National Regulatory Research Institute

About NRRI

NRRI was founded in 1976 by the National Association of Regulatory Utility Commissioners (NARUC). While corporately independent, NARUC and NRRI are linked in multiple ways to ensure accountability. NARUC, as the association of all state regulators, is invested in quality research serving its members. NRRI coordinates its activities to support NARUC's policy, research, educational and member-support service to state commissions.

Mission Statement

To serve state utility regulators by producing and disseminating relevant, high-quality research that provides the analytical framework and practical tools necessary to improve their public interest decision-making. In all its activities, NRRI embodies the following values: relevance, excellence, objectivity, creativity, independence, fiscal prudence, ethics, timeliness and continuous improvement.

Board of Directors

Chair: Hon. ToNola D. Brown-Bland, Commissioner, North Carolina Utilities
Vice Chair: Hon. John Rosales, Commissioner, Illinois Commerce Commission
Treasurer: Hon. Betty Ann Kane, Chairman, District of Columbia Public Service Commission
Secretary: Rajnish Barua, Ph.D., Executive Director, NRRI
Hon. David W. Danner, Chairman, Washington Utilities and Transportation Commission
Hon. Elizabeth B. Fleming, Commissioner, South Carolina Public Service Commission
Hon. Sarah Hofmann, Commissioner, Vermont Public Service Board
Hon. John E. Howard, Commissioner, South Carolina Public Service Commission
Hon. Mike Huebsch, Commissioner, Public Service Commission of Wisconsin
Hon. Ellen Nowak, Chairperson, Public Service Commission of Wisconsin
Hon. Greg White, Executive Director, NARUC
Acknowledgments

The author wishes to thank Kathryn Kline, NRRI, for her help in preparing and reviewing this document. She also wishes to thank Lynn Notarianni, Colorado Public Utility Commission, and Chair, NARUC Staff Subcommittee on Telecommunications, Suzanne Smith, Iowa Utilities Board, and Thomas Wilson, Wyoming Public Service Commission, for their detailed reviews of this document.
Executive Summary

As the transition from traditional wireline voice service to IP-enabled and wireless communications accelerates, state legislators have shifted their focus away from deregulating traditional providers and toward increasing broadband availability, broadening state universal service fund contributions, and ensuring the availability and quality of emergency services. Only two state legislatures proposed bills limiting commission oversight of wireline services during 2016, with no state directly addressing the question of regulating VoIP or IP-enabled services.1 Minnesota passed HF 1066 reducing regulation for carriers in areas with effective competition, while maintaining support for basic local service. The Minnesota Competitive Market Regulation Act, HF 1066, ensures the continued availability of service throughout the state by maintaining the Minnesota Public Utility Commission's oversight of basic service pricing in areas where competition is judged strong enough to discipline providers and ensure on-going consumer choice.

Minnesota brings the number of states that have significantly reduced or eliminated oversight of wireline telecommunications to 41, an increase of only one from the previous year. A bill under consideration by the District of Columbia would have increased this number to 42 had it passed. The DC Telecommunications Modernization Act (B 21-0659) would have reduced oversight of Verizon, including providing a path for the replacement of wired service with fixed wireless and VoIP. Passage of B 21-0659 would have resulted in reduced regulation for Verizon in all but two states in its nine states territory, Massachusetts and New York.2

Figure 1 below shows the current map of telecommunications deregulation. The colors represent the primary incumbent wireline carriers in each state in order to show the extent to which these carriers have been released from traditional regulation. State commissions continue to have jurisdiction over service in the states shown in white.

Although only two states addressed deregulation in 2016, telecommunications itself continued to be a significant issue for the states. Legislators in 47 states and the District of Columbia reviewed over 70 bills addressing telecommunications issues during the 2015-2016 legislative sessions.3

---

1 Minnesota's deregulatory legislation defines a telecommunications service as "an offering to the public, regardless of technology," suggesting continued commission oversight both wired and IP-enabled communications services.

2 Verizon remains price regulated in Maryland and in most of its Pennsylvania service territory. In addition, the company remains subject to commission oversight of service quality, billing, asset sales, etc.

3 There were no 2016 legislative sessions in Montana, Nevada, North Dakota, and Texas.
Eleven state legislatures reviewed the need for carrier of last resort (COLR) service, reducing or eliminating these requirements as competition increases and regulation decreases. These states proposed legislation allowing carriers to provide COLR service using any technology, including wireless, and to eliminate or modify COLR requirements in areas deemed competitive. The most significant change in COLR regulation was Maine bill HB 466, Telecommunications Competition. This bill eliminated COLR requirements in specific cities where the legislature determined that the availability of competitive carriers provides consumers with multiple service options. The reduction in COLR requirements will continue into 2017 and beyond as the IP transition reduces the number of customers purchasing traditional wired service.

Universal service was also an important issue for state legislatures. Nine states proposed legislation addressing state USF funds, including broadening the funding base by requiring wireless and VoIP providers to contribute to state funds. As the states expand the USF contribution base, state commissions may use disbursements from the state fund as a means of addressing the quality of services provided by these carriers.

Quality of service standards, the oversight of emergency services, and outage reporting took on increased importance during 2016, due in part to a perceived increase in 911 service outages and the uncertainty surrounding the effect of the technology transition on end users.

Eight states introduced bills that included a quality of service component; three passed. Of these bills, Minnesota's is the most consumer-focused, requiring the "new" competitive local service providers to continue to meet existing quality standards despite reductions in commission oversight. Similarly, Maine's Carrier of Last Resort (COLR) legislation conditions withdrawal of COLR service in areas beyond those specifically identified by the state legislature in HB 466.
the Telecommunications Competition Act, on proof that the state's incumbent local exchange
carrier (ILEC), FairPoint, meets service quality standards on an on-going basis. Finally, New
York bill S05619, Telecommunications Service Standards, would re-impose the service
standards reduced by the NY PSC in 2010.

Eleven states addressed the question of emergency services and service outage reporting.
The Colorado legislature established a task force to determine how and to what extent the
Colorado PUC should oversee emergency service providers. Nebraska consolidated emergency
service deployment and oversight under the state public service commission.

As the tide of deregulation ebbs, state legislatures have increased their focus on
broadband. During the 2016 legislative session, 19 states proposed legislation addressing ways
to increase broadband availability and adoption, including proposing changes to current state
laws limiting the availability of municipal broadband systems. Of these bills, 5 passed, 13 failed,
and one (in Massachusetts) remains pending. The number of bills focusing on broadband
suggests that broadband deployment and adoption continue to be among the most important
considerations for state governments. The state legislatures view broadband as critical for
economic development and are seeking ways to increase service deployment and speed. While
the focus on broadband is an important one, the high failure rate for these bills points to the need
for more work on the part of state commissions to explain the importance of connectivity and to
develop implementation plans. This may change as carriers begin to expand their networks with
Connect American Fund (CAF) monies.

Telecommunications will remain a key focus for state legislatures going forward in
response to the IP transition, the implementation of broadband lifeline programs, and the
potential for Congress to craft a new telecommunications act. State commissions will continue
to play a significant role in ensuring that this legislation meets the needs of their citizens.
Reduced regulation has changed the traditional role of state public utility commissions from
direct oversight to advice and consent, but has not eliminated the opportunity for working to
align the actions of telecommunications providers with the public good.

Although many states no longer directly regulate either traditional or new services, state
commissions should continue to play an active role in evaluating telecommunications markets
and proposing legislation to close any gaps left by the new rules. They can do this in four key
ways:

1. **Analyze competition on an exchange by exchange basis.**
The states are best positioned to evaluate competition at the micro level. Although
FCC data shows the number of circuits provided by competitors at a macro level,
only state commissions have the resources and the knowledge to determine where
competition is available and how it has impacted pricing and service availability.

2. **Focus on health and safety.**
While deregulation has removed direct oversight of pricing, service quality, and
product availability, state commissions retain oversight of emergency services,
including 911 and outage reporting. By collecting data on service outages, 911
problems, and other safety related issues, state commissions can ensure that carriers provide adequate service across the state.

3. **Collect and evaluate customer complaints.**
   Customer complaints continue to be a key harbinger of the success of competition as a brake on poor performance. Although deregulation has removed or limited state commission oversight of service quality and, in some instances, even moved the complaint process to unrelated agencies, commissions should continue to track the effect of limited regulation on customers. If complaints about a specific service or carrier increase (and these complaints provide credible evidence of a market failure), state commissions should consider proposing legislation that will reinstate part or all of the state's oversight of customer issues.

4. **Participate in the Broadband Lifeline program to identify areas for improvement and track customer adoption.**
   The Broadband Lifeline order limits state participation in designating Broadband ETCs but does not remove the states' ability to oversee the success of broadband providers, identify issues, and raise questions concerning support. In addition, states with state lifeline support programs can use those programs as a means of continuing to evaluate the success of Lifeline in increasing broadband adoption.

   The current cycle of deregulatory legislation appears to have reached its end. As new products and services are introduced and consumers continue to move to new technologies (including cutting the cord altogether), state commissions will continue to play a central role in protecting consumers and helping to advance the economic benefits brought about by the shift to new technology. The success or failure of a fully deregulated environment depends on how producers and consumers adapt to changing technologies and changing demands. State commissions provide a backstop to ensure that adaptation improves rather than reduces the ability of consumers to obtain the services they need at prices they can afford, regardless of the product they choose or where they are located.

---

Table of Contents

I. Introduction ........................................................................................................................1

II. 2016 legislation at a glance ...............................................................................................5

   A. Limits on regulation ........................................................................................................5
       1. Minnesota ..................................................................................................................5
       2. The District of Columbia ......................................................................................8
       3. California ...............................................................................................................8

   B. Basic local service and Carrier of Last Resort (COLR) obligations .........................10
       1. Maine charts a path to discontinuing COLR .......................................................10
       2. South Carolina updates COLR rules .................................................................12
       3. New Jersey addresses wireline replacement ....................................................13

   C. Universal Service Fund changes .............................................................................14

   D. Contribution ..............................................................................................................14

   E. Distribution ................................................................................................................15

   F. High Cost Support in New York .............................................................................15

   G. Emergency Services and Outage Reporting .........................................................17

   H. 911 ............................................................................................................................17
       1. Colorado ..............................................................................................................17
       2. Nebraska ...........................................................................................................20
       3. New Hampshire ...............................................................................................20

   I. Outage Reporting ......................................................................................................21
       1. California ..........................................................................................................21
       2. New Jersey .......................................................................................................22
       3. New York ..........................................................................................................22

III. Broadband ..................................................................................................................24

   A. Broadband deployment .............................................................................................25
       1. Maryland ............................................................................................................26
       2. Tennessee ..........................................................................................................26
       3. Virginia .............................................................................................................27
       4. West Virginia ...................................................................................................27

   B. Municipal broadband legislation .............................................................................28
       1. Alabama ...........................................................................................................28
C. Broadband Studies .................................................................................................30
   1. Alaska ........................................................................................................31
   2. Georgia ......................................................................................................32
   3. Idaho ..........................................................................................................32
   4. Massachusetts ............................................................................................32
   5. Nebraska ....................................................................................................33
   6. Tennessee ...................................................................................................33
D. Broadband Funding ................................................................................................34
   1. California ...................................................................................................34
   2. Idaho ..........................................................................................................35
   3. Minnesota ...................................................................................................36
   4. New Mexico ...............................................................................................36
   5. Vermont .....................................................................................................36
   6. Wisconsin ...................................................................................................37

IV. Assessing the future of telecommunications regulation ...............................................38
    1. Legislative trends .......................................................................................38
    2. Opportunities for State commissions .........................................................39
V. Conclusions and Recommendations ...............................................................................42

Appendix: 2016 Legislation .....................................................................................................44
Bibliography ............................................................................................................................69

List of Tables and Figures

Figure 1: The Status of Reduced Regulation by State and Carrier in 2016 .........................2
Table 1: 2016 Broadband Legislation .................................................................................24
The Year in Review 2016: 
Moving Past Reduced Regulation

I. Introduction

As the transition from traditional wireline voice service to IP-enabled and wireless communications accelerates, state legislators have begun to shift their focus away from simply reducing regulation on incumbent carriers and toward determining how to ensure the ubiquitous availability of communications services as regulation is reduced or withdrawn. To that end, for the first time since 2009, legislative efforts moved from simply limiting/eliminating regulatory oversight to considering post-deregulatory issues, including the future of carrier of last resort (COLR) requirements, managing the IP transition, state universal service funding, the availability and quality of emergency services (including outage reporting and 911 oversight), broadband deployment, and the functions of state commissions themselves. This paper addresses those issues and examines the ways in which state commissions may continue to ensure that telecommunications companies meet the needs of consumers and business across their states, even as oversight is withdrawn.

By the end of September 2016, 41 states had eliminated or significantly reduced telecommunications regulation for both traditional wireline carriers (ILECs) and carriers that provide Internet-enabled services. These limitations have been implemented primarily through legislation but also by commission action in a few states. This number increased by only one state, Minnesota, over the 2015 total. The Minnesota legislation provides a glide path for incumbent carriers to be regulated as competitive carriers. Legislation pending in the District of Columbia as part of the fiscal 2017 budget bill would have a similar effect, bringing the total number of "deregulated" states to 42.

Figure 1 shows the states that had either eliminated or significantly reduced telecommunications oversight as of September 30, 2016. The colors in the map represent the incumbent local exchange companies that served these states at the AT&T divestiture. The states that continue to regulate wireline telecommunications services (and in some cases IP-enabled service) are shown in white.

---

5 For example, Pennsylvania and New Jersey reduced regulation on their incumbent carrier through commission proceedings.

6 State commission retain jurisdiction over wireline telecommunications in AK, AZ, CT, DC, HI, MA, NY, OR, UT, and WA. The absolute number of state commissions with jurisdiction over IP-enabled services remains unclear, particularly after the DC Circuit's Net Neutrality decision.
As we noted above, the legislative focus in 2016 shifted away from deregulation and toward revisions to policies such as COLR, emergency service, and broadband. We summarize these changes briefly below.

