

THE ROLE OF STATE AND LOCAL GOVERNMENT IN BROADBAND DEPLOYMENT

A REGIONAL RESOURCE FROM THE SLC



Introduction

The Federal Communications Commission (FCC) redefined "broadband internet" on January 29, 2015.¹ Under the new definition, broadband internet connection must meet benchmark speeds of 25 megabits per second (Mbps) for downloads and 3 Mbps for uploads. Such speeds allow multiple users (or devices) within a household to browse the web and stream video simultaneously, or allow a single user to stream high definition video. The Commission's redefinition of broadband—more than six times its previous download speed benchmark of 4 Mbps—reflects the growing ubiquity of the Internet and aims to ensure the infrastructure has the capacity to meet new, data-intensive usage and its derived benefits.

The FCC's new benchmark will set standards for internet service providers, but also will shape policies relating to internet infrastructure development in rural areas, where internet adoption particularly lags.² Researchers point to a lack of access, speed, or perceived usefulness of the Internet in rural areas to explain its slow adoption in rural America. Importantly, each explanation lends itself to a different approach in policy, and closing the gap offers important social and economic benefits to rural areas, in particular. The distances and terrain between dispersed populations that make rural areas more expensive

to network than high-density urban areas also potentially create greater value for those communities, through services like distance education, telemedicine and telework—all requiring fast, reliable internet connections.

Beyond remote, rural areas, broadband services in municipalities in the SLC member states range greatly in speed, cost and access. Some have deployed super high-speed gigabit infrastructure as a means of attracting business to the area—and to great success. The cities of Chattanooga, Tennessee; Bristol, Virginia; Lafayette, Louisiana; and Kansas City, Missouri, top world rankings for network speed, alongside much larger cities, such as Seoul, Hong Kong, Tokyo, and Zurich, and higher than Los Angeles, New York, Washington, and San Francisco.³ Both Amazon and Volkswagen cited Chattanooga's broadband network as a reason for locating major facilities in the area.⁴ Gigabit speeds require new network technology—namely, installation of fiber optic cables—that pose similar disincentives as extending rural network infrastructure.

While most researchers and policymakers agree that broadband infrastructure benefits communities economically, competing jurisdictions complicate the issue of access. Due to infrastructure rights-of-way and economies of scale, competitive fiber-based internet service providers, such as Google or Ting, frequently include local

governments in their discussion of installation plans. In some cities, local public utilities implement their own networks utilizing preexisting rights-of-way or public-private partnerships. Meanwhile, many states in the region have laws regulating how municipal networks operate. In 2015, however, the FCC issued a declaratory ruling to limit state and local regulation of broadband services, as it is “jurisdictionally interstate for regulatory purposes.”⁵ This order pends litigation, but has particular significance for Southern cities and states.

This *SLC Regional Resource* examines the role of states in broadband deployment and its relationship to municipal and federal initiatives, with particular attention to the needs of rural areas and the successes of Southern cities and towns. Notably, this *SLC Regional Resource* focuses on government-owned broadband infrastructure and direct service provision,

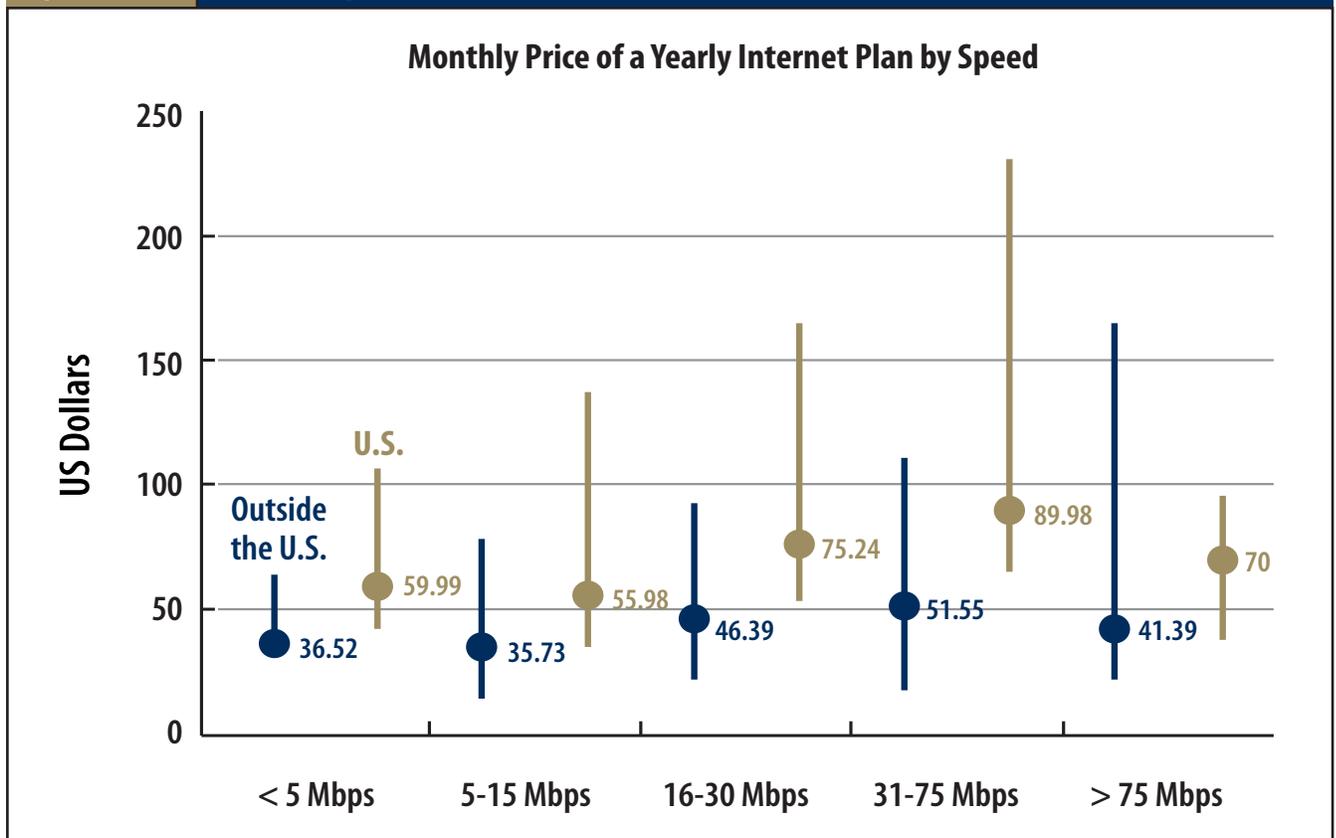
though other policies and incentives are discussed broadly. It does not address private alternative internet service providers.

Background

The expansion of broadband internet is to this century what electricity was to the last.^{6,7} Identifying broadband as an essential utility, analogous to electricity in both necessity and tendency toward natural monopoly, the Obama Administration has sought to increase the economic competitiveness of rural areas in the United States through extensions of broadband networks and, thereby, increase the economic competitiveness of the country on a global scale.

Currently, the per capita use of internet in the United States lags behind much of the developed world.⁸ Additionally, consumers in the United States pay more for slower connections than many other developed

Figure 1 Internet Speeds and Prices in the United States and Abroad



Source: The Executive Office of the President. "Community-Based Broadband Solutions: The Benefits of Competition and Choice for Community Development and Highspeed Internet Access." January 2015. Note: lines denote price range, while points represent median price.

