

State and Local High Speed Internet Initiatives

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Issue

This report provides examples of state and local initiatives established or modified since 2012 to facilitate or encourage installation of and access to fiber networks and high speed Internet. The initiatives are categorized by type and the examples provided are not exhaustive.

Summary

States take various approaches to incentivizing or encouraging expansion of broadband access. These include changes to infrastructure deployment rules and practices; grants, funding, and other financial incentives; mapping and planning efforts; municipal, cooperative, or other local efforts; and public private partnerships.

Laws in Arizona and Minnesota coordinate broadband conduit installation with certain state department of transportation projects. Laws in Nevada, Virginia, and West Virginia allow states to lease, trade, or otherwise distribute state-owned or installed broadband facilities.

Many states have grant programs or other funding mechanisms to support broadband projects, often specifically for underserved or rural areas. At least five states (Colorado, Florida, Indiana, Minnesota, and Nebraska) have established or modified grant programs since 2012, and several others authorize other types of financing mechanisms (e.g., allowing counties or municipalities to administer grant programs). At least six states (Colorado, Idaho, Tennessee, Mississippi, Oregon, and Pennsylvania) have or authorize tax incentives for broadband-related costs.

Many states have statutory requirements to engage in broadband planning and mapping efforts. Under a federal initiative, funded in part by the American Recovery and Reinvestment Act (ARRA) in 2009 and 2010, all states created broadband maps and several states have continued their mapping efforts even after this funding expired.

Several states have authorized or encouraged municipalities, cooperatives, and other entities to implement broadband projects. Legislation passed in 2017 authorized electric cooperatives in Tennessee to provide Internet access and related services. In 2018, New Hampshire passed a law allowing municipalities to bond for publically owned Internet network infrastructure in unserved areas. The law in California authorizes community services districts to construct, improve, maintain, and operate broadband facilities and provide broadband services, but requires districts to transfer facilities to private entities under certain circumstances. Indiana and Tennessee have passed laws creating a process for municipalities to designate themselves as “broadband ready”.

Kentucky and New Hampshire have also recently passed laws authorizing public-private partnerships related to broadband. In 2017, Kentucky passed legislation establishing the Kentucky Communications Network Authority (KCNA) to, among other things, oversee and maintain KentuckyWired, the state’s open-access broadband network. KentuckyWired was established under a public-private partnership with Macquarie Capital. Recently passed legislation in New Hampshire allows municipalities to issue bonds to finance development, construction, reconstruction, and improvement of broadband infrastructure in unserved locations. The law also allows them to do so as part of a public-private partnership.

Deployment Rules

Federal law generally encourages the spread of high speed Internet by, among other things, prohibiting state and local governments from denying siting applications to modify existing wireless towers or co-locate, remove, or replace wireless transmission equipment (47 U.S.C. § 1455). Some states have codified this prohibition and established deadlines for local governments to approve these applications (e.g., Georgia (GA Code Ann. §§ 36-66B-1 to -4); Hawaii (Haw. Rev. Stat. Ann. §§ 27-45 & 46-89)). Others have taken various approaches to encourage or facilitate deployment of broadband infrastructure, including coordinating deployment with other construction projects and implementing policies that generally encourage the state and other entities to share access to their broadband network infrastructure.

Construction Coordination and Dig Once Policies

Arizona

The law allows the Department of Transportation director to install broadband conduit as part of certain rural highway construction projects if the department receives funding to cover the cost. The law allows the director to lease conduit to providers at a cost-based rate and coordinate planning and relocation if necessary (Ariz. Rev. Stat. § 28-7382).

Minnesota

The law requires the Office of Broadband Development to collaborate with the Department of Transportation and other entities to coordinate “dig once” efforts for planning, relocation, installation or improvement of broadband conduit within the right-of-way in conjunction with any construction. Such collaboration may include evaluating engineering and design standards and contract terms with private entities, among other things (Minn. Stat. Ann. § 116J.391).