Five states – Maine, Minnesota, New Jersey, South Carolina, and Wisconsin – proposed legislation addressing carrier of last resort (COLR) requirements. Of these, Maine bill HB 466, Telecommunications Competition, was the most expansive, establishing a path and timeline that will allow the state's incumbent carrier, FairPoint, to cease offering COLR service on a location by location basis as competition offers customers additional service options. Moving in the opposite direction, Minnesota bill HF 160 (Chapter 115) preserved COLR requirements while providing carriers with the opportunity to increase basic service pricing following a defined schedule.

Seven states – California, Colorado, Illinois, Nebraska, New Hampshire, New Jersey, and New York – initiated legislation addressing the state commission's role in overseeing emergency services, outage reporting, and customer credits for outages exceeding 24 hours. Legislation in Colorado established a task force to determine the level of oversight the state will have over emergency services provided by IP-enabled technology in light of legislation in 2014 eliminating

---

7 FairPoint must meet specific quality of service goals in order to eliminate COLR requirements in areas beyond those specified in the first tranche.
regulation of IP.\textsuperscript{8} Nebraska established the state commission as the lead agency in managing emergency services, charging it with coordinating contributions to 911 and establishing service quality standards.

Five states – California, Illinois, New Hampshire, New York, and Minnesota – addressed service quality issues. For the second time in two years, the New York legislature proposed changes to the regulations regarding service quality, proposing moving oversight from a select group of customers with only one service option to all customers.

Two states – New Jersey and Maryland – considered labor-union backed bills requiring the continued availability of wireline service and opposing the use of fixed wireless to replace copper-based service. Pending legislation in New Jersey would prohibit the state's incumbent carrier, Verizon, from transitioning service from wireline to fixed wireless unless a customer specifically requests such a change.\textsuperscript{9} Legislation in Maryland would have required Verizon to provide wired broadband service (DSL and FiOS) to all consumers across the state.

Seven states – Idaho, Kansas, Louisiana, Oklahoma, South Carolina, and Washington – reviewed the need for changes to the state universal service program, including ensuring that all providers contribute to the fund, regardless of the technology they use to provide service. In addition, pending legislation in New York would create a state fund to ensure the ubiquitous availability of affordable service.

Broadband was the most common legislative focus during 2016. Sixteen states – Alabama, Alaska, California, Georgia, Idaho, Massachusetts, Maryland, Minnesota, Missouri, New Mexico, Tennessee, Utah, Vermont, Virginia, West Virginia, and Wisconsin – proposed legislation to increase or manage broadband deployment.\textsuperscript{10} Of these, four states – Alabama, Missouri, Tennessee, and Utah – proposed legislation to increase the availability of municipal broadband with differing results.

Finally, legislatures in California and New York addressed questions related to the design, responsibilities, and makeup of the state public utility commissions, as well as reviewing the states' regulatory focus. Among these studies, California bill AB 2903 would have required the California Research Bureau (a division of the state library system) to review the regulation of telecommunications across the state in order to "clearly define California’s goals for the regulation of the telecommunications industry.”\textsuperscript{11}

\begin{footnotesize}
\begin{enumerate}
\item New Jersey continues to respond to issues raised by Verizon's move to eliminate wired service in parts of New York and New Jersey as a result of Super Storm Sandy.
\item These states account for a total of 18 bills submitted during the 2016 legislative sessions.
\item California Bill, AB 2903, PUC Duties and Responsibilities; available at https://legiscan.com/CA/text/AB2903/2015 The California Research Bureau is a division of the state library system.
\end{enumerate}
\end{footnotesize}
We discuss these bills and their effect on telecommunications in Part II of this paper. Appendix provides a state-by-state review of telecommunications legislation in 2016.

The purpose of this paper is to continue to track and analyze legislation that impacts state jurisdiction over telecommunications in order to help state commissions and state legislators understand legislative patterns and make decisions that will continue to ensure that service meets customer needs. As deregulation slows, state commissions may use the information provided here to identify areas for regulatory focus. This paper addresses four key issues.

1. Has deregulation reached its natural end? If so, how can we gauge the effects of these changes on consumers and companies?

2. What has been the impact of deregulation on customers and competitors? Is competition robust enough to ensure service quality, particularly for emergency services?

3. As the IP transition continues, how should state commissions address the consumer protections that may be required as more users transition to unregulated, IP-enabled services?

4. How can the states ensure that broadband services are deployed across their territories? What incentives are necessary to ensure ubiquitous, affordable broadband service?

This paper is organized as follows:

**Part I** is this introduction.

**Part II** addresses key legislative changes proposed or enacted during the in 2016 legislative sessions. These include limits on regulation, changes to COLR policy, USF funding and support, the oversight of emergency services, and service outages.

**Part III** reviews legislation regarding broadband deployment and municipal and shared broadband services. This section addresses legislation directed toward increasing broadband deployment by providing grants and other support to providers.

**Part IV** examines the future of telecommunications regulation and competition. This section provides recommendations for the ways in which state commissions can meet the challenge of ensuring the public good in an area where they no longer have direct oversight.

**Part V** provides conclusions and recommendations

As deregulation reaches its end point, state legislators and public utility commissions are left with the question of whether oversight remains necessary in critical areas like emergency services, outage reporting, and service quality, and how they may apply this oversight in a deregulated environment. These questions have become more challenging as customers continue to migrate from traditional wired service to minimally regulated services such as wireless and VoIP. By reviewing legislation across the states, we hope to give the states a basis for making their own decisions about what telecommunications services should remain regulated and how to exercise that oversight in a minimally regulated world.
II. 2016 legislation at a glance

This section provides an overview of the key issues addressed by state legislatures in 2016. These issues include limits on regulation, changes to COLR policy, service quality reporting and monitoring (including outage reporting and service credits), emergency services, state universal service funds, broadband deployment, and the structure of the state public service commission.

A. Limits on regulation

1. Minnesota

Minnesota became the 41st state to significantly reduce or eliminate telecommunications oversight by passing HF 1066, the Competitive Market Regulation Act of 2016. The new law establishes competitive market criteria that telephone service must meet in a local exchange area in order to receive approval from the Minnesota Public Utilities Commission for a lighter regulatory burden.

HF 1066 provides two paths to reduced regulation: (1) proof that the carrier has lost at least half of its access lines to a competitive provider or (2) proof a smaller line loss percentage and proof of the availability of alternative service on a location by location basis. The bill defines an alternative service as either a wireless service or a service provided by any other provider of local voice service who owns a substantial proportion of the last-mile or loop facilities delivering service to a majority of households in an exchange service area, without regard to the technology used to deliver the service.

A carrier seeking to be regulated under HF 1066 must petition the Commission for designation as a competitive provider. The petition must provide data showing that the carrier

1. serves fewer than 50 percent of the households in an exchange service area, and at least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider; or
2. serves more than 50 percent of the households in an exchange service area, and:

---


14 Minnesota HF 1066 (Chapter 115), Competitive Market Regulation, 5/19/16, § 237.025 subd 1(a), available at https://legiscan.com/MN/text/HF1066/2015 The definition of alternate service includes service provided by a cable company but specifically excludes service provided by a satellite provider or an over the top VoIP provider.
At least 60 percent of households in the exchange service area can choose voice service from at least one additional unaffiliated competitive service provider;

No significant economic, technological, or other barriers to market entry and exit exist;

No single provider has the ability to maintain prices above competitive levels for a significant period of time or otherwise deter competition; and

The petitioning local exchange carrier will continue to offer basic local service, as defined in subdivision 8, consistent with its tariffs in effect at the time of its petition.\(^{15}\)

The first path allows carriers to petition for deregulation based solely on the loss of customers in their service territory. This test reflects the idea that, by definition, a carrier that has lost 50% or more of its base is no longer dominant.\(^{16}\) A carrier that qualifies for designation under part I of the statute need no longer provide basic local service or act as a carrier of last resort (COLR).

The second path is more stringent. The petitioning carrier must provide information concerning the actual number of competitive providers in each exchange area, including information showing that these providers provide competition sufficient to constrain the incumbent from "deterring competition." A carrier designated as competitive under the second test must continue to provide basic local service (albeit at gradually increasing rates.)\(^{17}\)

The Minnesota statute is similar in many respects to earlier legislation across the country reducing regulation based on the availability of competitive providers. For example, in the former BellSouth states, where AT&T was the incumbent carrier, deregulation was conditioned on the presence of competitors, generally at least one wireless and one wireline provider. Similarly, the Minnesota statute defines competition in terms of the number of "unaffiliated" competitors\(^{18}\) from which a customer may choose (in this case only one), but requires "proof"

---


\(^{16}\) This section of the statute tracks legislation passed in AT&T's former Bell South territories (for example, North and South Carolina, and Georgia), which designate a carrier as "competitive" if other carriers offer service in the area. In these states, carriers simply report themselves as "competitive."

\(^{17}\) This is an important distinction between the two prongs of the competitive designation. The requirement to continue offering basic local service in areas where the petitioning carrier continues to serve more than 50% of households presumes that these customers continue to require a price "managed" service.

\(^{18}\) Unaffiliated carrier is one not owned or managed by the petitioning carrier. This means that a carrier petitioning for treatment as competitive may not use its own wireless product to prove that a competitor is available. CenturyLink, the incumbent carrier in Minnesota does not have a wireless carrier at this time.
that these competitors actually offer comparable service to that offered by the incumbent. Importantly, the Minnesota statute is more stringent than previous bills in other parts of the country, since it requires the company seeking reduced regulation to file a petition with the state commission providing data showing the actual level of competition, and providing for a contested case.

The statute requires an objection from a party within 45 days of the filing of the petition and, if no party objects within the time frame, the petition is “deemed approved.” The statute also requires the Commission to make a final determination “within 180 days of the date all information required under subdivision 2 was submitted.”

As expected, CenturyLink filed a petition to be regulated under Prong 1 of HF 1066 within days of its passage. The petition states that

- CenturyLink QC meets the criteria set forth in Minn. Stat. § 237.025, Subd 4(1), in every Minnesota exchange it serves because CenturyLink QC:
  - Serves less than 50 percent of the households in the exchange area; and,
  - At least 60 percent of the households can choose voice service from at least one unaffiliated competitive service provider.

The CenturyLink petition states that the company serves less than 40% of the customers in its rate centers where it is seeking deregulation and that over 60% of the customers in those exchanges may choose service from a wireline or wireless provider. According to the petition, these statistics more than satisfy the terms of Prong 1 of the new law.

The Minnesota Department of Commerce and the Minnesota Attorney General pushed back on the Century Link application, stating that more granular data is required. The commission has 180 days from the date the application is deemed "sufficient" to rule on the CenturyLink petition.

---


In this respect, the law is similar legislation in Colorado, where the commission determines areas with "effective competition" as the basis for deregulation.

20 Qwest Corporation, DBA CenturyLink, In the Matter of the Petition Of CenturyLink QC to be Regulated Pursuant to Minn. Stat. § 237.025: Competitive Market Regulation, MN PUC Docket No. P-421/AM-16-496, 6/30/16

21 Id, Introduction

22 On 9/14/16, the Public Utilities Commission determined that the CenturyLink petition for "competitive market regulation" was incomplete and said that the company will be required to provide additional data to support its request before the 180 day clock starts. See Minnesota Public Utility Commission, Docket Number: P-421/AM-16-496, In the Matter of the Petition of CenturyLink QC to be Regulated Pursuant to Minn. Stat. § 237.025: Competitive Market, available at
2. The District of Columbia

Legislation pending as part of the District of Columbia budget bill (B21-0659) would have reduced oversight of the city's incumbent local carrier, Verizon. The bill would limit the PSC's role in assessing the quality of service provided by the incumbent carrier. In addition, paper tariffs would no longer be required. B21-0659 provides that

The incumbent local exchange carrier shall be regulated as a competitive telecommunications provider in the provision of retail telecommunications services and local exchange services as of January 1, 2017. Any alternative form of regulation and related orders adopted by the Public Service Commission before January 1, 2017, shall be null and void.

The bill would allow "the local exchange carrier to provide local exchange service through the use of all available technologies [including VoIP] and terrestrial wireless technologies." These services are not regulated by the PSC, effectively removing oversight from the incumbent. As in other states, the bill would not eliminate the requirement that the ILEC continue to provide wholesale services to competitors or remove the PSC's authority to arbitrate interconnection agreements.

B21-0659 did not pass during the 2016 legislative session, but is expected to be reintroduced in 2017. Should the District of Columbia pass legislation like B21-0659, it would bring the total number of states that have reduced or eliminated telecommunications regulation to 42. Comprehensive public service commission oversight would remain in only three of the nine states in the Verizon territory, Maryland, Massachusetts, and New York.

3. California

California deregulated telecommunications services provided through alternate technologies like VoIP in 2011, with a review of the requirements planned for 2020. Under the 2011 legislation, the California Public Utility Commission (CPUC) retained authority over


24 Id § j(1)

25 Id § 34-2002.01(a)

26 Verizon completed the transfer of 10 of the 19 states where it had been the incumbent carrier to Frontier in 2016, reducing the Verizon footprint to 9 states. Some commenters believe that Verizon may seek to further reduce this number or withdraw wireline service from states altogether. These rumors remain unsubstantiated. State commissions in Pennsylvania and New Jersey continue to retain limited oversight of pricing and service quality in areas with limited competition.

traditional wireline communications, including the transition to broadband (i.e., the "Technology Transition") but not over new service provided by IP-enabled technologies. During the 2016 session, the legislature proposed (but did not pass) AB 2395, to clarify the level of oversight granted to the commission via previous bills and to provide "date certain" for the completion of the IP transition.

