

Appendix A

Right of Way Codes in the U.S.

Compiled through original research by NTIA, with reliance on
existing research by NARUC and NATOA.

<http://www.ntia.doc.gov/ntiahome/staterow/rowtableexcel>

States	Jurisdiction	Right of Way Compensation Code
Alabama	<p>Ala. Code § 11-49-1 (2002): Requires consent from city or town authorities before using public lands for the construction or operation of any private utility or private enterprise.</p> <p>Ala. Code § 11-50-B-3 (2002): Government agencies at the state and local level have the authority to manage public rights-of-way, and to require fair and reasonable compensation from telecommunications providers for the use of such rights-of-way.</p>	<p>Ala. Code § 11-50-B-3 (2002): Fair and reasonable compensation to municipalities for use of ROW is allowed.</p> <p>Ala. Code § 40-21-50 (2002): Telecommunications providers subject to 2.2% state gross receipts tax.</p> <p>Ala. Code § 40-21-64 (2002): Counties prohibited from levying privilege/license tax.</p>
Alaska	<p>Alaska Stat. § 29.35.010 (2002): Municipalities granted the power to regulate rights of way.</p> <p>Alaska Stat. § 38.05.810(e) (2002): The Director of the Mining, Land and Water Division may negotiate with licensed public utilities or common carriers for the lease, sale, or other disposal of state land. Such negotiations must have the approval of the commissioner, and may only be entered into if the utility or carrier reasonably requires the land to conduct its business.</p>	<p>Alaska Stat. § 42.05.251 (2002): Fee not to exceed actual cost to the municipality of the utility's use of the public way and of administering the permit program. Utilities may recover fee costs by applying them to customers' utility bills as a surcharge.</p>
Arizona	<p>Ariz. Rev. Stat. §§ 9-581 - 9-583;</p> <p>Ariz. Rev. Stat. § 9-583(A) (2001): A political subdivision (city, county, municipality, etc.) has the authority to manage its public highways and exercise its police powers, but may not exercise such power to prohibit the ability of any telecommunications company to provide its service.</p>	<p>Ariz. Rev. Stat. § 9-582(B) (2001): Any application or permit fees must be related to the costs incurred by processing the application, and must also be assessed within a reasonable amount of time after those costs are incurred.</p> <p>Ariz. Rev. Stat. § 9-582(D) (2001): Arizona permits a political subdivision and a telecommunications licensee or franchisee to agree to an in-kind arrangement, but the costs of the in-kind facilities offset the provider's obligation to pay local transaction privilege taxes or linear foot charges (applicable to interstate</p>

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		<p>services) and must be equal to or less than the taxes or charges. Ariz. Rev. Stat. § 9-582(D) (2001): "The in-kind facilities . . . shall remain in possession and ownership of the political subdivision after the term of the existing license or franchise expires." Ariz. Rev. Stat. § 9-582(D) (2001): "Notwithstanding subsections A and B of this section, in a license or franchise, a political subdivision and a telecommunications corporation may agree to in-kind payments for use of the public highways different from those specified in subsection A or B of this section." Ariz. Rev. Stat. § 9-582(E) (2001): "... The license or franchise shall be structured so that the in-kind payments made for use of the public highways to provide interstate telecommunications services under the license or franchise are less than or equal to and are offset against any linear foot charge owed pursuant to section 9-583, subsection C, paragraphs 2 and 3."</p>
Arkansas	<p>Ark. Code Ann. § 14-200-101(a)(2) (2002): Cities and towns have jurisdiction to assess franchise fees and other terms and conditions of franchise agreement. Ark. Code Ann. § 27-67-304(b) (2002): As long as it does not interfere with public use of the highways, any political subdivision, rural electric cooperative, rural telephone cooperative, private cable company or public utility may use state Highway Commission lands under existing permits, or under subsequent permits approved by the commission.</p>	<p>Ark. Code Ann. § 14-200-101(a)(1)(A) (2002): Local franchise fees not to exceed 4.25% of gross receipts from local service or higher amount agreed to by affected provider OR the voters. Ark. Code Ann. § 14-200-101(a)(1)(D) (2002): Affected utilities may recover fee costs by charging customers an amount equal to the right-of-way fee.</p>
Colorado	Colo. Rev. Stat. §§ 38-5.5-101 - 38-	Colo. Rev. Stat. § 38-5.5-107(1)(b)

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	5.5-108; 38-5.5-104 (2002): Any telecommunications provider authorized to do business in Colorado may construct facilities on state public lands upon payment of just compensation and compliance with the requirements set by the state Board of Land Commissioners.	(2002): Any application or permit fees must be related to the costs incurred by processing the application, and must also be assessed within a reasonable amount of time after those costs are incurred. Colo. Rev. Stat. §38-5.5-107(3) (2002): In-kind fee provisions are not allowed, nor may a municipality require one as a condition of consent to use a highway.
Connecticut	Conn. Gen. Stat. § 7-130d (2001). Municipalities are granted authority to regulate right-of-way. Conn. Gen. Stat. § 7-148 (2001). Municipalities may regulate installation of facilities and control excavation procedures. Conn. Gen. Stat. § 16-228 (2001): Telecommunications companies may construct their lines along public roads or navigable waters, as long as such construction does not obstruct the roads or waters.	Conn. Gen. Stat. § 7-130 (2001). Municipalities are granted authority to charge fees.
Delaware	Del. Code Ann. tit. 26, § 901 (2002): Local authorities are explicitly granted authority over right-of-way management. Del. Code Ann. tit. 22, § 103 (2002): "Street openings. No person shall open or excavate the bed of any street or highway of any city, town or village in this state for the purpose of laying or placing pipes, wires or other conductors therein without first obtaining the consent of the duly constituted authorities of such city, town or village. Nothing in this section shall require such consent before opening or excavating the bed of any such street or highway for the purpose of repairing any pipes, wires or other conductors theretofore lawfully laid	Del. Code Ann. tit. 30, § 5501 (2002): 4.25% Gross Receipts Tax assessed by PSC on intrastate telecommunications services, including cellular service. Providers may pass through to customers. Del. Code Ann. tit. 30, § 5502(4) (2002): "A tax is imposed upon any distributor of cable television communications commodities and services which tax shall be at the rate of 2.125% of the gross receipts or tariff charges received by the distributor for such commodities or services distributed within this state." Del. Code Ann. tit. 26, § 115 (2002): Gross revenues assessment on all public utilities for cost of regulation. Del. Code Ann. tit. 8, § 501-518

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	or placed in such street or highway."	(2002): Corporate Franchise Tax: "Every telegraph, telephone or cable company . . . to be incorporated under the laws of this state, shall pay an annual tax, for the use of the state, by way of license for the corporate franchise as prescribed in this chapter."
DC	D.C. Code Ann. § 10-1141.03 (2002). The Mayor may issue permits to occupy or otherwise use public rights-of-way, public space, and public structures for any purpose. He may do so without regard to whether the permittee owns the property abutting the public areas, and he may revoke the permit at any time. Any leasing or subleasing of the public areas must be with the express consent of the mayor. When a permit is revoked or expires, the Mayor may require the permittee to remove any apparatus constructed in the public areas. D.C. Code Ann. § 43-1454(a) (2002): "Any telecommunications provider in the District shall have the right to utilize the public right-of-ways of the District for installation, maintenance, repair, replacement, and operation of its telecommunications system..."	D.C. Code Ann. § 10-1141.04 (2002): Right-of-way access permit fees to cover costs of reviewing permit applications. "The Mayor may allow a permittee to pay a fixed charge for a set period of time, pay an amount based upon the amount of the public right-of-way or public space used or occupied, pay an amount based upon a revenue sharing formula, or provide in-kind services to the District in lieu of a monetary payment, or the Mayor may require a permittee to pay a combination of these items." D.C. Code Ann. § 47-2501(3) (2002): "After May 31, 1994, pay to the Mayor 10% of these gross receipts from sales included in bills rendered after May 31, 1994, for a telephone company. . ."
Florida	Fla. Stat. Ch. 202.10-202.41 (2002) COMMUNICATIONS SERVICES TAX SIMPLIFICATION LAW Prohibits municipalities and counties from requiring a telecommunications company to enter franchise, license or other agreements. Municipal and county right-of-way rules and regulations may only address placement and maintenance of facilities. Requires local governments to provide notice of proposed right-of-way ordinances to FL Department of state.	Fla. Stat. Ch. 202.10-202.41 (2002) COMMUNICATIONS SERVICES TAX SIMPLIFICATION LAW Municipalities & counties may charge permit fees to recover actual costs (not to exceed \$100) and tax rate reduced by .12%. If no permits, may increase tax rate by .12%. Fla. Stat. Ch. 202.10-202.41 (2002) Florida enacted a harmonized state and local communications services tax system, which functions as a sales or use tax assessed on the retail price of telecommunications

