continued high level of network availability, the low customer trouble report rate, the anecdotal nature of the complaints cited by these groups, and the companies' continued success in meeting performance metrics established by the state commissions for both retail and wholesale services. They also note that the emerging fiber network will be more resilient than the current copper network, since it is more resistant to weather issues and easier to repair.

It is reliable—fiber lines are more durable than copper, require fewer repairs, and have a longer lifespan—and fiber offers improved performance, and is more energy efficient.<sup>126</sup>

The carriers also note that significant numbers of customers are abandoning the traditional network altogether and moving to wireless or over-the-top VoIP products of their own volition.<sup>127</sup>

As we noted earlier, the FCC considered this issue in the Technology transition NPRM and added the de facto disabling of the copper network to the definition of copper retirement.<sup>128</sup>

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<sup>125</sup> Knutson, Ryan, Verizon's Biggest Union Claims Carrier is Not Fixing Broken Landlines, The Wall Street Journal, 6/9/15, available at <http://www.wsj.com/articles/verizons-biggest-union-claims-carrier-isnt-fixing-broken-landlines-1433853524>

<sup>126</sup> McCready, Maggie, Ex Parte presentation, Technology Transitions, GN Docket No. 13-5; Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers, RM-11358, July 15, 2015

<sup>127</sup> The copper-fiber debate presents an interesting conundrum for consumers and regulators alike. At the same time that customers, states, and the FCC are championing the higher broadband speeds that can be provided only via fiber networks, consumer groups are also focusing on the processes companies are using to move to these new networks and demanding that the "old" technology remain in place for those who want it.

<sup>128</sup> In the Matter of Technology Transitions, Report and Order on Reconsideration, and Further Notice of Proposed Rulemaking, WC Docket No. 05-25, 8/6/15, available at <https://www.fcc.gov/document/fcc-releases-rules-spur-technology-transitions-protect-consumers>

We find that the practice of deliberately allowing copper networks to deteriorate is harmful to competition, negatively impacting end users, and that the de facto retirements should be covered in the copper retirement requirements. We therefore add to our definition of retirement any "failure to maintain copper loops, subloops, or the feeder portion of such loops or subloops that is the functional equivalent of removal or disabling."<sup>129</sup>

In the interim, state commissions from DC to California have opened proceedings to examine service quality and copper lines replacement. These investigations may provide guidance to other states considering how to ensure service quality even as oversight is withdrawn.

**a. District of Columbia**

The District of Columbia PUC retains oversight of Verizon's traditional landline infrastructure, including regulated TDM service provided over fiber facilities.<sup>130</sup> The PUC is preempted from oversight of IP-based services under D.C. law. Under the Commission's rules, Verizon must meet specific performance criteria for service installation, reliability (including repeat troubles), and mean time to repair out of service conditions. The Commission reviews the company's performance on a monthly basis and requires explanations of shortfalls.

On August 26, 2011, the Office of People's Counsel (OPC) filed a Petition with the Commission to investigate the reliability of Verizon's services, including its procedures for migrating customers from copper to fiber. After an investigation and hearings, the Commission found that Verizon had not met its service quality requirements for two specific measures (repeat trouble and mean time to repair) and directed the company

To take certain actions and file a remedial plan indicating how it would improve its performance in resolving troubles with copper facilities that recur within 30 days of the original trouble ("repeat troubles") and repairing residential copper troubles ("trouble clearance").<sup>131</sup>

The Commission continued its investigation through 2014, modifying some of the metrics to more accurately track the company's performance and its success at meeting its remedial plan. The Commission established a series of performance targets that required Verizon to make year over year improvements in its trouble repair rate. The targets also required

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<sup>129</sup> Id., Paragraph 90

<sup>130</sup> The DC PUC does not have jurisdiction over VoIP, including FiOS, or cable offerings from Verizon and other companies.

<sup>131</sup> Public Service Commission of the District of Columbia Formal Case No. 1090, In the Matter Of the Investigation into the Reliability of Verizon Washington, DC's Telecommunications Infrastructure, Order No. 17895, June 1, 2015

the company to make improvements in the number of recurring troubles experienced by customers with traditional service (i.e., repeat troubles).

Oversight encourages performance improvement. By 2015, the Commission found that Verizon had met its target for reducing repeat troubles but needed to make further progress on lowering its trouble rate to the level proposed in the remedial plan. For this reason, the Commission ordered Verizon to continue to report its trouble rate on a monthly basis until its performance meets quality of service standards.

The OPC's testimony in Formal Case 1090 also suggested that Verizon was failing to maintain its copper infrastructure as a way to force customers to migrate from copper to fiber. In response to this suggestion and based on informal customer complaints regarding the transition to fiber, the DC PSC opened Formal Case 1102

to study issues related to the continued use of the Company's copper infrastructure and related to any transition from the copper facilities to fiber facilities for providing telecommunications services, including the retirement of time-division multiplexed ("TDM") facilities and offerings and their replacement with Internet Protocol ("IP") based alternatives.<sup>132</sup>

This on-going case illustrates the key questions surrounding the Technology transition--the need for continued maintenance of the copper infrastructure where fiber has not yet been deployed or where customers do not want to transition to newer technologies, and the conundrum faced by companies that, on the one hand, are being encouraged to increase the availability and speed of broadband networks, while, on the other, being required to continuing to offer legacy technologies to fewer and fewer customers. Verizon points out this issue in its Reply Brief in FC 1102.

District customers are clamoring for new technology. Specifically, customers are demanding the best-in-class services that fiber facilities can provide. . . While [the petitioner] claims to applaud the deployment of fiber facilities and the implementation of new technologies in the District, it simultaneously asks the Commission to erect roadblocks to Verizon's investment in fiber by singling out Verizon for regulations that would hinder that very implementation.<sup>133</sup>

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<sup>132</sup> Public Service Commission of the District of Columbia, Formal Case No. 1102, In the Matter of the Investigation into the Continued Use of Verizon Washington, DC, Inc's Copper Infrastructure to Provide Telecommunications Services, Order 17045, January 27, 2013

<sup>133</sup> Verizon Washington DC, Reply Post Hearing Brief – Public, Formal Case No. 1102, In the Matter of the Investigation into the Continued Use of Verizon Washington, DC, Inc's Copper Infrastructure to Provide Telecommunications Services, Order 17045, April 27, 2015, available at [http://www.dcpSC.org/edocket/docketsheets\\_pdf\\_FS.asp?caseno=FC1102&docketno=310&flag=D&show\\_result=Y](http://www.dcpSC.org/edocket/docketsheets_pdf_FS.asp?caseno=FC1102&docketno=310&flag=D&show_result=Y)



OPC has countered Verizon's contention that customers want new technologies by pointing out that some customers do not.

This proceeding is about ensuring Verizon abides by its legal obligations such that regardless of which Verizon facility (e.g., copper or fiber) or service option (e.g., copper-switched, fiber-switched, or FDV) is selected by customers, they will receive safe, reliable, and efficient service. Customers – not Verizon – are entitled to decide what service they prefer.<sup>134</sup>

Formal Case 1102 remains open.

#### **b. California**

Like the District of Columbia PSC, the California Public Utility Commission (CPUC) has been concerned with reports of declining quality of service for both traditional TDM customers and VoIP customers. The CPUC opened Rulemaking 11-12-001 in December 2011 to evaluate the quality of service provided by the state's telecommunications carriers, both wireline and VoIP. The proceeding was opened to study the

Infrastructure, facilities, policies, and practices [as] a necessary foundational activity within this proceeding to help gauge the condition of carrier infrastructure and facilities and ensure the facilities support a level of service consistent with public safety and customer needs.<sup>135</sup>

As part of this proceeding, CPUC staff issued a report on the quality of service provided by the state's major carriers from 2010 to 2013. The report found that AT&T California and Verizon California Inc. (Verizon California) had not met the minimum Out of Service restoral time measurement standard of repairing out-of-service lines within 24 hours, 90% of the time for any year during the period of 2010 through 2013, raising concerns about whether the quality of service provided by these companies was sufficient to protect the public interest by ensuring that customers may reach emergency services when necessary, regardless of the telecommunications provider they use.<sup>136</sup>

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<sup>134</sup> Office of the People's Counsel District of Columbia, Reply Post Hearing Brief, Formal Case No. 1102, In the Matter of the Investigation into the Continued Use of Verizon Washington, DC, Inc's Copper Infrastructure to Provide Telecommunications Services, April 27, 2015

<sup>135</sup> Proposed Decision of Commissioner Picker, 4/17/2015, Rulemaking 11-12-001, available at <http://docs.cpuc.ca.gov/EFileSearchForm.aspx>

<sup>136</sup> California Public Utility Commission, Order Instituting Rulemaking to Evaluate Telecommunications Corporations Service Quality Performance and Consider Modification to Service Quality Rules, Rulemaking 11-12-001, Report of the Commission's Communications Division on Proposed Modifications to General Order 133-C including a Service Quality Refunds and Fines Proposal.