AB 2395 would have required a company moving its customers to an IP-enabled service to develop a customer education process to ensure that customers understand the requirements and options associated with the service. The bill would also have required carriers to explain the differences in technology between circuit-switched and IP-enabled service, including the need for customer-provided battery backup to enable the service to continue to function during a power outage, as well as the reduction in commission oversight due to the change to an IP-enabled service.

Importantly,

- The bill would prohibit a telephone corporation from withdrawing any voice grade single-line circuit-switched legacy telephone services without first giving prior notice, as specified, to any customer that would be affected by the planned discontinuance. The bill would require the telephone corporation, upon giving the required notice to customers, to give notice to the commission certifying (1) that the telephone corporation has completed the education and outreach program, and (2) that an alternative voice service is available for the affected customers in the affected area.  
- The bill would have ensured the availability of a substitutable service by requiring the commission to confirm that the replacement service is, indeed, equivalent to the service being withdrawn. It would have further allowed customers to request Commission review of the replacement product. Should the Commission find that the replacement service did not, in fact, provide an adequate substitute for service to be withdrawn, it could initiate a proceeding to evaluate the new service and "order the withdrawing telephone corporation to provide voice service to the customer for a period no longer than 12 months after withdrawal."  
- Finally, the bill would have authorized telephone corporations in the state to begin withdrawing traditional switched wireline service, January 1, 2020. The bill would also have extended the ban on Commission oversight of IP-enabled services beyond the original 2020 date for the sunset of this requirement.

The CPUC and consumer groups argued vociferously against the bill, pointing out that it would undermine the CPUC's constitutional authority and would eliminate the requirement that carriers provide COLR service. The bill failed but may reappear in the 2017 legislative session.

---


29 Op cit. AB 2395 Legislative Digest
B. Basic local service and Carrier of Last Resort (COLR) obligations

The 2016 legislative sessions saw a continued focus on the need for COLR service, particularly as residential and small business customers increasingly opt for non-traditional services, such as wireless (both fixed and mobile) and VoIP, over traditional wireline "plain old telephone service" (POTS). To that end, legislatures in four states, Maine, New Jersey, South Carolina, and Wisconsin, reviewed their COLR policies, addressing questions such as the need for COLR, whether and under what conditions wireline service must be preserved, and the type of technologies that carriers may use to provide COLR service. We discuss these bills below.30

1. Maine charts a path to discontinuing COLR

With the passage of H.P. 305 (Chapter 462), An Act to Increase Competition and Ensure a Robust Information and Telecommunications Market, Maine became the first state to provide a process for eliminating COLR requirements.31 H.P. 305 allows the state's incumbent carrier, FairPoint, to withdraw COLR service in specified local exchanges across the state. The bill provides a schedule of locations where FairPoint will no longer be obligated to offer "provider of last resort service" beginning in May, 2016 (30 days after the Act was signed into law), and continuing every 6 months thereafter. 32

The bill allows the FairPoint to replace price-controlled COLR service with a "market rate" offer after one year.

For one year from the date a price cap ILEC is relieved of the obligation to provide provider of last resort service in a municipality in accordance with this subsection, the price cap ILEC shall continue to offer to each provider of last resort service customer in that municipality to whom it was providing the service on the date the obligation ceased a telephone service with the same rates, terms and conditions as it provides to provider of last resort service customers to whom it is obligated to provide provider of last resort service.33

FairPoint must hold a public meeting in each jurisdiction where it will discontinue COLR service in order to inform customers of the changes it is proposing, including changes to pricing.

30 For a more detailed review of COLR policies in the states, see Lichtenberg, Sherry, Ph.D. Carrier of Last Resort: Necessity or Anachronism? NRRI Report No. 16–06, July 2016, available at nrri.org. Minnesota's deregulation bill preserves COLR requirements in areas without sufficient competition.
32 FairPoint has begun the process of discontinuing COLR service in the first tranche of states. It must meet specific quality of service goals to move to the next set of exchange areas.
33 Id. Sec. 3 35-A MRSA §7221, sub-§§4(C)
FairPoint may begin to withdraw COLR service in the state's largest cities (Portland, Bangor, South Portland, Auburn, Biddeford, and Sanford), with additional exchange areas added every six months thereafter. In total, FairPoint may withdraw COLR service in 22 cities by 2018. FairPoint may request the addition of more locations but must prove that alternate wireline and wireless suppliers are available in those areas.

The Maine bill requires the PUC to determine that alternate service is available in the areas where FairPoint seems to withdraw COLR service. The commission may approve the withdrawal of COLR service if it finds that:

(a) In addition to the price cap ILEC, there is at least one wireline-facilities based voice network service provider that offers service to at least 95% of the households in the municipality; 34 and,

(b) One or more mobile telecommunications services providers offer, on a combined basis, mobile telecommunications services to at least 97% of the households in the municipality. 35

These rules are similar to those implemented in Colorado and Kentucky, limiting the requirement for COLR to areas without "effective competition." 36

FairPoint and the Maine commission held the first the "informational meetings" concerning the rescission of COLR service in August, 2016. Attendees at the meetings were primarily concerned with the potential requirement that they move to wireless rather than wireline service. Because FairPoint must continue to offer service that mirrors COLR service for a year from the date of the decision to withdraw COLR service (in this case 8/29/16), the full impact of this change will not be felt immediately. 37

To ensure that the legislature understands the customer impacts of the withdrawal of COLR requirements, the Act requires the Commission to report on the impact of the reduction in COLR requirements in January, 2018 and again in January, 2020. The report must include:

The effect of the removal on [the] former provider of last resort service customers, the price cap ILEC's workforce, the maintenance and status of the copper line network, public safety and the cost, features and availability of telephone service, including service to the hearing impaired, and broadband service. 38

The report may also include recommendations for additional legislation, including recommendations for amending or repealing the Act.

34 Cable providers are included in the category of wireline service providers; thus, this requirement could be met in areas where a cable company provides service to the majority of homes.

35 Id. at Sec. 5.A.1-2

36 Kentucky requires the ILEC to continue to offer COLR service in the least populated areas of the state.

37 Kania, Rich, Maine Public Utility Commission, email to Sherry Lichtenberg, 9/6/16

38 Id. at Section 7
2. South Carolina updates COLR rules

South Carolina Act 181, the Telecommunications Equity in Funding Act, became law in May, 2016. The Act addresses expanding the USF contribution base to include VoIP and pre-paid wireless carriers, as well as changes to basic local service requirements for carriers that have "elected" deregulation. The Act also addresses commission oversight of basic local service in areas where the incumbent carrier chooses to withdraw COLR service.

Similar to bills passed in other states, South Carolina Act 181 addresses the need to "level the playing field" for traditional carriers, first, by bringing some aspects of non-traditional service under commission jurisdiction (in this case TRS fees) and, second, by removing what the wireline carriers consider to be "onerous" service requirements. Act 181 requires VoIP carriers and pre-paid wireless carriers to collect the state's dual party relay (TRS) service charge from their customers and remit it to the state fund. Providers may retain two percent of the monies collected.

Act 181 also amends the definition of "voice service" to allow carriers to provide basic local service using any technology (including fixed wireless). Voice service means retail service provided through any technology or service arrangement that includes the applicable functionalities described in 47 C.F.R. sec. 54.101(a).

Act 181 precludes the commission from oversight of basic local service for those carriers that elected deregulation prior to 2016, except where the carrier petitions to withdraw service altogether. For any LEC that elected to operate under section 58-9-576(C) prior to January 1, 2016, the commission must not:

(i) impose any requirements related to the terms, conditions, rates, or availability of any of the LEC's stand alone basic residential lines that were in service on the pre-election date; or

(b)(ii) Otherwise regulate any of the LEC's stand alone basic residential lines that were in service on the pre-election date.

Carriers may raise the price of basic local service, provide service using any technology, or cease offering a single line basic local service product altogether.

The LEC may choose to cease offering and disconnect basic local service 90 days after giving notice to the customer. Customers that are notified of disconnection may seek help from the South Carolina commission in finding an alternate carrier. The commission may review the

---


40 Act 181, Section 6 (c)(i)

41 Id. Section 6(c)(i)(1)

42 Carriers may not cease providing service altogether without filing a Section 214 application with the FCC and seeking state commission approval of the change.
complaint and seek a way to resolve the customer's issue, including by requiring the carrier to provide service either using its own service or through the services of an affiliate.

If the commission determines a reasonable request for service has been made and that no voice service is available to the customer, the commission may:

(1) Make a determination that the LEC is best able to provide voice service to the customer's residence and it may order the LEC to provide the voice service to the customer's residence. If ordered by the commission to provide voice service, the LEC shall do so directly or through an affiliate; or

(2) Conduct a competitive procurement process to identify a willing provider of voice service to provide voice service to the customer's residence. The willing provider of voice service selected shall provide the voice service directly or through an affiliate. (Emphasis added)

The commission's role in ensuring that customers continue to have basic service ceases in 2020. To date, no carrier has withdrawn COLR service under the terms of the bill.

3. New Jersey addresses wireline replacement

The question of replacing wireline service with fixed wireless service in New Jersey (and, to a lesser extent, other states in the Verizon footprint) continues to be a concern for labor unions, legislators, customers, and consumer advocates. Beginning in 2013, the New Jersey legislature has proposed bills limiting the replacement of copper wireline infrastructure with fixed wireless service or another "emerging" technology. Assembly bill 2333 follows this pattern,

Assembly Bill 2333 (and Senate Bill S2694) would require the state's incumbent carrier (Verizon) to continue to provide copper-based, wireline service throughout the state for one year after the bill passes unless the New Jersey Board of Public Utilities (BPU) orders the company to provide other service during a "declared emergency." Most importantly, the bill would require that the company continue to provide wired service to state public safety agencies (PSAPs) unless:

a. the public safety agency, after receiving appropriate notice and information, consents in writing to the replacement on forms prepared by the Board of Public Utilities; or

43 Act 181, Section 6 (2)(c)(1)
44 Interestingly, the 2020 date is also the date on which AT&T has proposed the IP transition be completed and carriers released to offer service using any technology.
45 The New Jersey legislature considered the same bill under the title A2459 during the 2014 session.
46 New Jersey Assembly Bill 2333/S2694, Moratorium on Copper Replacement, available at http://www.njleg.state.nj.us/2016/Bills/A2500/2333_I1.PDF
b. the public safety agency requests, without solicitation, that a local exchange telecommunications company replace copper-based landline telephone service with wireless telephone service, provided that the public safety agency may return to copper-based landline telephone service, or other comparable service as determined by the Board of Public Utilities, with no penalty or termination fee imposed by the local exchange telecommunications company.47

If passed, AB 2333 would respond to concerns regarding what some commenters consider to be a less robust service offered by Verizon after Super Storm Sandy. The bill would not prohibit the ILEC from replacing wired service with fixed wireless or another technology upon "customer request," but would require the company to explain the limitations of the new service in detail and allow customers to return to copper-based wired service with no penalty if they find the new service unsatisfactory.48 AB 2333 remains pending.

C. Universal Service Fund changes

Seven states proposed changes to their state universal service funds during 2016. These bills addressed increasing the size of the fund by broadening the types of carriers that can be assessed, as well as increasing 911 funding and ensuring that funds are dedicated to emergency services. In addition, one state, Washington, addressed how to handle fund surpluses, while a second, New York, proposed legislation to create a fund, directed primarily at increasing broadband access. We discuss these changes briefly below.

D. Contribution

As customers increasingly move to VoIP and wireless service, universal service fund contributions from wireline revenues have decreased at both the state and federal level.

During 2016, Louisiana and South Carolina enacted bills addressing contributions to state funds, including state USF and 911 contributions. Louisiana Act 590 requires pre-paid wireless consumers to contribute to state 911 funds. Charges will be assessed at the Point of Sale and may be used only for 911.49 South Carolina Act 181, State Equity in Telecom Funding, requires all providers, including wireless, VoIP and prepaid wireless carriers, to contribute to the state's Dual Party Relay (TRS) fund. 50

47 AB 2333, §3
48 Verizon disputes the idea that some consumers are being "forced" to move to fixed wireless service and notes that they offer the service only upon customer request and after full disclosure of the limitations of the fixed wireless product.
Oklahoma also addressed USF contribution. Oklahoma House Bill 2616, State USF, adds VoIP and wireless providers to the companies required to contribute to the state USF and Lifeline funds. The bill also redefines "access lines" used to determine USC contribution to include lines provided using any technology. HB 2616 was enacted in April 2016.\(^{51}\)

E. Distribution

To whom USF funds are distributed remains a key question for state legislatures and commissions.

The Idaho legislature proposed a bill to include broadband and VoIP providers in the types of carriers that may be designated as eligible telecommunications carriers (ETCs) in order to receive Lifeline and high cost funding. Idaho House Bill 408 would have revised the definition of basic local service to include both voice and data, making additional carriers eligible for support and providing state residents with additional supported services. The bill would have substituted the term "communications carrier" for telecommunications service in the Idaho code, broadening the types of service supported by the state USF fund. “Communications service” means the provision of cable service, video service, telecommunication service, broadband, or high-speed internet access service to the public, or any sector of the public, for a fee, regardless of the technology used to deliver the service.\(^{52}\) Had HB 408 passed, it would have added broadband and high-speed internet access service to the list of basic services defined in the Idaho Code.

In Rhode Island, SB 2794, addressed 911 funding, requiring that funds collected for 911 services be used only to fund 911 and not for any other purpose. SB 2794 did not pass.\(^{53}\)

Finally, the State of Washington passed legislation allowing unspent USF funds up to $5M to be carried over to the next year.\(^{54}\)

F. High Cost Support in New York

As in 2015, 2016 saw the New York legislature propose a series of bills related to telecommunications, many of which were bound over from previous legislative sessions. These bills include proposals to redefine quality of service standards, require outage reporting, address the potential for incumbent carriers to sell their New York properties, create a high cost fund, and redesign the makeup of the Public Service Commission itself. Of these, A01946, An Act to

---


\(^{53}\) Rhode Island SB 2794, Restrict the use of 911 funds, available at https://legiscan.com/RI/text/S2794/2016

Amend the Public Service Law, services (first proposed in 2011), is the most far reaching in relation to telecommunications.

