I. INTRODUCTION

Throughout history, nations have regulated communications industries to varying degrees in pursuit of policy goals that are deemed unachievable without government intervention. Traditionally, government intervention has occurred in an environment that permitted—or, some might argue, necessitated—the development of regulatory frameworks that relied on monopoly providers and imposed rules that differed substantially with the type of communications technology. In recent years, circumstances have changed dramatically. Policymakers are actively seeking to encourage competition and implement deregulatory policies in many industries of traditionally heavily-regulated monopoly providers. Furthermore, what have traditionally been economically distinct communications markets are converging into a common market because of advancements in communications technology. These developments are increasing the complexity of developing, evaluating and implementing appropriate government interventions in communications markets. The consequence of these developments are thus three-fold: the risks of adverse unintended consequences of government interventions rise; the costs caused by such consequences increase; and the ability to implement timely corrections is constrained.

This article asserts that “essentiality of access”—that is, the historical alignment of access (to an essential service or facility) problems to legal principles—should be used as an organizing principle for examining many of the future policy objectives in the communications industry in order to better enable the adoption of appropriate government interventions. Policy problems that have consistently been handled by distinct legal rules for each distinct technology, must now be addressed simultaneously across competing technology platforms. In this article, “essentiality of access” is applied to debates regarding broadband policy in the United States, as broadband access issues entail legal complexities that serve as a useful microcosm of this convergence of legal paradigms in the communications industry.

Using “essentiality of access” as a focal point, this article demonstrates that differing types of access objectives based on viewing broadband as an essential service or facility require reference to distinctive legal principles. By juxtaposing differing access problems and legal principles, this paper explains how the pursuit of broadband policy objectives will require recognition of the differing relationships of access recipients to the access providers—as end user customer, competitor, speaker or audience member—that at times conflict and require policymakers to choose certain interests over others. This legal reality makes the selection of broadband policy objectives and associated government interventions a tremendously complex endeavor.

In making broadband policy decisions, however, this article shows that there is an even more fundamental challenge for policymakers and the
courts. When balancing the competing interests of access recipients and access providers, the constitutionality of broadband policy choices may depend on characteristics of broadband providers that are unique to the corporate form. The legal rights and duties of individuals and corporations are not synonymous under United States law, although the distinction is perhaps less obvious in recent times given the prevalence of the corporate form throughout the twentieth century. The courts will ultimately need to clarify the principles for determining the rights of broadband corporations under the United States Constitution in order to address the constitutional challenges that new broadband policies will likely engender.

Section II of this article describes how "essentiality of access" can be used as an organizing principle. Section III briefly describes the diversity of perceived benefits from widespread broadband deployment, and the breadth of the corresponding demands for government intervention. Section III also stresses the complexity of developing broadband policy because of obvious legal, economic and political constraints on government action. Section IV identifies the important legal principles that evolved in the United States in response to various types of access problems regarding an essential service or facility. The historical development and meaning of each legal principle is provided, with the discussion organized according to the type of affected rights—economic, welfare or free speech. Section V identifies broadband access issues in terms of the type of access problem posed and the legal rights affected. Assuming that the relevant aspect of broadband access is an essential service or facility, and the circumstances require government intervention, it then identifies the associated legal principles discussed in Section IV, and describes how differing principles and rights may be in conflict. Section VI discusses why the pursuit of broadband policy objectives will require policy makers and the courts to explicitly consider and clarify the differing rights of natural persons and corporations.

II. "ESSENTIALITY OF ACCESS" AS AN ORGANIZING PRINCIPLE

In the United States, there are various contexts in which concerns of access to some essential service or facility have arisen and for which legal principles have been developed. As discussed in Section III, problems of access to an essential service or facility differ based on the following set of characteristics: what services or facilities are deemed to be essential; for whom (access recipient) they are deemed to be essential; the nature of the relationship between the access recipient and the access provider; and what circumstances are impeding the accessibility of the service or facility. Furthermore, specific legal principles have developed, both under the common law and in statutes, to address access issues bearing similar characteristics.

The mapping of access situations sharing similar characteristics next to the legal principles applied to them can be a valuable tool for determining the appropriate course of government intervention for future "access to essential service or facilities" problems.

Using an access problem-to-legal principle typology for purposes of evaluating broadband access issues is what is meant in this article by applying "essentiality of access" as an organizing principle. More specifically, each broadband access objective is first analyzed in terms of the specific form of access deemed to be essential—to whom, from whom, and for what purpose—and the underlying problems or obstacles impeding that access. Next, existing legal principles addressing previous access problems with similar characteristics are identified and evaluated for their suitability to address the broadband access issue.

In terms of determining whether government intervention is necessary, it is important to recog—

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1 The legal principles include common carrier and public utility obligations, "business affected with a public interest," the essential facilities doctrine, universal service and free speech rights. See infra Section IV and Table 1.

2 It is important to use the historically developed legal principles for several reasons. First, many of the broadband access issues stem from long-recognized economic or societal problems that the legal system has had to address in other contexts and for which specific legal principles have already been established. Second, awareness of these preexisting principles is not only insightful of prior experience but is often necessary to address legal constraints on transitioning from preexisting regimes. Third, trends underlying the development of existing legal principles reveal a more fundamental legal problem unresolved by the courts—the scope of corporations' constitutional rights—that will affect judicial enforcement of agency or legislative interventions to achieve broadband objectives.
nize that different legal principles affect different types of legal rights. In particular, the legal principles that are relevant here affect economic rights, welfare-related rights or free speech rights. Awareness of the types of rights that are affected—both rights of the access recipient and of the access provider—is necessary for determining whether there may be conflicts of different rights when simultaneously pursuing multiple access objectives, as well as the options available for resolving them. For example, some rights may have greater constitutional protections than others, thereby limiting legislative prerogative for choosing among constituent interests. In this regard, the distinction in constitutional rights of individuals, as opposed to corporations, may be critical.