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		<p>services. Fla. Stat. Ch. 337.401(3)(c), (2002). The local tax component varies by locality. Of the combined state and local tax rate (which can exceed 10%), 0.24% is earmarked to replace permit fees foregone by local governments that opt to participate in the tax collection system instead of collecting fees.</p> <p>Fla. Stat. Ch. 202.24(2) (2002). Prohibits in kind compensation.</p>
Georgia	<p>Ga. Code Ann. § 32-4-92 (2002). Authorizes permitting authority of local governments. Locals may establish reasonable regulations for the installation and construction of facilities in right-of-way, but the regulations may not be more stringent than those enforced by the Dept of Transportation to regulate state highway right-of-way. The locality may require a written application specifying the nature, extent and location of the facilities in the area. They may also require the applicant to furnish indemnification bond or other acceptable security to pay for any damage to public road or member of the public.</p> <p>Ga. Code Ann. § 46-5-1(a) (2002): Any telecom company has the right to construct, maintain, or operate its lines along the state public highways, as long as the local municipal authorities approve.</p>	<p>Ga. Code Ann. § 46-5-1(a) (2002): A telecom company may have right-of-way access to construct and maintain its lines over any state lands, railroads, or private lands as long as it pays due compensation for such use.</p> <p>Ga. Code Ann. § 48-5-423 (2002): "Ascertainment of valuations of special franchises; levy and collection of tax. (a) In arriving at a proposed assessment, the commissioner shall not be bound to accept the valuation fixed for a special franchise in the return made but shall review the return and valuation. When the commissioner refuses to accept the return, the subsequent proceedings shall be in all particulars the same procedures as are provided by law in the case of refusal to accept the returns made by public utilities of their tangible property. (b) Special franchises shall be taxed at the same rate as other property upon the value of the special franchise as returned or upon the value determined by the county board of tax assessors. The tax on special franchises shall be levied and collected in the same manner as is provided by law in the case of the tangible property of public utilities."</p>
Hawaii	Haw. Rev. Stat. § 264-13 (2002). The governor or the director of	Haw. Rev. Stat. § 264-7(b) (2002): The director of transportation

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	<p>transportation may dispose of easements or rights-of-way along state highways under any terms that are within the public interest.</p>	<p>established the fee schedule for permits. The fee schedule should be calculated to recover any costs spent on issuing the permit. The applicant shall pay the fee, but the director may waive the fee where he determines that the work to be done will improve the highway or otherwise benefit the state. No fee is required where the only work to be done is the setting of poles to carry overhead wires.</p>
Idaho	<p>Idaho Code § 62-618 (2002): Municipalities are not permitted to regulate telecommunications companies.</p> <p>Idaho Code § 62-701 (2002): Telecommunications providers may erect facilities and structures on any public lands, including along public roads, waterways, or other lands, as long as those facilities don't disrupt the use of such roads, etc.</p> <p>Idaho Code § 62-701A(2) (2002): "With respect to the installation of its facilities within public rights-of-way, the telecommunications provider shall at all times be subject to the authority of a city, county or highway district. No grant of authority pursuant to this section shall be deemed to waive other rights or requirements of the codes, ordinances or resolutions of a city, county or highway district regarding permits, reasonable fees to be paid, manner of construction, or the like, nor to grant any property interest in the public rights-of-way."</p>	<p>Idaho Code § 50-329A (2002). Municipal franchise fees may be levied on providers, but levy may not exceed 3% of gross operating revenues; providers may pass through to customers. This franchise fee is in lieu of any other tax or fee imposed by the municipality related to easements, franchises, rights of way, utility lines and equipment.</p> <p>Idaho Code §§ 61-1001 & 1004 (2002). Utilities pay yearly gross revenue fee to the Public Utilities Commission to reimburse for cost of regulation. This fee is based upon a consideration of the time and expense devoted to the supervision and regulation of each class of . . . public utilities during the preceding calendar year, including salaries and wages of the commissioners and employees and all other necessary and lawful expenditures of the commission.</p>
Illinois	None Indicated	<p>35 Ill. Comp. Stat. 635/5 (2002): Recognizing that telecommunications providers were becoming more competitive, the Illinois General Assembly abolished municipal franchise fees and established a uniform municipal</p>

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		<p>infrastructure maintenance fee. Although this fee is meant to replace the revenue that municipalities lost from the franchise fees, the statute provides that the fee may not be related to the use of public rights-of-way or to the costs of maintaining and regulating such use.</p> <p>35 Ill. Comp. Stat. 636/5-60 (2002): With the implementation of the municipal infrastructure maintenance fee, municipalities were deemed to have waived their rights to any compensation that might subsequently accrue under a franchise agreement executed before January 1, 1998, if: 1) the municipality imposes a tax at a rate exceeding 5%; 2) the municipality affirmatively waives such fees; or 3) the municipality has a municipal infrastructure maintenance fee in place.</p> <p>35 Ill. Comp. Stat. 635/15 (2002): The state fee portion of the municipal infrastructure maintenance fee is .05% of the gross retail revenues.</p> <p>35 Ill. Comp. Stat. § 635/20 (a), (b) (2002): The municipality's portion of the municipal infrastructure maintenance fee may not exceed 1% of gross retail revenues in areas with a population of 500,000 or less, or 2% in areas with a population of 500,000 or more.</p> <p>35 Ill. Comp. Stat. 635/30 (2002): With the implementation of the municipal infrastructure maintenance fee, municipalities may no longer assess franchise fees or other charges on telecommunications providers.</p>
Indiana	Ind. Code § 8-1-2-101(b) (2002): Municipalities or county executives may operate and maintain the public	Ind. Code § 8-1-2-101(b) (2002): Compensation may not exceed the municipality's direct and actual costs

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	<p>roads and other lands for the benefit of public safety. They may also manage the rights-of-way associated with the public roads or other lands, and may require compensation for their use. Such compensation must be competitively neutral and non-discriminatory.</p>	<p>of managing the right-of-way for the public utility. These costs shall be assigned individually to the public utility creating the costs. Ind. Code § 8-1-2-101(b) (2002): Management costs may include the costs of: 1. Registering occupants; 2. Verifying occupation; 3. Inspecting job sites and restoration projects; 4. Restoring work inadequately performed; 5. Administering a restoration ordinance that ensures the right-of-way will be returned to its original condition; and 6. any management costs associated with the implementation of any other ordinance associated with rights-of-way. These costs may not include rents, franchise fees, or any other fee paid by a public utility for occupation of the right-of-way.</p>
Iowa	<p>Iowa Code § 364.2(4)(a) (2002): "A city may grant to any person a franchise to erect, maintain, or operate plants and systems [for telecommunications systems and other utilities] . . .within the city for a term of not more than 25 years. When considering whether to grant, amend, extend, or renew a franchise, a city shall hold a hearing. The franchise may be granted, extended, or renewed only by an ordinance, but no exclusive franchise shall be granted . . . Iowa Code § 477.1 (2002): Any telecommunications provider may construct its system along the public roads, along public waterways, or through public or private lands. However, construction along a primary road is subject to rules adopted by the state department of transportation. Iowa Code § 480A.1- § 480A.6 (2002). § 480A.1: "Purpose. The</p>	<p>Iowa Code § 480A.3 (2002): The only fee that a municipality can recover from a utility are those management costs caused by the utility's occupation of the right-of-way. If the management costs are attributed to more than one entity, the costs shall be allocated proportionately to the users of the right-of-way. Any other obligations must be imposed on a competitively neutral basis. Iowa Code § 480A.4 (2002): A municipality may not allow in-kind services in lieu of fees, nor may it require in-kind services as a condition for use of the right-of-way.</p>

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	<p>general assembly finds that it is in the public interest to define the right of local governments to charge public utilities for the location and operation of public utility facilities in local government rights-of-way."</p>	
Kansas	<p>Kan. Stat. Ann. § 17-1902(B) (2002) (Amended by Senate Bill 397, effective Jul 1, 2002): Any provider has the right to construct systems and related facilities along the state's public rights-of-way. The systems and facilities must be constructed so as not to obstruct other entities' use of the rights-of-way.</p> <p>Kan. Stat. Ann. § 17-1902(k) (2002) (Amended by Senate Bill 397, effective Jul 1, 2002): A city may require a telecommunications provider to repair all damage to a right-of-way cause by the use of that right-of-way. If the provider fails to make such repairs, the city may effect the repairs and charge the provider for their cost.</p>	<p>Kan. Stat. Ann. § 17-1902(N) (2002) (Amended by Senate Bill 397, effective Jul 1, 2002). A city may charge for the reasonable, actual, and verifiable costs of managing the city right-of-way. Fees may include: a permit fee, excavation fee, inspection fee, repair and restoration costs, performance bond.</p> <p>Kan. Stat. Ann. § 17-1902(h) (2002) (Amended by Senate Bill 397, effective Jul 1, 2002): A city may not require a telecommunications company to provide it with in-kind services.</p> <p>Kan. Stat. Ann. § 12-2001(g), (j). Each city may assess a one-time franchise application fee to cover the costs of reviewing the application. It may also impose either an access line fee of up to \$2.00 per access line per month, or a gross receipts fee of up to 5% on local services.</p>
Kentucky	<p>Ky. Rev. Stat. Ann. § 278.540 (2002): Once just compensation has been made, the provider gains the right to construct, maintain and operate its lines through any public lands of this state and across and along any public road.</p>	<p>Ky. Rev. Stat. Ann. § 278.540(1) (2002): Just compensation for right-of-way access is authorized.</p> <p>Ky. Rev. Stat. Ann. § 278.130 (2002): Cities are prohibited from assessing occupational license tax on public utilities. Instead, PSC assesses annual license tax on utilities.</p>
Louisiana	<p>La. Rev. Stat. Ann. § 48:381.1(C) (2002). Providers requesting access to state highways must apply for a right-of-way access permit with the PSC chief engineer.</p> <p>La. Rev. Stat. Ann. § 48:381.3(A)(2) (2002). Providers seeking access to locally controlled right-of-way are</p>	<p>La. Rev. Stat. Ann. § 48:381.2 (A)(2), (2002): When fiber optic cable providers apply for permits, their application commits them to a one-time permit fee.</p> <p>La. Rev. Stat. Ann. § 48:381.2(F) (2002): In-kind services (shared resources) may help defray permit</p>