A01946 recommends the creation of a universal service high cost fund, proposes a contribution methodology for that fund that includes all carriers that use "telephone numbers," addresses the potential for a telecommunications company to leave New York, and adds a formal carrier of last resort (COLR) requirement to state statutes. The bill redefines the term "essential service" to include wired, wireless, and digital networks (including VoIP networks).

The term "essential services" means the provision by telecommunications providers utilizing telephone numbers of voice grade access to and across analog, digital, or wireless networks, as pertains to the carrier, with the ability to place and receive calls; touch-tone service; single-party service; access to emergency services, including 911 and E911 (which identifies a caller's location); access to operator services; access to inter-exchange services; access to directory assistance; access to "lifeline" services, or other services equivalent in price and quality for qualifying low-income consumers; and access to all of such other services as may be mandated by federal, state, and local law.55

Most importantly, the bill would require the commission to review the impact on universal service within 30 days learning of any company selling its New York assets, transferring those assets to another company, or "contemplating" any other change in ownership. The review would result in a "universal service impact analysis" [that] shall be issued before the commission may vote upon the approval of such occurrence.57

To ensure that service remains universally available to all state residents, even after an incumbent provider departs, the bill creates a universal service fund to support service in high cost areas.

The purpose of the high cost support mechanism is to provide financial assistance to telecommunications services providers utilizing telephone numbers to help make basic local analog, digital, and wireless services universally available, at just and reasonable rates and allow such providers to be fully reimbursed for the difference between the reasonable costs incurred in making basic service available to their customers within a rural, high cost geographic support area and the price charged for such service, after taking into account any amounts received by such providers under price support mechanisms established by the federal government and by this state.58

---


56 Id. 22-52

57 Id. 42-44 There have been continued rumors suggesting Verizon may be considering a sale of some of its New York state exchanges.

58 A01946, § 92-h
The fund would be governed by the rules established by the Commission. Carriers that agree to serve as COLRs would be able to draw from the fund in an amount that would cover the difference between CAF support and actual costs.

A01946 remains pending. The New York legislature remains in session year round.

G. Emergency Services and Outage Reporting

As mass market users transition to VoIP, wireless, and other non-traditional products, the states' ability to ensure service quality, monitor/evaluate service outages, and ensure continued access to 911 across multiple networks has become increasingly critical. Simultaneously, however, legislation in a growing number of states limiting state oversight of IP-enabled services (including VoIP) has raised questions concerning how and who should ensure that critical services are properly maintained and managed.

Will the IP transition place oversight of services like 911 solely in the hands of the FCC? If so, what will be the states' involvement in ensuring universal access to essential services? We discuss state legislation addressing these questions in the following paragraphs.

H. 911

1. Colorado

Colorado passed HB 1329, An Act Concerning the Exemption of Certain Internet-Protocol-Enabled Services from Oversight by the Public Utilities Commission, in 2013. The bill exempted VoIP and IP-enabled services from PUC oversight, but retained commission oversight of emergency services, regardless of the technology used to provide connectivity.

Nothing in this part 4 [of this Act] shall be construed to affect, modify, limit, or expand the Commission's authority to regulate basic emergency service.

The Governor acknowledged the importance of continued oversight of emergency services in his message to the Legislature enacting the package of deregulation bills in 2014,

With regard to public safety, we were clear from the outset that any reform effort must maintain reliable and common sense oversight of our basic emergency services . . . and provide the public safety community the certainty to operate the a 9-1-1 network regardless of technology . . . The bill clarifies that the Public

---


60Id. Section 3, Part 4
Utilities Commission (PUC) will maintain its current authority to regulate basic emergency services, regardless of technology.\(^{61}\)

The Colorado PUC opened Proceeding 15R-0318T in May 2015 to implement the provisions of HB 1329.\(^{62}\) Emergency services provided using IP technology follow a model that differs from that of traditional TDM services (e.g., direct links to the Public Safety Answering points); for example, by routing calls to central aggregation points outside of the state, using intermediate providers, etc. For this reason, the draft rules proposed to clarify which types of providers will be subject to Commission oversight of emergency services, including "transport, aggregation, or routing providers (TARPs), providers of originating number identification services (ALI/ANI), and any other providers of basic emergency services."\(^{63}\)

The proposed rules would have redefined basic emergency services to include the services and conduct vital to the interests of connectivity, outage reporting, statewide average pricing, and database accuracy, regardless of technology used:

a. interconnection for 9-1-1 calls between a TARP and an originating service provider or a provider of intermediary aggregation services;

b. delivery of 9-1-1 calls from an originating service provider or a provider of intermediary aggregation services to a TARP;

c. delivery of 9-1-1 calls by a TARP to a PSAP including, but not limited to, switching, routing, aggregation, transport, protocol conversion, database inquiries, and interconnection to the PSAP;

d. ALI and ANI services; and

e. provisioning by originating service providers or a provider of intermediary aggregation services to TARPs, ALI providers and providers of ANI of information required to deliver 9-1-1 calls to a PSAP, including but not limited to, telephone numbers, including non-published and non-listed numbers.\(^{64}\)

The proposed rules also addressed outage reporting, the potential for competitive emergency service providers to enter the market, and the effect of the transition to an all IP network on emergency services.


\[^{63}\] Id.

The Colorado PUC's proposal to continue and, potentially, expand oversight of emergency services, including "Next generation" E911 services (NG911), met with resistance from both providers and some public safety officials. These commenters recommended a collaborative process to determine the type and extent of the rules required.

CenturyLink urges the Commission to decline to adopt the rules proposed in this proceeding at this time, and instead establish a series of workshops, comment cycles, and hearings to develop more incremental changes to the existing rules that (a) establish the Commission’s authority over basic emergency service consistent with the language of C.R.S. §29-11-101 et seq., regardless of the technology used, (b) adopt outage reporting requirements that mirror FCC outage reporting requirements, and (c) provide a reasonable approach and funding mechanism to support building diversity in basic emergency service networks.65

The state legislature sought to clarify the issue and resolve the dispute by passing SB 183, preempting the Commission proceeding and creating a task to define the entities responsible for the oversight of emergency services in an IP environment. The Task Force would clarify the

General Assembly's intent to maintain the Public Utilities Commission's Authority over Basic Emergency Services while prohibiting the regulation of Internet-Protocol-Enabled services by defining the term "Basic Emergency Service" in a manner that is consistent with such intent.66

The Task Force will study how other states address emergency services issues, including outage reporting and ensuring system reliability. In addition, it will determine whether the PUC's existing rules provide "sufficient protection for the 911 needs of Colorado," or whether new or revised rules are needed. The task force will also evaluate whether existing emergency services funding is sufficient to cover current 911 protections as well as to support the transition to NG911.67 The Task Force will report on its findings no later than January 31, 2017.

The PUC has dismissed the emergency services rulemaking until the legislative task force makes its findings.68


66 Colorado Senate Bill 183, Task Force on 911 Oversight, Outage Reporting, and Reliability, 6/10/16, available at https://legiscan.com/CO/text/SB183/2016 The first meeting of the Task Force was September 14, 2016. Minutes have not yet been released.

67 Id. 29-11-302

2. Nebraska

The Nebraska legislature took a different path than Colorado in reviewing emergency service and oversight, directly assigning oversight of the 911 system, including public safety answering points (PSAPs), 911 transport, and any ancillary services (including customer premises equipment) to the Nebraska PUC. LB 938, the 911 Service Act, establishes the Nebraska commission as

The statewide implementation and coordinating authority to plan, implement, coordinate, manage, maintain, and provide funding assistance for a 911 service system consistent and compatible with national public safety standards advanced by recognized standards and development organizations.69

The legislation defines 911 service to include voice calls, video calls, text messages and data-only calls. It charges the commission with managing the implementation of 911 service, E911 service, and any future emergency services (i.e., NG911) in order "to ensure that coordinated 911 service is provided to all residents of the state at a consistent level of service in a cost-effective manner."70 To that end, the Commission will be responsible for defining and evaluating technical standards for the provision of emergency services and for training PSAP personnel. To do this, the Commission will consult with all stakeholders, including originating service providers, to create rules and processes for maintaining and overseeing emergency services regardless of technology.

LB 938 gives the commission authority over the implementation of 911 services, regardless of how they are provided, but does not expand the Commission’s authority over IP-enabled services beyond this change.

The express authority granted to the commission to implement the 911 Service System Act shall not be deemed to supersede or otherwise modify section 86-124 or to provide the commission with any additional authority not provided by law existing on the effective date of this act, including, but not limited to, regulatory authority over originating service providers.71

3. New Hampshire

New Hampshire also addressed the oversight of emergency services during the 2016 legislative session, although the legislation did not pass SB 260, Regulation of Local Service Providers, would have allowed the Commission to re-regulate carriers that have chosen to be

70 Op. cit. LB 938, Section 19
71 LB 938, Section 29. Unlike Colorado, VoIP services are not specifically deregulated in Nebraska. Some VoIP seek state certification in order to gain access to numbering resources, negotiate interconnection agreements, etc. The Commission also requires VoIP providers to remit to the Universal Service Fund. Finally, the Commission takes consumer-complaints about VoIP and IP services.
exempt from Commission oversight where necessary to ensure the adequacy of emergency services.

Incumbent local exchange carriers that are excepted local exchange carriers shall provide services and facilities to police, fire, emergency medical services, enhanced 911, and any other communication system necessary for the protection of public health and safety, [which] are reasonably safe and adequate. The commission may conduct investigations of, pursue enforcement actions against, and order the payment of reparations and the performance of other remedial measures by, any incumbent local exchange carrier that is an excepted local exchange carrier with respect to the incumbent local exchange carriers failure to comply with its obligations . . . 72

Although SB 260 failed on a voice vote, as "inexpedient to legislate," the bill may suggest that states are beginning to become concerned about the impact of reduced regulation on emergency services.

I. Outage Reporting

Multistate service outages experienced by both traditional and non-traditional providers during 2016 raised concerns about service quality and availability from state commissions, emergency providers, and others. Although much of the evidence for the cause of these outages has been anecdotal, the need to track outages and propose corrections resulted in bills directing providers to notify state PUCs directly of outages (rather than solely through the FCC's Network Outage Reporting (NORS) tool) and penalizing carriers for outages by granting consumers service credits. 73

Although a number of states continue to require carriers to report and repair outages for their traditional wireline services within a specified time period, the applicability of this requirement to IP-enabled service (VoIP) providers has been questioned. We discuss bills in California, New Jersey, and New York regarding outage notification below.

1. California

California bill SB 1250 (pending) would require rural providers that do not offer enhanced 911 services to provide email notification of outages to the state Office of Emergency Services within 60 minutes of discovering the outage. The Office of Emergency Services would


73 The FCC requires communications providers, including wireline, wireless, paging, cable, satellite VoIP and Signaling System 7 service providers to electronically report information about significant disruptions or outages to their communications systems that meet specified thresholds set forth in Part 4 of the FCC's rules (47 C.F.R. Part 4). Communications providers must also report information regarding communications disruptions affecting Enhanced 9-1-1 facilities and airports . . . The outage data is presumed to be confidential. The states have requested that the FCC to provide data from the Network Outage Reporting System (NORS), but this issue remains unresolved.
then notify the county emergency service office and the county sheriff of the outage. The bill would also require the carrier to provide the Office of Emergency Services with an estimate of the length of the service disruption and a contact name and number for addressing issues. As with NORS reporting, the information provided by the carrier would remain confidential.74

2. New Jersey

New Jersey Bill A211 Outage Credits would require all carriers to provide prorated bill credits for outages lasting longer than 24 hours. Assembly Bill 211 would extend outage reporting and credit requirements to VoIP providers. Currently, these credits are required from wireline providers only.

The Board of Public Utilities shall require a company that provides a VoIP service or IP-enabled service, on a prorated basis, to adjust a customer’s bill, or provide a refund to a customer, who has experienced a service interruption for a period of more than 24 hours. The company shall not require the customer to take any action in order to receive a bill adjustment or refund under this section.75

Assembly Bill 211 remains pending in committee.

3. New York

New York revised its rules in 2010 to limit service quality and outage reporting and penalties to specific classes of wireline customers that had no alternative to basic wireline service. Increasing levels of complaints and the transition of customers from traditional TDM service to cable and IP-enabled services have resulted in legislative efforts to redefine and reestablish the service quality standards changed in 2010 and to extend these standards to new categories of service providers, including "cable corporations and combination telephone and cable corporations." Senate Bill 5619, An Act to Amend the Public Service Law in Relation to Service Quality Standards, Credits, Reports, and Penalties, proposes to update current service quality standards to include wireline, cable-based, and IP-based voice carriers, as well as to extend these requirements beyond the current limited set of core subscribers.76

First introduced in 2015, SB 5619 (and its Assembly companion AB 8123) would direct the NY Public Service Commission to impose service quality standards, minimum performance

75 New Jersey Assembly Bill 211, Outage Credits, available at http://www.njleg.state.nj.us/2016/Bills/A0500/211_I1.PDF The New Jersey Board of Public Utilities (BPU) does not otherwise regulate VoIP providers.
76 The current NY rules address service quality only for a segment of users, those who have no other choice for voice services and those with disabilities or other specific issues. See Lichtenberg, Sherry, Ph.D., Evaluating Telecommunications Service Quality: Can Consumers Really "Vote With Their Feet", NRRI Report 11-06, 2/10/2011, available at www.nrri.org.
levels, credits, and reporting requirements on cable corporations, combination telephone and cable corporations, and VoIP providers.