III. THE COMPLEXITY OF BROADBAND POLICY

Recent policy debates affecting the communications industry have focused on encouraging the widespread deployment of broadband technology. In this context, broadband refers to a technical "capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." The perceived benefits of broadband deployment are vast and diverse, as noted by Federal Communication Commission Chairman Michael Powell:

The widespread deployment of broadband infrastructure has become the central communications policy objective today. It is widely believed that ubiquitous broadband deployment will bring valuable new services to consumers, stimulate economic activity, improve national productivity, and advance many other worthy objectives—such as improving education, and advancing economic opportunity for more Americans. We share much of this view and intend to do our part in advancing reasonable and timely deployment.

Reports, studies and proposed legislation related to broadband also reflect this diversity in alleged benefits and, consequently, call for varying and distinctly different forms of government intervention. For example, the ACLU advocates that regulators mandate open access of cable systems to Internet Service Providers ("ISP's") because Internet access makes available to citizens a form of speech and self-expression that is perhaps the closest thing ever invented to a true free market of ideas. The Economic Policy Institute proposes adopting a model of symmetric intermediate regulation for digital subscriber line ("DSL") services and cable modem services to foster private sector investment in broadband infrastructure. They argue that this would allow private investors to reap the benefits of improved business productivity, greater consumer prosperity and economic growth. The Leadership Conference on Civil Rights Education Fund and the Benton Foundation urge the federal government to continue funding for the e-rate, the Technology Opportunities Program and the Community Technology Centers Program, in order to narrow gaps in access to computers and the Internet. These gaps generally arise from a digital divide based on income, race and ethnicity, geography and disability. Senator Joseph Lieberman (D-CT) plans to

5 See American Civil Liberties Union, White Paper, No Competition: How Monopoly Control of the Broadband Internet Threatens Free Speech, at http://www.aclu.org/issues/cyber/broadband-report.pdf (2002) (the ACLU report is supported by a study that it commissioned, jointly with the Center of Digital Democracy, to Columbia Telecommunications Corporation regarding the technical prospects for maintaining the Internet’s open nature as it makes the shift from dial-up to cable).
7 See 47 U.S.C. §254(h)(1)(B) (2001) (requiring that certain educational institutions be given discounts, which are often referred to as the “c-rate,” for the purchase of telecommunications services, funded through contributions assessed against telecommunications service providers). See also 47 C.F.R. §§54.400-520 (2001) (implementing universal service funding for schools and libraries pursuant to §254).
8 See Bringing a Nation Online, infra note 10, at 13-16 (explaining that the Technology Opportunities Program was initiated in 1994 by the United States Department of Commerce’s National Telecommunications and Information Administration to provide matching grants to nonprofit organizations in order to promote widespread availability and use of digital network technologies in the public and non-profit sectors).
9 Id. at 16-17 (noting that the Community Technology Centers Program was established in 1999 by the Department of Education to "promote the development of model programs that demonstrate the educational effectiveness of technology in urban and rural areas and economically distress communities").
introduce a series of legislative initiatives, including an FCC regulatory plan, tax incentives, government support for research on advanced infrastructure technology and government use of e-commerce broadband applications in an effort to achieve major economic growth and productivity gains in the United States by making affordable broadband Internet connections available to American homes, schools and small businesses.11

As these examples illustrate, the type of government intervention deemed likely to encourage the deployment of broadband technology depends on the perception of the desired benefits to be reaped, as well as the remedies necessary to overcome the obstacles in achieving them. Thus, simply stating that one supports government intervention to encourage widespread deployment of broadband infrastructure is hopelessly vague. Rather, development of broadband policy requires a clear articulation of the purposes for which government intervention is being sought, and an assessment of how that intervention should be designed to accomplish those goals.

The complexity of developing broadband policy is further complicated by the difficulties in transitioning from preexisting regulatory regimes that vary with historically distinct communications technologies. Some changes in government policy may pose legal or economic—not to mention political—problems that undermine the sustainability of achieving the desired policy objectives over time. Failure to adequately anticipate and address these problems, as extensively discussed by the author in prior work,12 will likely increase the risk of adverse, unintended consequences brought about by government action or inaction. It could also hinder the ability to implement timely corrections.

IV. LEGAL PRINCIPLES MANDATING ACCESS TO ESSENTIAL SERVICES OR FACILITIES

This section first provides an overview of significant legal principles that have developed in response to different problems regarding access to some essential service or facility. Subsection A reviews the underlying sources of governmental power on which these legal principles are based. Subsections B through D review the meaning of these legal principles and the historical reasons underlying their development. The discussions in Subsections B through D are organized to address legal principles affecting economic rights, welfare rights and free speech rights, respectively. The background provided throughout this section is necessary for evaluating the application of legal principles to broadband access problems in Section V, and for understanding the need to consider and clarify the differing constitutional rights of individuals and corporations in Section VI.

The following table (Table 1) provides an overview of important legal principles that have developed in the United States to address various access problems with regard to an essential service or facility. The table first describes the access problem—for what reason access is deemed necessary, the relationship of the access recipient to the access provider, and the nature of the underlying problem or purpose to be addressed—and then the legal principle and associated obligations of the access provider that developed to address modifying communication policies in response to new technologies and deregulatory philosophy [hereinafter Cherry & Wildman 2000]; Barbara A. Cherry & Steven S. Wildman, Institutional Endowment as Foundation for Regulatory Performance and Regime Transitions: The Role of the US Constitution in Telecommunications Regulation in the United States, 23 TELECOMMUNICATIONS POLICY 607-23 (1999), at http://www.specitor.com/tphonline.htm (Oct. 1999) (analyzing the relationship of constitutional principles to economic efficiency goals, with application to recovery of stranded costs) [hereinafter Cherry & Wildman 1999]; Barbara A. Cherry & Steven S. Wildman, Unilateral and Bilateral Rules: A Framework for Increasing Competition While Meeting Universal Service Goals in Telecommunications, in Making Universal Service Policy: Enhancing the Process through Multidisciplinary Evaluation (Barbara A. Cherry, Steven S. Wildman, & A. Hammond, eds., 1999) (1999) [hereinafter Unilateral and Bilateral Rules] (analyzing legal and economic problems of pursuing universal service goals in a market without legal monopolies).