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	subject to the ordinances and resolutions of the locality where they are located.	fee costs for providers. "F. The fee for fiber-optic telecommunication installations placed within a controlled access highway right-of-way shall not exceed the actual cost of the administration of the program. The department may reduce fees in exchange for shared resources. The department is authorized to reduce fees for its agents, defined for the purposes of this Subsection as those applicants who erect facilities on behalf of the department in order to conduct department work."
Maine	<p>Me. Rev. Stat. Ann. tit. 35-A § 2502 (2001): Statutes specifically designate licensing authority among municipal, county, and state governments, based on the location of the right-of-way.</p> <p>Me. Rev. Stat. Ann. tit. 35-A §§ 2503-2505 (2001): Permits may require description of facilities. Terms and conditions of permits may specify other requirements determined necessary in the best interests of the public safety and use of the right-of-way so as not to obstruct use for public travel.</p>	<p>Me. Rev. Stat. Ann. tit. 35-A §§ 2503, 2510 (2001): There are two permits, the right-of-way location permit and the right-of-way excavation permit. Each one has its own fee.</p> <p>Me. Rev. Stat. Ann. tit. 35-A § 2510-1 (2001): Local excavation fees may not exceed the reasonable cost of replacing the excavated pavement.</p>
Maryland	Md. Ann. Code art. 23A, § 2(13) (2002): Municipalities have the express power to grant exclusive or non-exclusive franchises to a community antenna system or cable systems that use rights-of-way. The municipality may impose franchise fees and establish rates, rules and regulations for the franchises.	None indicated.
Mass.	Mass. Gen. Laws Ann. ch. 166 § 25 (2002): Municipalities may permit construction of telecommunications systems in public areas, and they may also establish reasonable regulations for the construction and maintenance of telecommunications	Mass. Gen. Laws Ann. ch. 166 § 25A (2002): The telecommunications and energy department has the authority to set rates for right-of-way use, and in setting those rates the department must consider consumer interests.

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	<p>systems, as well as other public utility systems.</p> <p>Mass. Gen. Laws Ann. ch. 166 § 22 (2002): Providers must provide written notice of intent to access right-of-way for construction purposes. The municipality must hold a hearing and issue written notice of the hearing. After the hearing, the municipality may grant to the provider a location for the lines and allowances for the number and height of the lines to be installed.</p> <p>Mass. Gen. Laws Ann. ch. 166 § 25A (2002): Any municipal regulations pertaining to the installation or construction of telecom lines must be approved by the state Department of Telecommunications and Energy.</p> <p>Mass. Gen. Laws Ann. ch. 166 § 38 (2002): Penalties for intentional or malicious injury of telecom facilities in right-of-way.</p>	<p>Mass. Gen. Laws Ann. ch. 166 §25A (2002): The telecommunications and energy department shall set reasonable rates for telecommunications attachments to existing right-of-way. The rates shall not be lower than the cost to the utility providing the existing facility, nor more than the proportional cost of the attachment.</p>
Michigan	<p>Mich. Comp. Laws Ann. §§ 484.3101-484.3120 (2002) Metropolitan extension telecommunications rights-of-way oversight act. § 484.3103: "(1) Pursuant to section 27 of article VII of the state constitution of 1963 and any other applicable law, the metropolitan extension telecommunications rights-of-way oversight authority is established as an autonomous agency within the department of consumer and industry services."</p> <p>Mich. Comp. Laws Ann. § 484.3115 (2002): Municipalities shall grant providers a permit to use any public rights-of-way located within the municipal jurisdiction. If an application involves an easement or public place, then the municipality</p>	<p>Mich. Comp. Laws Ann. § 484.3108 (2002) Maintenance fee. "...(3) Except as otherwise provided under subsection (6), for the period of November 1, 2002 to March 31, 2003, a provider shall pay an initial annual maintenance fee to the authority on April 29, 2003 of 2 cents per each linear foot of public right-of-way occupied by the provider's facilities within a metropolitan area, prorated for the period specified in this subsection. (4) Except as otherwise provided under subsection (6), for each year after the initial period provided for under subsection (3), a provider shall pay the authority an annual maintenance fee of 5 cents per each linear foot of public right-of-way occupied by the provider's facilities</p>

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	<p>should act promptly in granting the permit.</p>	<p>within a metropolitan area. (5) The fee required under this section is based on the linear feet occupied by the provider regardless of the quantity or type of the provider's facilities utilizing the public right-of-way or whether the facilities are leased to another provider. (6) In recognition of the need to provide nondiscriminatory compensation to municipalities for management of their rights-of-way, the fees required under this section shall be the lesser of the amounts prescribed under subsections (3) and (4) or 1 of the following: (a) For a provider that was an incumbent local exchange carrier in this state on January 1, 2002, the fees within the exchange in which that provider was providing basic local exchange service on January 1, 2002, when restated by the authority on a per access line per year basis, shall not exceed the statewide per access line per year fee of the provider with the highest number of access lines in this state. The authority shall annually determine the statewide per access line per year fee by dividing the amount of the total annual fees the provider is required to pay under subsections (3) and (4) by the provider's total number of access lines in this state. (b) For all other providers in an exchange, the fee per linear foot for the provider's facilities located in the public rights-of-way in that exchange shall be the same as that of the incumbent local exchange carrier.</p> <p>Mich. Comp. Laws Ann. § 484.3106 (2002): When applying for a municipal permit, a provider must pay a \$500 application fee. This fee must be paid to each municipality</p>

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		where the provider needs access to a right-of-way.
Minnesota	<p>Minn. Stat. § 237.04 (2002): The Minn. Department of Commerce has the authority to establish rules for the use of right-of-way by public utilities. These rules shall include regulations for construction, maintenance, and operation of facilities along right-of-ways.</p> <p>Minn. R. 7819.4000 (2002) Municipalities may establish a right-of-way mapping system to facilitate right-of-way management, enhance public safety, improve right-of-way design, and encourage cooperation between municipalities.</p> <p>MINNESOTA ADMINISTRATIVE CODE, PUBLIC UTILITIES COMMISSION, CHAPTER 7819 PUBLIC RIGHTS-OF-WAY STANDARDS</p>	<p>Minn. Stat. § 237.163(6)(a) (2002): "A local government unit may recover its right-of-way management costs by imposing a fee for registration, a fee for each right-of-way permit, or, when appropriate, a fee applicable to a particular telecommunications right-of-way user when that user causes the local government unit to incur costs as a result of actions or inactions of that user. A local government unit may not recover from a telecommunications right-of-way user costs caused by another entity's activity in the right-of-way."</p> <p>Minn. Stat. § 237.163(6)(b) (2002): "Fees, or other right-of-way obligations, imposed by a local government unit on telecommunications right-of-way users under this section must be: (1) based on the actual costs incurred by the local government unit in managing the public right-of-way; (2) based on an allocation among all users of the public right-of-way, including the local government unit itself, which shall reflect the proportionate costs imposed on the local government unit by each of the various types of uses of the public rights-of-way; (3) imposed on a competitively neutral basis; and (4) imposed in a manner so that aboveground uses of public rights-of-way do not bear costs incurred by the local government unit to regulate underground uses of public rights-of-way."</p> <p>Minn. Stat. § 237.163(7)(d) (2002): "A local government unit may not collect a fee imposed under this section through the provision of in-</p>