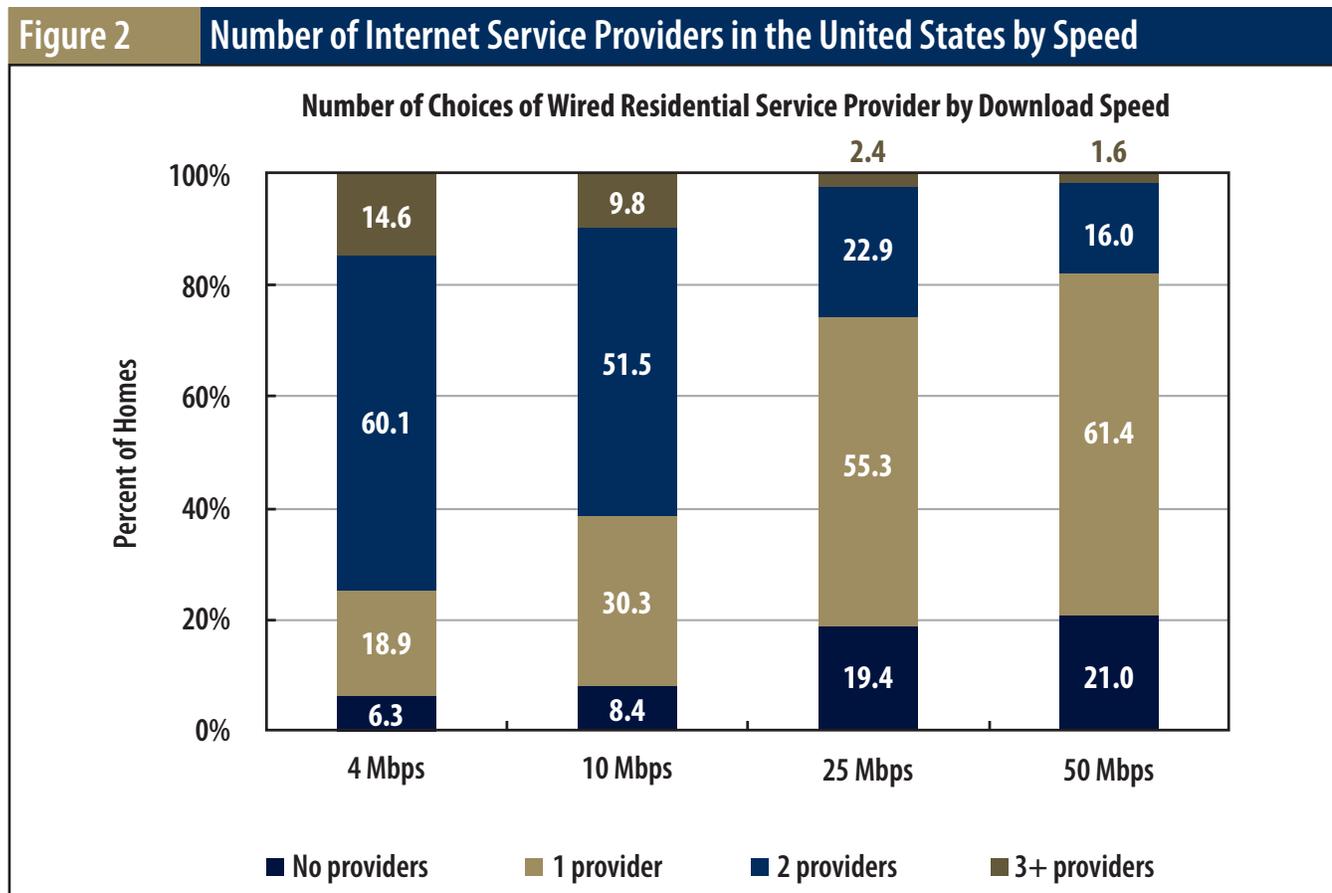
countries do for faster connectivity.⁹ The United States has trailed in action, as demonstrated by its status as the 52nd country in the world to release a national broadband plan.¹⁰ These plans—advocated by international development agencies such as the Organisation for Co-operation and Development (OECD) and scientific organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and International Telecommunication Union (ITU)—“use appropriate policies and strategies to make broadband available, affordable and accessible, as a vital development enabler for building inclusive, resilient and sustainable modern-day knowledge societies.”¹¹

In 2009, Congress mandated a National Broadband Plan as a part of the American Recovery and Reinvestment Act. The Act recognized widespread applications for broadband, identifying it as

foundational to economic growth in the modern economy, and sought to maximize “consumer welfare, civic participation, public safety and homeland security, community development, healthcare delivery, energy independence and efficiency, employee training, private sector investment, entrepreneurial activity, job creation, economic growth and other national purposes.” While the FCC assumed the role due to the Act’s emphasis on universal service, the Commission’s status as an independent agency made implementation difficult.¹² While the FCC offered much in regulatory expertise, it lacked executive authority. Late action and unclear authority led to competing policies at the local, state and federal levels, and uneven development of broadband infrastructure.

Trends in Adoption

Since its inception, internet use in the United States has rapidly increased across all demographics. Indeed,



Source: The Executive Office of the President. "Community-Based Broadband Solutions: The Benefits of Competition and Choice for Community Development and Highspeed Internet Access." January 2015.

for some demographic groups, internet use has reached near saturation. In 2014, the Pew Research Center Internet Project Survey reported that in the United States, 99 percent of adults with a household income of \$75,000 or more use the Internet, as do 97 percent of adults between the ages of 18 and 29, as well as 97 percent of adults with college degrees.¹³ The same survey reported that 87 percent of all adults use the Internet, with 53 percent of internet users saying the technology would be “very hard” to give up.

However, some discrepancies—or “digital divides”—persist for both adoption and use. For example, rates of adoption are slightly lower for racial and ethnic minorities and people in rural areas. Over time, racial and ethnic differences in internet adoption have narrowed, as have differences in adoption across groups of different age, class and educational attainment.¹⁴ Though internet use among all users has increased, rural residents still are less likely than urban or suburban residents to use the Internet.¹⁵ In rural areas, 78 percent of adults use the Internet; in urban and suburban areas, 85 percent of adults use the Internet.¹⁶

Theories on the Urban-Rural Digital Divide

Empirical analysis of the economic impact of broadband in rural counties in the United States suggests a causal relationship between broadband adoption and income growth and declines in unemployment, as well as a relationship between non-metropolitan counties with low levels of broadband adoption and negative growth rates of both the number of businesses and employment.¹⁷ As researchers move closer to demonstrating a causal relationship between broadband adoption and economic development, case studies have shown that broadband internet can attract major firms, divisions and facilities, as well as enable the development and growth of smaller, local businesses, and enable individual telecommuting to high-wage labor markets.^{18,19} Given the benefits of internet access, policymakers have a particular interest in closing digital divides. To this end, researchers posit different theories as to why the urban-rural digital divide persists which, in turn, offer different levers for policymakers looking to increase rural internet adoption.

Limited Access

While 92 percent of Americans in urban areas have access to broadband internet, access by rural Americans is just 47 percent.²⁰ Intuitively, access affects use. As of 2015, 24 percent of adult Americans who do not use the Internet reside in rural areas, making rural residents about twice as likely as urban and suburban residents to be offline.²¹

Telecommunications companies hesitate to develop infrastructure in rural areas for a number of reasons. Physical infrastructure outlays, such as the installation of fiber optic cables, in remote areas cost more due to the distance or difficult terrain separating dispersed populations. Furthermore, investments in middle and upper class communities tend to outpace low-income communities where potential consumer bases are smaller. As a result, rural access often is limited, especially in low-income areas.

Speed

Very slow internet connections, particularly at relatively high prices, discourages adoption. While 53 percent of all rural residents lack access to 25 Mbps download/3 Mbps upload speeds, another 20 percent lack access even to 4 Mbps download/1 Mbps upload speeds.²² The 2015 Broadband Progress Report, issued by the FCC, finds that where broadband internet (25 Mbps download/3 Mbps upload) is available, it is adopted at about the same rate regardless of geography: 30 percent in urban areas and 28 percent in rural.

Studies show communities benefit from faster connection speeds. Researchers at Oklahoma State University, Mississippi State University and the University of Texas at Austin found that higher download speeds have a positive effect on the number of people working within the creative class in rural counties and noted that very high speeds—of 100 Mbps or more—are needed to attract new businesses.²³ In accordance with their findings on the positive economic effects of broadband adoption in rural counties,^A

^A The study preceded the updated definition of broadband. Rather, the researchers used various data thresholds below the current 25 mbps/10 mbps standard.

Glossary

- » **Broadband/Internet adoption:** *individuals, households, businesses, or organizations with dedicated internet connections, distinct from potential access to or availability of broadband, or from passive internet use*
- » **Certificate of public convenience and necessity:** *a document issued by public utility commissions to ensure regulatory compliance*
- » **Dark fiber:** *networks of excess fiber optic cables laid for future use*
- » **Digital divide:** *regional or demographic differences in rates of adoption for specific technologies*
- » **Fiber-to-home:** *the fastest available form of residential internet connection, in which both last-mile and middle-mile connections are made over fiber optic cable*
- » **Last-mile:** *physical connection from the end-user, or individual consumer, to the core network, over fiber optic cable, coaxial cable, or copper wire*
- » **Middle-mile infrastructure:** *the capital-intensive core part of a network, to which last-mile connections are made*
- » **Spectrum:** *a range of radio frequencies, with some dedicated to certain types of communication, allocated by the FCC and National Telecommunications and Information Administration in accordance with the Telecommunications Act of 1996*
- » **Unserved/underserved communities:** *areas marked by broadband access below a certain threshold, set by statute, state, or agency*

they recommend policy interventions that emphasize broadband adoption and speed over availability.