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Table 1: Legal Principles to Address Different Access Problems Regarding Essential Services or Facilities

<table>
<thead>
<tr>
<th>Access is Needed to Sustain What</th>
<th>Relationship of Access Recipient to Access Provider</th>
<th>Underlying Purpose or Problem</th>
<th>Legal Principle(s)</th>
<th>Obligations of Access Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of essential service, not adequately supplied in a competitive market, throughout the community.</td>
<td>Customer as endusers.</td>
<td>Economic coercion; dependence of customer requires protection.</td>
<td>Common carrier; public utility; business affected with a public interest.</td>
<td>Provide access to essential service without discrimination, at reasonable rates, and with adequate skill and care.</td>
</tr>
<tr>
<td>Viable competition in a related market of a monopolist.</td>
<td>Competitors.</td>
<td>Economic characteristics of supply require access to monopolist's essential facilities.</td>
<td>Prohibit refusal to deal with competitors (e.g. essential facilities doctrine).</td>
<td>Provide access to essential facility (input) under reasonable prices, terms and conditions.</td>
</tr>
<tr>
<td>Equality of access to essential services.</td>
<td>Targeted customers as endusers.</td>
<td>High cost of providing service; indigence of customers.</td>
<td>Universal service as a form of welfare benefit.</td>
<td>Contribute funds to and/or provide subsidized essential services.</td>
</tr>
<tr>
<td>Legitimacy of, and citizen's participation in, democracy.</td>
<td>Speaker as enduser or competitor (for benefit of audience).</td>
<td>Viewpoint diversity and channel provider's potential refusal to deal with speaker.</td>
<td>Free speech rights.</td>
<td>Provide access to channel of communication.</td>
</tr>
</tbody>
</table>

that problem. The first two rows of Table 1 describe legal principles related to economic rights, the third row to welfare-related rights and the last row to free speech rights.\textsuperscript{15}

A. Sources of Governmental Powers

The Tenth Amendment of the United States Constitution\textsuperscript{14} clearly establishes that powers not granted to the federal government are reserved to the states.\textsuperscript{15} So while the federal government has the exclusive power to regulate interstate commerce, the states retain the power to regulate intrastate commerce.\textsuperscript{16} In addition, state powers include inherent powers of the sovereign that have their origin under English common law.\textsuperscript{17} These inherent powers include police power, franchising and the creation of corporations.\textsuperscript{18} The legal principles in Table 1 can be traced, in large part, to the exercise of these powers.

The police power is the power to legislate for the common welfare.\textsuperscript{19} The police power is the basis of broad regulatory authority that state legislatures have exercised to implement a wide array of policy objectives, such as those affecting economic, welfare, and free speech rights as discussed in Sections B through D. However, a State's exercise of the police power is limited by the provisions of the United States Constitution, enforceable upon judicial review by the courts. As discussed in Subsection B.4, judicial interpretation of the permissible scope of a State's police power has played an important role in shaping the economic regulation of “essential services” in the United States.

State governments also have the inherent au-

\textsuperscript{13} The classification of rights is apparent from the content of the second and third columns.

\textsuperscript{14} U.S. CONST. amend. X.

\textsuperscript{15} The Tenth Amendment provides: “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.” U.S. CONST. amend. X.

\textsuperscript{16} Article 1, Section 8 of the United States Constitution provides that Congress shall have the power to regulate commerce among the States. U.S. CONST. art. I, §8.

\textsuperscript{17} Each state also has its own constitution that allocates power among the legislative, executive and judicial branches, and may place limitations on the state legislature's inherent powers. However, state constitutional limitations are not explored in this article.

\textsuperscript{18} See infra notes 19-20 and accompanying text.

\textsuperscript{19} LEONARD W. LEVY, THE LAW OF THE COMMONWEALTH AND CHIEF JUSTICE SHAW, 229-265 (1957) (discussing the history of the police power and its development in the United States) [hereinafter LEVY].
authority to delegate certain powers to private individuals for the purpose of benefiting the public. Such a delegation of power is referred to as the granting of a franchise. As discussed in Subsection B.1, the franchise power has been used extensively in the United States to enable the widespread deployment of infrastructures by private entities, such as railroads and public utilities that are deemed to be essential.

State governments also have the power to create corporations. Based on the traditional meaning of this power under English common law, a corporation was considered a quasi-governmental body—that is, a private government holding delegated public authority—that was self-governing and could hold property. A special legislative act was required to grant a charter for a corporation, and the corporation’s activities were limited to what was specified in the charter. By the seventeenth century, some corporations charters were granted to establish enterprises created to make profits for its stockholders. However, it was not until the nineteenth century that general incorporation statutes were gradually enacted by the states to eliminate the need for special legislative acts to grant charters and to permit private persons to create corporations. As described in Subsections B.2 and B.3, these general incorporation statutes gave rise to economic abuses that the Interstate Commerce Act and the Sherman Antitrust Act were enacted to address.

Franchises were required to permit private individuals to charge tolls or fees for the use of facilities they built, such as bridges, ferries, aqueducts, and canals. Franchises could also be used to delegate to private parties the governmental authority—such as eminent domain—that was necessary to exercise their functions under the franchise. J. Hughes, The Government Habit Redux 37-43, 103-05 (1991) (discussing franchising powers). See generally Sallyanne Payton, The Duty of a Public Utility to Serve in the Presence of New Competition, in ECONOMIC PRINCIPLES IN PUBLIC UTILITIES IN- TRODUCTION IN THE LAW OF THE UNITED STATES: 1780-1970, 13-57 (1970) (discussing the historical framework that led to the growth of corporations as quasi-governmental bodies) [hereinafter HURST].

22 See Creighton, supra note 21, at 51-54; HURST, supra note 22, at 13-18.
25 See infra notes 51.
26 See Communications Act of 1934, 47 U.S.C. §151 (2001) (defining “Telecommunications carrier” as “any provider of telecommunications services”); 47 U.S.C. §153(44) (2001). “Telecommunications service” is defined as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.” 47 U.S.C. §153(46). “Telecommunications” is defined as “the transmis-

B. Access Issues Affecting Economic Rights

The legal principles affecting economic rights in Table 1 address evolving concepts of economic coercion for which government intervention has been deemed necessary for the purpose of providing access to an essential service or facility. The legal principles that relate to economic coercion of customers (as end users) are based on: the law of common carriers and public utilities; the codification of common carrier regulation of railroads in the Interstate Commerce Act (“ICA”) of 1887; and the state’s power to regulate “businesses affected with a public interest.” The legal principles related to economic coercion affecting competitors is the essential facilities doctrine, a doctrine that has evolved from judicial interpretation of the Sherman Act in 1890 and related cases addressing refusals to deal. Furthermore, a common thread running throughout the evolution of these legal principles is the changing form and growing importance of corporations.