The commission shall establish quality of service standards, minimum performance levels, customer-specific credits, and reporting requirements that shall apply to each telephone corporation, cable corporation, combination telephone and cable corporation or voice over internet protocol service provider. . . Service standards shall include, but not be limited to: (a) measures relating to repairs for service outages within forty-eight hours . . . (b) a requirement that new installation orders be completed within five days . . . (c) a requirement that each corporation or service provider develop procedures to prioritize service to customers who are Lifeline customers, who are special needs customers, and for customers who utilize a medical alert system . . .

Most importantly, the bill would instruct the Commission to re-establish the "service quality monitoring and measurement [standards] in force on January 1, 2010," including penalties for failure to meet these standards. The service quality standards would include minimum performance levels for service installation, service quality requirements, outage reporting, and time frames for repairing outages. Customers would receive automatic credits for a company's failure to meet these requirements.

SB 5619 is still pending. The New York Legislature is in session for the full year, so passage is still possible.

---

77 Op. cit.§232
78 Id. §232(4)
III. Broadband

2016 saw a shift in legislative focus away from deregulation and toward broadband issues, including deployment, municipal programs, availability studies, and funding. Nineteen states proposed legislation addressing ways to increase broadband availability and adoption in 2016. Of these bills, 5 passed, 13 failed, and one (in Massachusetts) remains pending. The number of bills focusing on broadband suggests that broadband deployment and adoption are important considerations for state governments. At the same time, the high failure rate for these bills points to the need for more work on the part of state commissions to explain the importance of connectivity and to develop implementation plans. This may change as carriers begin to expand their networks with Connect American Fund (CAF) monies.

Table 1 summarizes the broadband bills proposed during 2016. These bills are discussed in detail below.

Table 1: 2016 Broadband Legislation

<table>
<thead>
<tr>
<th>State</th>
<th>Deployment</th>
<th>Municipal Broadband</th>
<th>Broadband Studies</th>
<th>Broadband Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK</td>
<td></td>
<td>HB 346 - BB penetration task force - Failed</td>
<td>HB 346 - Create a broadband fund - Failed</td>
<td></td>
</tr>
<tr>
<td>AL</td>
<td>SB 56 - Remove restrictions on municipal BB</td>
<td>Failed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td></td>
<td>Res 876 - Study rural BB deployment; recommend legislation - Enacted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA</td>
<td></td>
<td>HR 058 - Study the status of BB in the state. Failed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>HB 613 - Wired BB Act - ILEC must provide BB throughout the state. Failed</td>
<td>HB 613 includes a yearly report to the legislature on BB deployment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td></td>
<td>S2275, Next Gen BB study - pending</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td></td>
<td>SB 745 Prioritize BB funding for unserved public housing units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24
<table>
<thead>
<tr>
<th>State</th>
<th>Deployment</th>
<th>Municipal Broadband</th>
<th>Broadband Studies</th>
<th>Broadband Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN</td>
<td></td>
<td></td>
<td></td>
<td>SB 3582, $30M for rural expansion. Failed.</td>
</tr>
<tr>
<td>MO</td>
<td></td>
<td>SB 946 - Allow municipal BB where no competition - Failed</td>
<td></td>
<td>HB 2741, Rural BB fund. Failed.</td>
</tr>
<tr>
<td>NM</td>
<td></td>
<td></td>
<td></td>
<td>HB 128, BB infrastructure tax deduction. Failed</td>
</tr>
<tr>
<td>TN</td>
<td>HR 482 - Support Rural Deployment - Failed</td>
<td>HB 1839 - Allow municipal BB networks to expand - Failed</td>
<td>SB 2200, Annual BB deployment report. Failed</td>
<td></td>
</tr>
<tr>
<td>UT</td>
<td></td>
<td>SB 114 - Municipalities may vote on municipal BB - Enacted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td>HO 710, School BB Connectivity fund. Failed. H726 - BB USF surcharge. Failed</td>
</tr>
<tr>
<td>VA</td>
<td>CH 655 - Permit BB installation in state highway conduit - Enacted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WV</td>
<td>SB 315 - Create a state middle mile network - Failed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A. Broadband deployment**

Bills to increase the deployment of broadband service in unserved and underserved areas were proposed in Maryland, Tennessee, Virginia, and West Virginia. Of these, only one, Virginia Chapter 655, was enacted.
1. **Maryland**

The Maryland legislature considered HB 613, a bill requiring companies that "provide intrastate local or long distance exchange service" to make wired broadband available throughout the state, so that,

In the twenty-first century, all homes and businesses in the State require wired broadband service to connect to the global community . . . It is the responsibility of the State to ensure that every home and business in the State has access to at least one wired broadband option.79

The bill specified that wired broadband service includes "DSL, cable modem, and fiber optic service," but does not include service provided via satellite or wireless. Carriers offering service as a result of the bill would be entitled to disbursements from the state's Rural Broadband Assistance Fund. If enacted, the bill would have required the Maryland PSC to coordinate with the FCC on broadband expansion efforts and to file a yearly report with the General Assembly on "the progress made in promoting universal wired broadband access in the State."80

In its review of the bill, the PSC raised concerns regarding the requirement that it work with the FCC to incent broadband deployment, because it has no jurisdiction over broadband and "lacks expertise" in the area.81 The PSC suggested that it would need changes to public utility law to meet the requirements of the bill and would be required to hire additional staff with broadband expertise.

Although HB 613 did not pass, it raised the concern that the state's incumbent carriers are not providing service to underserved areas and sought ways to ensure broadband deployment in order to increase economic growth in unserved and underserved areas. This theme appears all of the bills proposing ways to increase broadband penetration.

2. **Tennessee**

The Tennessee legislature also proposed a resolution to increase broadband deployment by urging providers to expand service to rural areas. Like the Maryland legislature, the Tennessee House resolution recognizes the importance of broadband to the economic viability of rural communities, by indicating that

Broadband access is not a luxury; it is a necessity, as affordable and reliable broadband is a building block for healthy communities and crucial to expanding


80 Id. 8-704(B) The bill also raised concerns that the state's largest incumbent carrier (Verizon) was failing to maintain and repair its copper telephone lines therefore limiting the ability to provide DSL service in rural areas.

jobs and future development. Therefore we urge and encourage Internet service providers doing business in Tennessee to act with due speed and haste to expand broadband Internet access to our rural communities so that they may survive and thrive in a global economy.  

HJR 482 failed.

3. **Virginia**

The Virginia legislature sought to increase broadband penetration by allowing carriers to install broadband facilities in state highway conduit. Enacted as Chapter 655 of the Code of Virginia, the bill permits a broadband service provider to install, maintain, operate, repair, and replace within the public right of way underground lines, systems, and facilities necessary for the provision and extension of broadband services to the extent allowed by applicable land use permit regulations, policies, and procedures of the Department.  

While the results of the bill are still pending, the ability to use state conduit will reduce the cost of providing broadband and may encourage new entrants.

4. **West Virginia**

West Virginia Bill SB 315 sought to create a state supported middle mile broadband network to encourage broadband deployment in the state. As in Maryland and Tennessee, the preamble to the bill focuses on the need for broadband service in order to ensure economic growth, access to telemedicine and remote learning programs, and to provide better emergency service coverage, particularly for the most rural parts of the state.

The purpose of the 2016 Amendments is to promote the construction of broadband infrastructure throughout the State of West Virginia, which will ultimately result in increased access to broadband service for a greater number of unserved or underserved households and businesses. This is a particularly important need in West Virginia, because by increasing access to broadband throughout the state, the provision of telemedicine services to rural health facilities can be enhanced and the enhancement of broadband can also make 911 and emergency alert systems more capable, allowing for better protection of West Virginia residents' lives and property.

---

The bill would not provide "last mile" service to end users, but would increase the likelihood that by creating a statewide middle mile infrastructure, retail providers would increase service in rural areas. The middle mile infrastructure fund would be administered by the state water authority but monies could be used for broadband only.

SB 315 did not pass.

B. Municipal broadband legislation

Four states, Alabama, Missouri, Tennessee, and Utah, addressed the question of municipal broadband, proposing legislation to allow existing municipal providers to extend service to nearby areas without retail competition. These proposed changes came on the heels of the FCC's failed order to pre-empt state broadband limitations.

1. Alabama

Alabama bill SB 56 would have removed language in the Code of Alabama restricting municipalities from providing broadband service. It would also have allowed municipalities to offer cable service to their residents, by building systems or leasing unused transport and equipment on the municipality's internal cable and internet systems.

SB 56 would have

Removed restrictions on the service area of a public provider that is a municipality or a municipal instrumentality. This bill would further allow the public provider to provide cable systems, telecommunications equipment and systems, furnish cable service, interactive computer service, Internet access, other Internet services, advanced telecommunications service, and other services, or any combination thereof without the restrictions as to coverage area.85

SB 56 did not pass but may be proposed again during the 2017 legislative session, given the current focus on increasing broadband penetration through incentives for both cities and providers. As the FCC's Gigi Sohn pointed out in a speech in Minneapolis, municipal broadband remains an important goal of the FCC and, potentially, the states.

It is for advocates for local Internet choice to bring every local mayor, city council, business, school, college, library, chamber of commerce and citizen together to convince state officials that for the future of those cities and towns and by extension, the state itself, localities must have the ability to determine their own broadband futures.86

2. **Tennessee**

Current Tennessee law allows municipal electric companies to provide broadband service within their territories. HB 1839 would have allowed utilities that are currently offering such service to expand their coverage to adjacent territories, provided that no retail carrier is currently providing service in that area. The bill was proposed in response to the request of the Chattanooga electric utility to offer service to an adjoining location where it provided electric service. Under the proposed bill,

A municipality that is providing broadband Internet service within its service area pursuant to present law may file a petition with the Tennessee regulatory authority (TRA), seeking to provide broadband Internet service to unserved or underserved customers outside its service area.87

The TRA will grant the petition if it finds that no provider in the areas is offering broadband service at a speed of 25 megabits down and 3 megabits up; that the area is not receiving CAF funds, and that the municipality will charge market rates for service. The bill would not have increased the jurisdiction of the TRA over broadband but would simply have allowed it to approve applications from municipal utilities seeking to extend service.

Press reports suggest that industry lobbying may have caused the bill to fail.

Tennessee's law prevents a popular Chattanooga-based utility-run ISP, EPB, from expanding its up to 10 Gbps offerings. Tennessee Rep. Kevin Brooks recently tried to pass a bill that would have dismantled the state's restriction, but his effort ran face-first into a lobbying wall constructed by companies like AT&T and Comcast. He then recently tried to strip down the measure so it simply let EPB expand near its headquarters and to one neighboring county, but that provision was also shot down 5-3. 88

3. **Utah**

A bill allowing municipalities to provide broadband to unserved areas had a different fate in Utah. SB 114, which allows municipalities to vote on providing broadband, was enacted in 2016.

A legislative body of a municipality may, by a majority vote [may], call an election on whether [or not] the municipality shall provide [the] proposed: cable television services; or public telecommunications services. A municipal [legislature] that, before July 1, 2016, approves the provision of public telecommunications service facilities may, by a majority vote, call an election on


whether the municipality shall provide proposed public telecommunications service facilities.  

A municipality seeking to provide broadband service must have been providing municipal electric or other service prior to 2013 and simply be seeking to add public communications services to that offer. The municipal utility must charge rates equivalent to retail services.

C. Broadband Studies

State legislatures across the country have cited the availability of high speed broadband service as a prerequisite for economic, educational, and civic development, particularly in rural areas. For example, Georgia Senate Resolution 876 points to the importance of broadband to both community and state development.

WHEREAS High-speed broadband communications is to the 21st Century what highway construction and electrification were to the development of our rural communities in the 20th Century . . . Without up-to-date access to the digital world, Georgia's rural communities have a reduced quality of life and lack a key catalyst for economic growth . . . because they lack access to high-speed broadband communications.

Idaho Concurrent Resolution 58 also points to the economic and civic benefits of broadband service.

WHEREAS, broadband service is a vital necessity for effective commerce in the twenty-first century; and . . . businesses have repeatedly told the Legislature that telecommunication infrastructure is an important consideration in their decisions to expand or change location; and . . . communities . . . are dependent on broadband for health care, public safety, education and commerce; and . . . the ability to "connect" is especially vital to smaller businesses in . . . rural communities.


90 Ironically, while these legislatures seem to be in agreement that broadband deployment is equivalent to rural electrification and should be universally supported, few have actually passed legislation implementing broadband deployment requirements. These decisions may be influenced by the presumption that broadband is an interstate service and thus not subject to state universal service requirements.


Given the focus on broadband as an economic driver, it is not surprising six state legislatures proposed studies to identify gaps in broadband availability and recommend methods for increasing both deployment and adoption in 2016. These bills charged the states' public utility commissions with studying broadband deployment and providing reports to the legislature showing how deployment and availability have increased. Bills calling for studying broadband availability were submitted in Alaska, Georgia, Idaho, Massachusetts, Nebraska, and Tennessee. While only Georgia's bill passed, all of these bills are briefly discussed below.

1. Alaska

Alaska Bill 346 proposed the creation the Alaska Broadband Development Corporation "for the purpose of facilitating, upgrading, planning, financing, installing, owning, operating, and promoting effective use of a broadband system throughout the state." The Corporation would be an independent entity composed of members with expertise in broadband technology, broadband development, and "expertise in the operation and the business of operating a broadband network."

The Broadband Development Corporation would fund a wholesale middle mile broadband transport network and lease service to commercial providers. To track the success of the project, the bill would establish a Broadband Task Force and working group to review existing and planned broadband projects and propose ways to modify current regulations to encourage increased development. The Task Force would

(A) Determine the current level of broadband access in the 28 urban and rural areas of the state; (B) determine an acceptable level of broadband service throughout the state; (C) determine the means for increasing the level of service including regulatory changes and investment incentives for areas that are below [an] acceptable level . . . (D) explore the potential for increased use of high-speed broadband service for . . . education and health care . . . delivery (E) solicit suggestions from [industry]for expanding the availability of broadband service in the state; (F) study all means for delivering high-speed broadband service; (G) establish best practices to establish and maintain a database [of] . . . broadband . . . providers . . . [and] projects . . . (H) explore ways for encouraging state and municipal agencies to expand the development and use of high-speed broadband services, including audio and video streaming, voice-over Internet protocol, teleconferencing, and wireless networking.