Based on these findings, the staff recommended adding penalties to the quality of service metrics for a carrier's failure to meet the (declining) out of service, including refunds to customers for outages.

Staff proposes to adopt refunds for customers that have been out of service for more than 24 hours and fines for URF Carriers that do not meet one or all of the Commission's minimum standards for the three Service Quality measures applicable to URF Carriers.<sup>137</sup>

The report also recommended a new requirement for carriers to provide copies of their FCC outage notifications (NORS reports) to the Commission.

Most importantly, the staff recommendations extended these reporting measures to interconnected VoIP providers as well as traditional service provided over the TDM network.

The Service Quality rules and proposed changes should apply to any telephone corporation, common carrier, or other entity that provides voice service in California with lines, including facilities-based interconnected VoIP providers, that: 1) Have been granted a Certificate of Public Convenience and Necessity (CPCN) by the Commission, 2) Are designated as an Eligible Telecommunications Carrier (ETC) by either the FCC or this Commission to receive federal high-cost support and/or low-income support, and/or 3) Are authorized to provide California Lifeline.<sup>138</sup>

Verizon disagreed with Staff's comments regarding the health of the network, noting that

If these claims were accurate, the level of trouble reports would be high . . . They are not -- rather, they are far below the Commission's standards.<sup>139</sup>

A draft decision in this proceeding issued by Commissioner Michael Pickering supports the changes to the metrics proposed by staff but recommends deferring the network study ordered in 2011 to a later date.

This decision finds that the examination of the networks of AT&T California and Verizon California Inc. (Verizon California) ordered in this proceeding<sup>1</sup> should be deferred until the Commission rules on the proposed service quality rule changes and penalties under consideration in this proceeding. If adopted, the penalty mechanism provides strong motivation to telephone corporations to improve service quality to a level that meets the Commission's General Order

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<sup>137</sup> Id. Section V

<sup>138</sup> Id. Introduction

<sup>139</sup> TR's State Newswire, CALIFORNIA -- Groups urge PUC to conduct examination of AT&T, Verizon networks, 5/15/15

133-C minimum service quality measure standards and provide safe and reliable service at reasonable rates.<sup>140</sup>

The proceeding remains open, with a number of groups, including the Center for Accessible Technology, Communications Workers of America, District 9, Consumer Federation of California, The Greenlining Institute, and The Utility Reform Network, noting that while the new metrics are important, a study of network maintenance and reliability (similar to that conducted by the DC PSC) is a necessary precursor to both the change in metrics and the sale of Verizon's California assets to Frontier.

### c. New York

The New York Department of Public Service (DPS) Office of Telecommunications released a study on the status of telecommunications competition and availability in New York, June 23, 2015. The study (filed in Case 14-C-0370, was initiated by the New York Public Service Commission (PSC) in 2014 in part in response to a petition from the Connect New York Coalition, a group of 76 elected officials, labor organizations and consumer groups formed "to push the New York State Public Service Commission to investigate what they say is the decline in service, lack of competition, and lack of choice in telecom services in the state."<sup>141</sup>

The petition requested that the PSC open "a formal, adversarial and fully litigated Proceeding"

To consider the methods, technologies, policies and impacts on the public of New York's telecommunications system, with specific reference to Commission decisions regarding deregulation of service. This proceeding should address factual matters upon which policies are based, the broad functionality and impacts of the system and its governing policies . . .<sup>142</sup>

A bill requesting a similar study was introduced in the NY Legislature in 2015 but did not pass.<sup>143</sup>

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<sup>140</sup> Op. Cit, Pickering decision summary

<sup>141</sup> Eggerton, John, New York Groups, Officials Seek PSC Telecom Inquiry, Broadcasting and Cable, July 1, 2014, available at <http://www.broadcastingcable.com/news/washington/new-york-groups-officials-seek-psc-telecom-inquiry/132176>

<sup>142</sup> Connect New York Coalition, Petition Seeking an Order of the Public Service Commission Commencing a Proceeding to Consider Issues Pertaining to Telecommunication Services, July 1, 2014, available at <https://www.scribd.com/doc/232125660/Connect-New-York-Coalition-Petition>

<sup>143</sup> See New York Senate Bill 4463, AN ACT in relation to directing the public service commission to prepare and complete a comprehensive examination and study of the telecommunications industry in this state, available at [https://legiscan.com/NY/text/S04463/id/1224111/New\\_York-2015-S04463-Amended.html](https://legiscan.com/NY/text/S04463/id/1224111/New_York-2015-S04463-Amended.html)

The DPS study found that competition among carriers is strong in New York. 95% of consumers have access to multiple carriers and technologies, including traditional wireline, wireless, and cable offerings (although not all areas of the state support head-to-head competition by multiple providers, a situation that mirrors that of the rest of the country.) New York is served by 40 ILECs including rural carriers (each serving a different area of the state), 22 cable companies that offer VoIP, either as part of a package or as a standalone offering, and the 4 major wireless companies, AT&T, Verizon, Sprint, and T-Mobile, as well as wireless resellers such as TracFone, Straight Talk, and Cricket Communications.<sup>144</sup>

Table 1 (below) shows the availability and adoption rate for the types of voice service offered in the state.

**Table 1: Voice Service Availability and Adoption<sup>146</sup>**

Voice Service	Availability	Adoption
LEC	>95%	>40%
Satellite	>95%	<1%
Wireless	>95%	>95%
Cable	>95%	>40%
Over-the-top VoIP	>95%	>3%
Fiber	50%	>20%

As in other states, the number of traditional ILEC switched access lines in New York is declining significantly as consumers transition to VoIP (primarily provided by their cable companies) and wireless. ILEC switched access lines in New York have declined from a high of just under 15,000,000 to fewer than 5,000,000 lines in 2013,

Both residential and business customers are migrating away from the traditional telephone company providers, and adopting alternative service providers . . . Consumers are also finding value in voice service provided by over-the-top providers. Broadband service is widely available to New Yorkers, allowing them to adopt over-the-top services that require very little bandwidth to provide voice service. Low-cost over-the-top voice service, combined with a basic broadband connection, makes for a competitively priced alternative to traditional basic telephone service.<sup>147</sup>

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<sup>144</sup> New York Public Service Commission, Case 14-C-0370 - In the Matter of a Study on the State of Telecommunications in New York State, Staff Assessment of Telecommunications Services, June 23, 2015 available at <http://media.syracuse.com/news/other/2015/06/23/TelecomWhitePaper.pdf>

<sup>146</sup> DPS Report, p.8

<sup>147</sup> DPS Report , p. 11

The New York report finds that 10 years after the New York PSC declared telecommunications providers competitive in the state and reduced oversight, competitive choice remains widely available.

Customers in New York generally have the choice for phone service between an incumbent telephone carrier, a cable carrier, over-the-top VoIP and four primary wireless carriers.<sup>148</sup>

The New York PSC retains jurisdiction over pricing for basic local service and service quality for a specific subset of "core" customers (generally those with no competitive choice, those subscribing to basic service, Lifeline customers, and customers with special needs),<sup>149</sup> The Commission maintains a call center to accept and resolve customer complaints concerning wireline carriers. The Commission does not regulate wireless or VoIP carriers and has limited jurisdiction over cable companies.

The report notes that while the Out of Service metric for core customers (a small subset of access lines) has shown improvement over time, quality of service for all ILEC customers has been trending downward.

The trend, from January 2009 through September 2013, indicates that the CTRR (Customer Trouble Report Rate) for service providers has been gradually worsening, and is still well below the Commission's service standard by which reliable service quality is measured. It should be noted that the statewide trend line is driven in large part by the largest incumbent phone companies as well as recent extreme weather events, including Hurricanes Irene and Lee and Superstorm Sandy<sup>150</sup>

Customer complaints regarding service quality and the timeliness of installation and repair have been increasing, potentially signaling a decline in network maintenance. This trend is similar to that reported by both DC and California in their reviews of service quality.

The study also reviews the technology transition and the need for commission oversight of the process for moving customers from copper to fiber. In one of the few direct recommendations in the study, Staff recommends that the PSC

Ensure that copper retirements are not being accelerated as an artificial means to degrade competition, raise consumer prices or otherwise reduce consumer protections. Thus, if copper retirements are conducted as part of a migration plan to new networks, such as FTTP, customers (including residential, business, and

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<sup>148</sup> Id., p.14

<sup>149</sup> The quality requirements for core customers apply to Verizon and Time Warner. Carriers with fewer than 500,000 lines are only required to report on the metric tracking customer trouble reports.

<sup>150</sup> New York Report, p. 22

wholesale) should continue to have an equivalent service available at comparable cost, quality, reliability, and resiliency with equivalent consumer protections.<sup>151</sup>

The commission has begun a series of public hearings to solicit comments on the report and plan for future investigations. As part of this process, the Coalition has renewed its request that the Commission address the seven key issues listed in the Coalition's petition.