B.1. Common Carrier and Public Utility Regulation

Common carriers and public utilities are subject to a greater degree of regulation than general businesses. Furthermore, as a subset of “businesses affected with a public interest,” as discussed in Subsection B.4, greater regulatory burdens are permissible under the United States Constitution. Under current law, telecommunications service providers are both considered both common
carriers and public utilities.\textsuperscript{29} Thus, if providing broadband access is one in the same as providing telecommunications services, then the legal obligations imposed on common carriers and public utilities become involved.\textsuperscript{30}

Unique obligations have been imposed on common carriers since the Middle Ages and are based on the English common law of "public callings."\textsuperscript{31} These obligations evolved in medieval England to address numerous situations of economic coercion, exploitation and the illegal wielding of bargaining power. These obligations are: to charge reasonable prices ("just price");\textsuperscript{32} to serve without discrimination; and to exercise their calling with adequate care, skill and honesty.\textsuperscript{33}

The same obligations were subsequently applied to a new category of entities, public utilities,\textsuperscript{34} which developed during the nineteenth century in the United States. A public utility is a private corporation that provides a service of public importance, or necessity, under a government grant of privilege. This grant of privilege imposes an affirmative duty to render service demanded by any member of the public.\textsuperscript{35} Public utilities were initially created by local government grants of franchises, which were subsequently preempted by the codification of public utility law in state statutes.\textsuperscript{36} It should be noted, however, that a public utility's obligations tend to be greater than those of a common carrier because a public utility typically bears the affirmative duty to extend facilities to serve an entire community, and is also constrained in its ability to discontinue the provision of service.\textsuperscript{37}

### B.2. Interstate Regulation of Common Carriers

As previously discussed, throughout the nineteenth century, the states enacted general incorporation statutes. The ease with which corporations could then be created provided the means to accumulate vast levels of capital for industrial enterprises and to conduct interstate business on an unprecedented scale.\textsuperscript{38} During the latter part economic transactions that involved coercion, exploitation and misuse of bargaining power, John W. Baldwin, \textit{The Medieval Theories of the Just Price}, in \textit{49 Transactions of the American Philosophical Society} 4, 68-80 (1959) (discussing just price doctrine). See also Odd Langholm, \textit{Economics in the Medieval Schools} 221-35 (1992) (discussing just price doctrine).

\textsuperscript{29} See Barbara A. Cherry, \textit{The Crisis in Telecommunications Carrier Liability} 50-57 (1999) (hereinafter Cherry).

\textsuperscript{30} Whether the provision of broadband access should be considered the provision of a telecommunications service is highly debatable. See infra Section V (discussing some of the ramifications of the inclusion or exclusion of broadband access from the definition of telecommunications service).

\textsuperscript{31} Public callings originated with passage of the Statute of Laborers in 1349 to prevent workers from extracting unreasonable wages due to large population loss from the Black Death. Over time, any service performed for the public interest, or necessity, under a government grant of privilege is called a public calling. Examples include common carriers, innkeepers, blacksmiths and surgeons. With the decline of feudalism, most businesses came to be governed by the evolving common law of contracts. However, the tort obligations of public callings remained for a few classes of businesses, including common carriers. Notwithstanding the declining scope of businesses to which the obligations of public callings still applied, they were also imposed on a new class of businesses-public utilities-that evolved during the nineteenth century. See Martin G. Glaeser, \textit{Public Utilities in American Capitalism} 197-99 (1957) (discussing the development of public callings) [hereinafter Glaeser]; see generally Edward A. Adler, \textit{Business Jurisprudence}, 28 Harv. L. Rev. 135 (1915) (discussing the development of public callings).

\textsuperscript{32} A significant component of the obligations of public callings is the doctrine of the "just price." Originating in medieval England, the just price doctrine required equivalence of value in exchange so that the price of a good or service reflects its value for the community in general, and is not excessively high or low due to unique circumstances of specific buyers or sellers. Its purpose was to enforce justice in

\textsuperscript{33} See generally Hurst, supra note 22, at 13-55 (discussing the development of the corporate form in the United States). The rise of "big business" began in the 1880s, "that is, the development of a new economic institution, the large enter-
of the nineteenth century, common law remedies did not adequately address the economic abuses of large corporations, and corporations' interstate activities were beyond the jurisdictional reach of the states' police powers. In response, a special United States Senate committee, popularly known as the Cullom Committee, was created to review these economic abuses associated with large corporations, particularly with regard to the railroad industry. In 1886, the committee issued its report, the Cullom Report, which presents a classical statement of need for federal economic regulation of the railroad.

The Cullom Report stated, in pertinent part:

[N]o general question of governmental policy occupies at this time so prominent a place in the thoughts of the people as that of controlling the steady growth and extending influence of corporate power and of regulating its relations to the public; and as no corporations are more conspicuously before the public eye, and as there are none whose operations so directly affect every citizen in the daily pursuit of his business or avocation as the corporations engaged in transportation, they naturally receive the most consideration in this connection.

In recognition of the railroad's importance to commerce in the United States, and its historical grant of privileges to perform a public function, the Cullom Report highlighted the unique relationship that railroads have to the public, as they—when compared to general businesses—bear greater obligations. To address the economic abuses in the railroad industry—particularly discrimination in rates among customers, speculative building and irresponsible financial manipulation—it recommended a Federal statutory scheme of regulation. The next year, the Interstate Commerce Act ("ICA") was enacted based on the Cullom Report, creating the first federal expert agency to implement an interstate regulatory statute.