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		<p>kind services by a telecommunications right-of-way user, nor may a local government unit require the provision of in-kind services as a condition of consent to use the local government unit's public right-of-way."</p> <p>Minn. R. 7819.1100(3) (2002): "Degradation fee. A right-of-way user may elect to pay a degradation fee in lieu of restoration. However, the right-of-way user shall remain responsible for replacing and compacting the subgrade and aggregate base material in the excavation and the degradation fee must not include the cost to accomplish these responsibilities."</p> <p>Minn. R. 7819.1000(1) (2002): "Permit fee. A local government unit that requires a permit for excavation in or obstruction of the public right-of-way shall make its permit fee schedule available to the public. The permit fee schedule must be established in advance and designed to recover the local government unit's actual costs incurred in managing the public right-of-way."</p> <p>Minn. R. 7819.1000(2) (2002): "Allocation of permit fees. Permit fees must be based on an allocation among all users of the public right-of-way, which shall include the local government unit itself, so as to reflect the proportionate costs imposed on the local government unit by each of the various types of users of the public rights-of-way. Although the local government unit must be allocated its proportionate share of permit fees, the local government unit need not transfer funds to pay permit fees. Permit fees must be allocated in a competitively neutral manner and must be</p>

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		<p>imposed in a manner so that aboveground uses of public rights-of-way do not bear costs incurred by the local government unit to regulate underground uses of public rights-of-way."</p> <p>Minn. R. 7819.1000(3) (2002): "Delay penalty. A local government unit may establish and impose a reasonable penalty for unreasonable delays in right-of-way excavation, obstruction, patching, or restoration. The delay penalty must be established from time to time by resolution of the local government unit's governing body. A delay penalty must not be imposed if the delay in project completion is due to circumstances beyond the control of the applicant, including without limitation inclement weather, acts of God, or civil strife."</p>
Mississippi	Miss. Code Ann. § 21-27-1 (2002): Municipalities do not have the right to grant exclusive use of rights-of-way, nor may they grant a franchise without compensation, or for a period of more than 25 years.	None indicated.
Missouri	Mo. Rev. Stat. § 67.1832 (2001): Municipalities shall permit telecommunication companies and other public utilities to construct, maintain and operate their systems on public rights-of-way.	<p>Mo. Rev. Stat. § 67.1840.2(1) (2001): "Right-of-way permit fees . . . shall be: [b]ased on the actual, substantiated costs reasonably incurred by the political subdivision in managing the public right-of-way." Mo. Rev. Stat. § 67.1830(5) (2001): ""Management costs" or "rights-of-way management costs", the actual costs a political subdivision reasonably incurs in managing its public rights-of-way, including such costs, if incurred, as those associated with the following: (a) Issuing, processing and verifying right-of-way permit applications; (b) Inspecting job sites and restoration</p>

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		<p>projects; (c) Protecting or moving public utility right-of-way user construction equipment after reasonable notification to the public utility right-of-way user during public right-of-way work; (d) Determining the adequacy of public right-of-way restoration; (e) Restoring work inadequately performed after providing notice and the opportunity to correct the work; and (f) Revoking right-of-way permits."</p> <p>Mo. Rev. Stat. § 67.1842.3 (2001): Prohibits in-kind compensation.</p>
Montana	<p>Mont. Code Ann. § 7-13-2220 (2002): "Right-of-way across state lands. The right-of-way is given, dedicated, and set apart to locate, construct, and maintain district works over and through any lands which are the property of this state, and the district has the same rights and privileges relating to the right-of-way as are granted to municipalities."</p> <p>Mont. Code Ann. § 7-3-4449 (2002): "The commission shall have all powers to grant rights to occupy or use the streets, highways, bridges, or public places in the municipality that now are or hereafter may be granted to municipalities by the constitution or laws of Montana. Every ordinance or resolution passed by the commission granting the right to occupy or use streets, highways, or public places of municipalities shall be complete in the form in which it is finally passed and remain on file with the commission for inspection by the public for at least 1 week before the final adoption or passage thereof."</p>	None indicated.
Nebraska	Neb. Rev. Stat. Ann. § 86-704(1) (2002): A telecommunications	Neb. Rev. Stat. Ann. § 86-704 (4)(a) (2002): "A municipality shall not levy

States	Jurisdiction	Right of Way Compensation Code
	<p>company or other public utility may construct its system facilities along the public state roads, public lands, or private lands if necessary. The construction of this system may not impede road use, and any wires or cables must be at least 18 feet above highway crossings.</p>	<p>a tax, fee, or charge for any right or privilege of engaging in a telecommunications business or for the use by a telecommunications company of a public highway other than: (i) An occupation tax authorized under section 14-109, 15-202, 15-203, 16-205, or 17-525; and (ii) A public highway construction permit fee or charge to the extent that the fee or charge applies to all persons seeking use of the public highway in a substantially similar manner. All public highway construction permit fees or charges shall be directly related to the costs incurred by the municipality in providing services relating to the granting or administration of permits." Neb. Rev. Stat. Ann. § 86-704 (2002): (4)(a)(ii): Any highway construction permit fee or charge shall also be reasonably related in time to the occurrence of such costs. "(6) Taxes or fees shall not be collected by a municipality through the provision of in-kind services by a telecommunications company, and a municipality shall not require the provision of in-kind services as a condition of consent to the use of a public highway."</p>
Nevada	<p>Nev. Rev. Stat. § 707.280 (2002): Anyone constructing a telecommunications line has the right-of-way for that line and any other lands, public or private, that may be necessary to construct and operate that line. Nev. Rev. Stat. § 707.250 (2002): A telecommunications company registered in the state of Nevada may construct and maintain their lines through any public or private lands, along public roads, or along</p>	None indicated.

States	Jurisdiction	Right of Way Compensation Code
	<p>navigable waters, provided the lines do not cause an obstruction. Nev. Rev. Stat. § 268.088 (2002): "Municipalities are not authorized to impose any terms or conditions on a franchise for the provision of telecommunications service other than terms or conditions concerning the placement and location of the telephone lines and fees imposed for a business license or the franchise, right or privilege to construct, install or operate such lines."</p>	
New Hampshire	<p>N.H. Rev. Stat. Ann. § 231:161, I. (a)-(c) (2002): Permits to access state-maintained right-of-way must be acquired from the NH Transportation Commission. Local right-of-way access must be obtained from local governments. N.H. Rev. Stat. Ann. § 48:17-10 (2002): Municipal or county government consent must be obtained before accessing right-of-way under their jurisdiction.</p>	<p>N.H. Rev. Stat. Ann. § 231:165 (2002): Payment for the town clerk's services and fees should be made by the provider. A minimum \$10 fee is authorized by state statutes.</p>
New Jersey	<p>N.J. Stat. Ann. § 48:17-11 (2002): "The municipal or county government may regulate the use of all right-of-way with police and other regulations and restrictions."</p>	None indicated.
New Mexico	<p>N.M. Stat. Ann. §3-42-2A (2002): "If previous to the incorporation of a municipality, the board of county commissioners has granted to any person right-of-way over, upon, in and about the streets of the municipality for the erection, construction, maintenance or operation of a public utility, and such person has erected, constructed, or in good faith commenced the erection or construction of such a utility, the governing body shall, without a vote by the electorate: (1) authorize the completion of the system; (2)</p>	None indicated.

States	Jurisdiction	Right of Way Compensation Code
	<p>authorize the continued or subsequent operation and maintenance of the system; (3) recognize the rights acquired by the person erecting or constructing such a system; and (4) grant such a person a franchise for the maximum term of years allowed by law upon such terms as are fair, just and equitable to all parties concerned. state ROW rules governing state administration of ROW for telecoms."</p> <p>N.M. Stat. Ann. § 19-7-57(2002): The Commissioner may grant rights-of-way and easements to telecommunications providers and other public utilities. The grantee shall pay the price set by the Commissioner, and this price will be at least the minimum price for the lands.</p>	
New York	<p>N.Y. Gen City Law § 20 (Consol. 2002): Cities have the right to grant franchises or rights to use public waters, streets, or lands located within the city.</p> <p>N.Y. Transp. Corp. Law § 27 (Consol. 2002): Telecommunications companies may construct their lines along public roads, navigable waters, or other public lands, provided that the lines do not impede the use of such roads, etc.</p>	None indicated.
North Carolina	<p>N.C. Gen. Stat. § 62-39 (2002) Public Utility Commission has the power to regulate crossings of telephone, telegraph, electric power lines and pipelines and rights-of-way of railroads and other utilities by another utility</p> <p>N.C. Gen. Stat. § 62-182 (2002): Telecommunications companies and other public utilities have the right to contract with private land owners for rights-of-way.</p>	None indicated.