- A) How much do providers invest in the legacy systems as compared to fiber and wireless?
- B) What are the actual costs and revenues for each system? What rates of return have been earned in the regulated system?
- C) What is the current level of service quality in all systems? How is it measured?
- D) Does competition exist? How many platforms are available to consumers? Is broadband being deployed?
- E) What has happened to rates/cost of service in each system?
- F) What services are technologically available for inclusion in a basic service list? What are public expectations? How are they measured?
- G) What percentage of New Yorkers [do] not have telephone service?<sup>152</sup>

These issues provide a starting point for other state commissions as they begin to address questions of service quality, availability, and competition.

### **3. Emergency services**

Recent failures of the 911 system in both specific states and nationally have led to an increased focus on the functioning of the emergency services network by both the states and the FCC. In July, 2015, for example, the FCC fined T-Mobile \$17.5 million for an outage that prevented its customers from reaching emergency service providers. The T-Mobile fine followed a \$16 million settlement with CenturyLink and a \$1.4 million settlement with Intrado Communications in connection with the April 2014 multi-state 911 outage lasting for over six hours. In March, the FCC settled with Verizon for \$3.4 million in connection with the same April 2014 outage.<sup>153</sup>

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<sup>151</sup> New York Report, p.33

<sup>152</sup> Coalition Petition, p. 5-6

<sup>153</sup> News Release, July 17, 2015, FCC Reaches \$17.5 Million Settlement With T-Mobile For Nationwide 911 Outages; New Compliance Plan Will Improve 911 Service Reliability, available at <https://www.fcc.gov/document/t-mobile-pay-175-million-resolve-911-outage-investigation-0>

As the FCC report on the April incident points out, the increase in 911 outages raises concerns about both the health of the network in general and the transition from traditional wireline technologies to new IP-based services.

What is most troubling is that this is not an isolated incident or an act of nature. So-called “sunny day” outages are on the rise. That’s because, as 911 has evolved into a system that is more technologically advanced, the interaction of new and old systems is introducing fragility into the communications system that is more important in times of dire need.<sup>154</sup>

The new services rely on the IP-network to deliver calls to PSAPs from widely dispersed locations, resulting in new risks for call processing and transmission.

The states are addressing the question of expanding and protecting the emergency services network through both investigation and legislation. In Nebraska, LR 319 would direct the PUC to review a number of issues, including, "the administration of Enhanced Wireless 911 service and proposals to implement next-generation 911 services."<sup>155</sup>

In Montana, the legislature passed HJR 7, a resolution requesting

that an interim committee evaluate how the state, local governments, and emergency responders can form a partnership to begin planning for NG 911; identify what legislative changes need to be made to implement NG 911; identify funding requirements and potential funding sources; develop a plan for implementing a standards-based NG 911 system; and propose legislation to enable implementation of NG 911.<sup>156</sup>

Utah also passed legislation requiring a study of the state 911 system. SB 237 directs the Utah Communications Authority Board to conduct an audit and study of the state 911 system. The study will focus on the potential cost savings that may be achieved by the functional consolidation of public safety answering points (PSAPs), and creating a strategic plan for the system. Results of the study and audit should be completed and submitted on or before July 1, 2016.<sup>157</sup>

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<sup>154</sup> Federal Communications Commission, Public Safety and Homeland Security Bureau, Report and Recommendations, Public Safety Docket No. 14-72, PSHSB Case File Nos. 14-CCR-0001-0007A, October, 2014, available at <https://www.fcc.gov/document/april-2014-multistate-911-outage-report>

<sup>155</sup> Nebraska Bill LR 319, Interim study to examine certain issues under the jurisdiction of the Public Service Commission, available at <https://legiscan.com/NE/bill/LR319/2015>

<sup>156</sup> State Newswire, MONTANA -- Resolution calling for study of NG 911 implementation advances, April 15, 2015

<sup>157</sup> Utah SB 237, Public Safety Amendments, available at <https://legiscan.com/UT/text/SB0237/2015>

In addition to the direct 911 legislation passed during the 2014-2015 legislative sessions, the proposed New York and California telecommunications studies would include a review of the availability and quality of emergency services.

In order to gain insight into the reasons for network outages and the process the carriers use to correct them, the states have requested access to the FCC's Network Outage reports (NORS).<sup>158</sup> As NARUC points out in its comments on the March 30 NPRM on the NORS reports,

All States share the need for immediate, secure and confidential access to the service outage detail provided in NORS. Comprehensive analysis of such data is [the] key to understanding the impact of outages on multiple modes of communication and data services which comprise each State's communications networks.<sup>159</sup>

Washington State's review of the 911 outage in April, 2014 provides a model for the ways in which state commissions may use their jurisdiction over the health and safety of the network to oversee the adequacy of the 911 system. Because 911 services are provided both by carriers and by 911 processors, it is important that the states examine the full breath of 911 services.

Staff's review of the April outage (and previous 911 failures) determined that the 2014 outage was caused by errors in the processes followed by both CenturyLink and its vendor, Intrado. Staff determined that the company had failed to follow the Commission's rules regarding both the management of its network and the notification of outages impacting 911 services. Staff recommended that the company be fined for failing to meet the commission's rules and take remedial action to minimize future outages. Most importantly, staff recommended on-going "reporting requirements [that] would provide the commission with periodic information to proactively review actions and changes CenturyLink undertakes to the state's 911 system."<sup>160</sup>

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<sup>158</sup> See Federal Communications Commission, Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part 4 of the Commission's Rules Concerning Disruptions to Communications, PS Docket Nos. 15-80 and 04-35, Notice of Proposed Rulemaking, Second Report and Order, Order on Reconsideration, 30 FCC Rcd 3206, available at [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-39A1\\_Rcd.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-39A1_Rcd.pdf) - published in the FR at: 80 Fed. Reg. 34350 (Jun. 16, 2015), <http://www.gpo.gov/fdsys/pkg/FR-2015-06-16/pdf/2015-14687.pdf> The outage reports are particularly important as legislation has reduced the states' ability to require carriers to provide quality of service reporting.

<sup>159</sup> Comments Of The National Association Of Regulatory Utility Commissioners, PS Docket Nos. 15-80 and 04-35, Notice of Proposed Rulemaking, Second Report and Order, Order on Reconsideration, available at <http://apps.fcc.gov/ecfs/document/view?id=60001116258>

<sup>160</sup> Id. p. 31



The Washington review reinforces the importance of direct state oversight of key processes affecting their citizens.

## **V. Conclusions and Recommendations**

The challenge of future regulatory oversight will be to accommodate new technologies, support industry investment and [the] expansion of advanced networks, and incent competition where possible, while maintaining consumer protections as network transitions take place.<sup>161</sup>

Even where telecommunications has been largely deregulated, almost all state commissions retain the public service obligation to ensure that customers continue to receive reliable service regardless of their location or the technology or company they choose. This section provides actions commissions may take to ensure the successful completion of this objective.

### **A. Participate actively in the technology transition**

The transition to new products and services is well underway. The number of customers subscribing to traditional wireline service continues to decrease, while the adoption of VoIP and wireless products continues to increase. By December 2013, there were 85 million end-user switched access lines in service in the United States, with 48 million (over half) of these provided by interconnected VoIP carriers, primarily cable companies.<sup>162</sup> The growth of "wireless only" subscribers has also continued. By the end of 2014, more than 106 million adults had "cut the cord," and were living in wireless only homes.<sup>163</sup>

By the end of 2013, only about one in four households remained with ILEC switched access service, as shown in the following figure.

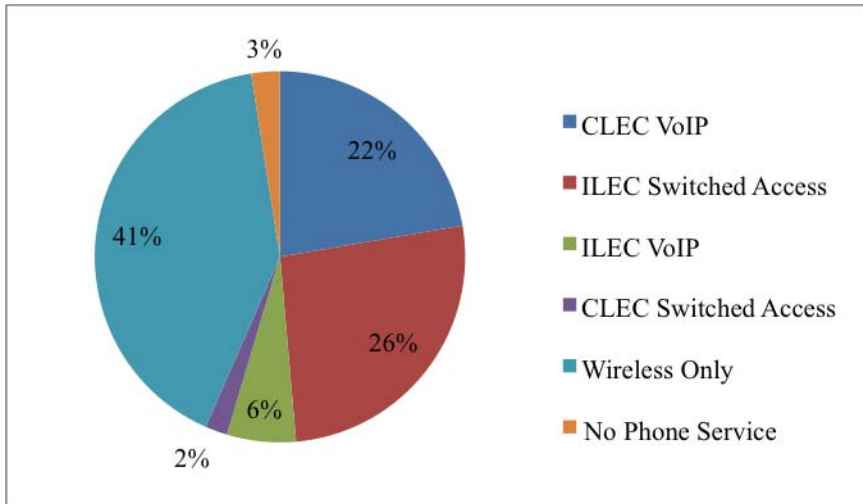
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<sup>161</sup> New York Staff Report, p.34

<sup>162</sup> FCC, Local Telephone Competition, Status as of December 31, 2013, Industry Analysis and Technology Division, Wireline Competition Bureau, October 2014, available at <https://transition.fcc.gov/wcb/iatd/comp.html>

<sup>163</sup> Blumberg, Steven J. Ph.D., and Julian V. Luke, Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July–December 2014, Division of Health Interview Statistics, National Center for Health Statistics, available at <http://www.cdc.gov/nchs/nhis/releases.htm>

**Figure 3: Service Type by Household**



**Note: Author's construct based on FCC data**

As the transition continues, State commissions face the unique challenge of managing the customer migration from traditional services, including basic local landline service, while ensuring that citizens continue to have access to reliable, universally available communications regardless of the provider or technology they choose. Meeting this goal requires active participation in the technology transition, including evaluating the new technology options carriers will offer, identifying areas where a lack of choice or technical constraints require that traditional landline service must be maintained, and ensuring that "no customer is left behind" by the transition. State commissions are in the best position to understand the effect of the transition on their citizens, and to identify gaps in product functionality (for example, the inability to interface with health monitoring devices or the lack of service during power outages), and to develop processes for helping customers understand their new service choices. Although the initial "guidance" for the management of the transition will be provided by the FCC, only the states can ensure that the transition proceeds smoothly.