Perception of Usefulness

Surveys and case studies among rural residents led some researchers to conclude that promoting benefits of broadband in rural areas and improving internet literacy would help close the urban-rural divide.²⁴ This conclusion fits within some recent data on reasons for why people do not use the Internet. One-third of non-adopters, as surveyed by the Pew Research Center in 2013, reported lack of relevance or interest in the Internet, and another third reported that it would be too difficult to learn how to use it.²⁵

While researchers posit different theories or policy approaches to closing the urban-rural digital divide, the issues of limited access, speed, or perceived usefulness may not operate exclusively or independently of each other, and may have different scales of effect. For example, improvements in internet literacy and availability at local libraries and community centers may encourage further, albeit limited, adoption by individuals. Expanded digital literacy skills, availability and speed may then generate the sort of broad internet use that broadband advocates tout, such as access to business, education and telehealth. Though users cannot engage as readily or regularly in online classes or virtual doctor appointments from a communal location, the developed interest and ability may encourage adoption at home, while providing a minimum level of access to all residents. Organizational and business adoption, however, rely much

Table 1		Technology and Speed	
Technology	Transmission	Download speed	Typical application
Digital Subscriber Line (DSL)	Copper telephone wires	>256 Kbps	Different types of DSL enable different types of use, ranging from web browsing to video conferencing
Cable Modem	Coaxial cables	>1.5 Mbps	Speeds are generally comparable to DSL
Fiber	Fiber-optic cables	<10 Gbps	Fastest technology available, can exceed speeds of cable or copper wire
Wireless	Radio waves	1 Mbps	Speeds are generally comparable to DSL and cable
Satellite	Radio waves	500 Kbps	Useful in very remote areas

Source: Federal Communications Commission. "Types of Broadband Connections." http://www.broadband.gov/broadband_types.html.

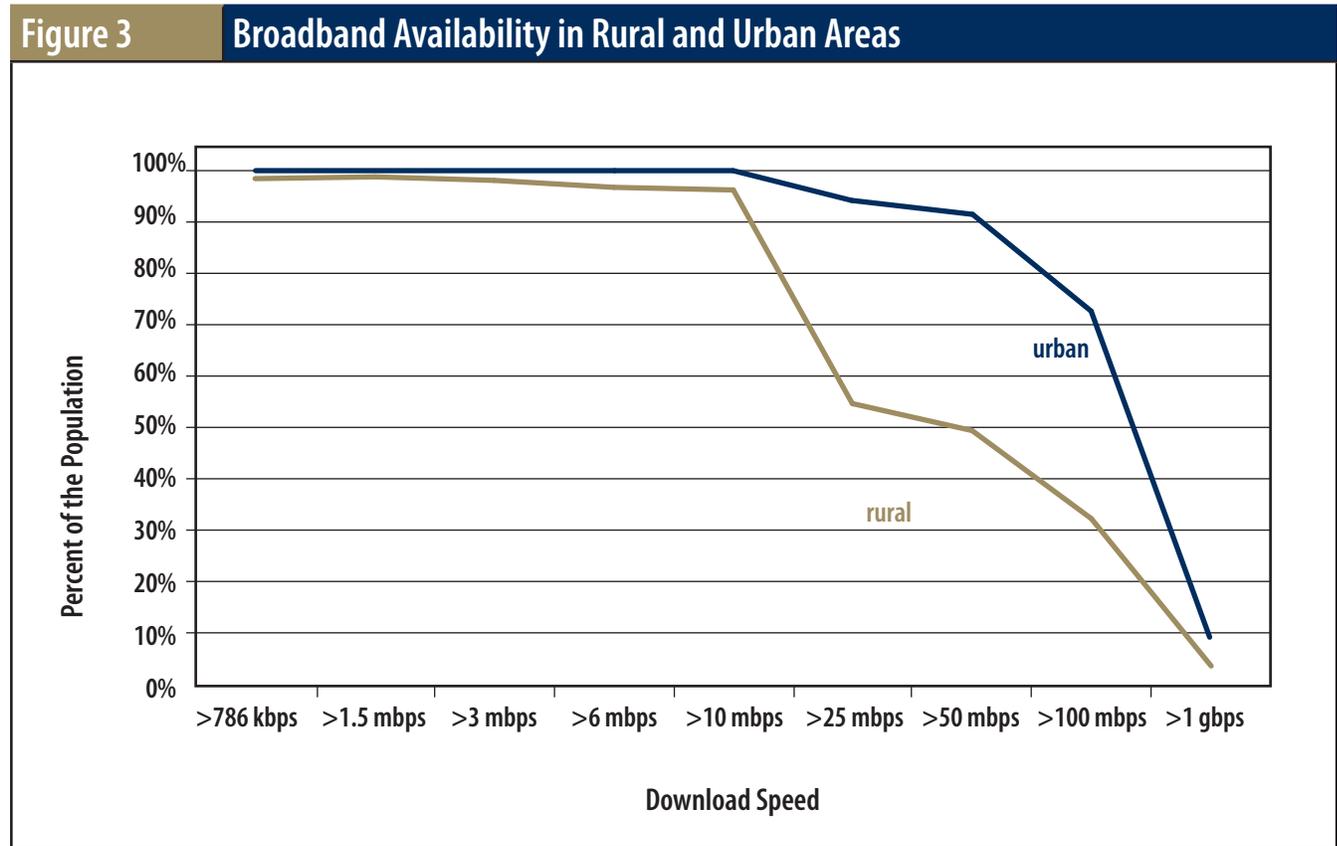
more on access to high speeds, necessitating widely available physical, wired infrastructure. For the purposes of attracting tech companies or data centers, communities will need to prioritize fiber infrastructure development.

Broadband Policies, Regulation and Legislation

Regulation and legislation on broadband internet occurs at the federal, state and local level. At the federal level, the FCC regulates the technical aspects of broadband, including its definition. The FCC also encourages broadband expansion, tracking its availability, measuring nationwide performance, and implementing the National Broadband Plan, mandated by Congress to guarantee all Americans have “access to broadband capability.” The FCC works to achieve this mandate through ongoing policies that ensure market competition, provide efficient access to government resources such as spectrum or rights-of-way, incorporate broadband within universal service provisions, and maximize access to broadband in public

sectors. In the National Broadband Plan, the FCC acknowledges a need for flexibility in developing and executing these policies, stating, “Like the Internet itself, the plan will always be changing—adjusting to new developments in technologies and markets, reflecting new realities and evolving to realize the unforeseen opportunities of a particular time.” As such, the implementation of the Plan is ongoing and responds to needs and issues as they arise.

Many other federal agencies, including the U.S. Department of Agriculture, Department of Commerce, Department of Education, Department of the Interior, Department of Housing and Urban Development, and Appalachian Regional Commission, also promote broadband expansion, providing grants for the development of broadband infrastructure, permitting access to government rights-of-way, connecting public buildings, and providing internet literacy and training programs. The Broadband Opportunity Council, created in March 2015 following a



Source: National Telecommunications and Information Administration. *Broadband Statistics Report: Broadband Availability in Urban vs. Rural Areas. Report. 2015. Data as of June 2014*

presidential memorandum, further identifies methods to improve broadband access and use by 26 federal agencies through rulemaking procedure.

Similarly, states' roles in broadband policy are varied. States may coordinate with federal agencies through grant applications or comments in rulemaking; track broadband coverage; provide supplementary state universal service funds to encourage supply-side expansion; invest directly in middle-mile infrastructure; distribute grants toward internet literacy to improve demand-side engagement; and oversee laws and regulations on public broadband networks. Every state in the nation has, at some time, formed a commission, task force, council, or project to support broadband expansion, though some have since disbanded.

Local governments also may implement demand-side promotion and education programs, or support supply-side expansion through access to rights-of-way or direct service provision. Direct service provision includes initiatives to provide access at certain public buildings, citywide or area-wide wireless internet, or wired broadband internet to homes and businesses through a public utility.