States	Jurisdiction	Right of Way Compensation Code
North Dakota	N.D. Cent. Code § 49-09-16 (2002): Municipalities may grant rights-of-way, on the public lands and roads under their jurisdiction, for the construction of a telecommunications system or other public utility system. The municipality granting the right of way may also specify the rules and conditions attached to the right-of-way.	N.D. Cent. Code § 49-21-26 (2002): After December 31, 1998, all telecommunications recovery fees must be approved by the municipality electorate. N.D. Cent. Code § 49-21-26 (2002): A municipality may request that a telecommunications company move its facilities from the public right of way, and the telecommunications company must pay for such removal. N.D. Cent. Code § 49-21-26 (2002): Recovery fess may only include the municipality's costs of managing the right of way; any other fees must be assessed on a competitively neutral basis. If the management costs are attributable to more than one entity, the recovery fee must be assessed to all parties on a proportional basis. N.D. Cent. Code § 49-21-27 (2002): Municipalities may not require in kind services in lieu of a fee or as a pre-requisite to right-of-way use.
Ohio	Ohio Rev. Code Ann. § 4939.01 - 4939.09 (Anderson 2002); § 4939.02: Ohio's policy regarding rights-of-way grants authority to municipalities to manage rights-of-way, ensures lawful fee recovery, and promotes municipal coordination and standardization.	Ohio Rev. Code Ann. § 4939.05 (B) (Banks-Baldwin 2002): Municipalities may charge different fees for the use of their rights-of-way, based on the amount of public land used, the type of public utility, or any other different treatment justified by public health and safety concerns. This includes a complete waiver of the fee. Ohio Rev. Code Ann. § 4939.05 (C) (Banks-Baldwin 2002): Fees charged may only reflect actual costs of managing the rights-of-way, plus any demonstrable future costs. Ohio Rev. Code Ann. § 4939.05 (A) (Banks-Baldwin 2002): Ohio prohibits the use of in-kind services in lieu of fees.
Oklahoma	Okla. Const. Art. IX, § 2: Telecommunications companies and	None indicated.

States	Jurisdiction	Right of Way Compensation Code
	<p>other public utilities have a right to construct their lines within the state, and to connect with like lines at the state border.</p> <p>Okla. Stat. Tit.11 § 36-101(2003): Municipal governments are authorized to regulate and control use of ROW in the municipality.</p> <p>Okla. Stat. Tit.18 § 601 (2003): Telecommunications companies are granted a right of way over public and private lands and roads, subject to the local authorities.</p>	
Oregon	<p>Or. Rev. Stat. § 221.515 (2001): Municipalities have the authority to regulate and collect taxes for the use of rights-of-way within their jurisdiction.</p>	<p>Or. Rev. Stat. § 221.515 (2001): Municipalities may collect a privilege tax for the use of rights-of-way, not to exceed 7% of the gross revenues (earned within the municipality) of a telecommunications provider.</p> <p>Or. Rev. Stat. § 221.515 (2001): If a telecommunications company is paying the privilege tax, then it does not have to pay any other compensation. To the extent that any other fees are levied, they will be deducted from the privilege tax.</p>
Pennsylvania	<p>71 PA. Cons. Stat. § 194 (2002) (Adm. Code § 514): Municipalities may not grant easements or rights-of-way without the express authority from the General Assembly. However, municipalities may grant licenses to public service companies to construct lines if those lines will give state buildings better service, or if such line is necessary to serve the public.</p>	<p>72 PA. Cons. Stat. § 6164 (2002): If a fee dispute is heard in court, the court will determine the license fee necessary to compensate the municipality for its services performed in regulating the license, and the amount determined will be the maximum amount charged to the licensee.</p> <p>71 PA. Cons. Stat. § 194 (2002): (Adm. Code § 514): Licenses shall provide the amount of compensation due to the Commonwealth for the use of its property.</p>
Rhode Island	<p>R.I. Gen Laws § 39-17-1 (2002): Municipalities are granted franchising authority to regulate access to ROW.</p> <p>R.I. Gen. Laws § 37-7-8 (2002):</p>	<p>R.I. Gen Laws § 39-17-3 (2002): Franchise holders must pay franchise tax up to 3% of gross earnings in that locality, on a quarterly basis.</p>

States	Jurisdiction	Right of Way Compensation Code
	<p>"Grant of easements and rights of way over acquired lands. Whenever, in the opinion of the acquiring authority, an easement or right of way may be granted in land owned or held by the state without thereby jeopardizing the interests of the state, and the granting of the easement or right of way will be for the public good, the acquiring authority, with the approval of the state properties committee, is hereby authorized and empowered to grant the easement or right of way by proper instrument, approved as to substance by the director of administration and as to form by the attorney general, for such consideration, and in such manner and upon such terms and conditions as may, in the judgment of the state purchasing agent, be most advantageous to the public interest."</p>	<p>R.I. Gen Laws § 39-17-8 (2002): Cities and towns may not charge for use of streets, except as provided through the franchise tax authorization.</p>
<p>South Carolina</p>	<p>S.C. Code Ann. § 58-9-2240. A municipality may not use its authority to regulate rights-of-way as a means to impose additional regulations on telecommunications companies or public utilities. S.C. Code Ann. § 58-12-10 (2002): Before a cable company may place its lines, it must get permission from the agency in charge of the lands, roads, and public waters. If the cable must traverse public lands, the cable company must get permission from the public landowner.</p>	<p>S.C. Code Ann. § 58-9-2220 (2002). South Carolina authorizes municipalities to implement a two-tiered tax system. (A). A business license tax of up to 0.75% of retail telecommunications gross income. A franchise or consent fee for the installation or construction of physical facilities in public rights-of-ways. The maximum permissible fee is based on municipal population and ranges from \$100 for a population of 1,000 or less to \$1,000 for a population of more than 25,000.</p>
<p>South Dakota</p>	<p>S.D. Codified Laws § 49-32-1 (2002): Telecommunications companies are granted rights-of-way over public lands and along public roads, subject to control by the proper authorities. S.D. Codified Laws § 9-35-1 (2002): Municipalities have the right to</p>	<p>.</p>

States	Jurisdiction	Right of Way Compensation Code
	<p>determine charges for local telephone service, subject to the PUC's powers, and to regulate the placement of telephone poles, lines, and other facilities.</p>	
Tennessee	<p>Tenn. Code Ann. § 65-21-201 (2002): Telecommunications companies or their equivalent are granted rights-of-way along public roads, over public lands, along navigable waters, and on private lands.</p> <p>Tenn. Code Ann. §13-24-303 (2002): Protects authority of locals to exercise reasonable municipal and county police powers.</p>	
Texas	<p>Tex. Loc. Gov't. Code Ann. § 283.001 (2002): "(b) It is also the policy of this state that municipalities: (1) retain the authority to manage a public right-of-way within the municipality to ensure the health, safety, and welfare of the public;"</p> <p>Tex. Loc. Gov't. Code Ann. § 282.002 (2002): "General Authority of General-Law Municipality. (a) A general-law municipality has exclusive control over the public grounds of the municipality."</p>	<p>Tex. Loc. Gov't. Code Ann. § 283.001 (2002): "(b) It is also the policy of this state that municipalities: (2) receive from certificated telecommunications providers fair and reasonable compensation for the use of a public right-of-way within the municipality."</p> <p>Tex. Loc. Gov't. Code Ann. § 283.051 (2002): "Right-Of-Way Fee. (a) Notwithstanding any other law, a certificated telecommunications provider that provides telecommunications services within a municipality is required to pay as compensation to a municipality for use of the public rights-of-way in the municipality only the amount determined by the commission under Section 283.055."</p> <p>Tex. Loc. Gov't. Code Ann. § 283.055 (2002): The Texas Public Utilities Commission shall set the per-line rate that a municipality can charge for use of its rights-of-way.</p> <p>Tex. Loc. Gov't. Code Ann. § 283.055 (2002): Municipalities are prohibited from receiving services without compensation or at below market prices.</p>

States	Jurisdiction	Right of Way Compensation Code
Utah	<p>Utah Code Ann. § 54-4-25 (2003): Telecommunications companies and other utilities must obtain certification from the PUC that construction is required before they may begin construction on a right-of-way.</p> <p>Utah Code Ann. § 72-7-102 (2003): Local highway authorities (county or municipal) may allow excavating, installation of utilities and other facilities or access under rules made by the [local] highway authority[ies] and in compliance with federal, state and local law as applicable.</p> <p>Utah Code Ann. § 72-3-109 (2003): "(1) Except as provided in Subsection (3), the jurisdiction and responsibility of the department and the municipalities for state highways within municipalities is as follows: ... (c) (i) A municipality has jurisdiction over all other portions of the right-of-way and is responsible for construction and maintenance of the right-of-way."</p>	<p>Utah Code Ann. § 72-7-102 (4) (2003): The Highway Authority may require compensation from utilities for use of their rights-of-way, but such compensation may only include those management costs caused by the utilities' activity.</p> <p>Utah Code Ann. § 72-7-102 (4) (2003): The Highway Authority's fees must be charged on a competitively neutral basis. If more than one utility is responsible for the management costs incurred, the fees must be allocated to each company or entity proportionately.</p> <p>Utah Code Ann. § 72-7-102 (4)(e) (2003): Providers are entitled to recover ROW access fee costs from their customers.</p>
Vermont	<p>VT. Stat. Ann. tit. 19 § 1111(a) (2002): "Permits. -- Permits must be obtained by anyone or any corporation wishing to use as described in this section any part of the highway right-of-way on either the state or town system. Notwithstanding any other statutory requirement, a permit shall be required for any use of any highway right-of-way, consistent with the provisions of this section. The authority given to the board, the secretary and the attorney general under this section shall also apply to the legislative bodies of towns."</p>	.
Virginia	<p>VA. Code Ann. § 56-458 (2002): Telecommunications companies have the right to build its system along public roads and railroads, on public lands, and along navigable waterways.</p>	<p>VA. Code Ann. § 56-468.1 (2002): In Virginia, the state Department of Transportation annually calculates the Public Rights-of-Way Use Fee as an annual average rate per access line. The average weights public highway miles at \$425 per mile and new installations at \$1 per linear foot.</p> <p>VA. Code Ann. § 56-458(E) (2002). In-</p>

