

anyone else. To the contrary, the statute directs the Commission to take steps to accelerate deployment of advanced networks. Burdening cable operators with common carrier-like regulations would turn section 706 on its head by suppressing investment in advanced infrastructure.

**A. Section 706 Addresses the Deployment of “Telecommunications” Capability**

“Advanced telecommunications capability” is defined as capability that “enables users to originate and receive . . . telecommunications.”<sup>36/</sup> While the definition does not appear limited to facilities used to provide common carrier “telecommunications service,”<sup>37/</sup> it expressly encompasses only telecommunications capability used to originate and receive telecommunications. “Advanced telecommunications capability” would therefore not include cable systems to the extent they deliver cable services or information services, and section 706 itself would not apply to such systems. This conclusion is supported by a review of relevant provisions of the Telecommunications Act of 1996.

First, as the Commission recently recognized, the Senate version of the bill that ultimately became the 1996 Act was specifically amended to make clear that cable operators were not engaged in the provision of “telecommunications service” to the extent they provide cable services.<sup>38/</sup> This change, which was carried forward to the enacted statute, reflects the Cable Act’s prohibition of “common carrier or utility” regulation of cable systems by reason of

---

<sup>36/</sup> Section 706(c)(1).

<sup>37/</sup> The Communications Act separately defines “telecommunications,” “telecommunications service,” and “telecommunications carrier.” See 47 U.S.C. § 153(43), (46), (44). “Telecommunications” means “the transmission, between or among points specified by the user, of information of the user’s choosing, without any change in the form or content of the information as sent and received.” Only a person that offers telecommunications for a fee directly to the public is considered a “telecommunications carrier” subject to regulation as a common carrier.

providing cable service.<sup>39/</sup> The Commission has also found that, like cable services, “information services” remain in a separate category from “telecommunications services” after enactment of the 1996 Act.<sup>40/</sup> An information service provider “does not offer telecommunications” – *i.e.*, a “transparent transmission path” -- even though it may use telecommunications to provide the information service.<sup>41/</sup>

Second, the 1996 Act also expanded the definition of “cable service”<sup>42/</sup> -- and thus the scope of cable’s protection against treatment as a common carrier or utility -- to include “interactive services,” including information services and enhanced services.<sup>43/</sup> This change reflects the evolution of cable services from traditional one-way provision of video programming that has been made possible by cable companies’ investments in advanced broadband technology. Under the expanded definition of “cable service,” Internet access and other advanced services would still be considered cable services if they were provided by a cable operator over a cable system. A recent Working Paper published by the FCC’s Office of Plans and Policy supports this reading of the statute.<sup>44/</sup> The provision of advanced cable services would not bring cable systems within the ambit of “advanced telecommunications capability.”<sup>45/</sup>

---

<sup>38/</sup> In the Matter of Federal-State Joint Board on Universal Service, CC Docket 96-45, Report to Congress, FCC 98-67 at ¶ 44 (rel. April 10, 1998) (“Report to Congress”).

<sup>39/</sup> 47 U.S.C. § 541(c).

<sup>40/</sup> Report to Congress at ¶ 45-46.

<sup>41/</sup> Id. at ¶ 39.

<sup>42/</sup> Pub. L. No. 104-104, § 301(a)(1) (adding “or use”).

<sup>43/</sup> H.R. Conf. Rep. 104-458, 104<sup>th</sup> Cong., at 169 (1996).

<sup>44/</sup> B. Esbin, INTERNET OVER CABLE: DEFINING THE FUTURE IN TERMS OF THE PAST, FCC Office of Plans and Policy Working Paper Series, No. 30, at 88 (August 1998) (“The Commission could reasonably conclude that Internet access services . . . , when provided by a cable operator over its cable system, come within the revised definition of ‘cable services’ under Title VI.”).

<sup>45/</sup> Nor would such services meet the Commission’s definition of “advanced services.” Cf. Section 706 NOI at ¶ 13 n. 8 (defining “advanced services” as services “derived from” advanced telecommunications capability).

Of course, as demonstrated above, cable companies are vigorously deploying advanced broadband networks, and advanced cable networks are properly considered part of the nation's rapidly growing inventory of broadband infrastructure. In determining whether action to accelerate deployment of "advanced telecommunications capability" is needed, the Commission should take the investments of cable operators into account.<sup>46/</sup>

**B. The Goal of Section 706 is Investment in Broadband Infrastructure**

The plain language and legislative history of section 706(b) make clear that Congress's primary goal in enacting this provision was to encourage the deployment of new facilities-based networks by removing "barriers to infrastructure investment" if it finds that this infrastructure is not being "deployed to all Americans in a reasonable and timely fashion." Thus, the conference report on section 706 explains that the Commission should assess the "availability, at reasonable cost, of equipment needed to deliver advanced broadband capability" and accelerate deployment of such equipment using methods that "provide the proper incentives for infrastructure investment."<sup>47/</sup>

Promoting infrastructure investment had long been a goal of Senator Burns, the author of section 706. Almost five years before the enactment of the 1996 Act, Senator Burns, along with then-Senator Gore, introduced the bill that was the precursor to section 706. There he first emphasized the importance of promoting the deployment of infrastructure in the Information Age: "Communications infrastructure will be as important in the future to the information

---

<sup>46/</sup> Cf. Section 706 NOI at ¶¶ 8, 12 (inviting "all segments" of "communications and related industries," including cable, to participate in the inquiry, and noting that "it is critical that the analysis and debate surrounding section 706 focus . . . on . . . emerging technologies for delivering higher bandwidth services").