---

93 As discussed in Part II above, the Maryland legislature also proposed a study of broadband availability as part of HB 613, requiring wired broadband throughout the state. This bill also failed.


95 Id.

96 Id. Sec.44.33.940
HB 346 was referred to committee and was still pending at the conclusion of the 2016 legislative session.

2. Georgia

Georgia Senate Resolution 876 was the only broadband study proposal to pass during the 2016 legislative session. The Resolution creates the "Joint High-Speed Broadband Communications Access for all Georgians" Study Committee to determine how to increase broadband penetration in rural areas of the state. Like the broadband study committee proposed in Alaska, the Georgia study committee would not be part of the Georgia PUC but would be composed of state legislators.

The committee shall undertake a study of the conditions, needs, issues, and problems [related to broadband deployment] . . . and recommend any action or legislation which the committee deems necessary or appropriate.\(^{97}\)

The committee will report any findings from its study to the legislature by December 1, 2016, at which time it will be abolished.

3. Idaho

Idaho also proposed a resolution calling for the formation of a committee to study broadband penetration and availability. House Concurrent Resolution 58 points to what the sponsors deem to be "inconsistent leadership on broadband mapping, promotion, or development" and directs the Department of Commerce to "investigate developing the capacity to coordinate and lead broadband development in Idaho."\(^{98}\) The resolution charges the Idaho Department of Commerce taking a lead role in structuring a broadband plan. The Department would provide the plan to the Legislature during the 2017 Legislative Session. The plan focuses on improving the availability of broadband to businesses across the state by creating public-private partnerships to extend broadband connectivity.\(^{99}\)

The resolution did not pass.

4. Massachusetts

Massachusetts Senate Bill 2275 would create a special commission to study telecommunications generally in the commonwealth, including the availability of broadband infrastructure,


With the goal of recommending a comprehensive approach to manage, maintain, improve and expand the telecommunications network and ensure consumers, both residences and businesses, as well as competitive local exchange carriers have access to a reliable and competitive broadband network.100

The wide ranging bill would create a special commission to review competition and pricing for broadband networks, evaluate consumer requirements for broadband service, and review work done in other states to ensure that "core public interest principles" are maintained in the deployment of broadband networks. The commission would also examine the reliability, resiliency, and interoperability of networks in the commonwealth, the types of technologies and speeds available across the state, identify served and underserved areas, and analyze census data to determine if deployment is limited in certain areas based on the characteristics of the population.

The commission would be chaired by the commissioner of the Massachusetts Department of Telecommunications and Cable, and include other participants named by the governor, including senior executives from a telecommunications company and a CLEC.

The report of the commission would be due March 1, 2017 and SB 2275 remains pending.

5. Nebraska

The Nebraska legislature proposed a resolution similar to Idaho's study resolution during the 2016 legislative session. Legislative Resolution 538 would have directed the Transportation and Telecommunications committee to study "the existing structure of regulations governing telecommunications services within Nebraska," including broadband. The resolution would have further directed the committee to review the availability and quality of broadband services in the state and determine what incentives could be established to "supplement existing support mechanisms and encourage investment in broadband telecommunications infrastructure in Nebraska."101

Resolution 538 did not pass. In the interim, Nebraska PUC has been reviewing the state's current telecommunications regulations and hopes to open a proceeding to determine what changes might be required in 2017.

6. Tennessee

Tennessee Senate Bill 2200 (House Bill 2133) would have directed the Tennessee Regulatory Authority (TRA) to make an annual study of the broadband speeds for each certificated carrier in the state.

100 Massachusetts Senate Bill 2275, An Act relative to the Next Generation Network Initiative, available at https://malegislature.gov/Bills/189/Senate/S2275

The authority shall prepare a report, using its existing resources, that lists the highest broadband Internet download speed that each holder of a state-issued certificate of franchise authority advertises to customers who are located in each county covered by each such provider's state-issued certificate of franchise authority.\textsuperscript{102}

Although SB 2200 did not pass, it suggests a continued interest by the state legislature in determining whether broadband is available across the state and whether that service meets the speed requirement of a 1.5 Mbps download speed and an upload speed of at least 25 Mbps.\textsuperscript{103}

\section*{D. Broadband Funding}

As the pace of deregulation slows, states legislators have begun to focus on establishing funding sources to encourage broadband deployment and adoption. The 2016 legislative session saw eight states reviewing bills encouraging broadband deployment through a combination of direct grants, changes to USF funding, and tax incentives. Idaho, Minnesota, Missouri, New Mexico, Vermont, and Wisconsin addressed broadband funding, primarily in rural areas. California, which already provides significant broadband funding through the state USF program, as well as broadband grant programs, passed legislation ensuring that state broadband funding is directed specifically to unserved areas. We discuss these bills below.

\subsection*{1. California}

California's broadband universal service fund is the largest in the country. The California Advanced Services Fund (CASF) stood at $113.997M (net of administrative expenses) in December 2015, based on collections from end user customers of intrastate telecommunications carriers.\textsuperscript{104} The goal of California's broadband program is to make broadband available to 98\% of the residents in the state. As of December, 2015, this goal had been met in urban areas, but not in rural areas, where broadband penetration stands at only 43\%.\textsuperscript{105}

The CASF provides support in three key areas:

\begin{itemize}
\item \textsuperscript{102} Tennessee SB 220, Broadband Internet Service, Deployment, available at https://legiscan.com/TN/text/SB2200/2015
\item \textsuperscript{103} The speeds mandated by the Tennessee legislature are below those required by the FCC in the CAF Order.
\item \textsuperscript{105} Id., p.4 California statute defines broadband as 6Mbps downstream and 1.5Mbps upstream. These speeds are currently below the requirements of the Connect America Fund and thus may be subject to legislative change in the future.
\end{itemize}
(1) Grants and loans for deployment of broadband infrastructure in unserved and underserved areas;

(2) Grants to regional consortia to advance broadband deployment, access and adoption;

(3) Grants to public housing [units] for access and/or adoption activities.

The CASF Broadband Public Housing account provides grants of up to $20M per year to make broadband available in the state's public housing units. During the 2016 legislative session, California's legislature expressed concern about the definition of unserved and underserved public housing units and the way in which funding is prioritized. California Senate Bill 745 (Ch 710) addressed this issue by requiring the CPUC to prioritize broadband funding for public housing to unserved areas, defined as those units where "at least one housing unit within the housing development is not offered broadband internet service." Interestingly, the bill removes previous language defining unserved units as those without access to "wired internet service," a change that would presumably allow carriers/consortia to receive funding for mobile or fixed wireless service.

2. **Idaho**

Using broadband to close the "homework gap", (a problem where teachers assign homework that must be completed using the internet, leaving those without access in the cold) resonated with state legislators during 2016. Although the Idaho legislature tabled a bill to study the status of broadband deployment in the state, it enacted legislation to increase broadband availability for schools.

SB 1333 (Ch 183) creates the broadband infrastructure improvement matching grant fund for schools eligible for the FCC E-rate program. This program provides funds to eligible school districts to obtain broadband access and support. In addition to the funds generally available under the program, the E-Rate program provides matching funds of up to 10% for state construction projects.

SB 1333 gives the state Department Education responsibility for determining the eligibility qualifications and applicant priority for the grants, which will cover up to 10% of the cost of an eligible special construction project. A key component of the fund is the requirement that the networks constructed using grant money be available to other carriers.

---

In order to receive moneys from the fund, the contract for such a construction project must contain a provision that the constructing provider of the project will make any dark fiber laid pursuant to the contract available for use by any other provider.107

3. Minnesota

Minnesota bill SF 3581 would have appropriated $30 million from the state's general fund for fiscal year 2017 to “promote the expansion of access to broadband service in unserved or underserved areas of the state.”108

SF 3581 failed.

4. New Mexico

New Mexico proposed to expand broadband availability by issuing equipment tax credits to companies that install broadband infrastructure. HB 128 would have created a deduction from the state's gross receipts tax for components and construction services utilized to expand broadband availability. The broadband facilities covered by the bill would have included switching equipment, transmission facilities, fiber-optic and copper cables, and any other item directly related to a system capable of transmission of internet protocol or other of transmission of internet protocol or other formatted data at transmission speeds of a minimum of ten megabits per second of download speed and one megabit per second of upload speed, all of which will be owned and used by a provider of internet access services.109

Action on HB 128 was postponed indefinitely.

5. Vermont

As in Idaho, the Vermont legislature considered a bill to increase the availability of broadband service to unserved and underserved schools. H710 would have amended the state's Broadband Connectivity Initiative (implemented in 2014) to give priority for connectivity grants to proposals that include upgrading broadband access for public schools.

The Vermont Connectivity Initiative seeks to provide each service location in Vermont access to Internet service that is capable of speeds of at least 10 Mbps download and 1 Mbps upload, or the FCC speed requirements established under Connect America Fund Phase II, whichever is higher, beginning with locations not served as of December 31, 2013 according to

the minimum technical service characteristic objectives applicable at that time. Within this category of service locations, priority shall be given first to unserved and then to underserved locations . . . “unserved” means a location having access to only satellite or dial-up Internet service and “underserved” means a location having access to Internet service with speeds that exceed satellite and dial-up speeds but are less than 4 Mbps 6 download and 1 Mbps upload.110

H710 would have created a school connectivity grant program funded under the Vermont Connectivity Initiative to provide competitive grants of up to $50,000 per project to schools with no or limited broadband availability. The Department of Public Service would base its recommendation for which schools could receive grants on service availability, economic feasibility, and the objectives of the state's telecommunications plan. The decision on which schools to support would also include a review of the percentage of students receiving free or reduced lunches, whether the community in which the school is situated has broadband access, and “whether the community in which [the] public school is situated is rural and has a percentage of households categorized as low-income that is higher than the State average.”111

Finally, H 710 would have appropriated $1M to the Connectivity Initiative overall and $200K to the School connectivity grant program.

H 710 failed on fiscal grounds.

6. Wisconsin

Wisconsin Act 278 (AB 820) amends the state's broadband expansion grant program to provide new service and ensure that grants do not subsidize telecommunications providers or their customers. Act 278 amended the program criteria to prioritize projects that are scalable, promote economic development, or address the needs of unserved and underserved areas. Communities may be certified as Broadband Forward communities by submitting an application to the grant program.

Act 278 was implemented in March 2016.

---

111 Id. § 7515b
IV. Assessing the future of telecommunications regulation

A. Legislative trends

As we noted in part I of this paper, 2016 saw a shift in legislative priorities away from the deregulation of wireline telecommunications and toward other issues, including oversight of emergency services and outage reporting; changes to universal service requirements, including broadening the contribution base; and broadband deployment and adoption.

Only two state legislatures proposed bills limiting commission oversight of wireline services during 2016, with no state directly addressing the question of regulating VoIP or IP-enabled services.\footnote{Minnesota's deregulatory legislation does not explicitly address IP-enabled service but defines a telecommunications service as "an offering to the public, regardless of technology," suggesting continued commission oversight.} Of the states proposing deregulatory legislation, only Minnesota was successful in reducing regulation, while maintaining support for basic local service, including pricing oversight. Minnesota's bill increased the number of states reducing or eliminating oversight of wireline telecommunications to 41.\footnote{As of 11/11, a deregulatory bill remains under consideration in the District of Columbia. The remaining 16 states have either reduced commission oversight by internal regulatory decisions or have simply chosen to address telecommunications issues on a case by case basis.}

Based on current and past legislative actions, it appears that state legislators have begun to view reductions in carrier of last resort and basic service requirements as corollaries to deregulation. Once telecommunications oversight is diminished, legislators address the specifics of where and whether COLR obligations should be maintained. During the 2016 legislative sessions, 11 state legislatures reviewed the need for specific COLR requirements, reducing or eliminating them as competition increases and regulation decreases. These states introduced legislation allowing carriers to provide COLR service using any technology. As part of the trend toward reducing basic service requirements, Maine passed legislation eliminating COLR requirements in areas where intermodal competition provides consumers with multiple service options. This trend will continue into 2017 and beyond, particularly as both Federal and State focus shifts from voice services to broadband.

Nine states proposed legislation amending state USF funds, including broadening the funding base by including wireless and VoIP providers. As the states expand the USF contribution base, state commissions may use disbursements from the state fund as a means of addressing the quality of services provided by these carriers.

Although quality of service remains a key issue for state public utility commissions, legislators appear less concerned that changes in regulation or the types of services customers purchase may negatively impact service quality or even lead to reduced availability of critical services such as 911.
Only eight bills introduced during the 2016 legislative session included a quality of service component, with only three passing. Of these bills, Minnesota's provides the most support for consumers, requiring companies that provide basic local service after being declared "competitive providers" to continue to meet existing quality standards. In a similar vein, Maine's Bill HB 466 allows the withdrawal of COLR service in areas beyond those listed in the bill only after the state's incumbent carrier meets quality of service standards for these additional jurisdictions.

Each of these bills gives the state commission continued responsibility for the oversight of service quality for wireline services. As the IP transition continues, state commissions will need to address the need for oversight of non-traditional services in areas where competition may not be sufficient to discipline the market. This oversight will be most important as a means of ensuring that emergency services remain robust. State commissions may use their oversight of emergency services to ensure that service quality remains high for all customers and all technologies.

As their focus shifts away from deregulation, state legislatures are turning their attention to broadband. By far the largest category of legislation in 2016 was bills addressing broadband deployment, particularly in unserved and underserved areas. Thirty-four states considered broadband legislation, including bills directed toward removing barriers to municipal broadband deployment, bills focused on identifying areas where broadband deployment has stalled, and bills providing grants for broadband installations.