Infrastructure Trading, Leasing, and Other Coordination

Nevada

[SB 53](#) in 2017 authorized the Nevada Department of Transportation (DOT) to engage in “fiber trading” with telecommunications companies. Under the act, telecommunications providers seeking access to a DOT right-of-way to install, operate, or maintain telecommunications equipment must enter into an agreement with DOT and compensate it either monetarily or in-kind (e.g., excess conduit). The act also authorizes DOT to grant a telecommunications provider use of and access to spare conduit and related DOT facilities if DOT:

1. determines such facilities are not needed for highway purposes,
2. is fairly compensated, and
3. offers such use and access in a competitively neutral and nondiscriminatory manner.

Virginia

The law requires state departments, agencies, and institutions responsible for state-owned communications towers in unserved areas to lease or convey a license or other interest in the tower to qualified providers, allowing providers to use the tower to deploy broadband services (VA Code Ann. § 2.2-1150.2).

West Virginia

Legislation passed in West Virginia in 2017 ([HB 3093](#)) contains provisions on “microtrenching” and “make-ready” pole access which generally make it easier for broadband network providers to share certain infrastructure facilities.

Under the act, microtrenching means a technique of deploying cables, including those specifically for broadband networks, using a cutting wheel to cut a trench with smaller dimensions than can be achieved with conventional trench digging equipment (i.e., no greater than three inches in width and a depth between one and two feet). The act allows people to perform microtrenching to the extent allowed by local governments, but requires anyone doing so to:

1. install a vacant conduit of the same size as the installer's own conduit;
2. install conduit in a way that readily permits another owner to add length to the microtrenching by connecting their own conduit to the first owner's conduit;
3. submit certain information to the appropriate permitting entity within 40 days of completing construction, including an "as-built" drawing of the installed conduit and a map showing its street location.

Under the act, once a microtrenched conduit is installed, other users can apply to the state's Broadband Enhancement Council for authorization to use the vacant conduit.

The act also establishes a make-ready pole access procedure for companies and other entities to attach equipment to utility poles. Generally, "make-ready" refers to the process used by utility pole owners and those who wish to attach equipment to the poles to prepare a pole for a new attachment of fiber, cable, or other equipment. Under the procedure established by the act, such "attachers" submit an attachment application to the utility pole owner to attach equipment, antenna, lines, or any other type of facility to the utility pole. Once the application is approved, the attacher may relocate or alter third party attachments (i.e., equipment attached to the pole by other entities excluding electric supply facilities). If relocation of third party equipment by an attacher would result in a customer outage, the attacher must provide 45 days written notice to the third party user to allow the user to relocate its facilities. If the third party user takes no action in that timeframe, the attacher may perform the work. The act allows third parties to inspect the attacher's work and require the attacher to indemnify pole owners from third party damage and loss, among other things.

Grants, Funding, and Other Financial Incentives

Several states have programs to provide funding for broadband infrastructure projects, both directly (Table 1) and indirectly, through bonding and other intermediaries (Table 2). Some initiatives are limited to projects in rural, underserved, or unserved areas. States may also use state universal service funds, generally funded through a charge on providers, to fund broadband infrastructure, as

explained below. States also encourage broadband infrastructure investment through tax incentives.