<sup>47/</sup> H.R. Conf. Rep. No. 104-458, 104<sup>th</sup> Cong., 2d Sess. 210 (1996).

economy as the transportation infrastructure has been to the industrial economy.”<sup>48/</sup> Section 706 embodies the goal of ensuring that an advanced infrastructure will be available to the American people.

Consistent with this goal, any actions taken by the Commission after a finding of inadequate deployment must be aimed at “accelerat[ing] deployment” of advanced capabilities. In the context of section 706(b), the plain language of the statute makes clear that “removing barriers to infrastructure investment” and “promoting competition in the telecommunications market” describe regulatory methods for hastening deployment of advanced networks. Thus, the appropriateness of any action the Commission may take pursuant to the directive of section 706 must be measured against how it affects such deployment.

The Commission acknowledges the regulatory methods enumerated in the statute to promote infrastructure investment<sup>49/</sup> but goes on to suggest that “regulatory intervention” may also be necessary.<sup>50/</sup> That term does not appear in section 706 and in fact is at odds with the general deregulatory thrust of the provision, *i.e.*, to “remov[e] barriers to investment.”<sup>51/</sup> Regulatory “intervention” that hinders investment in new networks would be fundamentally inconsistent with the policies expressed in this section. Unlike other provisions of the Communications Act that are concerned primarily with price competition for identical services, section 706 recognizes that the deployment of multiple infrastructures (“without regard to any

---

<sup>48/</sup> 137 Cong. Rec. S7054 (daily ed. June 5, 1991) (statement of Sen. Burns on the introduction of S. 1200, 102d Cong., 1st Sess. (1991)).

<sup>49/</sup> Section 706 NOI at ¶ 69.

<sup>50/</sup> NOI at ¶¶ 79-81 (“Is an unregulated market likely to give the holders of the last miles the ability and incentive to discriminate against all ISPs or in favor of their own ISP operations, to the detriment of consumers? If such conduct is likely, what is the appropriate regulatory remedy? . . . If there is true choice in the supply of last miles to residential consumers, would any economic regulation be needed?”)

transmission media or technology”) will confer substantial consumer benefits by enabling infrastructure providers to compete on the basis of the functionalities they devise and incorporate into their networks.

Imposing unbundling and resale obligations on cable operators for the benefit of entities that chose not to construct their own networks would turn section 706 on its head by suppressing cable’s incentives to invest in new broadband capability.<sup>52/</sup> Congress<sup>53/</sup> and the Commission<sup>54/</sup> have historically limited the application of such obligations to “dominant” common carriers with market power. Nothing in section 706 or any other provision of the Communications Act supports a departure from this salutary policy.

**C. Section 706 Is Not an Independent Grant of Authority**

Section 706 itself “does not constitute an independent grant of forbearance authority or of authority to employ other regulating methods.”<sup>55/</sup> Rather, the provision establishes a policy (“encourage the deployment . . . of advanced telecommunications capability”) that the

---

<sup>51/</sup> Section 706 NOI at ¶ 7.

<sup>52/</sup> Cf. Section 706 NOI, Separate Statement of Commissioner Powell (“Powell Statement”) at 3 (“While mandating access is a useful tool and can bring about short-term gains in retail competition, it also may undermine incentives for developing new ways to circumvent the power of incumbents over distribution.”). These concerns are not theoretical. Given the possibility that this proceeding could lead to forced access to cable plant, @Home, the Internet service provider owned in part by five cable companies, included it as a “risk factor” in a recent filing before the Securities and Exchange Commission. At Home Corporation, Amendment No. 1 to Form S-3 Registration Statement under the Securities Act of 1933, as filed with the Securities and Exchange Commission on August 12, 1998 (available at <<http://www.sec.gov/Archives/edgar/data/1020620/0001012870-98-002083.txt>>).

<sup>53/</sup> Compare 47 U.S.C. §§ 251(a) (obligations of all telecommunications carriers) with 251(b) (all LECs), and 251(c) (incumbent LECs). See also 47 U.S.C. § 251(h)(2)(A) (a non-incumbent carrier may be classified as an “incumbent” only if it “occupies a position in the market for telephone exchange service” comparable to the original incumbent).