B.3. Sherman Act and Refusals to Deal

As stated in the Cullom Report, the economic abuses of large corporations were not confined to railroads. However, it was easier politically to first enact a federal statute regulating only the railroad industry. The ICA was soon followed by enactment of the Sherman Antitrust Act in 1890. The Sherman Act was the first federal antitrust statute prohibiting certain anticompetitive and monopolistic practices by all general businesses.

The Sherman Act was enacted to regulate a broader concept of economic coercion, which had been developing under neoclassical economics. This new concept was broader than what had been recognized under the common law. For example, neoclassical economists expanded the concept of economic coercion "to encompass the collective refusal to deal, and . . . the loss of market opportunities that competition would have afforded." Although the economic abuses underlying passage of the Sherman Act were primarily in response to concerns for consumers as end users, plaintiffs have also pursued claims in their role as competitors. More specifically, cases had been brought involving collective, or unilateral refusals to deal with competitors. Assertion of such

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41 See generally id. at 16-87 (discussing the origins of the Interstate Commerce Act and extracts from the Cullom Report).
42 Id. at 33.
43 Id. at 31-87.
45 See GUIDO CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES 5-7, 31-58 (1982). The enactment of the ICA is part of a larger legal trend towards statutorification that started in the nineteenth century to address the inadequacies of common law remedies. See 1 PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW §§101-03 (2d ed. 2000) [hereinafter AREEDA & HOVENKAMP Vol. 1].
46 Id. at §§104-a-b.
48 Id.
49 For cases involving unilateral refusals to deal, see, e.g.,
claims prior to the Sherman Act were uncommon, as tort common law imposed liability for refusals to deal only on “businesses affected with a public interest,” which included common carriers and public utilities. Over time, however, the courts have interpreted the Sherman Act to prohibit refusals to deal for a broader set of businesses and circumstances. This trend has also led to the development of the essential facilities doctrine. The primary use of this doctrine is to require a monopolist to share with competitors at a reasonable price, an input that is deemed essential for viable competition in a related market. A commonality these refusal to deal cases is the availability of a legal remedy requiring access by a competitor to some service or facility deemed essential for viable competition.

United States v. Griffith, 334 U.S. 100 (1948) (holding that the defendant violated the Sherman Antitrust Act and enjoining the dominant owner of movie theaters (defendant) from interfering in the contract terms between movie producers and competing theaters in other towns); Otter Tail Power Co. v. United States, 410 U.S. 366 (1973) (holding that the defendant was subject to antitrust regulation and ordering the defendant-monopolist of electric transmission lines to wheel power to municipalities that operated their own retail distribution facilities). For cases involving collective refusals to deal, see, e.g., United States v. Terminal R.R. Ass’n of St. Louis, 224 U.S. 383 (1912) (holding that defendant was engaged in illegal restraint and an attempted monopoly, and therefore the court required members of the railroad association to admit their railroad competitors to their consortium to enable access to the only existing railway bridge); Associated Press v. United States, 326 U.S. 1 (1945) (holding defendant in violation of the Sherman Antitrust Act and requiring the Associated Press to admit non-member newspapers on terms that did not discriminate against newspapers that competed with existing AP members). For a discussion of cases regarding refusals to deal, see generally 3A PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW §770-72 (2d ed. 2002) [hereinafter AREEDA & HOVENKAMP VOL. 3A].

The development of this doctrine is based on the following criteria: (1) control of the essential facility by a monopolist; (2) a competitor’s inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility. Id.

An important function of the courts is to determine when government regulation exceeds constitutional limits. In the nineteenth century, important cases were decided to delineate the permissible scope of State regulation under the United States Constitution. Of particular importance here is the concept of “businesses affected with a public interest,” which developed under the English common law, and is recognized by the United States Supreme Court in Munn v. Illinois. Under this concept, the permissible scope of State regulation under its police power is greater for businesses affected with a public interest than for general businesses. Businesses affected with a public interest are those for which it was deemed that the dependence of the customer required protection; and those businesses included common carriers and public utilities. Key attributes of these businesses are: (1) that the service is of

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special public importance or necessity; (2) that circumstances or characteristics of supply are such that the service is not available in a competitive market; and (3) that the activity has current and/or future widespread effects on the community at large. 61

In *Nebbia v. New York*,62 the Supreme Court effectively broadened the scope of permissible regulation under the police power for any business, so that the need to prove that a business did or did not fall into the historical classes of businesses affected with a public interest fell into disuse.63 However, the traditional definition of businesses affected with a public interest is not irrelevant. This is because, even though the Court found that the police power was coextensive with regulation in the public interest, it still maintained that permissible regulation as to a given business depends on the specific circumstances in each case.64 *Nebbia v. New York* is significant in that the court held that even though a wider range of businesses can now be subject to some government regulation, what is deemed a reasonable assertion of that governmental authority is still likely to be greater for a business in which the circumstances are similar to those of traditional justifications for regulating “businesses affected with a public interest.”

C. Access Issues Affecting Welfare Rights

The legal principles affecting welfare rights in

petition is considered impracticable. Such situations might arise from the grant of some special governmental privilege, even a legal monopoly, such as to common carriers or public utilities. However it also includes situations that arise without government involvement, such as firms being strategically situated in terms of location (grain elevators) or time (innkeepers with respect to travelers). See, e.g., *Munn*, 94 U.S. at 126, 131-32.

61 GLAESER, supra note 31, at 206-19. Significantly, the second attribute includes numerous situations in which competition is considered impracticable. Such situations might arise from the grant of some special governmental privilege, even a legal monopoly, such as to common carriers or public utilities. However it also includes situations that arise without government involvement, such as firms being strategically situated in terms of location (grain elevators) or time (innkeepers with respect to travelers). See, e.g., *Munn*, 94 U.S. at 126, 131-32.


63 Id. at 536. “It is clear that there is no closed class or category of businesses affected with a public interest, and the function of courts in the application of the Fifth and Fourteenth Amendments is to determine in each case whether circumstances vindicate the challenged regulation as a reasonable exertion of governmental authority or condemn it as arbitrary or discriminatory.” Id.

64 Id. at 531, 536-38. The Court proceeded to examine the specific circumstances of the case concerning the constitutionality of price regulation of retail milk sales in New York in a manner reflective of the traditional attributes of businesses affected with a public interest. The Court found that, even though the dairy industry was clearly not a public utility (having not received any public grant or franchise) nor a monopoly, the importance of the product, maladjustments of the market, and widespread impact on the community-conclusions of state legislative investigation-were compelling reasons for upholding the state statute. Id.