Though these laws and programs are designed to promote broadband in underserved areas, the patchwork approach has contributed to the uneven development and expansion of broadband. It also has led to jurisdictional issues. Twenty-one states have laws regulating direct service provision by local governments,²⁶ which have since been called into question by the federal government.

Ongoing Issues in Federalism

In January 2015, a report on Community-Based Broadband Solutions from the Executive Office of the President supported municipal networks, citing examples of the Electric Power Board (EPB) of Chattanooga, Tennessee, and the city of Wilson, North Carolina, both of which offer fiber-to-home broadband services. Importantly, the report calls for an end to laws that limit local broadband services, saying “laws in 19 states—some specifically written by special interests trying to stifle new competitors—have

held back broadband access and, with it, economic opportunity.” The administration also filed a letter²⁷ to the FCC loosely supporting a petition by the EPB and Wilson to preempt the state laws that prohibited their networks' expansion. The letter does not specifically mention the petition, but does assert that the FCC “should ensure that community leaders have every tool available to them in order to meet the nation's goal of providing all citizens access to broadband capabilities... [and] utilize its authority to address barriers inhibiting local communities from responding to the needs of their citizens.” It also says that underserved communities should have the flexibility to explore direct service provision.

In the 2015 Open Internet Order, its final rule, the FCC acceded to the EPB and Wilson petition, stating that, “broadband Internet access service is jurisdictionally interstate for regulatory purposes.” Determining that the state laws pose barriers to broadband investment and competition, the FCC made the case for preemption under section 706 of the Telecommunications Act of 1996:

Under established law, a federal agency acting within the scope of its authority may preempt state law. Moreover, Congress need not explicitly delegate to the agency the authority to preempt...Our preemption authority falls within the “measures to promote competition in the local telecommunications market” and “other regulating methods” of section 706(a) that Congress directed the Commission to use to remove barriers to infrastructure investment. It likewise falls within the available “action[s] to accelerate deployment” we may take in order to “remove barriers to infrastructure investment” and to “promote competition” described in section 706(b). As Congress would have been aware in passing the 1996 Act, the Commission has in the past used preemption as a regulatory tool where state regulation conflicts with federal communications policy. Given this history against which Congress legislated, the best reading of section 706 is therefore that Congress understood preemption to be among the regulatory tools that the Commission might use to act under section 706. (pg. 58-61.)

On this basis, the Order preempted the Tennessee law in whole and the North Carolina law in part.

The state of Tennessee filed suit against the FCC in March 2015; North Carolina filed suit in May. The two cases, originally filed in the Sixth Circuit Court of Appeals and Fourth Circuit Court of Appeals, respectively, were consolidated in the Sixth Circuit in August 2015. The states filed opening briefs in September 2015, arguing the FCC’s interpretation of Section 706 did not meet the ‘plain statement’ requirement of the Supreme Court, which commonly applies to issues of federalism and preemption, and unconstitutionally undermines state sovereignty.

The FCC filed its response brief in November. As of March 8, 2016, the case is awaiting submission to a judicial panel. The outcome of *The State of Tennessee, et al. v. FCC, et al.* likely will have broad implications for state oversight of local broadband development and may open the door for other local governments to petition the FCC for preemption.

State by State

Nationwide, 21 states have laws restricting municipal broadband infrastructure. Ten of those states—Alabama, Arkansas, Florida, Louisiana, Missouri, North Carolina, South Carolina, Tennessee, Texas and Virginia—are in the Southern region.²⁸ The following section summarizes laws pertaining to municipal broadband in the region, highlights select initiatives to provide broadband access at the local and state levels, and addresses issues of federal preemption, where applicable.

Alabama

Alabama law allows municipal broadband under certain conditions designed to limit funding of utility construction and operations, service area and chargeable rates. Codified in 2000, recognizing the importance of broadband for “growth, job opportunities and sustained economic development,” Code of Alabama §11-50B stipulates that municipal utilities may provide unbundled, nondiscriminatory internet services to inhabitants of the municipality or preexisting utility service area, provided that 5 percent of eligible voters petition for a ballot referendum, which then is approved. The utility must provide access to

Other Interested Parties

In a statement separate from the Order, FCC Chairman Tom Wheeler cited the influence of special interests—namely incumbent service providers—in restricting competition from community-based broadband. The Internet Association—representing Google, Facebook, Yahoo, Amazon, Netflix, Twitter, Etsy, and eBay, among others—submitted amicus curiae in support of the FCC, detailing the beneficial effects of increased competition in the Chattanooga and Wilson markets. The National Governors Association, National Conference of State Legislatures, and The Council of State Governments filed amicus curiae supporting Tennessee, arguing the FCC does not have the authority to preempt state laws under section 706 and that establishing precedent for such authority would have wide-reaching and unintended consequences. The National Association of Regulatory Utility Commissioners has formally intervened on behalf of Tennessee and North Carolina.

public infrastructure for reasonable compensation and must be self-sustaining, funding all capital costs and operating expenses through utility revenues and bonds payable from revenues. No taxes or state appropriations may fund municipal broadband, and the municipality cannot incur debt related to the provision of broadband. Service rates must reflect all direct and indirect costs of broadband provision, and “in the determination of its rates and charges for cable service or telecommunications service, as the case may be, [the public provider shall] impute an amount equal to the amount of the franchise-imposed fee or fees and any pole attachment fees which it would pay to itself ... were it a private provider.” Senate Bill 56, currently under consideration in the 2016 legislative session, would strike territory restrictions.

Opelika Power Services, the public power utility of Opelika, Alabama, offers gigabit broadband services over fiber optic cable to city residents and businesses. The utility also provides gigabit speeds to Opelika City Schools.²⁹ Mayor Gary Fuller, who led the city’s

fiber initiative, aims to expand service to Auburn and Lee County, and supports the FCC preemption of state laws limiting service area.³⁰

Arkansas

As of 2007, Arkansas law permits electric utilities to construct, own and maintain broadband infrastructure to provide broadband services within its electric service area. Under the 2007 Broadband Over Power Lines Enabling Act, utilities can either provide services directly or lease the equipment for the provision of services. Utilities cannot incorporate costs incurred for broadband provision into electricity rates, but are exempt from pole attachment rates. Cities without public utilities cannot provide broadband services to nonpublic entities.

City-owned utilities in Conway, Arkansas, and Paragould, Arkansas, offer cable-based broadband internet services to residents and businesses. Residents of Siloam Springs, Arkansas, voted against fiber-to-home services in 2012.

Florida

Florida allows municipal broadband, but requires cities to meet strict financial standards. Local governments first must hold public hearings to determine community access to broadband is insufficient and that no private provider plans to implement service. The law requires a second hearing, at a minimum, to present a written business plan that outlines services, areas, costs, upgrade plans, and subscription projections. Under Florida Statutes §350.81, codified in 2005, following the required hearings, local governments may formally issue bonds to cover capital investments for broadband networks, but must recover all capital and operational costs within four years. Each year, the governing body must hold a public hearing to formally review associated revenues, expenses and debt obligations. If the project does not break even at four years, the local government must approve a plan to halt service provision, transfer service provision to a private entity, or reapprove service provision by majority vote. The law

also restricts bonds to the governing or service area, and requires a referendum on the initial bonds if they do not mature within 15 years. While government, municipal and public purpose property are tax exempt under Florida Statutes §196.012, municipal broadband is taxable.

The city of Palm Coast, Florida, operates a city-owned fiber network. The network can support transmissions of up to 10 gigabits per second and supports city services. Though the city does not provide internet services directly, it has opened the network to commercial use, maintaining the infrastructure through fees charged to internet service providers.³¹ In addition, the city is moving to provide residential access through municipal Wi-Fi hot spots.