<sup>54/</sup> See, e.g., Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor, First Report and Order, 85 FCC 2d 1 (1980).

<sup>55/</sup> Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, Memorandum Opinion and Order and Notice of Proposed Rulemaking, FCC 98-188 at ¶ 69 (rel. August 7, 1998) (“Section 706 Order and NPRM”).

Commission is directed to implement by using positive authority contained in other provisions of the Communications Act in a manner consistent with that policy.<sup>56/</sup>

The Commission itself has acknowledged that it must work within the structure of the Communications Act to achieve the goals of section 706. In the order adopted concurrent with the Section 706 NOI, the Commission held, correctly, that section 706 does not authorize the Commission to ignore section 10(d) of the Act and forbear from applying the market-opening requirements of sections 251(c) and 271 to incumbent LECs before those requirements are fully implemented.<sup>57/</sup> By the same token, section 706 does not authorize the Commission to extend such statutory requirements to entities other than incumbent LECs.

Neither section 706 nor any other provision of the Communications Act authorize the Commission to impose a common regulatory model, or “regulatory parity,” on all broadband delivery systems.<sup>58/</sup> As the Commission itself recognizes, there are currently different legal and regulatory models for different industries and “Congress, when it enacted the [1996] Act, created or retained these models and thereby endorsed their continued use.”<sup>59/</sup> In fact, Congress expressly declined to adopt proposals advanced by several Senators and the Clinton Administration for just the uniform regulatory framework mentioned in the Section 706 NOI.<sup>60/</sup>

---

<sup>56/</sup> Id.

<sup>57/</sup> Id. at ¶¶ 69-79.

<sup>58/</sup> Section 706 NOI at ¶ 77.

<sup>59/</sup> Id.

<sup>60/</sup> See, e.g., “Stevens Draft Includes ‘Title VII’ Provision; Senator Hopes to Include Language in Other Bills,” Telecommunications Reports (Apr. 18, 1994) at 1-2; “White House Working to Include ‘Title VII’ in Telecom Bills; Hollings Says Provision ‘Isn’t Realistic At This Time,’” Telecommunications Reports (February 28, 1994) at 4-6.

Under one version of this proposed framework, all providers of “advanced” services would have been subject to similar access and interconnection obligations.<sup>61/</sup>

Congress ultimately determined that regulatory “convergence” was inadvisable.<sup>62/</sup> It opted instead for the technology-neutral policy of infrastructure investment embodied in section 706. Viewed in this historical context, the use of the term “advanced telecommunications capability” is no invitation to the Commission to create a new regulatory classification. Rather, the breadth and scope of the term reflect Congress’s desire to ensure that all forms of broadband telecommunications capability be utilized in bringing high-speed services to the public. To the extent that the adoption of a uniform regulatory structure would lead to the imposition of burdensome new requirements on cable companies, such an outcome would also be contrary to the intent of section 706 to promote the development of advanced broadband infrastructure.

**D. Marketplace Conditions Do Not Support Regulation of Cable’s Broadband Plant**

As described above, cable operators and other companies are investing tens of billions of dollars in advanced infrastructure and deploying new ways to deliver broadband services to consumers. Much of this investment – for instance, the ILECs’ xDSL service and development of “third generation” wireless capability – is in the last mile. The cable industry is only one of numerous new entrants in the marketplace for two-way broadband services. Regardless of whether the deployment of advanced capability meets the “reasonable and timely” test of section 706, it would be premature at best to suggest that cable companies or any other new entrant will

---

<sup>61/</sup> See “NARUC Adopts Package of Legislative Resolutions to Guide Negotiations on Fast-Moving Telecom Bills,” Telecommunications Reports (Mar. 7, 1994) at 10-15 (describing specifics of proposed Title VII and NARUC’s opposition thereto).

establish a bottleneck in the last mile of advanced broadband plant that could prevent customers from gaining access to information service providers.<sup>63/</sup> More likely, the plethora of infrastructures will offer ISPs multiple pathways to homes, schools, and offices.

In the Section 706 Order and NPRM, the Commission has proposed to deregulate the advanced broadband services offered by the incumbent LECs if those services are provided through a structurally separate affiliate.<sup>64/</sup> Significantly, the Commission proposed to treat these affiliates as non-dominant, freeing them from price cap or rate-of-return regulation, facilities authorization requirements, and tariffing obligations.<sup>65/</sup> As new entrants in the marketplace for broadband services, cable operators surely command no greater market power than incumbent LECs with ubiquitous access to subscribers.<sup>66/</sup> It would be totally irrational to impose common carrier obligations on cable operators just as they are being removed from the incumbent LECs.

To understand how forbearance from regulation can lead to growth and innovation in the marketplace for broadband services, the Commission need look no further than its own treatment of information services, and, more specifically, the Internet. Since 1983, it has exempted

---

<sup>62/</sup> Congress has likewise opted for multiple regulatory structures for the delivery of video programming. Broadcasters, cable operators, providers of open video systems, and direct broadcast satellite operators each operate under separate regulatory regimes.