66 Id.


68 See THE POLITICS OF SOCIAL POLICY IN THE UNITED STATES 5-9 (Margaret Weir et al. eds., 1988).

69 See PIVEN & CLOWARD, supra note 65, at 248-84.

70 Id. at 248.
human needs, such as food, housing, transportation and health care.

However, government has also intervened to ensure access by all citizens—rather than just targeting low income groups—to other essential services, such as education. Modern universal service policy with regard to telecommunications services has characteristics of both. It requires nondiscriminatory, reasonable rates for all customers, as well as funding mechanisms to subsidize access for targeted groups. As previously discussed, the requirements of nondiscrimination and just and reasonable rates for all customers are based on common carrier and public utility laws. Subsidy mechanisms for targeted groups began with implicit subsidies in the regulated price structure, and explicit funding mechanisms for the benefit of certain targeted groups were recently codified by Congress in Section 254 of the Telecommunications Act of 1996.

D. Access Issues Affecting Free Speech Rights

The Free Speech Clause of the United States Constitution provides that "Congress shall make no law . . . abridging the freedom of speech." The First Amendment limits actions of the federal government; however, it has also been held applicable to the states through the Due Process Clause of the Fourteenth Amendment.

Freedom of speech not only protects the interests of individuals, but it also sustains a constitutional democracy. The courts recognize this dual role when addressing constitutional challenges to governmentally imposed access mandates under the freedom of speech clause of the First Amendment. First, the courts acknowledge that government intervention may be permissible in order to promote free speech given the essential role that free speech plays in maintaining the legitimacy of the government itself. In this regard, "it has long been a basic tenet of national communications policy that "the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public." This is often referred to as the viewpoint diversity principle, and its focus is on the benefits to the public. Second, in determining whether a given access mandate is constitutional, courts review the impact on the free speech rights of the party bearing the obligation to provide access to other speakers. As discussed more fully in Section VI.D, the jurisprudence for determining when the government’s interest justifies limiting a party’s free speech rights is very complex.

In the past, the viewpoint diversity has justified government action mandating that owners of channels of mass communication open access to their facilities to certain speakers. Mandates to provide access to certain speakers have been upheld in numerous situations such as the equal time rules for political candidates and the now repealed fairness doctrine imposed on broadcasters; the must-carry requirements imposed on

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72 See Martin L. Muehler, Jr., Universal Service Policy 4-10 (1997) (explaining universal service policy as it developed in the second half of the twentieth century as distinguished from its early meaning as interconnection policy in the early twentieth century).
73 See generally Cherry & Wildman 1999, supra note 12 (discussing service mechanisms and policies).
75 See supra notes 83, 84 and 87.
78 The First Amendment means . . . that the only constitutional way our Government can preserve itself is to leave its people the fullest possible freedom to praise, criticize or discuss, as they see fit, all governmental policies and to suggest, if they desire, that even its most fundamental postulates are bad and should be changed; 'Therein lies the security of the Republic, the very foundation of constitutional government.' Id.
81 In this context, the public's status is that of an audience.
82 See infra notes 83, 84 and 87.
84 See id. at 469-99 (discussing the convoluted history of the fairness doctrine).
cable companies; and the carry one, carry all rule imposed on satellite television carriers.

At this juncture, it is important to recognize the differences in the free speech rights of electronic mass media and telecommunications carriers. As previously discussed in Section IV.B.1, telecommunications carriers are considered both common carriers and public utilities and, as such, are required to provide nondiscriminatory access to all customers. Given the two-way (and essentially one-on-one) interactive nature of telecommunications service, in essence, all subscribers are considered speakers. The subscribers—not the carriers—control the content of the information transmitted over the facilities. In this regard, telecommunications carriers are not speakers. On the other hand, electronic mass media consist primarily of one-way transmissions from a speaker to many viewers. The owner of the channel of communication controls the content that is transmitted over the facilities, and the viewers are passive members of an audience. Under these circumstances, providers of electronic mass media—but not telecommunications carriers—are considered speakers entitled to some First Amendment protection. With the convergence of technology platforms, the courts will have to revisit the First Amendment distinctions in speaker status between telecommunications carriers and electronic mass media providers.

V. APPLYING “ESSENTIALITY OF ACCESS” TO BROADBAND ACCESS ISSUES

This section applies “essentiality of access” as an organizing principle for analyzing a sampling of broadband access issues. For each issue, assume that the relevant aspect of broadband access is considered an essential service or facility, and the circumstances are such that the underlying purpose or problem must be addressed through government intervention. Given this assumption, the purposes of this section are to identify for each broadband access issue: (1) what legal principles should be applied based on the mapping of access issues-to-legal principles described in Section IV and summarized in Table 1; (2) what policy actions have taken place or are pending; and (3) the consistencies or inconsistencies between (1) and (2). Section VI extends the analysis in Section V by incorporating the distinction between individuals’ and corporations’ constitutional rights and the implications for addressing broadband access issues.

The array of broadband access issues presented here was selected so that each type of access problem-to-legal principle identified in Section IV...
would arguably be applicable to a broadband issue. In addition, the broadband access issues are defined with reference to the layered model of the Internet as described by Werbach. The layered model is a useful analytical tool for discussing the relationship of the technological realities of broadband to the regulatory principles applied to it.

Table 2 provides an overview of the “essentiality of access” analysis discussed in this section. The broadband access issues are described in terms of the essential service or facility for which access is being sought and for whom. For each broadband issue, the table then describes: the nature of the relationship between the intended access recipient and the access provider; the nature of the underlying purpose or problem to be addressed; the applicable legal principle from Table 1; and recent or pending policy actions.