Georgia

Georgia law does not limit wired municipal broadband. Dalton, Georgia, has a citywide fiber-to-home network through its municipal public utility, and Peachtree City, Georgia, pursued citywide fiber options as recently as December 2015, but since entered a memorandum of understanding with a local service provider: NuLink.³²

Kentucky

With regard to municipal broadband, Kentucky Revised Statutes §96.531, codified in 2000, confirms “Any legislative body of any city may provide telecommunications service.” The Electric Plant Board of Russellville, Kentucky, offers gigabit broadband internet services over a 120-mile, city-owned fiber network. Several other cities, including Frankfort, Hopkinsville and Glasgow, offer citywide broadband over cable networks.³³

In 2015, to further expand broadband availability, the state began construction on KentuckyWired, an open access middle-mile fiber network spanning every county.³⁴ The 3,400-mile network aims to connect schools, universities and state government buildings, and will be available to last-mile providers, both public and private, for residential and commercial services. The Kentucky Communications Network

Authority, created through executive order, will manage the network, leasing access to internet service providers. The state estimates the network construction to be completed in three years at a cost of about \$324 million, depending on access to preexisting fiber. To fund the project, the state issued \$280 million in bonds, \$30 million in funding, anticipates \$23.5 million in federal grants, and has partnered with private investors.^{35,36,37} The statewide network should benefit the region as well, connecting to fiber networks in Tennessee, West Virginia and Ohio—though changes in various state leadership positions have temporarily slowed its progress and refocus its efforts, beginning with Eastern Kentucky.³⁸

Louisiana

The Local Government Fair Competition Act of 2004 sets out stringent requirements for local governments seeking to provide broadband services in Louisiana. Under the Act, local governments must hold a preliminary public hearing and conduct a feasibility study, projecting annual revenues, bond obligations, and administrative costs, prior to holding two more hearings, at a minimum, and a referendum. The law also requires that the government price services inclusive of taxes and fees incurred by private providers. Local governments can offer promotional discounts or service bundles but cannot cross-subsidize broadband services.

The municipal utility of Lafayette, Louisiana, offers broadband over a citywide fiber network. The network began as a project to improve communication within the Lafayette Utilities System (LUS). Now, the city offers residential internet speeds of up to 2 Gbps, among the highest home internet speeds in the world. According to the city-parish president of Lafayette, LUSFiber has attracted three high tech companies, totaling more than 1,000 new jobs and \$60 million in new wages.³⁹

Mississippi

Mississippi law does not specifically authorize or limit municipal broadband. The city councils of Gulfport and Biloxi, Mississippi, approved a resolution to cooperate on the development of a regional fiber optic

network to connect “businesses, schools, colleges, residents, and public spaces” and support “economic, social, and environmental improvements and sustainability” along the Gulf Coast.⁴⁰ Gulfport Mayor Billy Hewes cited the success of Lafayette, Louisiana, as the project’s inspiration.⁴¹

The resolution creates the Gulf Coast Broadband Commission, open to expansion in communities throughout the area, to construct, install, operate, and maintain infrastructure for the competitive licensure or direct, government provision of broadband internet. The resolution allows “any municipality or county government that is not an original signatory” to participate following the adoption of a resolution by its governing authority and approval by the participating parties and the state attorney general. Some cities already have explored joining the agreement. All five cities in Harrison County, and the county government itself, have joined the interlocal agreement.⁴² As of January 19, 2016, the city council of Gautier was set to adopt a resolution to join Biloxi and Gulfport to expand upon preexisting private fiber infrastructure.⁴³

Notably, the original agreement grants the municipalities powers of eminent domain for the completion of the project. City and state officials plan to use an undetermined amount of settlement money from the Deepwater Horizon oil spill to finance the project, at least in part.

Missouri

Missouri bans direct service provision of telecommunications by municipal governments, allowing only internal network use for city agencies and schools. The law does not bar political subdivisions from allowing nondiscriminatory access to rights-of-way within its geographic boundaries at cost. Missouri Revised Statutes §392.410.1, codified in 1997, declares “no political subdivision of this state shall provide or offer for sale, either to the public or to a telecommunications provider, a telecommunications service or a telecommunications facility used to provide a telecommunications service,” though the law provides exemptions for telecommunications for internal

government use, emergency services, medical and educational purposes, and use by students at school.

A legal note in the statute adds that the “section barring political subdivisions from providing telecommunication services is not preempted by Telecommunications Act of 1996,” based on the 2004 Supreme Court decision in *Nixon v. Missouri Municipal League*, a legal precursor to the current case on FCC preemption of Tennessee and North Carolina law.

Despite broadly restrictive statutory language, the exemptions notably include “internet-type services,” without providing a clear definition of the term. According to the National Regulatory Research Institute (NRRRI), “it is unclear whether this exemption might be construed to allow a municipality to provide stand-alone broadband service without a voice component or potentially other IP-enabled services that do not require a [certificate of public convenience and necessity].”⁴⁴ In fact, the municipal utility of Marshall, Missouri, offers broadband internet services and currently is in the process of expanding its fiber network citywide.⁴⁵ A bill currently under consideration in the Missouri House would specify limited circumstances in which municipal governments could offer broadband services after August 28, 2016. House Bill 2078 would limit municipal broadband to areas with fewer than 50 percent of residents served by any service providers; enact a \$500,000 cap on the total cost of service provision over the first five years of service; and require cities, towns or villages to approve the service, and subsequent subsidies by referendum, unless acting on behalf of a business requiring—and unable to secure from private providers—download speeds in excess of 1 Gbps.

North Carolina

North Carolina law sets out a variety of conditions under which municipal governments may provide broadband infrastructure or services. Codified in 2004, North Carolina General Statutes §160A-340 et seq. outlines requirements for city-owned communications service provision and spans issues of notice, financing, taxes, payments in lieu of taxes,

public-private partnerships and exemptions. Cities in underserved areas, determined by the North Carolina Utilities Commission, on a case-by-case basis, to have less than 50 percent household access to broadband internet within contiguous census tracts, are exempt from these provisions. All cities, underserved or not, must issue notice to the state utilities commission and hold two public hearings, at a minimum, to present proposals and allow private service providers comment.

Generally, municipal governments must comply with all regulations applicable to private telecommunications companies; maintain a separate account for communications operations and expenses; complete annual, independent reviews or audits of the account and service; and remit taxes applicable to private telecommunications companies to the city general fund. Cities must pass a referendum by a majority of votes to issue bonds for the service. The law excludes internal government use, smart grid use, and “provision of free services to the public or a subset thereof,” from the definition of communications service provision.

Municipal governments also may not expand service area beyond city boundaries, nor advertise, cross-subsidize, or price telecommunications services below cost. Though the law grandfathered in municipalities with existing public broadband services, it requires customer service areas outside those city boundaries to reopen contracts when the public contract expires.

Wilson, North Carolina—party to the FCC petition—operates a citywide fiber-to-home network, Greenlight, with minimum download speeds of 40 Mbps and maximum speeds of 1 Gbps. Built in 2009 with \$35 million in bonds, the city’s network predates the state law on municipal broadband service, but its boundaries are set explicitly in law: “For the city of Wilson, the service area is the county limits of Wilson County, including the incorporated areas within the County.” Though the city provides electric service to six neighboring counties through Wilson Energy, the city could not extend broadband service beyond the Wilson County border prior to the FCC’s preemption.⁴⁶ The city since has entered into

an interlocal government agreement to extend broadband service to Pinetops, North Carolina, a town of about 1,300, already serviced by Wilson Energy.^{47,48} Salisbury, North Carolina, also has a municipal fiber network—the first in the country to offer 10 Gbps citywide—exploring expansion.

Oklahoma

Oklahoma law does not specifically authorize or limit municipal broadband. The municipal utility in Sallisaw, Oklahoma, operates a citywide fiber-to-home network called DiamondNet. In 2004, after 14 months of feasibility research, the Sallisaw Municipal Authority issued \$7.5 million in 15-year revenue bonds to finance the construction of the network, which facilitates speeds of up to 50 Mbps.⁴⁹ At the time of deployment, the city managers and mayor of Sallisaw reported an increase in residential growth and interest in the city. In 2014, the Board of City Commissioners voted to approve a resolution supporting the FCC preemption of state-imposed barriers to community-based broadband.

South Carolina

South Carolina statute, codified in 2012, outlines conditions for government-owned communications service providers, including municipal broadband service providers. South Carolina Code of Laws §9-23 requires governments providing broadband to comply with all regulations applicable to private providers, and include taxes and capital costs applicable to private providers in the cost of service, as well as market-rate liability insurance as determined by the state Department of Insurance. The law prohibits subsidization and requires annual, independent audits of the account associated with revenues, expenses, property and investments related to the service, and grants investigative authority to the state Office of Regulatory Staff.

Local governments do not need to meet all of these conditions if an area is deemed unserved. The state Public Service Commission designates areas as unserved based on case-by-case petitions, in persistent poverty areas with less than 25 percent household

broadband access. Once a local government submits a petition, the Public Service Commission must notify private broadband providers, initiating a hearing process for objection and testimony. Broadband service providers may also petition the Commission to determine that an area is no longer unserved.