<sup>63/</sup> See Section 706 NOI at ¶ 79. Cf. Powell Statement at 1 (prospective regulation “tends to stifle innovation and impede the beneficial operation of market forces”). The Administrative Procedure Act requires that an agency be able to demonstrate the connection “between the facts found and the choices made.” Home Box Office, Inc. v. FCC, 567 F.2d 9, 35, 42 (D.C. Cir.) (per curiam), cert. denied, 434 U.S. 829 (1977). See also AT&T v. FCC, 974 F.2d 1351, 1354 (D.C. Cir. 1992); City of Brookings Mun. Tel. Co. v. FCC, 822 F.2d 1153, 1165 (D.C. Cir. 1987).

<sup>64/</sup> Section 706 Order and NPRM at ¶ 96.

<sup>65/</sup> Id. at ¶ 100.

<sup>66/</sup> Chairman Kennard has observed that, “at least until cable television rolls out these services, [broadband facilities] will be controlled by only one provider – the local phone company.” A Broad(band) Vision for America, Remarks by Chairman William E. Kennard before the Federal Communications Bar Association (June 24, 1998).

information service providers from the payment of access charges<sup>67/</sup> because of, among other things, “the potentially detrimental effects on the growth of the still-evolving information services industry” that the imposition of such charges would have.<sup>68/</sup> It reaffirmed the ISP exemption only last year.<sup>69/</sup>

The ISP exemption was the first in a series of many governmental actions designed to free information service providers from regulatory burdens that would impede their growth. Most recently, this exemption has been expanded to accommodate a variety of services related to the Internet. For example, unlike providers of telecommunications services, ISPs are under no obligation to contribute to the Universal Service Fund,<sup>70/</sup> and are exempt from interconnection obligations,<sup>71/</sup> and section 201 and 202 charges and services requirements.<sup>72/</sup>

The FCC’s treatment of ISPs is consistent with Congressional initiatives to shield the Internet from government regulation. For example, House Telecommunications Subcommittee

---

<sup>67/</sup> See In the Matter of MTS and WATS Market Structure, Memorandum Opinion and Order, 97 FCC 2d 683, 711-22 (1983); see also In the Matter of Amendments of Part 69 of the Commission’s Rules Relating to Enhanced Service Providers, Order, 3 FCC Rcd 2631 (1988).

<sup>68/</sup> Access Charge Reform, 12 FCC Rcd 15982, 16132 ¶ 343 (1997).

<sup>69/</sup> Id. at 16133 ¶ 344, aff’d sub nom., Southwestern Bell Tel. Co., et al. v. Fed. Communications Comm’n, \_\_\_ F.3d \_\_\_, 1998 WL 485387 (8th Cir. 1998).

<sup>70/</sup> See In the Matter of Federal State Joint Board on Universal Service, Report and Order, 12 FCC Rcd 8776, 9179 ¶ 788 (1997).

<sup>71/</sup> See 47 U.S.C. § 251(a)(1).

<sup>72/</sup> See 47 U.S.C. §§ 201-202. Unlike telecommunications carriers, ISPs are also not required to obtain authority from state public service commissions to provide service and are not required to file tariffs and reports with those commissions.

Chairman Billy Tauzin and Representative Rick White have introduced H.R. 2372, the Internet Protection Act of 1997, which would wall off the Internet from federal and state regulation.<sup>73/</sup> Legislation seeking to reduce or eliminate taxation of Internet services is also working its way through Congress.<sup>74/</sup> The Clinton Administration has likewise advanced a policy of self-regulation for the Internet and has urged other governments to refrain from imposing new and unnecessary bureaucratic procedures on electronic commerce.<sup>75/</sup>

Consistent with the deregulatory purpose of the 1996 Act, the Commission's broadband policies should likewise be rooted in encouraging competitive risk-taking without new regulations, rather than in devising new regulatory schemes. As it has in the past, the Commission should recognize that competition, not regulation, will best further the public interest and serve the needs of consumers. The explosive investment in broadband plant renders unnecessary – and counterproductive – new government regulation of cable operators and other competitive entrants.

## CONCLUSION

There is extensive deployment of advanced telecommunications services throughout the nation by a wide variety of providers. If the Commission finds that such deployment is not “reasonable and timely,” it must act consistent with the goals and terms of section 706: it may

---

<sup>73/</sup> See H.R. 2372, 105<sup>th</sup> Cong. 1st Sess. (1997) (purpose is to ensure that development of Internet and interactive computer service is unfettered by federal and state regulation). See also 143 Cong. Rec. E513 (daily ed. March 19, 1997) (statement of Rep. Nadler) (arguing that Internet deserves highest protection from government intrusion); 143 Cong. Rec. S12078 (daily ed. Nov. 8, 1997) (statement of Sen. Abraham) (urging colleagues to fight to ensure that high technology industries, and Internet in particular, remain as free as possible from Government regulation and taxation).