Few states make broadband deployment a function of the state commission, which generally has little oversight of broadband grants or quality of service. This focus may change as broadband infrastructure is completed and adoption becomes the main goal of both federal and state plans. Broadband Lifeline will remain under PUC jurisdiction to a great extent, giving commissions a means of understanding customer needs and evaluating program results. State commissions should continue to focus on identifying areas where broadband deployment has faltered or stalled, in order to determine how best to serve their constituents.

**B. Opportunities for State commissions**

Deregulation has changed the traditional role of state public utility commissions from direct oversight to advice and consent, but has not eliminated the opportunity for efforts aimed at aligning the private behavior of telecommunications providers with the public good. Although the majority of states no longer directly regulate either traditional or new services, state commissions are finding new ways of evaluating telecommunications markets and proposing legislation to close the gaps left by the new rules.

We detail these opportunities below.

---

114 California and Nebraska do not fit this pattern. The public utility commissions in both states have lead roles in broadband deployment and adoption.
1. **Analyze competition on an exchange by exchange basis**

The states are best positioned to evaluate competition at the micro level. While the FCC reports on the level of competition by state, this data does not provide the focus states need to determine where competition is available and how it has impacted pricing and service availability. Despite deregulation, both Florida and Texas continue to examine telecommunications competition in their states and provide reports to the state legislature. These reports can identify gaps in competition and can assist states in determining whether new or revised legislation is necessary.

California's recently released draft decision in Investigation 15-11-007, Analyzing the California Telecommunications Market and Directing Staff to Continue Data Gathering, Monitoring, and Reporting on the Market, suggests another means by which state commissions can continue to examine whether competition is sufficient to replace regulation.\(^{115}\)

2. **Focus on health and safety**

While deregulation has removed direct oversight of pricing, service quality, and product availability, the majority of state commissions retain oversight of emergency services, including 911 and outage reporting. By collecting data on service outages, 911 problems, and other safety related issues, state commissions can ensure that carriers provide adequate service across the state.

Colorado's examination of how emergency services should be regulated could be replicated in other states to ensure that the transition to IP-enabled E911 service does not result in gaps in service.\(^{116}\)

3. **Collect and evaluate customer complaints**

Customer complaints continue to be a key harbinger of the success of competition as a brake on poor performance. Although deregulation has removed or limited state commission oversight of service quality and even, in some instances, moved complaints to unrelated agencies, commissions should continue to track complaints. If complaints about a specific service or carrier increase, state commissions should evaluate whether these complaints indicate a market failure and, if so, consider proposing legislation that will reinstate part or all of the state's oversight of customer problems. This issue will become increasingly important as the transition to an IP network accelerates and will give both the state and the FCC a window into its success and methods for resolving problems.

\(^{115}\) California Public Utility Commission, Proposed Decision, Investigation 15-11-007, Analyzing the California Telecommunications Market and Directing Staff to Continue Data Gathering, Monitoring, and Reporting on the Market, November 15, 2016, available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M168/K604/168604492.PDF

4. **Participate in the Broadband Lifeline program**

The Broadband Lifeline order limits state participation in designating Broadband ETCs but does not remove the states' ability to oversee the success of broadband providers, identify issues, and raise questions concerning support. In addition, states with state lifeline support programs can use those programs as a means of continuing to evaluate the success of Lifeline in increasing broadband adoption.
V. Conclusions and Recommendations

At the outset of this paper, we asked three questions to guide the discussion of how state commissions can respond to deregulation. We attempt to answer those questions here.

1. **Has the deregulatory train reached its final destination? If so, how can we gauge the effects of these changes on consumers and companies?**

   Deregulation of wireline telecommunications appears to have drawn to a close. The remaining "regulated" states will continue to reduce oversight through changes to commission rules and requirements, but there will be few deregulation bills proposed by state legislators. Bills reducing or eliminating oversight of IP-enabled services may increase.

2. **What has been the impact of deregulation on customers and competitors? Is competition robust enough to ensure service quality, particularly for emergency services?**

   The effects of deregulation on competition and customers are still uncertain. For the most part, intermodal competition between different types of services has replaced intramodal competition between carriers as the key method for keeping services affordable and ensuring that product offerings, pricing, and quality meet the public interest. In areas without active competition, for example locations where there is only a single wired broadband provider and where wireless service is not available to all customers, state commission involvement will continue to be a key method for ensuring service affordability, availability, and quality. If regulatory constraints are loosened or removed in these areas, companies may focus only on high value services, leaving gaps for less affluent customers. For example, if there is no COLR obligation, companies may not serve those customers that do not generate sufficient profit or may repair service problems for high margin customers before those of low margin customers.

   State commissions should continue to focus their efforts on assessing the effect of deregulation on these "at-risk" areas.

3. **As the IP transition continues, how should state commissions address the consumer protections that may be required as more users transition to unregulated, IP-enabled services?**

   As the transition to advanced services continues, state commissions should continue to collect data on the effect of this transition on customers and services. This is particularly true in the area of emergency services, where network outages may affect service in multiple states, even though the source of the problem may be in an area outside commission jurisdiction. The outcome of the Colorado task force on the regulation of emergency service may serve as a model for commission action and future legislation in this area.
The current cycle of deregulatory legislation appears to have reached its end. As new products and services are introduced and consumers continue to move to new technologies, state commissions will continue to have a central role in protecting consumers and helping to advance the economic benefits brought about by the shift to new technology. The success or failure of a fully deregulated environment will depend on how well customers adapt to new products and services and the extent to which state commissions will need to step in to evaluate and correct problems raised by this important transition.
### Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>SB 56, Muni Telephone Svc, <a href="https://legiscan.com/AL/text/SB56/id/1311663/Alabama-2016-SB56-Introduced.pdf">link</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Remove restrictions on municipal BB providers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL</td>
<td>SJR 116. BB deployment, <a href="https://legiscan.com/AL/text/SJR116/id/1399360/Alabama-2016-SJR116-Introduced.pdf">link</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Support increased municipal broadband in the state</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AK</td>
<td>HB 346, Broadband Development Taskforce, <a href="https://legiscan.com/AK/text/HB346/2015">link</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Create a public corporation and task-force to review ways to improve broadband penetration.</td>
<td></td>
<td></td>
<td>Purchase property and equip for BB. Sell middle mile services on state BB facilities at wholesale prices.</td>
</tr>
<tr>
<td>AZ</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>AB 2903, PUC Duties and Responsibilities; <a href="http://www.leginfo.ca.gov/pub/15-16/bill/asm/ab_2901-2950/ab_2903_bill_20160810_amended_se_n_v98.pdf">http://www.leginfo.ca.gov/pub/15-16/bill/asm/ab_2901-2950/ab_2903_bill_20160810_amended_se_n_v98.pdf</a> (Replaces ACA 11)</td>
<td>Failed</td>
<td>Determine whether changes in regulations affected the CPUC's ability to maintain svc quality and resolve customer complaints</td>
<td></td>
<td></td>
<td></td>
<td>Identify any gaps in CPUC oversight of 911</td>
<td>CA Research Bureau to study telecom regulation and determine whether CPUC should be restructured. Bill moves transportation functions to other agencies; prohibits utility execs from serving as Commissioners for 2 yrs; provides &quot;recommendations to clearly define California's goals for the regulation of the telecommunications industry&quot;</td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>SB 215, Ex Parte communications, Chapter 807,</td>
<td>Enacted; Chapter 807,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Limits ex parte communications with the CPUC.</td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>SB 1250, Notification of rural outages, <a href="https://legiscan.com/CA/text/SB1250/2015">link</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Rural telcos without E911 must provide outage info to CPUC</td>
<td>Notify CPUC of outages and estimated time to restore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>SB 745, CASF funding for public housing, <a href="https://legiscan.com/CA/text/SB745/2015">link</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td>Prioritize CASF funding for unserved public housing units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>AB 2395, Replacement of the PSTN, <a href="https://legiscan.com/CA/text/">link</a></td>
<td>Failed</td>
<td>COLR not required in competition</td>
<td></td>
<td></td>
<td></td>
<td>Provide a timeline for the IP Transition. Eliminate TDM service by 2020.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>AB2395/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>SB 1481, Chapter 89, Prepaid Mobile Surcharge, <a href="https://legiscan.com/CA/text/SB1481/2015">legiscan.com</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>AB 1564, wireless 911 routing; <a href="http://www.leginfo.ca.gov/pub/15-16/bill/asm/ab_1551-1600/ab_1564_bill_20160817_enrolled.pdf">leginfo.ca.gov</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Create a state wide wireless 911 network.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>AB2570, Lifeline Fraud, <a href="http://www.leginfo.ca.gov/pub/15-16/bill/asm/ab_1551-1600/ab_1564_bill_20160817_enrolled.pdf">leginfo.ca.gov</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Office of Emergency Preparedness lead agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lifeline freeze;</td>
<td></td>
<td></td>
<td>Similar to FCC BB Lifeline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>2016 Legislation</td>
<td>Status</td>
<td>COLR/ Basic Service</td>
<td>Service Quality</td>
<td>USF</td>
<td>Broadband</td>
<td>911</td>
<td>Outage Reporting</td>
<td>Other</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>--------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>-----</td>
<td>-----------</td>
<td>-----</td>
<td>------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CT</td>
<td>PA-16-101 (HB 533), An Act Concerning Tariffs, <a href="https://legiscan.com/CT/text/HB05311/id/1">link</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tariffs not required for business services.</td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>407431/Connecticut-2016-HB05311-Chatered.htm1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Study telecommunications in the state.</td>
</tr>
<tr>
<td>DC</td>
<td>DC B 21-0659; Telecom</td>
<td>Pending</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Provide service</td>
</tr>
</tbody>
</table>

49
# Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>2016 Legislation Details</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA</td>
<td>Resolution 876,</td>
<td>Modernization,</td>
<td>Passed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HI</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>HB 408, USF,</td>
<td>Modernization,</td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Universal access to</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **FL** passed legislation that created a committee to study rural broadband deployment. Recommend legislation.
- **GA** passed resolution calling for a broadband study.
- **HI** and **IA** did not have any legislation.
- **ID** failed to pass legislation to amend SUSF to include universal access to broadband using any technology including VoIP but no oversight of VoIP.
### Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.com/ID/text/H0408/id/1317127/Idaho-2016-H0408-Introduced.pdf</td>
<td></td>
<td>cable, video, internet, high speed data. ETCs must provide universal svc, including BB.</td>
<td>add BB, BIAS, video. Define &quot;communications providers.&quot; Surcharge &lt;$.20/month. Funding for rural carriers 1/1/2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Session Law Chapter 183</td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Creates the Broadband</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL</td>
<td>(SB 1333), <a href="https://legiscan.com/ID/text/S1333/2016">https://legiscan.com/ID/text/S1333/2016</a></td>
<td>Pending</td>
<td>Redefines basic svc as Res and Bus lines used for local exchange svc. Includes svc provided via VoIP.</td>
<td>Maintains svc quality rules.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Provide custom er credits for outages &gt; 24 hours (reduce d from 30)</td>
</tr>
<tr>
<td>IN</td>
<td>2016-03-21 - Public Law 36 (SB0213), <a href="https://legiscan.com/IN/text/SB0213/2016">https://legiscan.com/IN/text/SB0213/2016, 911 fees</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Exempt ETCs from charging 911 fees on Lifelines</td>
</tr>
<tr>
<td>KS</td>
<td>HB 2131, Wireless siting, KS USF,</td>
<td>Enacted</td>
<td>May offer &quot;individu al&quot; customer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rural VoIP providers subject to commission</td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>KY</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA</td>
<td>Act 590, 911 surcharge, <a href="http://www.legislative.state.la.us/Legislation/Doc.aspx?d=1013087">http://www.legislative.state.la.us/Legislation/Doc.aspx?d=1013087</a></td>
<td>Enacted</td>
<td>Thermal Wave</td>
<td>USF except Lifeline support. VoIP providers contribute to USF based on intrastate revs.</td>
<td>oversight.</td>
<td></td>
<td>4% assessed on prepaid wireless service at point of sale. 911 charges must be used only for 911.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>MA S2275, Next Gen</td>
<td>Pending</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Establish committee to</td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Network Initiative, <a href="https://legiscan.com/MA/text/S2275/2015">https://legiscan.com/MA/text/S2275/2015</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>focused broadband deployment.</td>
<td></td>
<td></td>
<td>study BB. Report to legislature 3/17; propose legislation or regulatory changes. Comm should include univ. member and senior execs. of telcos, both ILEC and CLEC.</td>
</tr>
<tr>
<td>MD</td>
<td>HB 613, Wired Broadband Act of 2016, <a href="https://legiscan.com/MD/text/HB613/2016">https://legiscan.com/MD/text/HB613/2016</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>ILEC must provide wired BB throughout the state either directly or through a 3rd party or contribute cost of providing to Rural BB Assistance Fund. Svc may be DSL, cable, or other</td>
<td></td>
<td></td>
<td>MD Rural BB estab. 2009 to assist in bringing BB to rural and underserved areas. PUC to work with FCC to encourage BB deployment. Report to legislature yearly on BB deployment.</td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME</td>
<td>HB 466, Telecommunications Competition, <a href="https://legiscan.com/ME/text/LD466/id/1391913/Maine-2015-LD466-Chaptered.pdf">https://legiscan.com/ME/text/LD466/id/1391913/Maine-2015-LD466-Chaptered.pdf</a></td>
<td>Enacted</td>
<td>Modify COLR requirenents to allow ILEC to withdraw COLR service on a city by city basis. May use any technology to provide svc.</td>
<td>ILEC must meet QoS reqs to eliminate COLR svc. QoS reqs modified.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Per its filings, FairPoint &quot;has a substantial and unmet revenue need at this time,&quot; making service quality penalties &quot;punitive and harmful to FairPoint's ability to compete and provide the service demanded by the competitive market.&quot; Docket No. 2016-00175</td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN</td>
<td>HB5676-Introduced.htm</td>
<td>Enacted</td>
<td>Competive carriers must provide BLS at existing rates until 1/1/18; gradual increases afterwads. May not exceed $25 until 12/31/22</td>
<td>Continue to meet quality standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Telecom svc includes any technology. Carriers may petition to be regulated as CLECs.</td>
</tr>
<tr>
<td>MN</td>
<td>HF 1066 (Ch 115), MN Statute § 237.025, Competitive Mkt Reg., <a href="https://legiscan.com/MN/text/HF1066/2015">https://legiscan.com/MN/text/HF1066/2015</a></td>
<td>Enacted</td>
<td>Competive carriers must provide BLS at existing rates until 1/1/18; gradual increases afterwads. May not exceed $25 until 12/31/22</td>
<td>Continue to meet quality standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN</td>
<td>HF 3058/SF 3395, Dispute resolution, customer billing, <a href="https://legiscan.com/MN/text/HF3058/2015">https://legiscan.com/MN/text/HF3058/2015</a></td>
<td>Failed</td>
<td>Bills must include itemized charges; no chgs/fees not approved by federal or state gov. No chg for paper bill but may provide a discount for electronic bill.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Informal PUC dispute resolution for carrier to carrier issues. Carriers must complete calls, research calls that fail. Wholesale transport providers must register w commission.</td>
</tr>
</tbody>
</table>
### Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO</td>
<td>SB 946, Muni Broadband, <a href="https://legiscan.com/MO/text/SB946/id/1306968/Missouri-2016-SB946-Introduced.pdf">https://legiscan.com/MO/text/SB946/id/1306968/Missouri-2016-SB946-Introduced.pdf</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Matching funds.</td>
<td></td>
<td></td>
<td>Cities may offer municipal broadband services only where there is no competitor serving &gt;50% of users.</td>
</tr>
<tr>
<td>MS</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT</td>
<td>No 2016 legislative session</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE</td>
<td>LR 539, Study Telecom, <a href="https://legiscan.com/NE/text/LR539/2015">https://legiscan.com/NE/text/LR539/2015</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Study telecom to determine necessary reg., quality, incentives to increase BB, USF</td>
</tr>
<tr>
<td>NV</td>
<td>No 2016 legislative session</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td>A211, Outage</td>
<td>Pending</td>
<td></td>
<td>VoIP not</td>
<td>VoIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