A. Access for Individual End Users

The first broadband issue described in Table 2 is to ensure that all individual end user customers have access to the physical layer of the broadband network. Without access to fundamental transmission facilities, end users have no access to broadband services. For this issue, the underlying problem that may impede such access is economic coercion arising from an inequality of bargaining power between the broadband provider of the physical layer and the end users. This unequal bargaining power could manifest itself in practices such as provider refusals to deal with end users, excessively high prices, unreasonable terms and conditions and unreasonable discrimination among otherwise similarly situated end users. This is the same problem that led to the imposition of special obligations on “businesses affected with a public interest,” particularly common carriers and public utilities, as described in Sections IV.B.1 and B.4. Referring to Table 1, such problems have traditionally been addressed by imposing a legal duty on the provider of the essential service facility so that the government could provide non-discriminatory access at reasonable rates and with an adequate standard of care. This legal principle has its origins in the doctrine of “public callings” from medieval England.

Recently, the FCC has adopted new policies that would affect the likelihood of securing broadband access for all individual end users. First, in its Cable Modem Access Order, the FCC defined cable modem service as an information service under the Telecommunications Act of 1996. Furthermore, the FCC declared that cable modem service is an integrated offering with no separable telecommunications component. As a result, provision of cable modem service involves the provision of no service subject to common carrier regulation. This means that individual end users have no common carrier access rights to the physical layer of the cable companies’ networks, which are used for Internet access. The FCC’s ruling that cable modem service is an information service with no separable telecommunications component is currently on appeal.

Recognizing that the Cable Modem decision will pose asymmetric regulatory obligations between cable modem service providers and wire-
Table 2: Applying “Essentiality of Access” to Broadband Access Issues

<table>
<thead>
<tr>
<th>Broadband Access Issue</th>
<th>Relationship of Access Recipient to Access Provider</th>
<th>Underlying Purpose or Problem</th>
<th>Applicable “Essentiality of Access” Legal Principles</th>
<th>Policy Actions to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enduser access to physical infrastructure of broadband network.</td>
<td>Individual enduser customers.</td>
<td>Economic coercion arising from inequality of bargaining power between provider and customer as to an essential service.</td>
<td>Non-discriminatory access at reasonable rates and with adequate standard of care (i.e. “business affected with a public interest”, common carrier, or public utility regulation).</td>
<td>Cable modem service is an integrated information service with no common carriage regulation. The same may apply to wireline broadband Internet access providers.</td>
</tr>
<tr>
<td>Physical and/or logical infrastructures of broadband network need to be ubiquitously available throughout the community.</td>
<td>Communities of enduser customers.</td>
<td>Potential unavailability of essential service in portions of community.</td>
<td>Duty to serve (e.g. build-out requirement; exit barrier); perhaps also some form of subsidization or government privilege (e.g. franchise) to address financial burden of requirements.</td>
<td>For narrowband service, telecommunications carriers have build out requirements and eligible carriers must serve the entire service area. Cable companies have build out requirements for cable service in franchise area.</td>
</tr>
<tr>
<td>Access to the physical layer, through interconnection at the logical layer, for ISP’s, who are competitors at the logical layer.</td>
<td>Competitors.</td>
<td>Viewpoint diversity principle and provider’s refusal to provide access to its essential facility with competitors in a related market.</td>
<td>Mandatory access to address refusal to deal (e.g. essential facilities doctrine).</td>
<td>Cable modem service providers not required to provide access to competitive ISP’s. Wireline Internet access providers may not have to unbundle transmission component for sale under tariff.</td>
</tr>
<tr>
<td>Access to physical, and possibly logical, infrastructure of broadband service within definition of universal service.</td>
<td>Targeted enduser customers.</td>
<td>Inequality among individuals to access essential services due to specific unaffordability factors (e.g. indigence or high cost of serving customer).</td>
<td>Some form of subsidization for benefit of needy customers; perhaps also coupled with some form of duty to serve.</td>
<td>Internet access is within definition of universal service for eligible schools and libraries and for rural health care providers. Greater discounts are given for economically disadvantaged and rural schools and libraries.</td>
</tr>
<tr>
<td>Interconnection among broadband networks.</td>
<td>Speakers as competitors (for benefit of audience).</td>
<td>Viewpoint diversity principle coupled with potential refusals to deal.</td>
<td>Refusals to deal with speakers prohibited.</td>
<td>Interconnection among telecommunications carriers; must carry requirements on cable companies; carry one, carry all rule on satellite television carriers.</td>
</tr>
</tbody>
</table>

line broadband Internet access providers (DSL providers), the FCC has issued a Wireline Broadband Internet Access Notice of Proposed Rulemaking (“NPRM”). In this NPRM, the FCC tentatively concludes that wireline broadband Internet service to end users is also an integrated information service with no offering of a separa-

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ble telecommunications service.\textsuperscript{95} If this tentative conclusion is adopted, common carrier obligations would not apply to the physical layer of wireline broadband providers, even though wireline providers would still be common carriers as their narrowband physical network infrastructures.

By attempting to provide intermodal regulatory parity in this manner, the FCC would create \textit{intragmodal asymmetric regulation} between the physical layers of narrowband and broadband services. This is because a wireline carrier provides both narrowband and broadband services over the same physical lines (at least for residential customers). The fundamental question is whether such intramodal asymmetric regulation is sustainable. If not, then the entire common carrier regulatory regime for telecommunications services could erode.

### B. Access for Communities of Individual End users

The second broadband issue described in Table 2 is ensuring that all communities have access to the physical infrastructure of the broadband networks. While the first issue is concerned with access to \textit{existing} essential services or facilities, the second assumes that such services or facilities \textit{may not yet exist} in some communities, or portions thereof. For the latter issues, the underlying problem is that providers may refuse to invest in and serve certain areas. Reasons for refusing to serve may include business plans based on targeting higher profit areas, or costs of providing service that exceed the revenue that would reasonably be expected to be generated. This is similar to the issue and underlying problem that led to the use of franchises and public utility regulation to impose an affirmative duty to serve, as discussed in Section IV.B.1. Franchises (granting an exclusive privilege to serve) customarily imposed requirements on the public utility to build out and serve the entire franchise area—that is, imposed an affirmative duty to serve—as well as placed limitations on the utility’s ability to discontinue provision of service.\textsuperscript{96}

For telecommunications carriers, similar requirements have been codified in state statutes, and/or enforced through the imposition of carrier of last resort obligations\textsuperscript{97} with regard to the provision of narrowband services. Similar build-out requirements have been included in local governments’ franchise agreements with cable companies as to the provision of cable service. However, regulation of telecommunications carriers has also included some form of subsidization scheme either through the rate structure or through funding mechanisms, to help carriers remain financially viable while providing essentially ubiquitous networks.\textsuperscript{98} Such subsidization has been used to implement universal service policy, which has affected welfare rights, as discussed in Section IV.C.