The transition studies planned or underway in Ohio and Maryland (described in Section III of this paper) may provide a roadmap for other states to use in analyzing the impact of the transition on customers. In both of these states, the commission will determine if and where customers may need to retain access to wireline service, either due to gaps in coverage (for areas where wireless service is the proposed alternative) or requirements that the new services cannot yet meet (i.e., medical device connectivity or power alternatives). State studies of the transition from copper to fiber infrastructure as in the District of Columbia may also prove helpful in determining how to manage the transition.

A recent study of the requirements for universal service in an "all-IP" world suggests 11 areas states should consider as the transition moves forward.<sup>164</sup> These points for review are similar to the requirements for the Technology transition trials proposed by the FCC.<sup>165</sup>

We review these points here, with suggestions for the questions State commissions should address as the transition moves forward.

1. **Network capacity:** How will IP networks hold up under the strain of mass calling events?
2. **Service quality:** What is an acceptable level of quality for voice and data services provided over IP networks?
3. **Device interoperability:** Will existing customer premises equipment and ancillary devices work with the new networks? For example, will fixed wireless services provide connectivity for medical monitoring devices? To what extent will the new networks operate with existing alarm services, fax machines, elevator telephones, and other devices specifically developed to work with the TDM network?
4. **Accessibility:** Will the new networks support devices for the visually impaired, deaf, and disabled community? Could these new services actually provide better support than the traditional network? If so, how should carriers implement these changes?
5. **System Availability:** The current TDM network has a goal of 99.999% availability. What level of availability should be required of the new networks? Does the availability of multiple modes of communications change/reduce this requirement?
6. **Public Safety:** How will the new networks ensure continued access to 911/E911? What are the requirements for Next Generation-911?
7. **Security:** How will IP-networks meet the requirements to keep customer calls private and the network secure from attack?
8. **Call Persistence:** Do the new networks drop calls? What level of call loss is acceptable?

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<sup>164</sup> Griffin, Jody, Universal Service in an All-IP World, Public Knowledge, May, 2015, , available at <https://www.publicknowledge.org/news-blog/blogs/universal-service-in-an-all-ip-world>.

<sup>165</sup> 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 30, 2014, available at <https://www.fcc.gov/document/fcc-oks-voluntary-experiments-testing-impact-technology-transitions-0>

9. **Call functionality:** Will service continue to be universally available? Will all customers be able to connect with all other customers or do we risk the creation of "islands" where some customers cannot call others?
10. **Wireline coverage:** Wireline service is currently available to nearly all users in the United States. The transition trials currently underway in Alabama and Florida suggest that this may not be the case after the transition to IP. To what extent will the withdrawal of wired services in favor of wireless offers effect customers?<sup>166</sup>
11. **Affordability:** How can the states ensure that affordable basic service remains available to all who need it?

In addition, State commissions should continue to monitor the ability of wholesale carriers to offer alternative services to both consumers and business.

By addressing these questions early in the transition process, the States will remain effective advocates for consumers and carriers.

## **B. Define and identify substitutable products**

The success of the technology transition will depend in large part on the availability of products that can substitute for traditional service. The traditional definition of a product that can substitute for another is that the substitute product can

Satisfy the need of a consumer that another product or service fulfills. A substitute can be perfect or imperfect depending on whether the substitute completely or partially satisfies the consumer.<sup>167</sup>

State commissions facing the discontinuance of basic local service or the withdrawal of TDM service may want to create state-specific definitions of substitutable products and apply them to the products the petitioning carriers are planning to withdraw. These definitions may differ for consumers and business, making the granularity of the review and the decision all the more important.

Pennsylvania's process for identifying products that can substitute for basic local service may offer other states a tool for creating these definitions.<sup>168</sup> The Texas report on

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<sup>166</sup> Identifying customers with no wireline options is one of the goals of the Ohio study.

<sup>167</sup> Investopedia.com available at <http://www.investopedia.com/terms/s/substitute.asp>

<sup>168</sup> Pennsylvania Public Utility Commission, Opinion and Order, Joint Petition of Verizon Pennsylvania LLC And Verizon North LLC for Competitive Classification of all Retail Services in Certain Geographic Areas and for a Waiver of Regulations for Competitive Services, Cases P-2014-2446303 and P-2014-24463604, February 26, 2015

competition,<sup>169</sup> the Maine report on potential changes to COLR regulations,<sup>170</sup> and New York's report on the status of telecommunications in the state<sup>171</sup> also provide guidance for identifying substitutable products.

### **C. Evaluate competition**

The states define competition in various ways, from simply declaring that competition exists (for example, Illinois, Alabama, Florida) to evaluating the availability of competitive offerings on a per wire center basis (Pennsylvania, Colorado, and others). The processes used in Colorado and Pennsylvania to determine the level of competition and the availability of products that can substitute for traditional TDM wireline service provide a good roadmap for states reviewing the question of competition and product substitution.

As part of their response to the technology transition, states may wish to explore the actual level of competition in their states, that is, examine the list of competitors to determine whether they are indeed offering service and to whom. We suggest the following questions as a baseline for these studies.

#### **1. Study how customers define competition and product substitution.**

The Pennsylvania competition decision determined that customer migration away from wireline service to VoIP, cable offerings, and wireless demonstrated that consumers view these products as equivalent to traditional wireline service, despite limitations, such as the lack of line power. In evaluating the requirements for product substitutions, state commissions should consider consumer behavior, since consumers will be the ultimate arbiters of successful competition.

#### **2. Identify the number of competitors that are actually providing service by wire center.**

Competition soared after the initial passage of the 1996 Act as (the then) long distance companies such as AT&T and MCI entered local residential markets. Cable and wireless companies also entered the market or expanded existing

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<sup>169</sup> Public Utility Commission of Texas, Report to the 84th Texas Legislature, Scope of Competition in Telecommunications Markets of Texas, January, 2015, available at [http://interchange.puc.state.tx.us/WebApp/Interchange/application/dbapps/filings/pgSearch\\_Results.asp?TXT\\_CNTR\\_NO=42366&TXT\\_ITEM\\_NO=8](http://interchange.puc.state.tx.us/WebApp/Interchange/application/dbapps/filings/pgSearch_Results.asp?TXT_CNTR_NO=42366&TXT_ITEM_NO=8)

<sup>170</sup> Maine Public Utilities Commission, Options for Decreasing the Cost of Ensuring That There Are Adequate and Affordable Basic Telephone Service Options throughout the State, January 7, 2015, available at [www.maine.gov/mpuc/.../2015-01-07%20POLR%20Report%202020](http://www.maine.gov/mpuc/.../2015-01-07%20POLR%20Report%202020).

<sup>171</sup> New York Public Service Commission, Case 14-C-0370 - In the Matter of a Study on the State of Telecommunications in New York State, Staff Assessment of Telecommunications Services, June 23, 2015 available at <http://media.syracuse.com/news/other/2015/06/23/TelecomWhitePaper.pdf>

services, offering consumers choice and initially reducing prices. Many of these companies have now exited the competitive market or provide only minimal levels of service (for example to current customers only). Prior to determining that an area is "competitive," commissions should verify that the companies they are counting are actually providing service.

The study should evaluate consumer standalone broadband options, as well as the number of competitors offering voice service in the relevant market.

**3. Study competition in the residential, small, and large business segments separately.**

The majority of the competitive local exchange carriers (CLECs) that initially provided competition in the residential and business segments have transitioned to providing primarily business services. States electing to study the availability of multiple service options in order to determine what areas should be considered "effectively competitive" should divide their reviews into residential and business categories. The states may also want to define the number and types of services carriers offer before they are designated as competitors. This has become more difficult as states remove or reduce the requirement that carriers obtain CPCNs from the State commission prior to offering service, but remains a critical issue.

**4. Identify the requirements for moving from one carrier to another.**

Competition does not depend solely on the availability of multiple carriers offering different product choices. It also depends on the difficulty of making this transition. While consumers can easily transition their wireless service from one carrier to another, changing from one broadband/VoIP provider to another or from traditional TDM service to VoIP is not as simple. Customers wishing to switch carriers must generally purchase/lease a new router, change email addresses, and, often, schedule an in-person appointment to install new hardware. Returning to the previous vendor or moving to a third choice would require the same steps.