Table 1: Examples of Direct State Funding Initiatives

<i>State</i>	<i>Fund/ Grant Program</i>	<i>Description</i>
Colorado	Broadband Deployment Fund	Provides grants to deploy broadband service in unserved areas of the state. For-profit entities, nonprofit telephone cooperatives, or certain nonprofit rural electric associations are eligible to apply. The fund also receives certain funds from the state's universal service fund (Colo. Rev. Stat. Ann. § 40-15-509.5).
Florida	Rural Infrastructure Fund	Provides grants for infrastructure projects, including broadband infrastructure, in rural communities (Fla. Stat. Ann. § 288.0655)
	Department of Management Services Grant Authorization	Allows grants for projects that provide broadband access to certain entities, or remove barriers to entry and encourage investments in unserved areas (Fla. Stat. Ann. § 364.0135)
Indiana	Broadband Grants for Unserved Areas	Provides grants for qualified broadband providers and services in unserved areas administered by the Office of Community and Rural Affairs (Ind. Code Ann. 4-4-38-7 to -11)
Minnesota	Border-to-Border Broadband Program	Funds the expansion of broadband service to areas that are unserved or underserved. Grants provide up to half of project development costs with a limit of \$5 million per project (Minn. Stat. §§ 116J.391 to .396).
Nebraska	Nebraska Internet Enhancement Fund	Provides financial assistance to install and deliver broadband or other advanced telecommunication infrastructure throughout the state (Neb. Rev. Stat. §§ 86-579 and -580)

Table 2: Examples of Initiatives Using Other Types of Financing

<i>State</i>	<i>Description</i>	<i>Statute</i>
California	California law authorizes infrastructure financing districts to finance public capital facilities or projects that include broadband. By law, districts are governmental entities established to finance public facilities.	Cal. Gov't Code §§ 53395.3.2 & 53395.1
Massachusetts	The law requires the Massachusetts Technology Park Corporation to (1) establish the Massachusetts Broadband Institute to, among other things, assess and improve conditions in communities with no broadband access and (2) leverage private sector and federal investment by financing the construction and acquisition of broadband infrastructure to promote access.	Mass. Gen. Laws Ann. ch. 40J § 6B
North Carolina	The law allows counties in North Carolina to provide grants to unaffiliated qualified private high speed Internet access service providers. Grants must be technology neutral and may require matching funds from the provider.	N.C. Gen. Stat. Ann. § 153A-349.60
West Virginia	HB 3093 (2017) established an insurance fund within the state's Economic Development Authority to insure, for up to 20 years, repayment of loans	HB 3093

	entered into by state enterprises or authorities for capital costs related to provision of broadband services or linking telecommunications network segments in unserved areas, among other things.	
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State Universal Service Funds (USF)

Federal law requires interstate telecommunications companies to pay into the universal service fund (USF), which is used to make telephone service more affordable for low-income consumers and customers living in rural areas where the costs of providing telephone service are high. The fund also provides subsidies for Internet access, among other things. Each company makes a business decision about whether and how to charge its customers to recover its universal service costs.

Several states have additionally established their own universal service funds. These states make policy decisions about how their funds are assessed and collected and the purposes for which they can be spent. Some have added broadband Internet to the list of services supported by their state USF.

California

[The California Advanced Services Fund](#) (CASF) provides grants to various types of projects to support broadband adoption programs in communities with low broadband access (Cal. Pub. Util. Code § 281). The CASF is funded through a surcharge on certain revenues collected by telecommunications carriers. More information is available [here](#).

New Mexico

Legislation passed in New Mexico in 2017 made several changes to the New Mexico State Rural Universal Services Fund (NMRUSF) to encourage or support broadband expansion ([SB 308](#)). According to the bill's [fiscal impact report](#), the NMRUSF is a non-public fund administered by a third-party administrator but overseen by the New Mexico Public Regulation Commission (PRC).

Among other things, the act:

1. requires eligible telecommunications carriers that receive certain types of support through the fund to spend at least 60% of that funding on the deployment or maintenance of broadband services; and
2. creates a broadband program funded through the NMRUSF at a rate of at least \$5 million per year to fund awards in rural areas.

Oregon

Legislation passed in 2017 allowed the state's Public Utility Commission to use the state's USF to encourage broadband availability and provide support to telecommunications carriers that provide both basic telephone service and broadband service ([HB 2091](#)).

Utah

The law allows funds from the state's Universal Public Telecommunications Service Support Fund to be distributed to certain providers to deploy and manage networks capable of providing broadband Internet access service (Utah Code Ann. 1953 § 54-8b-15).