States	Jurisdiction	Right of Way Compensation Code
		kind fees prohibited.
Washington	<p>Wash. Rev. Code § 35.99.020 (2002): "Permits for use of right of way. A city or town may grant, issue, or deny permits for the use of the right of way by a service provider for installing, maintaining, repairing, or removing facilities for telecommunications services or cable television services . . . "</p> <p>Wash. Rev. Code § 35.99.040 (2002): Municipalities may not use the right-of-way permitting process as a means of regulating service providers, except where permitted by federal law.</p>	<p>Wash. Rev. Code § 35.21.860(1) (2002): Municipalities may charge fees for the use of their rights of way that recover their administrative costs related to the permit process, and a site-specific charge to wireless providers for the placement of new structures in the right-of-way.</p> <p>Wash. Rev. Code § 35.99.070 (2002): Washington permits cities and towns to obtain access to ducts, conduits, or related structures of a service provider, subject to conditions that include the payment of compensation sufficient to recover the provider's incremental costs. If the municipality allows the in-kind facilities to be used to provide service to the public, it must compensate the provider on the basis of fully allocated costs.</p>
West Virginia	<p>W.Va. Code § 8-31-1,2 (2002): Municipalities and counties have franchising authority and may impose terms and conditions for those agreements.</p> <p>W.Va. Code § 17-4-8 (2002): Telecommunications companies and other service providers are prohibited from constructing facilities on state roads except under the conditions as may be prescribed by the state road commissioner.</p>	<p>W.Va. Code § 17-16A-13 (2002): The Parkways Authority has the power to fix and collect fees for the use of rights-of-way along the state parkways.</p>
Wisconsin	<p>Wis. Stat. § 196.58 (2002): Municipalities may determine whether and on what conditions a public utility may enter and occupy their rights-of-way.</p> <p>Wis. Stat. § 196.499(14) (2002): "EXTENSION OF FACILITIES. Any telecommunications carrier may extend its facilities into or through any municipality for the furnishing of its services, subject to the reasonable regulation of the governing body of the municipality relative to the location of poles and wires and the preservation of the safe and convenient use of streets</p>	

States	Jurisdiction	Right of Way Compensation Code
	and alleys to the public. Upon a petition for relief made by a telecommunications carrier, the commission shall set a hearing and if it finds a contract, ordinance or resolution under this subsection to be unreasonable, the contract, ordinance or resolution shall be void."	
Wyoming	<p>Wyo. Const. Art. 10, § 17 (2002): "Rights of telegraph companies. Any association, corporation or lessee of the franchises thereof organized for the purpose shall have the right to construct and maintain lines of telegraph within this state, and to connect the same with other lines."</p> <p>Wyo. Stat. Ann. § 15-1-103(a)(xi) (2002): Local governments granted authority to take all necessary action to plan, construct, maintain and regulate the use of streets, including the regulation of any structures thereunder.</p>	.

Appendix B

Broadband Policies and Practices in the U.S.

*Independent Research Conducted by the
California Public Utilities Commission*

2004

Appendix B Sources

Alabama

Alabama Supercomputer Authority (ASA) <http://www.asc.edu/index.shtml>

Alabama Research and Education Network (AREN) <http://www.asc.edu/network/index.shtml>

State of Alabama <http://www.alabama.gov>

Alabama-Mississippi Telephone Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

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Alaska

Telecommunications Information Council Activities Update: Office of the Lt. Governor – January 2002

<http://www.gov.state.ak.us/litgov/Telecommunications/TICupdate2002.PDF>

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Arizona

Arizona Telemedicine Program (ATP) <http://www.telemedicine.arizona.edu/index.html>

"Arizona's 100 Million Dollar Plan for Rural Broadband Deployment"

<http://www.digitaldividenetwork.org/content/stories/index.cfm?key=134>

"News Release: TOPAZ Connecting Schools and Rural Areas Ahead of Schedule with Broadband"

http://gita.state.az.us/telecom/news/9_25_01_news_release.htm

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Arkansas

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California

Rural E-commerce Grants

http://www.motherlodeexpress.org/Docs/State%20press%20release%20ecommerce%20grants__.pdf

California Technology Investment Partnership <http://www.larta.org/Capital/caltip.asp>

New Generation Internet (NGI) <http://www.calngi.org/program/>

Corporation for Education Network Initiatives in California (CENIC) <http://www.cenic.org>

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Colorado

"The Multi-Use Network Project" <http://www.colorado.gov/dpa/doit/mnt>

Colorado Telecommunications Association

Rocky Mountain Telecommunications Association

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Connecticut

Commission for Education Technology <http://www.ct.gov/ctedtech/site/default>

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Delaware

No broadband programs were found to exist in Delaware at this time.

District of Columbia

Internet Open Access Study Act of 2001: Bill 14-6 <http://www.dwatch.com/council14/14-6.htm>

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Florida

Digital Divide Council <http://www.digitaldividecouncil.com/digitaldivide/index.html>

Digital Divide Council: Annual Report http://www.digitaldividecouncil.com/digitaldivide/documents/annual_report.doc

Florida Telecommunications Industry Association

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Georgia

Yamacraw Initiative <http://www.yamacraw.org/index.html>

Georgia Centers for Advanced Telecommunications Technology (GCATT) <http://www.gcatt.gatech.edu/index.htm>

Georgia Telephone Association

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Hawaii

No broadband programs were found to exist in Hawaii at this time.

Idaho

Broadband Tax Credit: www.puc.state.id.us/telecom/28784.pdf

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Illinois

Program to Foster the Elimination of the Digital Divide <http://www.state.il.us/gov/budgetpr/cmsbudget.htm>

Illinois Community Technology Fund <http://www.ictf.org>

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Indiana

accessIndiana <http://www.in.gov>

EPICS <http://eic.co.orange.in.us/Intelenet>

Grant Program <http://www.in.gov/intel/schoolgrants>

Indiana Web Academy <http://www.indianaacademy.org>

Indiana Telecommunications Network <http://www.itn.gov>

IN-map <http://www.in-map.net>

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Iowa

Iowa Communications Network (ICN) www.icn.state.ia.us

Iowa Telecommunications Association

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Kansas

<http://www.accesskansas.org>

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ConnectKentucky www.connectkentucky.org

Kentucky Information Highway <http://www.state.ky.us/kirm/kih.htm>

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Louisiana

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Maine

"Future MSLN" http://www.msln.maine.edu/msln/docs/adv_brd_letter.html

Maine School and Library Network (MSLN) <http://www.msln.maine.edu>

Telephone Association of Maine

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.appt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Maryland

ARINC Expands FiberNet for Montgomery County, Connects 100th Site <http://www.arinc.com/news/2003/02-03-03.html>

TEDCO "Improving Access to Broadband Infrastructure in Mountain Maryland" <http://www.marylandtedco.org/WesternMD.htm>

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Massachusetts

Berkshire Connect

www.bconnect.org

The MassBroadband Initiative <http://www.massbroadband.org/>

Massachusetts Technology Collaborative http://www.mtpc.org/InnovationEconomy/telecom_projects.htm

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Michigan

Michigan Broadband Authority http://www.michigan.gov/cis/0,1607,7-154-28077_28233---,00.html

Link Michigan <http://linkmichigan.michigan.org>

Michigan Exchange Carriers Association, Telecommunications Association of Michigan

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Minnesota

Connecting Minnesota <http://www.dot.state.mn.us/connect>

"Minnesota Kills \$200 Million Rural High-Speed Access Project"

http://www.govtech.net/news/features/news_feature.phtml?docid=3800

Minnesota Telecom Alliance

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Mississippi

Mississippi Legislature 2003 Regular Session: Senate Bill 2979

<http://billstatus.ls.state.ms.us/2003/pdf/history/SB/SB2979.htm>

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Missouri

eMINTS <http://emints.more.net>

MOREnet <http://www.more.net>

Missouri Telecommunications Industry Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Montana

METNET www.metnet.state.mt.us/main.html

Montana Independent Telecommunications Systems, Montana Telecommunications Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Nebraska