No city or town in South Carolina offers citywide broadband. Two counties, Oconee and Orangeburg, have partial fiber networks, created with federal grants and leased to private internet service providers.⁵⁰ Both counties opposed state legislation to restrict investment in government-owned broadband infrastructure.

Tennessee

Since 1997, Tennessee law has granted municipal governments with public electric utilities explicit authority to construct, own and maintain telecommunications and internet infrastructure. Tennessee Code Annotated §7-52-401 sets out conditions under which municipal governments may provide broadband services. It requires the electric utility board to have governing authority over the network, prohibits municipalities from subsidizing telecommunications services, and requires equivalent payments equal to state, local and federal taxes as those applied to private service providers. Tennessee Code Annotated §7-52-601, codified in 1999, further limits municipal broadband service to the utility's electrical service area, and §7-52-602 requires the review of a business plan, issuance of a service announcement, public hearing and majority referendum prior to implementing broadband service.

The law also requires the utility to operate broadband from a separate division, with separate accounts, records, audits, and rates, inclusive of fees applicable to private providers. A city without a public utility and designated as underserved—that is, one that “does not have access to broadband Internet services, has been an area developed for residential use for more than five (5) years, and is outside the service area of a video or cable service local franchise holder or the

franchise area of a holder of a state-issued certificate of franchise authority” — can provide broadband services. Underserved cities without a public utility only may provide broadband service through a public-private partnership.

The Electric Power Board (EPB) of Chattanooga, Tennessee, began development of its fiber optic network as part of a smart grid in 1996. In 2007, the Board of Directors announced its fiber-to-home initiative.⁵¹ By 2010, EPB became the first broadband service provider to offer gigabit speeds to its entire market. From 2011 to 2015, the network’s increased capacity attracted businesses and startup incubators, generating an estimated economic impact between \$865 million and \$1.3 billion, and creating 5,200 new jobs.⁵²

Famous for its network speed and size, EPB petitioned the FCC for a preemption of the Tennessee law that restricts broadband service provision to the utility’s electric service area.⁵³ The EPB petition cites Tennessee Code Annotated Section 601, stating:

The territorial restriction contained in Section 601 frustrates the Congressional goal that all Americans should have access to broadband capability, by prohibiting municipal electric utilities in Tennessee, including EPB, from providing broadband services and video programming outside of their electric service footprint, despite the fact that such entities are otherwise authorized to provide telecommunications services throughout the state of Tennessee. The explicit barrier created by Section 601’s territorial restriction is precisely the type of legal barrier that Congress directed the Commission to sweep away in Section 706 of the Telecommunications Act of 1996. (pg. 3)

Territorial restrictions, the petition contends, has led to a “digital desert” just outside the EPB service area, where bordering communities do not have access to speeds exceeding 768 Kbps—well below the FCC definition of broadband. While the state’s legal challenge to the FCC preemption is ongoing, in the 2016 session, the Tennessee General Assembly is considering a bill to revise the law, removing the service area restrictions.⁵⁴ The same bill has failed in years past.

Several other public utilities, equally affected by the FCC preemption, offer municipal broadband. The Clarksville Department of Electricity, Morristown Utility Systems, and Tullahoma Utilities Board all offer gigabit internet service; the Pulaski Electric Service and Jackson Energy Authority have citywide fiber networks.

Texas

Texas Utilities Code §54.202, codified in 1997, prohibits municipalities and public electric utilities from providing broadband services, or any other telecommunications service requiring a certificate of convenience and necessity, though they may lease excess capacity, or dark fiber. Like Missouri, NRR notes, in Texas, “a broadband-only municipal network might not necessarily be prohibited.”

Greenville, Texas, a home rule city with a population around 25,000, started offering broadband and television services through its municipal utility, over a citywide cable network, following a local referendum in 2000. The first of its kind in the state, the network broke even on its investment and revenues in 2004, earlier than city officials expected.⁵⁵ While the network precedes changes to Texas utilities law, including the prohibition of municipal broadband services and the transfer of cable franchise authority to the state, the Greenville Electric Utility System has implemented major upgrades to its cable network in recent years, and city officials report that businesses looking to locate in the area continue to inquire about the city’s provision of internet services.

Virginia

Virginia law allows counties, cities, towns, utilities, development authorities or other governmental entities to provide telecommunications services, subject to regulation and certification by the state Corporation Commission. Under Code of Virginia §15.2-2160, codified in 2002, localities providing broadband services must maintain separate accounts for revenues and investments related to broadband services; cannot cross-subsidize services where private providers operate; and must include costs equivalent to those

incurred by private providers, such as pole rentals, taxes, fees, rights-of-way, and use of public land, into service rates. They also must issue annual reports to the Commission, demonstrating cost calculations.

Localities with populations greater than 30,000 may provide communications services, excluding cable television, through a public-private partnership, provided approval from the Commission and prices do not fall below incumbent prices for privately-provided services. The law also limits the provision of telecommunications services to the electric service area or specific, Commission-approved geographic area.

Grandfathered into the state law, the municipal electric utility of Bristol, Virginia, offers broadband internet service on a fiber network that spans nine counties and two states. As of February 5, 2016, however, the utility has taken its first steps towards selling its network.⁵⁶

West Virginia

West Virginia does not specifically authorize or limit municipal broadband, though no city offers broadband internet services. In 2016, to encourage broadband deployment and economic development in the state, a bill from the previous legislative session to create a \$72 million statewide middle-mile fiber network for lease to private providers was reintroduced.⁵⁷ Despite questions regarding the plan's viability and opposition from incumbent service providers, the bill has advanced through committee, albeit heavily revised.^{58,59} Originally, Senate Bill 315 would have allowed the state Water Development Authority to issue bonds under a special purpose account, managed by the state Broadband Enhancement Council, to build statewide infrastructure with access for commercial, residential and government use. It also would have applied a mandatory end-user rate tied to local median income and established legislative oversight. The updated version of the bill allocates grant money to private companies and local governments to install fiber infrastructure, provided applicants supply detailed business plans with expected consumer base, project costs and bond payment plans.

A study by researchers at West Virginia State University estimated a statewide fiber network would create 4,000 new, permanent jobs and add \$940 million annually to the state's gross domestic product.⁶⁰

Conclusion

Conditions and restrictions on municipal broadband vary widely by state. While every community has much to gain from access to broadband internet, each faces unique challenges relating to preexisting infrastructure, geography, demographics, funding and state laws.⁶¹ Due to high infrastructure costs and economies of scale, cities with metropolitan areas of less than a million in population are not likely to see private fiber infrastructure investment, at least not in the immediate future. As a trend, cities that have invested in broadband infrastructure have seen increased private investment and improved services from market competition. Proponents of community-based broadband point to these improvements as evidence that municipal and community-based broadband enhance, rather than reduce, market competition.

Not all community networks have succeeded. In broadband deployment, one size does not fit all, and laws regulating broadband deployment should be correspondingly flexible. Common sense practices addressing risks, evaluating community needs and support, and encouraging fiscal responsibility should be undertaken by communities. The deployment of the most successful broadband networks rest on thoughtfully considered business cases. Certain, more restrictive requirements, however—such as imposed deadlines for financial solvency, limited bond terms, mandatory private partnerships, and limitations on bundling or other business practices—may not take into consideration individual community needs, and may hinder more than help. Similarly, territorial restrictions may prohibit mutually beneficial partnerships and potentially are subject to preemption by the federal government. Most states in the Southern region, however, have at least one city with successful municipal broadband network; some, the most successful in the world.