<sup>74/</sup> See S. 442, 105<sup>th</sup> Cong., 1<sup>st</sup> Sess. (1997) and H.R. 4105, 105<sup>th</sup> Cong., 2d Sess. (1997) (commonly referred to as the “Internet Tax Freedom Act”).

<sup>75/</sup> See A Global Framework for Electronic Commerce (July 1, 1998) <<http://www.whitehouse.gov/WH/New/Commerce>>.

not extend its inquiry to non-telecommunications carriers; it may not impose additional regulation on new entrants; and it may not use regulating methods unless they are independently authorized elsewhere in the Communications Act.

Respectfully submitted,

NATIONAL CABLE TELEVISION  
ASSOCIATION

Howard J. Symons  
Michelle M. Mundt  
Mintz, Levin, Cohn, Ferris,  
Glovsky and Popeo, P.C.  
701 Pennsylvania Avenue, N.W.  
Suite 900  
Washington, D.C. 20004  
202/434-7300



Daniel L. Brenner  
Neal M. Goldberg  
David L. Nicoll  
1724 Massachusetts Avenue, N.W.  
Washington, D.C. 20036  
202/775-3664

September 14, 1998

## Appendix 1

### Locations of Cable Company High - Speed Data and Internet Access Offerings

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Adelphia:</b>	<b>Florida:</b> Delray Beach, Lake Park, Riviera Beach, South Dade County, Stuart, Wellington <b>Massachusetts:</b> Adams/ North Adams, Berkshire County, Plymouth <b>New Jersey:</b> Berkeley Township, Dover Township, Lacey Township, Toms River <b>New York:</b> Amherst/Williamsville, Buffalo, Cheektowaga, Lackawanna Area, Lancaster/Lock Port, Niagara/Niagara Falls, Tonawanda, West Seneca <b>Ohio:</b> Macedonia/Western Reserve <b>Pennsylvania:</b> Bethel Park, Coudersport, Lansdale, Mount Lebanon, Philadelphia Area, Pittsburgh Area, Plymouth Meeting, West Mifflin <b>South Carolina:</b> Hilton Head <b>Vermont:</b> Burlington <b>Virginia:</b> Blacksburg, Charlottesville, Staunton, Waynesboro, Winchester
<b>Advanced Cable Communications:</b>	<b>Florida:</b> Coral Springs
<b>Armstrong Cable:</b>	<b>Pennsylvania:</b> Butler, Connellsville, Mt. Pleasant, Scottsdale, Zelienople
<b>Avenue Cable TV:</b>	<b>California:</b> Ventura
<b>Bedford Cablevision:</b>	<b>Virginia:</b> Bedford
<b>Befera Interactive CableNet:</b>	<b>Minnesota:</b> Hibbing
<b>Bend Communications:</b>	<b>Oregon:</b> Bend, Sisters, Black Butte
<b>Bresnan Communications:</b>	<b>Michigan:</b> Escanaba, Houghton-Hancock, Iron Mountain, Marquette, Bay City/Midland (11/98) <b>Minnesota:</b> Duluth (11/98), Marshall <b>Wisconsin:</b> Superior

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Cable America:</b>	<b>Alabama:</b> Huntsville, Madison <b>Arizona:</b> Mesa
<b>Cable Michigan:</b>	<b>Michigan:</b> Traverse City
<b>CableONE:</b>	<b>California:</b> Modesto
<b>Cablevision of Lake Havasu:</b>	<b>Arizona:</b> Lake Havasu
<b>Cablevision of Lake Travis:</b>	<b>Texas:</b> Lake Travis
<b>Cablevision of Loudon:</b>	<b>Virginia:</b> Loudon County
<b>Cablevision Systems Corp.:</b>	<b>Connecticut:</b> Fairfield/New Haven, Westport <b>New York:</b> Long Island/Nassau County, Oyster Bay, Yonkers
<b>Capitol Cable:</b>	<b>Missouri:</b> Boon County, Columbia
<b>Century Communications:</b>	<b>New York:</b> Norwich
<b>Chambers Communications:</b>	<b>California:</b> Chico, Novato <b>Idaho:</b> Payette <b>Oregon:</b> Ontario, Sunriver <b>Washington:</b> Edmonds
<b>Charter Communications:</b>	<b>California:</b> Pasadena, Los Angeles, Riverside <b>Connecticut:</b> Newtown <b>Georgia:</b> Newnan <b>Missouri:</b> St. Louis