Internet Enhancement Fund <http://www.nitc.state.ne.us>

Information Technology Commission <http://www.nitc.state.ne.us>

Nebraska Independent Telephone Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Nevada

Commission on Educational Technology <http://www.nde.state.nv.us/hrt/edtech/cet>

Nevada Net "System Computing Services" <http://www.scs.nevada.edu/nevadanet>

Nevada Telecommunications Association, A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

New Hampshire

"Networking in New Hampshire: Third Rail deploys fixed broadband for state's National Guard"

http://www.broadbandweek.com/news/010122/010122_apps_third.htm

"New Hampshire officials try to spread high-tech to all parts of the state"

http://www.seacoastonline.com/2001news/2_12biz.htm

Telephone Association of New England, New Hampshire Telecommunications Association

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New Jersey

"New Jersey Creates a \$100-Million Broadband Network for Its Colleges"

http://chronicle.com/free/2002/04/2002_040901u.htm

New Jersey Telecommunications Network Upgrade

<https://www.nascio.org/publications/Newsletters/0601statetrends.cfm>

Njedge.net <http://www.njedge.net/>

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New Mexico

Broadband Management Advisory Committee [http://www.cio.state.nm.us/BMACChart er.pdf](http://www.cio.state.nm.us/BMACChart%20er.pdf)

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

New York

Diffusion Fund www.nysed.gov/otpad/diffuse.htm

Regional Fiber Optic System http://www.uwnyc.org/technews/v2_n5_a6.html

New York State Telecommunications Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

North Carolina

North Carolina's Rural Internet Access Authority: e-NC <http://www.e-nc.org>

North Carolina Telephone Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

North Dakota

STAGENet <http://www.stagenet.nd.gov>

North Dakota Association of Telephone Cooperatives, North Dakota Telephone Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Ohio

Third Frontier Project www.state.oh.us/gov/thirdfrontier.htm

Ohio SchoolNet <http://www.ohioschoolnet.k12.oh.us>

Ohio Telecommunications Industry Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Oklahoma

OneNET <http://www.onenet.net>

"Wireless Broadband Opens Doors for Rural U.S. Communities"

<http://www.wirelessnesfactor.com/perl/story/12805.html>

Oklahoma Telephone Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Oregon

ORTCC <http://www.ortcc.org/>

Oregon Broadband Tax Credit <http://www.econ.state.or.us/telecom/div106.htm>

Oregon Telecommunications Association

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Pennsylvania

"Digital Divide Projects Announced" <http://www.121.org/news/newsarticle.html?ID=219>

Technology Based Education Initiatives – Link 2 Learn/Pennsylvania Education Network/Ben Franklin Technology Development Authority <http://www.inventpa.com/default.aspxid=135>

Pennsylvania Telephone Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Puerto Rico

No broadband programs were found to exist in Puerto Rico at this time.

Rhode Island

Rhode Island Network for Educational Technology (RINET) www.ri.net/RINET/index.html

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

South Carolina

"Bill Seeks to Exempt Internet Service From Regulation" <http://www.computeruser.com/news/03/02/17/news5.html>

South Carolina Information Network (SCINET)

www.state.sc.us/http://www.edweek.org/sreports/tc/policy/states/sc.htm

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Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

South Dakota

"Building the Digital Dakota Network" <http://www.state.sd.us/deca/DDN4Learning/Conclave/DDNHist.htm>

South Dakota Telecommunications Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Tennessee

ConnecTEN www.connect-tn.org

Tennessee Telecommunications Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Texas

Telecommunications Infrastructure Fund <http://www.lonestarbroadband.org>

Texas Telephone Association, Texas Statewide Telephone Cooperative

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State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Utah

Utah Telecommunications Open Infrastructure Agency www.utopianet.org

Utah Education Network www.uen.org

Utah Telehealth Network <http://www.utahealth.net>

EDNET <http://www.uen.org/ednet>

Utah Rural Telecom Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>
Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Vermont

Vermont Broadband Council www.vtbroadband.org

Telephone Association of Vermont

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Virgin Islands

"INSTALLGUYS Surpasses Customer's Expectations" <http://www.installguys.com/vi-userprofile.cfm>

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Virginia

Blacksburg Electronic Village (BEV) <http://www.bev.net>

eCorridors <http://ecorridors.cc.vt.edu/index.shtml>

Center for Innovative Technology (CIT) <http://www.cit.org>

Net.Work.Virginia <http://www.networkvirginia.net>

"Virginia's Center for Innovative Technology Awards Grants to Augusta, Highland, and Nelson Counties"
http://www.cit.org/press_releases/01-07-25PR%20ACAF%20Augusta%20County.pdf

Carolina-Virginia Telephone Membership Association

Virginia Telecommunications Industry Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Washington

Access Washington www.wa.gov/dis/k20

Washington Independent Telephone Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

West Virginia

YAS Broadband Initiative <http://www.lcsee.cemr.wvu.edu/yas>

West Virginia Department of Education Office of Technology <http://access.k12.wv.us>

West Virginia Network (WVNET) <http://www.wvnet.edu/wvindex.shtml>

West Virginia Telephone Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Wisconsin

Wiscnet <http://www.wiscnet.net>

Wisconsin State Telecommunications Association

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership, <http://www.techpolicybank.org/>

Wyoming

Southwestern Wyoming Enhanced & Expanded Telecommunications Network (SWEETnet) <http://www.sweetnet.us>

Wyoming Equality Network <http://www.k12.wy.us>

A Nation of Laboratories: Broadband Policy Experiments in the States, Alliance for Public Technology (APT) www.apt.org

State Broadband Initiatives, Telecommunications Industry Assn. <http://www.tiaonline.org/policy/states.cfm>

Action Ideas for Cities and States, The Children's Partnership,
<http://www.techpolicybank.org/>

Appendix C

Glossary of Broadband Terms

Glossary

- **3G** – *Third Generation*. Intended to be the next great wireless technology, wideband mobile services and applications offering users faster access to the web.
- **ADSL** - *Asymmetric Digital Subscriber Line*. DSL service with a larger portion of the capacity devoted to downstream communications, less to upstream. Typically thought of as a residential service.
- **ATM** – *Asynchronous Transfer Mode*: A data service offering by ASI, that can be used for interconnection of customer's LAN. ATM provides service from 1 Mbps to 145 Mbps utilizing Cell Relay Packets.
- **Bandwidth** – The amount of data transmitted in a given amount of time; usually measured in bits per second, kilobits per second, and megabits per second.
- **Bit** – A single unit of data, either a one or a zero. In the world of broadband, bits are used to refer to the amount of transmitted data. A kilobit (Kb) is approximately 1,000 bits. A megabit (Mb) is approximately 1,000,000 bits.
- **BPL** – *Broadband Over Powerline*. A theoretical technology that would provide broadband service over existing electrical power lines.
- **BPON** – *Broadband Passive Optical Network*: BPON is a point-to-multipoint fiber-lean architecture network system which uses passive splitters to deliver signals to multiple users. Instead of running a separate strand of fiber from the CO to every customer, BPON uses a single strand of fiber to serve up to 32 subscribers.
- **Broadband** – A descriptive term for evolving digital technologies that provide consumers with integrated access to voice, high-speed data service, video-demand services, and interactive delivery services (e.g. DSL, Cable Internet).
- **CAP** – *Competitive Access Provider*. (or “Bypass Carrier”) A Company that provides network links between the customer and the Inter-Exchange Carrier or even directly to the Internet Service Provider. CAPs operate private networks independent of Local Exchange Carriers.
- **CBO** – *Community Based Organizations*. Groups serving a community that are eligible for California Teleconnect Fund (CTF) Subsidy.
- **Cellular** – A mobile communications system that uses a combination of radio transmission and conventional telephone switching to permit telephone communications to and from mobile users within a specified area.
- **CEQA** – *California Environmental Quality Act*. Enacted in 1970, it requires government agencies to evaluate the environment impact of public construction projects.

- **CLEC** – *Competitive Local Exchange Carrier*. Wireline service provider that is authorized under state and Federal rules to compete with ILECs to provide local telephone service. CLECs provide telephone services in one of three ways or a combination thereof: a) by building or rebuilding telecommunications facilities of their own, b) by leasing capacity from another local telephone company (typically an ILEC) and reselling it, and c) by leasing discreet parts of the ILEC network referred to as UNEs.
- **CO** – *Central Office*. A circuit switch where the phone lines in a geographical area come together, usually housed in a small building.
- **Coaxial Cable** – A type of cable that can carry large amounts of bandwidth over long distances. Cable TV and cable modem service both utilize this technology.
- **CPCN** – *Certificate of Public Convenience and Necessity*. Authorization given by the CPUC to telecommunications carriers in order to provide service in the state of California.
- **CPUC** – *California Public Utilities Commission*. The organization mandated by the state Constitution to regulate public utilities in California.
- **CTF** – *California Teleconnect Fund*. A public program that provides subsidizes phone and data service to schools, hospitals, CBOs, and other qualified institutions in California. Benefits are calculated net of E-rate Federal subsidy.
- **CWDM** – *Coarse Wavelength Division Multiplexing (WDM)*: is generally held to be WDM with less than 8 active wavelengths per fibre.
- **DDTP** – *Deaf and Disabled Telephone Program*. A public program that provides benefits, including specialized equipment, to qualified California disabled customers.
- **Dial-Up** – A technology that provides customers with access to the Internet over an existing telephone line.
- **DLEC** – *Data Local Exchange Carrier*. DLECs deliver high-speed access to the Internet, not voice. DLECs include Covad, Northpoint and Rhythms.
- **Downstream** – Data flowing from the Internet to a computer (Surfing the net, getting E-mail, downloading a file).
- **DSL** – *Digital Subscriber Line*. The use of a copper telephone line to deliver “always on” broadband Internet service.
- **DSLAM** – *Digital Subscriber Line Access Multiplier*. A piece of technology installed at a telephone company’s CO and connects the carrier to the subscriber loop (and ultimately the customer’s PC).