Tax Incentives

Table 3 describes examples of state and local tax incentives for broadband infrastructure and related expenses.

Table 3: Examples of Tax Incentives

State	Description	Statute
Colorado	Allows municipal or county sales tax exemption for equipment sold to telecommunications providers and used directly to provide broadband communications services	Colo. Rev. Stat. Ann. § 29-2-105
Idaho	Individual and corporate income tax and franchise tax credit for 3% of qualified broadband equipment expenditures	Idaho Code Ann. § 63-3029I
Tennessee	6% franchise and excise tax credit, subject to certain limitations, for qualified broadband Internet access equipment placed in service in certain geographic areas	SB 1215 (2017)
Mississippi	Broadband Technology Tax Credit: income tax credit of up to 15% of equipment cost to telecommunications businesses that deploy qualifying equipment. For more information, see DOR's Tax Incentives, Exemptions, and Credits (p. 41 & 42).	Miss. Code Ann. § 57-87-5
	Sales tax exemption for equipment used to deploy broadband technologies installed in certain geographic areas	Miss. Code Ann. § 27-65-101
	10-year ad valorem tax exemption for equipment used to deploy broadband technologies placed in service in any area of the state	Miss. Code Ann. § 57-87-7
Oregon	Personal or corporate income tax credit or corporate excise tax credit for 25% of investments, including those related to broadband infrastructure, made by businesses engaging in electronic commerce in a city or enterprise zone designated for that purpose	Or. Rev. Stat. Ann. § 315.507
Pennsylvania	Mobile Telecommunications Broadband Investment Tax Credit: corporate income tax credit for telecommunications providers equal to 5% of qualified broadband equipment purchased, up to 50% of the taxpayer's liability. The tax credit sunsets January 1, 2024	72 Pa. Cons. Stat. § 8801-E et seq.

Mapping and Planning

National Broadband Map and Continued State Efforts

The National Broadband Map was an initiative delivered through the Broadband Technologies Opportunities Program (BTOP) and funded in part by the American Recovery and Reinvestment Act (ARRA) in 2009 and 2010. All states created broadband maps under this program. While many states stopped updating their maps when BTOP funding expired in 2016, some states (e.g., California, Hawaii, Minnesota, Nebraska, Utah, and West Virginia) found ways to continue broadband mapping activities.

Planning and Long Term Studies

Many states have established entities to engage in long-term planning to expand broadband access. Others have charged existing offices or officials with this task. Table 4 shows examples of initiatives in several states.

Table 4: Examples of Recent State Studies and Planning Initiatives

State	Entity or Office	Authorizing Act or Statute	Reports and Documents
California	California Broadband Council	Cal. Gov't Code § 8885 et seq.	None
Hawaii	Director of Commerce and Consumer Affairs	Haw. Rev. Stat. § 440G-11.5	2018 Annual Report
Maine	ConnectME Authority	Me. Rev. Stat. Ann. tit. 35-A §§ 9201 et seq.	Broadband Action Plan, June 2018
Maryland	Office of Rural Broadband in the Department of Information Technology	Executive Order MD 14 (2017)	None.
	Task Force on Rural Internet, Broadband, Wireless, and Cellular Services	SB 717, HB 1169 (2017)	2018 Task Force Report
Minnesota	Office of Broadband Development	Minn. Stat. Ann. § 116J.39	Annual Report March 2018
Nevada	Nevada Broadband Taskforce	Executive Order 2015-23	2016 report
	Office of Science, Innovation and Technology (OSIT)	SB 53, (2017)	None.
New Hampshire	Committee to Study Broadband Access to the Internet	HB 238 (2017)	Final Report
Vermont	Department of Public Service	30 Vt. Stat. Ann. tit. 30 §§ 202c & 202d	2018 Telecommunications Plan Final Draft
West Virginia	Broadband Enhancement Council	W. Va. Code Ann. §§ 31G-1-1 to -11	None.