States may want to consider the cost and time requirements for these changes in determining the availability of competition. If these requirements are too costly or too onerous, competition may exist in name only.

**D. Take the initiative to propose legislation**

Although the pace of legislation slowed during the 2014-2015 session, the magnitude of the dollars at stake to the telecommunications industry suggests that legislative proposals to reduce oversight of telecommunications services is sure to continue. Key legislative initiatives are likely to include reducing oversight in the 13 states that have not yet deregulated or reduced oversight, adding additional protections for customers of VoIP providers, and proposing changes to USF and Lifeline requirements and support. Legislatures may also address questions surrounding E911 and NG911 management and funding, municipal broadband and net neutrality.

State commissions should participate in the legislative process where appropriate. As the "expert agency" with the best understanding of customer requirements, service availability, and reliability, they can serve as a resource for the legislative process. By working with legislators to identify how best to move forward with the technology transition and meet the needs of consumers and carriers, the States will ensure that we retain the best communications system possible.

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## Appendix A

### COLR Requirements by State

State	COLR/BLS Required	Requirement
AL	Limited	BLS required only if no other carrier can provide service regardless of technology
AK	Y	
AZ	Y	
AR	Y	
CA	Y	
CO	Limited	Areas without effective competition
CT	Y	
DC	Y	
DE	Limited	Areas without effective competition; any technology
FL	N	
GA	Limited	Only carriers that receive SUSF
HI	Y	
ID	Limited	BLS required in areas without effective competition; no price oversight
IL	Y	BLS required; no rate regulation
IN	N	BLS/COLR requirements sunset 6/30/14
IA	Y	
KS	Limited	Areas without effective competition
KY	Limited	Areas w <15,000 homes; may use any technology
LA	Limited	Requirement withdrawn when ILEC line loss reaches X
ME	Limited	Areas without effective competition; ILEC is the COLR until 12/31/15
MD	Y	Defined by carrier AFOR
MA	Y	
MI	Limited	BLS requirement withdrawn
MN	Y	
MS	N	
MO	Limited	BLS/COLR requirement lifted in St. Louis, Kansas City
MT	N	
NE	Y	COLR requirement but not explicitly defined in regulations
NV	Limited	Request relief from BLS/COLR req. in competitive areas
NH	Limited	Carrier may cease providing BLS with Commission approval

NJ	Limited	BLS price deregulated
NM	Y	
NY	Y	
NC	N	COLR requirement eliminated 2015
ND	N	
OH	N	Withdraw or abandon BLS service with 30 days notice ; PUC studying svc discontinuance rules for IP transition
OK	Y	
OR	Y	
PA	Y	PUC reduced regulation where BLS effectively competitive; COLR requirement remains.
RI	Y	
SC	Y	
SD		
TN	N	COLR eliminated 2013
TX	N	
UT	Y	
VT	Y	
VA	Limited	Areas without effective competition
WA	Y	
WV	Y	
WI	N	
WY	Limited	Areas without effective competition

## Appendix B. 2014 – 2015 Legislation Review

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
AL	<b>Deregulated 2012;</b> Muni bill S438 2015, <a href="https://legiscan.com/AL/text/SB438/2015">https://legiscan.com/AL/text/SB438/2015</a> ( <b>failed</b> )	Intrastate access	Intrastate access; wholesale	No oversight	Use any technology to provide svc.; carrier may drop COLR obligation	Petition commission	No oversight	No oversight	Sec 251/252	2015 - Remove restrictions on muni broadband
AK	<b>Commission oversight retained;</b>	Intrastate access, toll, basic service	Retail; intrastate access; wholesale	Continued oversight		Commission decision	Continued oversight	No oversight		May not regulate phonebook production and distribution.
AZ	<b>Commission oversight retained;</b> 2015 Rate Oversight - SB 1098 ( <b>signed</b> ) <a href="https://legiscan.com/AZ/text/SB1098/id/1200783/Arizona-2015-SB1098-Chaptered.html">https://legiscan.com/AZ/text/SB1098/id/1200783/Arizona-2015-SB1098-Chaptered.html</a>	Comm may conduct rate hearings	Rate increases for companies w >\$1M intrastate rev. may be approved by ACC w/o a hearing					Oversight continued		
AR	<b>Deregulated 2013,</b> Act 1098; <a href="https://legiscan.com/AR/text/SB948/2013">https://legiscan.com/AR/text/SB948/2013</a>	BLS, switched intrastate access	Basic local service; tariffs posted on website	No oversight	BLS must be tariffed			No oversight. Must contribute to USF	Sec 251/252	

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
CA	<b>Deregulated 2012</b> , SB 1161	Intrastate access	Basic Svc., landline	Landline oversight	VoIP and wireless providers may be ETCs, landline quality only	Landline	Landline	No oversight except for ETCs	Sec 251/252	Commission has asserted jurisdiction over cable VoIP for svc quality; decision pending in open dockets
CO	<b>Deregulated 2014</b> ; 2015 - SB 271 eliminates role of Consumer Counsel in telecom cases ( <b>signed</b> ) <a href="https://legiscan.com/CO/text/SB271/2015">https://legiscan.com/CO/text/SB271/2015</a>	BLS, Intrastate access, 911; svcs in non-competitive areas.	Basic svc	Basic Svc; reliability and availability of emergency svcs	Req in areas w/o competition where the requesting carrier receives HC support		Basic svc	No oversight except for emergency svcs	Sec 251/252	2015 - Consumer Counsel represents public in hearings on all matters except telecom.
CT(1)	<b>Commission Oversight Retained.</b> (1994; PA 94-83)	ILEC AFOR	Wholesale, Intrastate access	Provide "high quality technical service"	Ensure universal service availability	Commission decision	Provide "high quality customer service"	No oversight of VoIP or other IP-enabled svcs	Sec 251/252	
CT(2)	SB 572, Establish the Office of Broadband Advocacy <a href="https://legiscan.com/CT/text/SB00572/2015y">https://legiscan.com/CT/text/SB00572/2015y</a> ( <b>failed</b> )									Create Office of Broadband Advocacy to facilitate broadband access to every citizen and increase access adoption of ultra-high-speed gigabit networks.

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
CT(3)	PURA Docket 15-04-35, <a href="http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/21beeee53e3f0a2c85257e590062d435?OpenDocument">http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/21beeee53e3f0a2c85257e590062d435?OpenDocument</a>									Review requirements for Frontier AFOR, including potential deregulation
DC	<b>Retains commission oversight</b> (landline)	Basic Service, including TDM provided over fiber	Verizon AFOR	Wireline service quality standards under AFOR	Must provide BLS	Petition commission	Retains complaint jurisdiction	DC Code §34-403, IP and VoIP "shall not be regulated by the Commission ."	Sec 251/252	Formal case 1102 reviewing copper to fiber transition and quality of service for copper
DE	<b>Deregulated 2014</b>	BLS rate may increase 10%/yr	No oversight	No oversight	No oversight	No COLR reqs	Jurisdiction over adequacy of BLS	No oversight		
FL	<b>Deregulated 2012</b>	No oversight	No oversight	No oversight	No req.	No oversight; FCC Sec. 214 rules	Complaints to the Dept. of Consumer Affairs;	No oversight	Sec. 251/252; wholesale disputes	

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
GA	<b>Deregulated 2012;</b> 2015- HB 556; <a href="https://legiscan.com/GA/text/HB556/2015">https://legiscan.com/GA/text/HB556/2015</a>	Tariffs optional	Intrastate access; wholesale		COLR req for carriers that take SUSF			No oversight		HB 556:All carriers contribute to USF; contrib. based on connections OR % gross intrastate rev.
HI	<b>Retains commission oversight;</b> 2015 SB870 <a href="https://legiscan.com/HI/text/SB870/id/1091166/Hawaii-2015-SB870-Introduced.html">https://legiscan.com/HI/text/SB870/id/1091166/Hawaii-2015-SB870-Introduced.html</a> (deferred)					Svc may be disco'd for non-payment of telecom charges only, not ancillary svcs				SB 870 would have prohibited cramming
ID	<b>Deregulated 2011;</b> ; <a href="http://www.legislature.idaho.gov/idstat/Title62/T62CH6SECT62-606.htm">http://www.legislature.idaho.gov/idstat/Title62/T62CH6SECT62-606.htm</a>	Tariffs withdrawn; price lists on company website	No bus. reg.; no res. reg in competitive areas	Consumer protection rules	No oversight in competitive areas	30 days notice to PUC and customers; customers may challenge	Resolve consumer complaints	VoIP is not a telecom svc; no oversight;No license or CPCN req	Sec. 251/252	2015 - SB 1105, VoIP dereg, <a href="https://legiscan.com/ID/text/S1105/id/1141380/Idaho-2015-S1105-Introduced.pdf">https://legiscan.com/ID/text/S1105/id/1141380/Idaho-2015-S1105-Introduced.pdf</a> (failed)