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Cheney Cable:</b>	<b>Washington:</b> Suburban Spokane
<b>Coast Cablevision:</b>	<b>California:</b> San Mateo
<b>Coaxial Communications:</b>	<b>Ohio:</b> Columbus
<b>Comcast Corporation:</b>	<b>California:</b> Orange County <b>Florida:</b> Sarasota <b>Maryland:</b> Baltimore County, Towson State University <b>Michigan:</b> Suburban Detroit <b>New Jersey:</b> North-Central, Essex County, Union County <b>Pennsylvania:</b> Philadelphia
<b>Conway Corp.:</b>	<b>Arkansas:</b> Conway
<b>Cox Communications:</b>	<b>Arizona:</b> Phoenix <b>California:</b> Eureka/Humboldt County, Orange County, San Diego <b>Connecticut:</b> Hartford, Meriden <b>Nebraska:</b> Omaha <b>Oklahoma:</b> Oklahoma City <b>Rhode Island:</b> Providence <b>Virginia:</b> Hampton Roads, Newport News
<b>Daniels Cablevision</b>	<b>California:</b> Encinitas, San Diego
<b>Davis Communications:</b>	<b>Washington:</b> Cheney
<b>Falcon/Capital Cable Partners:</b>	<b>Missouri:</b> Columbia
<b>Fanch:</b>	<b>Kentucky:</b> Murray

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Genesis:</b>	<b>Georgia:</b> Winder
<b>GMI:</b>	<b>Maryland:</b> St. Mary's County/Western Shore <b>Pennsylvania:</b> Berwick
<b>Helicon Cable:</b>	<b>Pennsylvania:</b> Uniontown <b>Vermont:</b> Barre
<b>Hibbing Cable TV:</b>	<b>Minnesota:</b> Hibbing
<b>Horizon Cable:</b>	<b>California:</b> Point Reyes <b>Michigan:</b> Central Michigan
<b>Insight Communications:</b>	<b>Indiana:</b> Noblesville
<b>InterMedia Partners:</b>	<b>South Carolina:</b> Greenville, Spartanburg <b>Tennessee:</b> Brentwood/Nashville, Kingsport, Williamson County
<b>James Cable Partners:</b>	<b>Oklahoma:</b> Durant
<b>Jones Communications:</b>	<b>South Carolina:</b> North Augusta <b>Virginia:</b> Alexandria, Prince William County
<b>Limestone Cable:</b>	<b>Kentucky:</b> Maysville
<b>Marcus Cable:</b>	<b>Texas:</b> Ft. Worth/Tarrant County, Park Cities (Highland Park, University Park) <b>Wisconsin:</b> Eau Claire Area, Rice Lake Area
<b>Mediacom:</b>	<b>California:</b> Ridgecrest

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>MediaOne:</b>	<p><b>California:</b> Los Angeles/Stockton</p> <p><b>Florida:</b> Jacksonville, South Florida (Broward County Area, Dade County, Hialeah, Lighthouse Point, Miami, Naples, Pompano Beach)</p> <p><b>Georgia:</b> Atlanta/Norcross</p> <p><b>Illinois:</b> Chicago</p> <p><b>Massachusetts:</b> Greater Boston (13 communities), Northern Massachusetts (19 communities), North Shore (12 communities), Milford, Southern Massachusetts</p> <p>(15 communities), Weymouth</p> <p><b>Michigan:</b> Ann Arbor, Canton Township, Dearborn Heights, Detroit (Suburban),</p> <p>Lansing, Northville, Plymouth Township, Southfield, Westland, Ypsilanti</p> <p><b>Minnesota:</b> Minneapolis/St. Paul</p> <p><b>New Hampshire:</b> Brentwood (5 communities), Salem (16 communities)</p> <p><b>New York:</b> Sandown</p> <p><b>Ohio:</b> Avon Lake, Bay Village</p>
<b>Mid-Continent Cable Co.:</b>	<b>South Dakota:</b> Aberdeen, Bath, Huron, Mitchell, Sioux Falls, Warner
<b>Palo Alto Cable Co-op:</b>	<b>California:</b> Palo Alto
<b>Phoenix Cable:</b>	<b>Alabama:</b> Phoenix City, Russell/Lee Counties
<b>Ponderosa Cable:</b>	<b>California:</b> Danville
<b>Prime Cable:</b>	<p><b>Maryland:</b> Montgomery County</p> <p><b>Nevada:</b> Las Vegas</p> <p><b>Virginia:</b> Arlington County</p>
<b>Raystay:</b>	<b>Pennsylvania:</b> Carlisle, Chambersburg