Endnotes

- 1) Federal Communications Commission. 2015. "Open Internet Order."
- 2) Lohr, Steve. "F.C.C. Sharply Revises Definition of Broadband." *The New York Times*, January 29, 2015. <http://bits.blogs.nytimes.com/2015/01/29/f-c-c-sharply-increases-definition-of-broadband/>.
- 3) Kehl, Danielle, Nick Russo, Robert Morgus, and Sarah Morris. *The Cost of Connectivity*. Washington, DC: Open Technology Institute, 2014.
- 4) Wheeler, Tom. 2014. *Removing Barriers to Competitive Community Broadband*. June 10. <https://www.fcc.gov/blog/removing-barriers-competitive-community-broadband>.
- 5) Federal Communications Commission. 2015. "2015 Broadband Progress Report."
- 6) Vilsack, Tom, and Penny Pritzker. 2015. *Broadband: The Electricity of the 21st Century*. January 15. <https://www.whitehouse.gov/blog/2015/01/15/broadband-electricity-21st-century>.
- 7) Lichtenberg, Sherry. 2015. *State Universal Service Funds 2014*. Silver Spring, MD: National Regulatory Research Institute.
- 8) Pick, James B., and Avijit Sarkar. 2015. "United States Digital Divide." In *The Global Digital Divides: Explaining Change*, 235-274. Springer.
- 9) Russo, Nick, Robert Morgus, Sarah Morris, and Danielle Kehl. 2014. *The Cost of Connectivity*. Washington, DC: Open Technology Institute.
- 10) Brotman, Stuart, Blair Levin, and Austin Schlick. 2015. "Bringing Internet Access to Every American: The 5th Anniversary of the National Broadband Plan." Washington, D.C.: The Brookings Institution.
- 11) The Broadband Commission. 2014. *The State of Broadband 2014: Broadband for All*. Geneva, Switzerland: The United Nations.
- 12) Brotman, Stuart, Blair Levin, and Austin Schlick. 2015. "Bringing Internet Access to Every American: The 5th Anniversary of the National Broadband Plan." Washington, D.C.: The Brookings Institution.
- 13) Fox, Susannah, and Lee Rainie. 2014. *The Web at 25 in the U.S.* Washington, DC: Pew Research Center.
- 14) Perrin, Andrew, and Maeve Duggan. 2015. *Americans' Internet Access: 2000-2015*. Washington, DC: Pew Research Center.
- 15) Ibid.
- 16) Ibid.
- 17) Whitacre, Brian, Roberto Gallardo, and Sharon Stover. 2014. "Broadband's contribution to economic growth in rural areas: Moving towards a causal relationship." *Telecommunications Policy*.
- 18) Song, Moohoun, Peter Orazem, and Rajesh Singh. 2006. *Broadband Access, Telecommuting and the Urban-Rural Digital Divide*. Ames: Iowa State University Office of Social and Economic Trend Analysis.
- 19) Mitchell, Christopher. 2012. *Broadband at the Speed of Light: How Three Communities Built Next-Generation Networks*. Institute for Local Self-Reliance.
- 20) Lohr, Steve. "F.C.C. Sharply Revises Definition of Broadband." *The New York Times*, January 29, 2015. <http://bits.blogs.nytimes.com/2015/01/29/f-c-c-sharply-increases-definition-of-broadband/>.
- 21) Anderson, Monica, and Andrew Perrin. 2015. "15% of Americans don't use the Internet. Who are they?" July 28. Accessed September 17, 2015. <http://www.pewresearch.org/fact-tank/2015/07/28/15-of-americans-dont-use-the-internet-who-are-they/>.
- 22) Federal Communications Commission. 2015. "2015 Broadband Progress Report."
- 23) Whitacre, Brian, Roberto Gallardo, and Sharon Stover. 2014. "Broadband's contribution to economic growth in rural areas: Moving towards a causal relationship." *Telecommunications Policy*.
- 24) LaRose, Robert, Jennifer L. Gregg, Sharon Stover, Joseph Straubhaar, and Serena Carpenter. 2007. "Closing the rural broadband gap: Promoting adoption of the Internet in rural America." *Telecommunication Policy* 359-373.

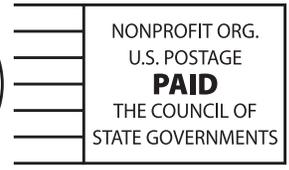
- 25) Zickuhr, Kathryn. 2013. "Who's Not Online and Why." September 25. Accessed September 17, 2015. <http://www.pewinternet.org/2013/09/25/whos-not-online-and-why/>.
- 26) Baller, James. State Restrictions on Community Broadband Services or Other Public Communications Initiatives. PDF. Washington, DC: The Baller Herbst Law Group, June 1, 2014.
- 27) Lawrence Strickling, Assistant Secretary for Communications and Information for the United States Department of Commerce, letter to Tom Wheeler, FCC Chairman, January 14, 2015. https://www.ntia.doc.gov/files/ntia/publications/ntia_ltr_01142015.pdf.
- 28) Mitchell, Christopher. "Community Network Map." Community Broadband Networks. October 2015. <http://www.muninetworks.org/communitymap>.
- 29) Brown, Becky, and Stacy Royster. "Opelika City Schools Using OPS Fiber Optics to Bring Schools up to Internet Speed." Alabama Currents, 2016, 11.
- 30) Johnston, Patrick. "Opelika Mayor Gary Fuller Praises FCC Decision on Internet Service Expansion." Opelika-Auburn News, February 26, 2015. Accessed January 7, 2016. http://www.oanow.com/news/business/article_a0075f68-be00-11e4-9abf-673e7750e394.html.
- 31) James Majcen, Director of IT and Communications, "Palm Coast FiberNET Information for Service Providers." City of Palm Coast.
- 32) "Peachtree City Opts for NuLink Broadband." Atlanta Journal-Constitution, February 8, 2016. Accessed February 24, 2016. <http://www.ajc.com/news/news/local/peachtree-city-opts-for-nulink-broadband/nqLqD/>.
- 33) Mitchell, Christopher. "Community Network Map." Community Broadband Networks. October 2015. <http://www.muninetworks.org/communitymap>.
- 34) "Gov. Beshear, Rep. Rogers Launch Statewide Broadband Network." Kentucky Finance & Administration Cabinet. August 31, 2015. Accessed January 13, 2016. <http://finance.ky.gov/initiatives/nextgenkih/Pages/KentuckyWired-Lauch.aspx>.
- 35) Estep, Bill. "Statewide Broadband Project Taking Shape, with Work Expected to Begin in September." August 31, 2015. Accessed January 13, 2016. <http://www.kentucky.com/news/business/article42611118.html>.
- 36) "KentuckyWired." Kentucky Finance & Administration Cabinet. December 2, 2015. Accessed January 13, 2016. <http://finance.ky.gov/initiatives/nextgenkih/Pages/default.aspx>.
- 37) Sigo, Shelly. "Kentucky Issues Bonds for Statewide Internet System." The Bond Buyer. August 26, 2015. Accessed January 13, 2016. <http://www.bondbuyer.com/news/regionalnews/kentucky-issues-bonds-for-statewide-internet-system-1083020-1.html>.
- 38) Estep, Bill. "Bevin Aims to Scale Back Broadband Project to Focus on Eastern Kentucky." Lexington Herald-Leader, February 5, 2016. <http://www.kentucky.com/news/politics-government/article58768608.html>.
- 39) "LUS Fiber Launches 2 Gbps Internet Service." Community Center: Current Fiber News. November 3, 2015. Accessed January 13, 2016. <http://lusfiber.com/index.php/about-lus-fiber/news>.
- 40) Andrew Gilich, Mayor of Biloxi, Mississippi. "Resolution 52." October 6, 2015. Accessed January 13, 2016. <http://www.biloxi.ms.us/agendas/citycouncil/2015/100615/100615bleg.pdf>.
- 41) Wilson, Steve. "Gulfport, Biloxi to Create Municipal Broadband Network." Louisiana Watchdog. October 8, 2015. Accessed January 15, 2016. <http://watchdog.org/241479/municipal-broadband/>.
- 42) Zilbermints, Regina. "Harrison County Signs on to High-speed Internet Project." Sun Herald. January 11, 2016. Accessed January 22, 2016. <http://www.sunherald.com/news/local/counties/harrison-county/article54137425.html>.
- 43) Anderson, Joanne. "Gautier to Join in Multi-City Fiber-optic Infrastructure Agreement." GulfLive. January 19, 2016. Accessed January 22, 2016. http://blog.gulflive.com/mississippi-press-news/2016/01/gautier_to_join_in_multi-city.html.
- 44) Lichtenberg, Sherry. Municipal Broadband: A Review of Rules, Requirements, and Options. Silver Spring, MD: National Regulatory Research Institute, 2014.