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
<b>IL</b>	<b>Deregulated 2010, PA 096-097;</b> carriers select competitive status; 2015 - HB 3822, <a href="https://legiscan.com/IL/text/HB3822/2015">https://legiscan.com/IL/text/HB3822/2015</a>	Intrastate access	Intrastate access; wholesale	No oversight of competitive carriers	Basic svc required but no rate reg.		May not file rate complaints agst competitive carriers	No VoIP oversight	Sec. 251/252	2015 - Prepaid wireless carriers must pay into the TRS fund ; IL Telecom Act sunsets 12/2015; extended
<b>IN</b>	<b>Deregulated;</b> bills in 2012/2013/2014	No tariff reqs.	Intrastate switched access	No oversight	No COLR req.		Slamming/ cramming only	No oversight; no internet tax regardless of FCC actions	Sec. 251/252	Prepaid wireless providers contribute to SUSF
<b>IA</b>	<b>Retains commission oversight</b>	No rate regulation of VoIP; no retail tariffs	Wholesale; customer notice for price changes	Oversight retained			Complaints may be filed w IUB	VoIP subject to TRS and 911 assessments; providers must obtain CPCNs	Sec. 251/252	SSB 1157, Regulation study; <a href="https://legiscan.com/IA/text/SB1157/id/1108702/Iowa-2015-SSB1157-Introduced.html">https://legiscan.com/IA/text/SB1157/id/1108702/Iowa-2015-SSB1157-Introduced.html</a> ( <b>fail</b> )
<b>KS</b>	<b>Deregulated 2012, SB 72; 2013, HB 2201</b>	BLS; rural line charge may not exceed avg price in urban areas	Intrastate access	No oversight; including fraudulent practices	No obligation in urban areas	Single line res service req.	May "administer complaints" but may not regulate	No oversight	Sec. 251/252; wireline only	

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
<b>KY</b>	<b>Deregulated 2015;</b> HB 152 <a href="https://legiscan.com/KY/bill/HB152/2015">https://legiscan.com/KY/bill/HB152/2015</a>	Utility may withdraw tariffs	Retail svcs deregulated in areas w >15K housing units; no reg of svc rates, terms, conditions, or availability	Maintain existing voice svc to meet FCC requirements. May develop ETC standards that meet FCC reqs. Requirements for BLS only	No BLS obligation in locations w/o existing svc. Carrier may offer voice svc using any tech. Cust may request landline BLS after 60 day trial of alt svc. Comm may enforce this req.	New landline service not req. in areas w >15,000 homes. May transition landline to other service.	Adjudicate carrier to carrier complaints. <b>Assist</b> in resolving customer complaints. (No definition provided.)	No oversight	Sec. 251/252	Deregulates AT&T, Cincinnati Bell, and Windstream. Carrier elects deregulation; applies to ILEC. Voice svc may be offered by the ILEC or an affiliate. Completes deregulation of all AT&T locations.
<b>LA</b>	<b>Deregulated;</b> Gen. order R-31839 (2014)	Competitive svcs deregulated ; pricing on co. website	Basic Service	No oversight in competitive areas	No req when competitive line share reaches 25%		No oversight	No oversight	Sec. 251/252	



State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
ME (1)	LD 992, <a href="https://legiscan.com/ME/text/LD992/id/1173850/Maine-2015-LD992-Introduced.pdf">https://legiscan.com/ME/text/LD992/id/1173850/Maine-2015-LD992-Introduced.pdf</a> (failed)		Wireless and broadband	PUC may establish svc standards and fine wireless and BB providers for svc quality violations	N/A	N/A	Investigate/ resolve cust complaints re wireless and BB	Oversight of BB providers would include VoIP.	N/A	May enact "major substantive rules" for wireless and BB providers. Assess suppliers to fund oversight activities. Assessments go into special fund.
ME (2)	<b>Commission oversight;</b> 2015 - LD 1302 , <a href="https://legiscan.com/ME/text/LD1302/id/1198123/Maine-2015-LD1302-Introduced.pdf">https://legiscan.com/ME/text/LD1302/id/1198123/Maine-2015-LD1302-Introduced.pdf</a> (signed)	Basic Svc.	COLR svc at "reasonably comparable rates" statewide until 2021. COLR may receive state USF support.	Standards for COLR svc. Backup power req removed.	ILEC COLR req ends 12/31/15. PUC may designate new COLR. Carrier may refuse.	No COLR req where 94% of population has access to 1 wired and 1 wireless provider	Complaints for COLR svc only	No oversight; contribute to SUSF		Voice network provider offers ability to make and receive calls using the PSTN using any technology. No backup power req. USF contribution req sunsets 2021

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
MD	<b>2015 - HB 472</b> ; <a href="http://mgaleg.maryland.gov/webmga/frmMain.aspx?pid=billpage&amp;stab=02&amp;id=HB0472&amp;tab=subject3&amp;ys=2015RS">http://mgaleg.maryland.gov/webmga/frmMain.aspx?pid=billpage&amp;stab=02&amp;id=HB0472&amp;tab=subject3&amp;ys=2015RS</a> (signed)	No tariffs for bundled or discretionary svcs. Company w <20,000 users may petition not to file tariffs.	Commission may issue orders to regulate companies that are not req to file tariffs.	Oversight as defined in company AFOR.	Defined by AFOR	Commission to study and recommend process for withdrawing svc by 9/1/15	Oversight continues; by 9/1/15 determine how consumers should be notified of svc withdrawal	No oversight (2008)	Sec 251/252	Definition: a telephone company "owns" lines for local service. By 9/1/15, PUC to determine which svcs from companies w/o AFOR are discretionary and competitive services.
MA	<b>Commission oversight retained</b>							No oversight		

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
MI	<b>Initially deregulated 2011 (PA 58)</b> ; additional dereg 2014 (Public Act 52); <a href="https://legiscan.com/MI/bill/SB0636/2013">https://legiscan.com/MI/bill/SB0636/2013</a>	Tariffs optional; access restructuring fund created	BLS, intrastate access, wholesale; no rate regulation	Wireline BLS only; may withdraw BLS 1/1/17. All FCC Transition Trial rpts submitted to FCC must also be submitted to PUC; Quality standards for payphone providers	May withdraw COLR svc 1/1/17; PSC may look for another COLR; if no other qualified provider, may order ILEC to continue svc; no USF support for carriers that do not offer BLS; may not create USF fund for COLR svc.	Provide 90 days notice; follow FCC rules based on transition trials; PUC may investigate alt suppliers using any technology. May withdraw toll svc if 1 alt supplier; may withdraw BLS if 2 alt suppliers; after 2017, file state discount notice at same time as Sec 214 app.	BLS only; cust may complain that no COLR available; PUC may investigate	No oversight	Sec. 251/252	Competition defined as 2 alt. carrier using any technology and providing "comparable svc." Comparable svc = any svc that provides 2 way call completion, including wireless and VoIP. PUC maintains database of alt suppliers. After 1/1/17, only 1 alt provider required
MN (1)	<b>Commission oversight retained and extended to VoIP</b> ; 2015 - SF 1862 ( <b>failed in committee</b> ); <a href="https://legiscan.com/MN/text/SF1862/id/1173858/Minnesota-2015-SF1862-Introduced.pdf">https://legiscan.com/MN/text/SF1862/id/1173858/Minnesota-2015-SF1862-Introduced.pdf</a> / HF 1558	Tariff req for basic service; rates frozen to 1/2016; 60 day notice req.	Basic local service.	Investigate complaints about the adequacy of services	No BLS rate increase until 1/1/2016, then limited to 10% per year		Investigate complaints, including call completion complaints; notice to company req. for BLS complaints.	Oversight of all wireline providers; VoIP/cable/packet defined as telecom. See Docket 14-383 (5-10-15)	LEC may stop accepting traffic for non-payment if no dispute filed	Call completion required. Comm may investigate/enforce. Intermediate providers must register.