Municipalities, Cooperatives, and Other Entities

California

The law authorizes community services districts to construct, improve, maintain, and operate broadband facilities and provide broadband services, but if the district determines that a private entity is able to operate the facilities and provide services, the district must either transfer title and ownership to the entity or lease its facilities to the entity at fair market value (Cal. Gov't Code § 61100, effective January 1, 2019).

Tennessee

Legislation passed in 2017 authorized electric cooperatives in Tennessee to provide Internet access and related services ([SB 1215](#)). Electric cooperatives were already authorized to provide telephone and other telecommunications services. Under the act, cooperatives that opt to provide Internet services must:

1. grant other Internet providers non-discriminatory access to locate their equipment on infrastructure or poles owned or controlled by the cooperative and
2. administer, operate, and maintain its electric system as a separate department and establish a separate fund for electric operations revenue that is not comingled or consolidated with other operations.

New Hampshire

In 2018, New Hampshire passed a law allowing municipalities to bond for publically owned Internet network infrastructure in unserved areas ([SB 170](#)). (See “Public Private Partnerships” for more information.)

Local “Broadband Ready” Designations

Indiana

Within the state’s Economic Development Corporation, the Broadband Ready Communities Development Center administers a program to certify cities, counties, and towns as “broadband ready communities.” Among other things, municipalities that wish to be certified as broadband ready communities must establish procedures for applications and permits that meet the program’s requirements (e.g., they cannot charge a fee and they must meet certain deadlines) (Ind. Code §§ 5-28-28.5-0.5 to -8).

Tennessee

Among other things, [SB 1215](#) (2017) authorized the state’s Department of Economic and Community Development (DECD) to establish guidelines for a “broadband ready community” certificate as a designation for which municipalities can apply. Under the act, municipalities may

receive this designation if they have adopted an efficient and streamlined ordinance or policy for reviewing applications and issuing permits related to certain broadband-related projects, among other things.

The act also establishes the broadband accessibility fund to provide grants to political subdivisions, electric cooperatives, and private corporations, among others, for projects that meet DECD criteria. Under the act, the department must generally prioritize projects that, among other things:

1. propose to acquire and install infrastructure that supports broadband services scalable to higher download and upload speeds; and
2. serve locations that (a) lack access to Internet services that meet certain thresholds for download and upload speeds and (b) demonstrate community support, including by receiving designation as a “broadband ready community.”

Public-Private Partnerships

Kentucky

In 2017, Kentucky passed legislation establishing the Kentucky Communications Network Authority (KCNA) and its board ([House Bill 343](#)). Among other things, the act requires KCNA to:

1. oversee and maintain KentuckyWired, the state’s open-access broadband network;
2. manage a master agreement establishing a public-private partnership between the state and private industry partners to design, engineer, build, operate, maintain, and upgrade the network;
3. provide network connectivity to state agencies;
4. offer access to other eligible entities;
5. promulgate regulations; and
6. enter into contracts with public and private entities to carry out KCNA’s duties and responsibilities.

Middle Mile

Generally, “middle mile” refers to infrastructure where retail providers can connect to the network. “Last mile” refers to retail service and lines that run to individual homes or businesses.

According to [KCNA’s website](#), KentuckyWired was established under a public-private partnership with Macquarie Capital. As an open access network, KCNA allows cities, private companies, and other entities to acquire access to “middle mile” lines but not “last mile” services.

New Hampshire

Municipalities in New Hampshire may issue bonds to finance development, construction, reconstruction, and improvement of broadband infrastructure in unserved locations. The law also

allows them to do so as part of a public private partnership (N.H. Rev. Stat. Ann. § 33:3-g). By law, such bonds are excluded from the municipality's debt limit (N.H. Rev. Stat. Ann. § 33:6-f).

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