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Rifkin &amp; Associates:</b>	<b>Florida:</b> Miami Beach <b>Georgia:</b> Atlanta, Gwinnet County <b>Tennessee:</b> Columbia, Cookeville, Lebanon <b>Virginia:</b> Bedford/Rocky Mountain <b>West Virginia:</b> Pt. Pleasant (10/98)
<b>San Bruno Municipal Cable:</b>	<b>California:</b> San Bruno
<b>Service Electric:</b>	<b>Pennsylvania:</b> Easton (11 communities), Emmaus (5 communities), Hunterdon (5 communities), Lehigh Valley (40 communities), Phillipsburg (7 communities), Slatebelt (16 communities)
<b>Sioux Falls Cable:</b>	<b>South Dakota:</b> Mitchell, Sioux Falls
<b>Southwestern Cable TV:</b>	<b>California:</b> Clairmont
<b>Suburban Cable / Lenfest:</b>	<b>Delaware:</b> New Castle County <b>Pennsylvania:</b> Delaware County, Montgomery County
<b>Summit Communications:</b>	<b>Washington:</b> Issaquah, Seattle
<b>Sun Country Cable:</b>	<b>California:</b> Los Altos <b>Washington:</b> Spokane
<b>Susquehanna Cable:</b>	<b>Indiana:</b> Shelbyville <b>Maine:</b> Brunswick <b>Mississippi:</b> Pearl <b>Pennsylvania:</b> York

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>TCA:</b>	<b>Texas:</b> Amarillo, Bryan/College Station, Tyler
<b>Tele-Communications, Inc.:</b>	<p><b>California:</b> Alameda/Alameda Bay Farm Island, Antioch, Bay Point, Castro Valley, Dublin, Fremont, Hercules, Livermore, Petaluma, Pinole, Pittsburg, Pleasanton, Pleasant Hill, Richmond, San Ramon</p> <p><b>Colorado:</b> Denver, Golden, South Lakewood, Wheatridge</p> <p><b>Connecticut:</b> Hartford (East &amp; West Hartford, Simsbury, Bloomfield, Windsor, Avon, Canton, Burlington, Plainville, Farmington)</p> <p><b>Illinois:</b> Arlington Heights</p> <p><b>Louisiana:</b> Baton Rouge</p> <p><b>Michigan:</b> East Lansing</p> <p><b>Pennsylvania:</b> McKeesport</p> <p><b>Texas:</b> Garland/Stonebridge, McKinney, Richardson</p> <p><b>Washington:</b> Seattle (East &amp; West Lake City, East &amp; West University, Madison, Green Lake, Queen Anne), Tacoma</p>
<b>Time Warner Cable:</b>	<p><b>California:</b> San Diego, Poway</p> <p><b>Florida:</b> Brandon, Carrollwood, Clearwater, Largo, Palm Harbor, St. Petersburg, Tampa Bay, Temple Terrace</p> <p><b>Hawaii:</b> Oahu</p> <p><b>Maine:</b> Portland</p> <p><b>New York:</b> Albany, Binghamton-Corning-Elmira, Norwich, Oneida, Oswego, Rochester, Saratoga, Syracuse, Troy</p> <p><b>Ohio:</b> Akron-Canton, Columbus, Upper Arlington, Worthington, Youngstown</p> <p><b>Tennessee:</b> Bartlett, Collierville, Cordova, Memphis/East Memphis</p> <p><b>Texas:</b> Austin, El Paso</p>

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Tri-Lakes Cable:</b>	<b>Colorado:</b> Gleneagle/Monument/Palmer Lake/Woodmoor
<b>US Cable Corp.</b>	<b>South Carolina:</b> Charleston Area (Wild Dunes/Seabrook Island/Johns Island/Kiawah Island)
<b>Wedgewood Communications:</b>	<b>Illinois:</b> Chicago
<b>Western Shore Cable:</b>	<b>Maryland:</b> King George's County, St. Mary's County
<b>21st Century:</b>	<b>Illinois:</b> Chicago

As of September, 1998. Sources: *Broadcasting & Cable Special Report: Commercial Cable Modem Launches in North America*; *Cable Datacom News: Commercial Cable Modem Launches in North America*; *CableFAX Daily: Broadband Bulletin*; NCTA Research.

**Appendix 2**  
**Cable's High Speed Education Connection: Years 1 -2**

	Community	Community
<b>Delphia Communications</b>	Amherst, NY	Mount Lebanon, PA
	Berkeley Township, NJ	Munhall, PA
	Cheektowaga, NY	Beachwood, NJ
	Coudersport, PA	Lakehurst, NJ
	Dover Township, NJ	Island Heights, NJ
	Lacey Township, NJ	
	North Tonawanda, NY	
	Town of Tonawanda, NY	
	West Seneca, NY	
<b>Resnan Communications</b>		Marquette, MI
		Escanaba, MI
		Iron Mountain, MI
		Haughton/Hancock, MI
<b>Cable ONE</b>		Modesto, CA
<b>Cablevision Systems Corporation</b>	Bergen County, NJ	Brookline, MA
	Greater Cleveland, OH	Middlesex County, MA
	(parts of) Fairfield, County, CT	New York, NY
	(parts of) Hudson County, NJ	Westchester County, NY
	(parts of) Monmouth County, NJ	
	(parts of) Nassau County, NY	
	(parts of) Suffolk County, NY	
	Yonkers, NY	
Boston, MA		
<b>Chambers Communications Corporation</b>	Sunriver, OR	
<b>Charter Communications</b>		Pasadena, CA
		Riverside, CA
<b>Comcast Corporation</b>	Baltimore County, MD	
	(parts of) Essex & Union Cos., NJ	
	Fraser, MI	
	Sarasota, FL	
	Orange County, CA	
	Philadelphia, PA	
<b>Cox Communications</b>	Mission Viejo, CA	New Orleans, LA
	Warwick, RI	Oklahoma City, OK
	San Diego, CA (Chula Vista & Poway)	Omaha, NE
	Hampton Roads, VA (VA Beach & Norfolk)	New England (W. Warwick, RI; Manchester, CT)
		Pensacola/Ft. Walton Beach, FL
		Orange County, CA
		Phoenix, AZ