- 45) "Internet Department." Marshall Municipal Utilities. Accessed January 21, 2016. <http://www.mmumo.net/internet.php>.
- 46) United States. Federal Communications Commission. Pleading Cycle Established for Comments on Electric Power Board and City of Wilson. July 28, 2014. https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1072A1_Rcd.pdf.
- 47) "Looking Back on 2015." The Wilson Times, December 31, 2015. Accessed February 2, 2016. <http://www.wilsontimes.com/News/Feature/Story/Top-stories-of-2015>.
- 48) Wyatt, Edward. "Communities Fight State Laws That Can Divide Broadband Access." The New York Times, November 9, 2014. Accessed February 2, 2016. <http://www.nytimes.com/2014/11/10/technology/in-rural-america-challenging-a-roadblock-to-high-speed-internet.html>.
- 49) Whitacre, Brian, Bill Baker, Keith Skelton, and Shannon Vann. "Rural Broadband Success Story: Sallisaw - A Fiber Optic Network for the Ages." Oklahoma Cooperative Extension Service. <http://agecon.okstate.edu/broadband/files/AGEC-1000web.pdf>.
- 50) Long, Matt. "Counties Criticize Broadband Bill, Calling It an Overreach." South Carolina Radio Network. February 21, 2011. <http://www.southcarolinaradionetwork.com/2011/02/21/counties-criticize-broadband-bill-calling-it-an-overreach/>.
- 51) "Our History." EPB. Accessed February 5, 2016. <https://epb.com/content/our-history>.
- 52) Hayes, Heather B. "How and Why Chattanooga, Tenn., and Other Cities Have Embraced Municipal Broadband." StateTech Magazine, January 20, 2016. <http://www.statetechmagazine.com/article/2016/01/how-and-why-chattanooga-tenn-and-other-cities-have-embraced-municipal-broadband>.
- 53) Baller, Jim, Sean Stokes, Frederick Hitchcock, Tom Greenholtz, and Kathryn King. Petition Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition. PDF. Chattanooga, Tennessee: Electric Power Board, July 24, 2014.
- 54) McGee, Jamie. "Tennessee Broadband Bill Said to Have New Momentum." The Tennessean, February 3, 2016. <http://www.tennessean.com/story/news/2016/02/03/tennessee-broadband-bill-said-have-new-momentum/79772708/>.
- 55) "100 Years of GEUS History." GEUS. Accessed February 9, 2016. <http://www.geus.org/history.htm>.
- 56) McGee, David. "BVU in Talks to Sell OptiNet Division." Bristol Herald Courier, February 5, 2016. http://www.heraldcourier.com/news/bvu-in-talks-to-sell-optinet-division/article_9638a6cf-7ba0-5f6b-8547-d9c8d32cd2d4.html.
- 57) Eyre, Eric. "Bill to Create \$72M Broadband Network Clears First Hurdle." Charleston Gazette-Mail, January 26, 2016. <http://www.wvgazettemail.com/news/20160126/bill-to-create-72m-broadband-network-clears-first-hurdle>.
- 58) Eyre, Eric. "Cable Firms Oppose Proposed State-funded Internet Network." Charleston Gazette-Mail, January 20, 2016. <http://www.wvgazettemail.com/news/20160120/cable-firms-oppose-proposed-state-funded-internet-network>.
- 59) Eyre, Eric. "Scaled-back Broadband Proposal Would Build State Network Piece by Piece." Charleston Gazette-Mail, February 14, 2016. <http://www.wvgazettemail.com/news/20160214/scaled-back-broadband-proposal-would-build-state-network-piece-by-piece>.
- 60) Suber, Elaina. "'Brunch Bill' an Issue for WV Restaurants, Tourism." Charleston Gazette-Mail, January 20, 2016. <http://www.wvgazettemail.com/news/20160120/brunch-bill-an-issue-for-wv-restaurants-tourism>.
- 61) Pulidindi, Julia. Why Broadband Matters: A Look at Its Impact and Application for Cities. Washington, DC: National League of Cities, 2013.

Appendix 1			
State	Statute	Year	Broadband or Service Provided
Alabama	11-50B	2000	“Having the capability of supporting, in both the provider-to-consumer (downstream) and the consumer-to-provider (upstream) directions, a speed (in technical terms, “bandwidth”) in excess of 200 kilobits per second (kbps) in the last mile.” (11-50B-2)
Arkansas	23-18-801	2007	“Broadband services” means the provision of regulated or nonregulated connectivity to a high-speed, high-capacity transmission medium that can carry signals from multiple independent network carriers over electric power lines and related facilities, whether above or below ground (23-18-802)
Florida	350.81	2005	“Advanced service” means high-speed-Internet-access-service capability in excess of 200 kilobits per second in the upstream or the downstream direction
Kentucky	96.531	2000	Telecommunications service
Louisiana	45.844.41-56	2004	“Telecommunications service” means the two-way transmission of signs, signals, writing, images, sounds, messages, data, or other information of any nature by wire, radio, light waves, or other electromagnetic means offered to the public generally. “Advanced service” means high-speed Internet access capability in excess of 144 kilobits per second both upstream and downstream. (45:844.43)
Missouri	392-410	1997	“Telecommunications service or telecommunications facility used to provide a telecommunications service for which a certificate of service authority is required”
North Carolina	160A-340	2011	“High-speed Internet access service” as defined by tier 1 broadband under the FCC
South Carolina	58-9-2600	2012	“Communications service” means a telecommunications service, a broadband service, or both. “Broadband service” means a service that meets the definition of “broadband service” in Section 58-9-10(17) and that has transmission speeds that are equal to or greater than the requirements for basic broadband tier 1 service as defined by the Federal Communications Commission for broadband data gathering and reporting.
Tennessee	7-52-601	1997	Internet services
Texas	54.201-202	1997	A service for which a certificate of convenience and necessity, a certificate of operating authority, or a service provider certificate of operating authority is required; or a nonswitched telecommunications service
Virginia	15.2-2160	2002	Telecommunications services

Note: Self-sustaining refers to any prohibitions on cross-subsidization or use of general revenue or taxes for broadband services.

Direct Service Provision Allowed?	Parameters for Service Provision					Public Providers
	Self-Sustaining	Bundling Restrictions	Bond Limitations	Service Area Limitations	Referendum Required	
YES	YES	YES	YES	YES	YES	Any municipality or municipal instrumentality
YES	NO	NO	NO	YES	NO	Electric utilities
YES	YES	NO	YES	YES	YES	Any county, municipality, special district, school district, utility authority or other authority or any instrumentality, agency, unit or department thereof
YES	NO	NO	NO	NO	NO	Any legislative body of any city
YES	YES	NO	YES	YES	YES	Any parish, municipalities, or other political subdivision of the state and any utility authority, board, branch, department or other unit thereof
NO	N/A	N/A	N/A	N/A	N/A	Political subdivision
YES	YES	NO	YES	YES	YES	City-owned communications service provider
YES	YES	NO	NO	YES	NO	Agency, entity, instrumentality, or political subdivision of the state, excluding the State Department of Administration
YES	YES	NO	NO	YES	NO	Municipality operating an electric plant
NO	N/A	N/A	N/A	N/A	N/A	Municipality or municipal electric system
YES	YES	YES	NO	YES	NO	Any county, city, town, authority, or other governmental entity that operates an electric distribution system



Southern Office of
The Council of State Governments
 P.O. Box 98129
 Atlanta, Georgia 30359
www.slcatlanta.org

Colleen Cousineau
 Director, SLC
 Deputy Executive Director, CSG

SOUTHERN LEGISLATIVE CONFERENCE

THE SOUTHERN OFFICE OF THE COUNCIL OF STATE GOVERNMENTS

REGIONAL VIEW NATIONAL REACH

This report, current as of February 24, 2016, was authored by Stephanie Noble, Publications and Research Associate for the Southern Legislative Conference (SLC) of The Council of State Governments (CSG), and edited by Colleen Cousineau. This report reflects the body of policy research made available to appointed and elected officials by the Southern Office.

The Southern Office of The Council of State Governments, located in Atlanta, Georgia, fosters and encourages inter-governmental cooperation among its 15 member states. In large measure, this is achieved through the ongoing work of the standing committees of its Southern Legislative Conference. Through member outreach in state capitols, policy research, international member delegations, staff exchange programs, meetings and fly-ins, staff

support state policymakers and legislative staff in their work to build a stronger region.

Founded in 1947, the SLC is a member-driven organization and the largest of four regional legislative groups operating under CSG and comprises the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

The SLC's six standing committees provide a forum which allows policymakers to share knowledge in their area of expertise with colleagues from across the South. By working together within the SLC and participating on its committees, Southern state legislative leaders are able to speak in a distinctive, unified voice while addressing issues that affect their states and the entire region.