service fund.
## Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ</td>
<td>AB2512, <a href="http://www.njleg.state.nj.us/2">http://www.njleg.state.nj.us/2</a></td>
<td>Pending</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BPU must render decision in cases involving telecom</td>
</tr>
<tr>
<td>State</td>
<td>2016 Legislation</td>
<td>Status</td>
<td>COLR/ Basic Service</td>
<td>Service Quality</td>
<td>USF</td>
<td>Broadband</td>
<td>911</td>
<td>Outage Reporting</td>
<td>Other</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>--------</td>
<td>---------------------</td>
<td>----------------</td>
<td>-----</td>
<td>-----------</td>
<td>-----</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>NM</td>
<td>HB 128, Deduction for BB dev., <a href="https://legiscan.com/NM/text/HB128/id/1317578/New_Me">https://legiscan.com/NM/text/HB128/id/1317578/New_Me</a> xico-2016-HB128-Comm_Sub.pdf</td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Increase BB penetration by providing a tax credit for materials used to construct broadband facilities</td>
<td></td>
<td></td>
<td>competition within 12 months of public hearing</td>
</tr>
<tr>
<td>NY</td>
<td>A01946, USF, <a href="https://legiscan.com/NY/text/A01946/2015">https://legiscan.com/NY/text/A01946/2015</a></td>
<td>Pending</td>
<td>Make voice grade access available to all regardless of technology; ensure reasonably comparable rates regardless</td>
<td></td>
<td>Establis h high cost fund to support basic svc; all carriers using numbers should contribut e &quot;to the extent allowed</td>
<td></td>
<td></td>
<td>Within 30 days of the proposal to transfer control of a company, PSC to perform an impact analysis to determine whether the change of control on the availability of essential svcs. Vote on the transfer after the report issued. Bill initially</td>
<td></td>
</tr>
</tbody>
</table>
**Appendix: 2016 Legislation**

*Note: In the “Status” column, bills are listed as “pending” in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
</table>
## Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ND</td>
<td>No 2016 legislative session</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OH</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OK</td>
<td>HB 2616, State USF, <a href="https://legiscan.com/OK/text/HB2616/id/1399158/Oklahoma-2016-HB2616-Enrolled.pdf">https://legiscan.com/OK/text/HB2616/id/1399158/Oklahoma-2016-HB2616-Enrolled.pdf</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td>Amend the state USF fund to include VoIP providers.</td>
<td>Redefine access lines to include connections provided by any technology.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RI</td>
<td>SB 2794, restrict uses of 911 funds, <a href="https://legiscan.com/RI/text/S2794/2016">https://legiscan.com/RI/text/S2794/2016</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>911 funds to be used for emergency svcs only.</td>
<td>Carriers must contribute regardless of technology, including prepaid wireless. PUC may reduce surcharge in case of overage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>Act 181, State Telecom Equity Act, <a href="https://legiscan">https://legiscan</a></td>
<td>Enacted</td>
<td>COLR may provide svc w any</td>
<td>COLR must meet quality reqs</td>
<td></td>
<td>All providers (wired,</td>
<td>Report on USF in 2018 and then every 4 years.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.com/SC/text/ S0277/id/1400 926/South_Carolina-2015-S0277-Amended.html</td>
<td></td>
<td>tech. Customer s may complain if no svc available. PSC may order LEC to provide svc.</td>
<td>regardless of tech.</td>
<td>wireless, VoIP, pre-paid) must contribut e to SUSF.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TN</td>
<td>HJR 482, Increase Rural Broadband,</td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Muni allowed if: 1. No provider offers svc in the territory; 2. Area is not receiving CAF funds; 3. Current system meeting pricing rules; 4. Rate may not be below svc cost. Offer BB only.</td>
</tr>
</tbody>
</table>
### Appendix: 2016 Legislation

Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>No 2016 legislative session</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>2016 Legislation</td>
<td>Status</td>
<td>COLR/Basic Service</td>
<td>Service Quality</td>
<td>USF</td>
<td>Broadband</td>
<td>911</td>
<td>Outage Reporting</td>
<td>Other</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------</td>
<td>--------</td>
<td>--------------------</td>
<td>----------------</td>
<td>-----</td>
<td>-----------</td>
<td>-----</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>VA</td>
<td>Ch 655, Code of VA, Broadband deployment, <a href="https://legiscan.com/VA/text/HB912/id/1386929/Virginia-2016-HB912-Chaptered.html">https://legiscan.com/VA/text/HB912/id/1386929/Virginia-2016-HB912-Chaptered.html</a></td>
<td>Enacted</td>
<td></td>
<td></td>
<td></td>
<td>Permit providers to install broadband in conduit on state highways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>Ch 145 (SB)</td>
<td>Enacted</td>
<td></td>
<td></td>
<td>USF</td>
<td></td>
<td></td>
<td></td>
<td>Yearly USF</td>
</tr>
<tr>
<td>State</td>
<td>2016 Legislation</td>
<td>Status</td>
<td>COLR/Basic Service</td>
<td>Service Quality</td>
<td>USF</td>
<td>Broadband</td>
<td>911</td>
<td>Outage Reporting</td>
<td>Other</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------</td>
<td>--------</td>
<td>-------------------</td>
<td>----------------</td>
<td>-----</td>
<td>-----------</td>
<td>-----</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>WA</td>
<td>SB 237, Municipal Broadband; <a href="https://legiscan.com/WA/text/SB6237/id/1293417/Washington-2015-SB6237-Introduced.pdf">https://legiscan.com/WA/text/SB6237/id/1293417/Washington-2015-SB6237-Introduced.pdf</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Municipal utilities may provide retail telecom and broadband services</td>
<td></td>
<td></td>
<td>Funding may not exceed $5M</td>
</tr>
<tr>
<td>WV</td>
<td>SB 315, Broadband Network, <a href="https://legiscan.com/WA/text/SB5670/2015">https://legiscan.com/WA/text/SB5670/2015</a></td>
<td>Failed</td>
<td></td>
<td></td>
<td></td>
<td>Build a state-owned, middle-mile BB network. Create an infrastructure fund for the network.</td>
<td></td>
<td></td>
<td>Requires an open access network. Connectivity to res and businesses, but does not include any last mile infrastructure. BB fund managed by Water</td>
</tr>
</tbody>
</table>
### Appendix: 2016 Legislation

*Note: In the “Status” column, bills are listed as "pending" in states where legislative session continues beyond 9/1/16 and bills that did not pass by the end of the session are listed as “failed.”*

<table>
<thead>
<tr>
<th>State</th>
<th>2016 Legislation</th>
<th>Status</th>
<th>COLR/ Basic Service</th>
<th>Service Quality</th>
<th>USF</th>
<th>Broadband</th>
<th>911</th>
<th>Outage Reporting</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>WI</td>
<td>AB 396, COLR requirements, <a href="https://legiscan.com/WI/text/AB396/id/1265629/Wisconsin-2015-AB396-Introduced.pdf">https://legiscan.com/WI/text/AB396/id/1265629/Wisconsin-2015-AB396-Introduced.pdf</a></td>
<td>Failed</td>
<td>Extend the sunset of COLR requirements for ILECs. ILECs must make BLS &quot;effectively available.&quot;</td>
<td></td>
<td>PSC may investigate failures to offer svc.</td>
<td></td>
<td></td>
<td></td>
<td>Would not apply to ILECs that received waivers prior to initial sunset date of 4/30/13. No additional waivers allowed.</td>
</tr>
<tr>
<td>WY</td>
<td>No legislation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

68
Bibliography


California Bill, AB 2903, PUC Duties and Responsibilities; available at https://legiscan.com/CA/text/AB2903/2015


SB 745 (Ch 710, Laws of 2016), Amend sections 281 and 914.7 of the Public Utilities Code, available at https://legiscan.com/CA/text/SB745/2015


Content, Thomas, State may spend Focus on Energy fees on broadband, Milwaukee Journal Sentinel, October 18, 2016, available at http://www.jsonline.com/story/money/business/energy/2016/10/18/state-may-spend-


Hughlett, Mike, CenturyLink, Minnesota's heir to old Bell system, wants to be freed from state oversight, Star Tribune, 8/26/16, available at http://www.startribune.com/centurylink-minnesota-s-heir-to-the-old-bell-system-wants-to-be-freed-from-state-oversight/391341871/


Senate Bill 1333 (Ch 183), Broadband Infrastructure Improvement Grant Fund, available at https://legiscan.com/ID/text/S1333/id/1338873/Idaho-2016-S1333-Introduced.pdf


Kania, Rich, Maine Public Utility Commission, email to Sherry Lichtenberg, 9/6/16


Massachusetts Senate Bill 2275, An Act relative to the Next Generation Network Initiative, available at https://malegislature.gov/Bills/189/Senate/S2275


Minnesota Department of Commerce, Comments in Docket Nos. P421/Am-16-496 & P421-Am-16-547, 8/15/16


Miranda, Kate, AB 2395 (Low), Legislative Memo – Telecommunications: replacement of public switched telephone network, March 17, 2016, available at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M159/K738/159738308.PDF


New Jersey Assembly Bill 2333, Moratorium on Copper Replacement, available at http://www.njleg.state.nj.us/2016/Bills/A2500/2333_I1.PDF

Assembly Bill 211, Outage Credits, available at http://www.njleg.state.nj.us/2016/Bills/A0500/211_I1.PDF


New York State Assembly Bill, A01946, An act to amend the public service law, in relation to universal telecommunications services, available


Qwest Corporation, DBA CenturyLink, In the Matter of the Petition Of CenturyLink QC to be Regulated Pursuant to Minn. Stat. § 237.025: Competitive Market Regulation, MN PUC Docket No. P-421/AM-16-496, 6/30/16


TR State Newswire, 9/15/16, PUC requires CenturyLink to supplement its dereg petition

TR State Newswire, 9/16/16, NEW YORK -- PSC approves joint proposal to renew state USF for four years


Woodward, Curt, State to pay Comcast $4m to build out rural broadband, Boston Globe, 8/22/16, available at [http://www.bostonglobe.com/business/2016/08/22/state-pay-comcast-for-more-rural-broadband/Zb8bqq5qGlpkQ0RErgDHM/story.html?utm_medium=nl&utm_source=internal&mrkid=4614566&mkt_tok=eyJpIjoiTTJKalkyTTVNRFJqWmpSayIsInQiOiJXeFpQdXIESk4V3M2R285amNEuZjFrRww0UWNDsk1UakZ1cmlFTml0eVJZNXQ0c3FGSXN1ZDFhU2pqMVRGeGdwUlhFQU9IbVZ6dXhYVXIIGUXIUEpDck0ZQU5pSjkyV2FUTkQ4aUlaNkE4cz0ifQ%3D%3D](http://www.bostonglobe.com/business/2016/08/22/state-pay-comcast-for-more-rural-broadband/Zb8bqq5qGlpkQ0RErgDHM/story.html?utm_medium=nl&utm_source=internal&mrkid=4614566&mkt_tok=eyJpIjoiTTJKalkyTTVNRFJqWmpSayIsInQiOiJXeFpQdXIESk4V3M2R285amNEuZjFrRww0UWNDsk1UakZ1cmlFTml0eVJZNXQ0c3FGSXN1ZDFhU2pqMVRGeGdwUlhFQU9IbVZ6dXhYVXIIGUXIUEpDck0ZQU5pSjkyV2FUTkQ4aUlaNkE4cz0ifQ%3D%3D)