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
MN(2 )	SF 736, Competitive market regulation; <a href="https://legiscan.com/MN/text/SF1862/id/1173858">https://legiscan.com/MN/text/SF1862/id/1173858</a> . (failed)	Intrastate access	Competitive carriers may drop AFOR and other agreements	Wireline BLS	Wireline BLS		Wireline BLS; access disputes; intercarrier disputes	Initial bill removed oversight of VoIP. Amended to remove that language.	Sec 251/252	Competitive carrier = facilities owner offering svc to 50% of households, incl VoIP and wireless but not satellite, resellers, or resale CLECs. ILEC competitive if serves <50% or proves 2 alt. suppliers. Comm may re-examine criteria.
MS	<b>Deregulated 2012</b> , HB 825	Intrastate switched access	No req.;	ETCs must meet FCC quality reqs.	COLR/BLS withdrawn		Access complaints; contracts	No jurisdiction over VoIP, IP, broadband	Enforce federal reqs. Sec. 251/252	"Competition adequately protects the public interest."
MO	<b>Deregulated 2011</b> ;HB339T	No tariffs; rates on company website	May elect exemption from all rules (FCC and State) governing retail svc.	FCC reporting reqs. (NORS)	No obligation in St. Louis, St. Louis County; Kansas City		Companies may exempt themselves from consumer reqs.	No oversight	Sec. 251/252	

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
MT	<b>Deregulated 2011;</b> SB 246	AFOR plans must produce fair, just, reasonable rates	Carriers petition for alt. reg. plans	AFOR should not degrade service quality				VoIP jurisdiction uncertain	Sec. 251/252	2015 HJ7, Study NG 911 <a href="https://legiscan.com/MT/text/HJ7/id/1201219/Montana-2015-HJ7-Enrolled.pdf">https://legiscan.com/MT/text/HJ7/id/1201219/Montana-2015-HJ7-Enrolled.pdf</a>
NE	<b>Deregulated 2011;</b>	Publish rates and terms on company website	BLS where no competition	Regulated	No explicit COLR reqs.		Commission oversight	No jurisdiction over VoIP, IP, broadband	Sec. 251/252	2015, LB 652, Study NG 911; <a href="https://legiscan.com/NE/text/LB652/id/1081812/Nebraska-2015-LB652-Introduced.pdf">https://legiscan.com/NE/text/LB652/id/1081812/Nebraska-2015-LB652-Introduced.pdf</a>
NV	<b>Deregulated 2013;</b> AB 486	No tariffs; rates on company website; basic svc req removed	Intrastate access	No oversight	COLR req removed where another carrier offers service using any technology		No oversight	No regulation; VoIP providers contribute to 911, TRS, other funds	Wholesale quality standards and metrics optional	2015 - SB 112 wholesale metrics optional (signed) <a href="https://legiscan.com/NV/text/SB112/id/1201804/Nevada-2015-SB112-Engrossed.pdf">https://legiscan.com/NV/text/SB112/id/1201804/Nevada-2015-SB112-Engrossed.pdf</a>

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
NH	<b>Deregulated 2014</b> , 2015 HB 1314; SB 260 <a href="https://legiscan.com/NH/text/SB260/2015">https://legiscan.com/NH/text/SB260/2015</a>	BLS	Regulate providers with respect to basic service and emergency svcs.	Regulate quality and reliability to ensure 911 availability	Basic svc regulated even when provided with non-reg features		May investigate adequacy of systems to provide emergency svc	No jurisdiction over VoIP, IP, broadband	Sec. 251/252	Protect infrastructure in case of bankruptcy of landline carrier; commission must approve sale, transfer, lease of assets of ILEC
NJ (1)	Outage Refunds, A1971; <a href="https://legiscan.com/gaits/search?state=NJ&amp;bill=A1971">https://legiscan.com/gaits/search?state=NJ&amp;bill=A1971</a> (pending)			(2015) Carrier shall proactively adjust bill for outages >24 hours; includes VoIP providers		Commission decision				

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
NJ (2)	<b>Initial deregulation of competitive svcs 2008, added dereg svcs 2013, 2015 - Stipulation, Case NJAC 1:1-19, naming all Verizon services competitive</b>	Remove rate regulation of res. BLS, 1-line bus svc, install chgs, directory assistance	No oversight of competitive svcs, including res. BLS	Quality standards to apply for 3 years	BLS rate increases capped for 5 years; no specific COLR regs.	Commission decision	Respond to complaints re quality of svc	No VoIP oversight	Sec 251/252	Define competitive svcs based on ease of mkt entry, other providers, availability of like or substitute svcs; BPU may redefine if necessary. Continue to provide Lifeline and pay into TRS
NM	<b>Commission oversight retained;</b>	Basic svc.; intrastate access; Lifeline ETCs; rate increases req 60 days notice	Basic svc in areas w/o competition Competi-tion = areas where > than 50% of customers do not take BLS. Separate res/bus designation	Reasonable quality standards; limited enforcement	May not declare carrier a COLR. No COLR in areas w effective competition		Resolve BLS consumer protection issues. No pricing oversight. Dereg carriers not exempt from Unfair Practices Act , other consumer protections	No oversight	Sec. 251/252	2015 - SB 193, Reduce PRC jurisdiction (failed), <a href="https://legiscan.com/NM/text/HB442/id/1159304/New_Mexico-2015-HB442-Comm_Sub.pdf">https://legiscan.com/NM/text/HB442/id/1159304/New_Mexico-2015-HB442-Comm_Sub.pdf</a> (Similar bill failed in 2014) Apply rules for mid-sized carriers (<50K access lines) to large carriers.

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
NY(1)	<b>Commission oversight retained;</b> 2015, A02118, Omnibus Telecom Reform Act of 2015 <a href="https://legiscan.com/NY/text/A02118/id/1076575/New_York-2015-A02118-Introduced.html">https://legiscan.com/NY/text/A02118/id/1076575/New_York-2015-A02118-Introduced.html</a>			Study wireless svc quality and provide reqs. Study telecom svc quality and provide reqs.			Take complaints regarding cable cos. Determine whether new complaint process req.		Req inter-connection of cable facilities w other providers.	Create a BB fund. Create a SUSF. Statewide cable franchising. Merger oversight. Report to eval the impact of selling telecom systems.
NY(2)	SB4888, Telecom Mergers, <a href="https://legiscan.com/NY/text/S04888/id/1213179/New_York-2015-S04888-Introduced.html">https://legiscan.com/NY/text/S04888/id/1213179/New_York-2015-S04888-Introduced.html</a>			Sale or transfer of LEC assets must maintain or improve quality of service						Oversight of mergers/sales/transfers for companies wi >\$200M rev
NY(3)	S2502 3rd party charges <a href="https://legiscan.com/NY/text/S02502/id/1095412/New_York-2015-S02502-Introduced.html">https://legiscan.com/NY/text/S02502/id/1095412/New_York-2015-S02502-Introduced.html</a>						AG investigates cramming complaints			Customer must affirmatively authorize 3rd party charges; 3rd party verification req



State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
NY(4)	A1946 Universal Service <a href="https://legiscan.com/NY/text/A01946/id/1074610/New_York-2015-A01946-Introduced.html">https://legiscan.com/NY/text/A01946/id/1074610/New_York-2015-A01946-Introduced.html</a>									Create a high cost fund
NY(5)	S01680, Outage Reporting, <a href="https://legiscan.com/NY/text/S01680/id/1073814/New_York-2015-S01680-Introduced.html">https://legiscan.com/NY/text/S01680/id/1073814/New_York-2015-S01680-Introduced.html</a>			Report outages impacting 100 lines and lasting more than 24 hours to PSC						
NC	<b>Deregulated 2011, S343;</b>	Tariffs optional	None; BLS deregulated	No oversight; Req for yearly cust sat rpts sunsets in 2015	No COLR req.		Continued oversight	Comm may not impose reqs for terms, conditions, service availability	Sec. 251/252	2015 HB 762, Close the Digital Gap Act of 2015; <a href="https://legiscan.com/NC/text/H762/id/1206305/North_Carolina-2015-H762-Amended.htm">https://legiscan.com/NC/text/H762/id/1206305/North_Carolina-2015-H762-Amended.htm</a> Remove obstruction to BB build. Include BB conduit in road projects.

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
ND(1)	<b>Deregulated 2015;</b> HB 1385 ( <b>signed</b> ) <a href="https://legiscan.com/ND/text/1385/id/1161543/North_Dakota-2015-1385-Enrolled.pdf">https://legiscan.com/ND/text/1385/id/1161543/North_Dakota-2015-1385-Enrolled.pdf</a>	Intrastate access			Carriers must continue to offer essential telecom svcs		Continue to enforce consumer protection and unfair practices laws	No oversight of VoIP or other IP-enabled svcs	Sec. 251/252	VoIP providers contribute to SUSF, 911, other taxes & surcharges
ND(2)	HB 1375 ( <b>signed</b> ) <a href="https://legiscan.com/ND/text/1375/id/1177882/North_Dakota-2015-1375-Enrolled.pdf">https://legiscan.com/ND/text/1375/id/1177882/North_Dakota-2015-1375-Enrolled.pdf</a>	BLS	Essential local telephone service (basic local service) regulated; no rate ceiling	No oversight	Allows price increases for BLS; removes rate ceiling					

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
OH	<b>Deregulated 2013 SB 162</b> ; 2015 HB64 Rules for service discontinuance, Budget, <a href="https://legiscan.com/OH/bill/HB64/2015">https://legiscan.com/OH/bill/HB64/2015</a>	BLS, 911, intrastate access, pole attachments, access to conduit tariffed	BLS, IAS	Ensure adequate voice service to all citizens using any technology	BLS does <u>not</u> include svc to which cust is transitioned after withdrawal of wired svc; no oversight of transitional svc; BLS is not synonymous w/ voice svc	30 days notice to PUC and customers to abandon svc entirely. May not withdraw or abandon BLS. FCC decision overrides state rules. 120 days notice req. See Section 4927.07 Ohio Code, <a href="http://codes.ohio.gov/orc/4927.07">http://codes.ohio.gov/orc/4927.07</a>	Res cust may petition PUC to stop svc withdrawal if no alt svc available. If no other willing provider is available, PUC may req withdrawing co to continue svc.	No oversight	Sec. 251/252	PUC must adopt rules to implement HB64, including svc withdrawal, based on collaborative discussions w carriers/others. Collaborative process to determine areas where customers will have no alternate svc available. PUC may extend BLS req for affected customers for 12 months while searching for alt supplier.