- **DWDM** – *Dense Wavelength Division Multiplexing (WDM)*: A SONNET term which is the means of increasing the capacity of Sonet fiber-optic transmission systems.
- **E-Rate** – A Federal program that provides subsidy for voice and data lines to qualified schools, hospitals, CBOs, and other qualified institutions. The subsidy is based on a percentage designated by the FCC. CTF benefits are calculated net of the E-rate subsidy.
- **EON** – *Ethernet Optical Network*: The use of Ethernet LAN packets running over a fiber network.
- **EvDO** – *Evolution Data Only*: EvDO is a new wireless technology that provides data connections that are 10 times as fast as a regular modem.
- **FCC** – *Federal Communications Commission*: A Federal regulatory agency that is responsible, among other things, of regulating VoIP.
- **FTTN** – *Fiber To The Neighborhood*: A hybrid network architecture involving optical fiber from the carrier network, terminating in a neighborhood cabinet with converts the signal from optical to electrical.
- **FTTP** – *Fiber To The Premise (Or FTTB – Fiber To The Building)*: A fiber optic system that connects directly from the carrier network to the user premises.
- **GPON** - *Gigabyte-Capable Passive Optical Network*: GPON uses a different, faster approach (up to 2.5 Gbit/s in current products) than BPON.
- **GPS** – *Global Positioning System*: A system using satellite technology that allows an equipped user to know exactly where he is anywhere on earth.
- **GSM** – *Global System for Mobile Communications*: This is the current radio/telephone standard in Europe and many other countries except Japan and the United States.
- **HFC** – *Hybrid Fiber Coaxial Network*: An outside plant distribution cabling concept employing both fiber optic and coaxial cable.
- **IEEE** - *Institute of Electrical and Electronics Engineers*
- **ILEC** – *Incumbent Local Exchange Carrier*: The traditional wireline telephone service providers within defined geographic areas. Prior to 1996, ILECs operated as monopolies having the exclusive right and responsibility for providing local and local toll telephone service within LATAs. ILECs include regional Bell operating companies such as SBC and non-Bell affiliated companies such as SureWest, both in California.

- **IP-VPN** – *Internet Protocol-Virtual Private Network*: A software-defined network offering the appearance, functionality and usefulness of a dedicated private network
- **ISDN** – *Integrated Services Digital Network*: An alternative method to simultaneously carry voice, data and other traffic, using the switched telephone network.
- **ISP** – *Internet Service Provider*: A company providing Internet access to consumers and businesses, acting as a bridge between customer (end-user) and infrastructure owners for dial-up, cable modem and DSL services.
- **Kbps** – *Kilobits per second*: 1,000 bits per second. A measure of how fast data can be transmitted.
- **LAN** – *Local Area Network*: A geographically localized network consisting of both hardware and software. The network can link workstations within a building or multiple computers with a single wireless Internet connection.
- **LATA** – *Local Access and Transport Areas*: A geographic area within with a divested Regional Bell Operating Company is permitted to offer exchange telecommunications and exchange access service. Calls between LATAs are often thought of as long distance service. Calls within a LATA (IntraLATA) typically include local and local toll services.
- **Local Loop** – A generic term for the connection between the customer's premises (home, office, etc.) and the provider's serving central office. Historically, this has been a wire connection; however, wireless options are increasingly available for local loop capacity.
- **MAN** – *Metropolitan Area Network*: A high-speed data intra-city network that links multiple locations with a campus, city or LATA. A MAN typically extends as far as 50 kilometers.
- **Mbps** – *Megabits per second*: 1,000,000 bits per second. A measure of how fast data can be transmitted.
- **Overbuilders** – Building excess capacity. In this context, it involves investment in additional infrastructure project to provide competition.
- **OVS** – *Open Video Systems*: OVS is a new option for those looking to offer cable television service outside the current framework of traditional regulation. It would allow more flexibility in providing service by reducing the build out requirements of new carriers.
- **PON** – *Passive Optical Network*: A Passive Optical Network consists of an optical line terminator located at the Central Office and a set of associated optical network

terminals located at the customer's premise. Between them lies the optical distribution network comprised of fibers and passive splitters or couplers. In a PON network, a single piece of fiber can be run from the serving exchange out to a subdivision or office park, and then individual fiber strands to each building or serving equipment can be split from the main fiber using passive splitters / couplers. This allows for an expensive piece of fiber cable from the exchange to the customer to be shared amongst many customers thereby dramatically lowering the overall costs of deployment for fiber to the business (FTTB) or fiber to the home (FTTH) applications.

- **Right-of-Way** – A legal right of passage over land owned by another. Carriers and service providers must obtain right-of-way to dig trenches or plant poles for cable systems, and to place wireless antennae.
- **RPR** – *Resilient Packet Ring* RPR uses Ethernet switching and a dual counter-rotating ring topology to provide SONET-like network resiliency and optimized bandwidth usage, while delivering multi-point Ethernet/IP services.
- **RUS** – *Rural Utility Service*: A division of the United States Department of Agriculture, it promotes universal service in unserved and underserved areas of the country with grants, loans, and financing.
- **SONNET** – *Synchronous Optical Network*: A family of fiber-optic transmission rates.
- **Streaming** – A Netscape innovation that downloads low bit text data first, then the higher bit graphics. This allows users to read the text of an Internet document first, rather than wait for the entire file to load.
- **Subscribership** – Subscribership is how many customers have subscribed for a particular telecommunications service.
- **Switched Network** – A domestic telecommunications network usually accessed by telephones, key telephone systems, private branch exchange trunks, and data arrangements.
- **T-1** – *Trunk Level 1*: A digital transmission link with a total signaling speed of 1.544 Mbps. It is a standard for digital transmission in North America.
- **T-3** – *Trunk Level 3*: 28 T1 lines or 44.736 Mbps.
- **ULTS** – *Universal Lifeline Telephone Service*: A public program that provides subsidized basic telephone service to qualified low-income individuals in California.
- **UNE** – *Unbundled Network Elements*: Leased portions of a carrier's (typically an ILEC's) network used by another carrier to provide service to customers.

- **Universal Service** – The idea of providing every home in the United States with basic telephone service.
- **Upstream** – Data flowing from your computer to the Internet (sending E-mail, uploading a file).
- **VDSL** – *Very High Data Rate Digital Subscriber Line*. A developing technology that employs an asymmetric form of ADSL, with projected speeds of up to 155 Mbps.
- **Video On Demand** – A service that allows users to remotely choose a movie from a digital library and be able to pause, fast-forward, or even rewind their selection.
- **VLAN** – *Virtual Local Area Network*
- **VoIP** – *Voice Over Internet Protocol*: A new technology that employs a data network (such as a broadband connection) to transmit voice conversations.
- **VPN** – *Virtual Private Network*: *VPN is a network that is constructed by using public wires to connect nodes. For example, there are a number of systems that enable you to create networks using the Internet as the medium for transporting data. These systems use encryption and other security mechanisms to ensure that only authorized users can access the network and that the data cannot be intercepted.*
- **WiMax** - WiMax is a wireless technology that provides high-throughput broadband connections over long distances. WiMax can be used for a number of applications, including "last mile" broadband connections, hotspot and cellular backhaul, and high-speed enterprise connectivity for businesses.
- **Wireless** – Telephone service transmitted via cellular, PCS, satellite, or other technologies that do not require the telephone to be connected to a land-based line.
- **Wireless Internet** – 1) Internet applications and access using mobile devices such as cell phones and palm devices. 2) Broadband Internet service provided via wireless connection, such as satellite or tower transmitters.
- **Wireline** – Service based on infrastructure on or near the ground, such as copper telephone wires or coaxial cable underground or on telephone poles.

Sources include the Glossary of the July 5, 2002 report on “The Status of Telecommunications Competition in California” submitted to the California State Legislature by the CPUC, the FCC Website, the Intel.com Website, Webopedia.com, the Passive Optical Networks Forum, and Newton’s Telecom Dictionary, 16th Expanded and Updated Edition.