**Appendix 2  
Cable's High Speed Education Connection: Years 1 -2**

		Santa Barbara, CA
<b>Multimedia</b>	Berwick, PA	
	Weatherly, PA	
<b>on Cable Communications</b>	Uniontown, PA	
<b>ht Communications</b>	Claremont, CA	Noblesville, IN
<b>Media Partners</b>	Nashville, TN	Greenville, SC
		Spartanburg, SC
<b>as Intercable</b>	Alexandria, VA	Palmdale, CA
	Augusta, GA	Celebration, FL
	North Augusta, SC	
<b>rcus Cable</b>		Park Cities, TX
		Fort Worth, TX
<b>diaOne</b>	Atlanta, GA	Newburyport, MA
	Culver City, CA	Wayland, MA
	Canton Township, MI	Weston, MA
	Jacksonville, FL	Stoughton, MA
	Needham, MA	Dearborn Heights, MI
	Newton, MA	Madison Heights, MI
	Northville, MI	Westland, MI
	City of Northville, MI	Southfield, MI
	Plymouth Township, MI	Ann Arbor, MI
	City of Plymouth, MI	Ypsilanti, MI
	Stockton, CA	
	Watertown, MA	
	Wellesley, MA	
<b>Service Electric Cable TV, Inc.</b>	Salisbury Township, PA	Schnecksville, PA
		Allentown, PA
		Bethlehem, PA
		Emmaus, PA
<b>Suburban Cable</b>		New Castle, DE
		Delaware County, PA
		Harrisburg, PA
<b>Susquehanna Cable Company</b>	York, PA	
<b>TCA Cable TV, Inc.</b>	Arkadelphia, AR	
<b>Tele-Communications, Inc.</b>	Arlington Heights, IL	
	Fremont, CA	
	Hartford, CT	
	Sunnyvale, CA	
	Seattle, WA	
		Brandon, FL

**Appendix 2**  
**Cable's High Speed Education Connection: Years 1 -2**

Upper Arlington, OH	Carrollwood, FL
Binghamton, NY	Clearwater, FL
Canton, OH	Largo, FL
Columbus, OH	St. Petersburg, FL
Corning, NY	Tampa, FL
Elmira, NY	Temple Terrace, FL
Oahu, HI	Oswego, NY
Poway, CA	Oneida, NY
San Diego, CA	Bartlett, TN
Worthington, OH	Collierville, TN
Albany, NY	Rochester, NY
Portland, ME	Syracuse, NY
	Memphis, TN
	El Paso, TX
	Palm Harbor, FL

### Appendix 3

## Locations of Cable Company Local Telephone Service Offerings

<b>COMPANY</b>	<b>LOCATION BY STATE</b>
<b>Cablevision Systems</b>	<b>New York:</b> Several Communities in Long Island
<b>Comcast Cable Communications</b>	<b>Florida:</b> West Palm Beach <b>Maryland:</b> Baltimore
<b>Cox Communications</b>	<b>Arizona:</b> (Planning to launch in Phoenix suburb on October 1, 1998) <b>California:</b> Orange County, San Diego <b>Connecticut:</b> Hartford <b>Louisiana:</b> (Planning to launch in New Orleans this year) <b>Nebraska:</b> Omaha <b>Virginia:</b> Hampton Roads
<b>Jones Communications</b>	<b>Maryland:</b> Prince George's County <b>Virginia:</b> Alexandria
<b>MediaOne</b>	<b>California:</b> Los Angeles Area <b>Florida:</b> Jacksonville, Lighthouse Point, Pompano Beach <b>Georgia:</b> Atlanta <b>Massachusetts:</b> Boston suburbs
<b>Rifkin &amp; Associates, Inc.</b>	<b>Georgia:</b> Atlanta <b>Florida:</b> Miami Beach
<b>Tele-Communications, Inc.</b>	<b>California:</b> Fremont

**Time Warner Cable**

**Connecticut:** Hartford Area  
**Illinois:** Arlington Heights

**New York:** Rochester

**As of August, 1998.**

**Source: NCTA research.**