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
OK	Deregulated 2013/2014 via commission action;	No tariffs required	Basic svc; intrastate access	No oversight	BLS in areas w <75K lines			No oversight	Sec. 251/252	2015 - SB672, OUSF <a href="https://legiscan.com/OK/text/SB672/id/1165237/Oklahoma-2015-SB672-Engrossed.pdf">https://legiscan.com/OK/text/SB672/id/1165237/Oklahoma-2015-SB672-Engrossed.pdf</a> . Collect OUSF fees from pre-paid wireless providers
OR	Deregulated 2005 ( <a href="http://www.oregonlaws.org/ors/759.036">http://www.oregonlaws.org/ors/759.036</a> ); 2015 - HB 2351, <a href="https://legiscan.com/OR/text/HB2351/2015">https://legiscan.com/OR/text/HB2351/2015</a>	Carriers file price lists for compet svcs	Intrastate access; non-competitive svcs	Comm may create QOS rules ( <a href="http://www.oregonlaws.org/ors/759.450">http://www.oregonlaws.org/ors/759.450</a> )	COLR obligation retained except in areas that contract w an alt supplier	Commission oversight	Commission oversight	VoIP providers contribute to 911; no decision on VoIP regulation. Deregulation bills have failed.	Sec 251/252	Increase 911 contribution

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
PA	<b>Deregulated in part; Act 183 (2004)</b> created process for id'ing and deregulating compet svcs; <b>2015 Order</b> - competitive svcs dereg in COs w competition, PA PUC Hearing Order, Docket P-2014-2446304, <a href="http://www.puc.state.pa.us/about_puc/search_results.aspx">http://www.puc.state.pa.us/about_puc/search_results.aspx</a>	No retail oversight in areas determined to be competitive ; no tariff req.	Intrastate access; wholesale; no BLS rate reg in competitive areas	5 year waiver of QOS reqs in competitive wire centers; Comm retains authority to review QOS; removes specific standards	Retains COLR obligation in entire territory	File application under Sec 214 to abandon copper	Retain consumer complaint procedures	No oversight; Internet Freedom Act	Sec 251/252	Deregulates VZ in areas the PA PUC deems competitive. Retains slamming/cramming rules; other consumer protections, including truth in billing reqs.
RI	<b>Deregulated 2011 S0265;</b>	BLS, Intrastate access	BLS using any technology; rate must match traditional svcs.	Wireless BLS must meet wireline standards	BLS req.		AG may enforce consumer complaints	No oversight	Sec. 251/252	2015 - H 5685; <a href="https://legiscan.com/RI/text/H5685/id/1143720/Rhode_Island-2015-H5685-Introduced.pdf">https://legiscan.com/RI/text/H5685/id/1143720/Rhode_Island-2015-H5685-Introduced.pdf</a> Adds wireless phones to telecom equip program (TEP)

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
SC	<b>Deregulated;</b> 2015 - S 277, State Telecom Equity in Funding Act, <a href="http://www.scstatehouse.gov/sess121_2015-2016/prever/277_20150226.htm">http://www.scstatehouse.gov/sess121_2015-2016/prever/277_20150226.htm</a>	Intrastate access. No oversight for compet svcs incl BLS	Basic Svc. Rates may be increased w/o PUC review for 5 years from date carrier is deregulated	COLR must meet SQ rules	May use any tech to meet COLR reqs, including stand alone BB. Only COLRs receive US funds. Cust may petition Comm to receive BLS. Comm may order LEC to provide if no other supplier	Provide written notice to customer 90 days before terminating svc. Must inform cust that he may complain to Comm.	Svc discontinu-ance if no other supplier available	No oversight. VoIP carriers must contribute to TRS on the same terms as wireline	Sec. 251/252	Wireless carriers, including prepaid, must contribute to TRS. USF report to Legislature in 2017
SD	<b>Deregulated</b>	BLS; intrastate access	BLS		BLS in areas w/o competition	Disco of non-competitive svc req comm approval. Comm notice for disco of competitive service		No VoIP oversight	Sec. 251/252	
TN	<b>Deregulated 2013, SB 1180</b>	No tariffs; CPCN req removed	None	No oversight			No oversight	No VoIP oversight	Sec. 251/252	Carriers self-designate as competitive

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
TX	Deregulated 2013; SB 0098DF	No tariffs; carriers may withdraw/c hg tariffs; no cost supp req.	No reg in areas w 2 unaffiliated carriers, svc using any technology	No oversight	No req in competitive areas		No oversight	Gives Comm jurisdiction over VoIP; reg. all providers that "hold themselves out to provide telecom svc"		2015 - HB 2650 Gives Comm jurisdiction over VoIP; reg. all providers that "hold themselves out to provide telecom svc" <a href="https://legiscan.com/TX/text/2015-HB2650-Introduced.html">https://legiscan.com/TX/text/2015-HB2650-Introduced.html</a> (pending)
UT	Deregulated 2005; updated 2010, SB 229	BLS	BLS; intrastate access	Commission oversight			Commission oversight	No VoIP oversight	Sec. 251/252	

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
VT	<b>Commission Oversight retained;</b> 2015 - H0117, Create Department of Telecommunications Access, <a href="https://legiscan.com/VT/text/H0117/id/1193988/Vermont-2015-H0117-Engrossed.pdf">https://legiscan.com/VT/text/H0117/id/1193988/Vermont-2015-H0117-Engrossed.pdf</a>				Req ILEC to petition the Public Service Board for high cost funding. Unallocated funds will be transferred to a broadband fund; 45% of SUSF transferred to the high-cost fund; 55% to broadband fund.					Create a Dpt of Public Svc , with Commissioner appt by Gov. Provide USF support for BB providers in areas w/o competition. Study BB deployment. Create "Connectivity Fund." Create an advisory body to review broadband grant requests.
VA	<b>Deregulated 2014, SB 584</b>	Tariffs optional	Carriers may select reg as competitive	Ensure adequate voice service	BLS not required; COLR req if no other terrestrial or wireless options		Resolve customer complaints	No oversight	Sec. 251/252	



State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
WA	Commission oversight									SB 5157, SUSF, <a href="https://legiscan.com/WA/text/SB5157/id/1075221/Washington-2015-SB5157-Introduced.pdf">https://legiscan.com/WA/text/SB5157/id/1075221/Washington-2015-SB5157-Introduced.pdf</a> . Providers may receive SUSF contributions if rates are above the Federal benchmark.
WV	Commission oversight							No oversight of VoIP		2015 - SB 576 An Act to Amend the code of WV, <b>signed</b> ; <a href="https://legiscan.com/WV/text/SB576/id/1163803/West_Virginia-2015-SB576-Enrolled.html">https://legiscan.com/WV/text/SB576/id/1163803/West_Virginia-2015-SB576-Enrolled.html</a>
WI	Deregulated 2011; Act 22	Intrastate switched access	No regulation of competitive svcs.	No oversight of competitive svcs	LEC may apply to PUC to waive COLR obligation		Dept of Agriculture and Consumer Affairs	No VoIP, Cable, BB oversight	Sec. 251/252	

State	Bill	Rates and Tariffs	Regulated Services	Service Quality	COLR/ Basic Service	Process to Discontinue Service	Complaints	VoIP	Wholesale	Other
WY(1)	<b>Deregulated;</b> 2015 - Enrolled Act 26 <b>(signed)</b> <a href="https://legiscan.com/WY/bill/SF0043/2015">https://legiscan.com/WY/bill/SF0043/2015</a>	Switched access; essential svcs (BLS) in non competitive areas; no rate reg.	Essential svcs (BLS - single line voice only) in non-competitive areas.	BLS in non-competitive areas for carriers accepting HC funds	HC funds only in non-competitive areas; svc must exceed price benchmark of \$30	Commission approval req to discontinue non-competitive svc.	BLS - non-competitive areas; carrier to carrier disputes; quality of service	No oversight (Act 82, 2013)	Sec. 251/252	An areas is competitive based on availability of multiple suppliers incl satellite. Local exchange svc competitive if 75% of cust have access to 1 unaffiliated landline carrier. Service may be bundled. Act 26 extends repeal of telecom rules to 7/1/19.
WY(2)	SF 140 <b>(failed)</b> <a href="https://legiscan.com/WY/text/SF0140/id/1097103/Wyoming-2015-SF0140-Introduced.pdf">https://legiscan.com/WY/text/SF0140/id/1097103/Wyoming-2015-SF0140-Introduced.pdf</a>	-	-	-	-	Svc may be discontinued based on high cost or if substitute svc is less expensive; PUC approval req.	Complaints for BLS only	-	-	-