Section 157 of the Telecommunications Act of 1996 directs the FCC and state commissions to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”\textsuperscript{99} Thus far, no provider of broadband services has been required to build out physical (or logical) infrastructure to serve communities. As previously described, the existing affirmative duties to serve apply to narrowband and cable services, but not to broadband services. To impose an affirmative obligation to build out broadband facilities would be an expansion of, but not inconsistent with, the current regulatory regimes for telecommunications carriers and cable companies.

### C. Access for Competitors

The third broadband issue described in Table 2 is ensuring that competitive Internet Service Providers (ISPs) have access to the physical infrastructure of a broadband provider through interconnection at the logical layer. The primary purpose underlying a policy for such access is the government’s interest in viewpoint diversity. More specifically, viewpoint diversity at the application and content layers can be achieved through diversity at the logical layer, because choice and quality of both applications and content vary among ISPs.

\begin{itemize}
    \item \textsuperscript{95} Id. at 3029-24, paras. 17-26.
    \item \textsuperscript{96} See supra note 20; Cherry, supra note 29, at 50-57.
    \item \textsuperscript{97} See Unilateral and Bilateral Rules, supra note 12, at 39-58.
    \item Carrier of last resort obligations were historically imposed by the states on incumbent monopoly providers, for both local exchange and toll services. Id. at 42. The continuing enforcement of such obligations in a market open to competition is an untested legal question.
    \item \textsuperscript{98} See id. at 39-58.
    \item \textsuperscript{99} 47 U.S.C. §157.
\end{itemize}
For refusal to deal with competitors, the applicable legal principle from Table 1 is to prohibit the refusal to deal. In particular, if the provider's facilities are considered essential to viable competition in the related market, the essential facilities doctrine would apply. As part of the Cable Modem Access Order discussed in Section V.A., the FCC has refused to compel cable modem service providers—even if they also provide local exchange service over the same facilities—to provide access to its physical network to competitive ISPs. As previously discussed, in the Wireline Broadband Internet Access NPRM, the FCC also tentatively concludes that wireline broadband Internet access is an integrated information service and is not required to provide the physical layer on a common carrier basis to end users. As for access by competitive ISPs, the FCC seeks comments as to whether the Bell Operating Companies should be relieved of the Computer Inquiry requirements to unbundleneck the transmission component for sale under tariff.

If access to broadband should later be considered essential, retention of the Cable Modem Access Order could adversely impact individuals as citizens by diminishing their access to diverse sources of information and viewpoints. In addition, to the extent that individuals' access to ISPs and use of the Internet is considered that of a speaker, then individuals' free speech rights as speakers would also be adversely affected. First Amendment rights would be eroded further should the FCC decide to relieve the Bell Operating Companies of the obligation to unbundle their transmission component of broadband in the Wireline Broadband Internet Access NPRM.

D. Broadband as Universal Service

The fourth broadband issue described in Table 2 is expanding the definition of universal service under Section 254 of the Telecommunications Act of 1996 to include access to broadband service. Again, for purposes of discussion here, this issue assumes that broadband is considered an essential service. The problem is that there is inequality among individuals' access to broadband service due to affordability factors. For example, some residents may be low income or others may not be able to afford prices in high cost areas. This is the same problem that has been addressed by legal principles affecting welfare rights discussed in Section IV.C. From Table 1, the legal principles suggested are: providing some funding directly to the disadvantaged individuals to obtain the service or subsidizing the essential service on behalf of the disadvantaged individuals.

At this time, FCC rules include Internet access within the definition of universal service for eligible schools and libraries, as well as for rural health care providers without toll-free access to the Internet. As a result, these eligible entities receive Internet access at a discount, and, in turn, the eligible carrier providing the access receives federal universal service support to compensate for the relevant discount. The discounts for eligible schools and libraries are significantly greater for those that are economically disadvantaged or in rural areas. Furthermore, in Section 214(e) of the Telecommunications Act of 1996, eligible carriers are required to provide universal service throughout the service area. In other words, there is also a duty to serve in order to ensure availability of Internet access service.

Therefore, for eligible schools, libraries and rural health care providers, the current universal service mechanism is consistent with the existing legal principles that have been applied to provide

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100 One could argue that the purpose of the third broadband issue discussed here is one of antitrust under the Sherman Act. However, this concern is subsumed by the viewpoint diversity principle. Viewpoint diversity provides an additional, distinct government interest from the antitrust concern that may make the need for government intervention more compelling. In this regard, the reader should note that the first broadband issue in Table 2 could also list viewpoint diversity as an added purpose. However, for purposes of discussion, it is preferable to address the impact solely on the economic rights as a starting point.

101 See Cable Modem Access Order, supra note 90, at paras. 33 and 38.
disadvantaged individuals with access to essential services. The eligible entities receive discounted rates, with higher discounts for disadvantaged entities. However, the size of the existing funding obligations of the federal universal service support mechanisms, which for eligible schools and libraries and rural health care providers is over two billion dollars per year, is of major concern.\(^{108}\)

Federal universal service support for disadvantaged individuals (low income households, high cost areas) does exist, but only for access to the narrowband physical infrastructure. If the definition of universal service is modified to include broadband, existing federal universal service support mechanisms could also be used to support access to broadband. However, expanding the definition of universal service to include broadband for disadvantaged individuals would only magnify the already large funding burden imposed on the telecommunications industry. To preserve the federal universal support mechanisms for current recipients, much less enable the FCC to also access contributions based on the intrastate revenues of telecommunications carriers, or funding from the federal government’s general tax revenues.\(^{109}\)

E. Access by Speaker as End User or Competitor

The interconnection among broadband networks in order to ensure that the Internet continues to function as a network of networks is the primary interconnection problem from the viewpoint of viewpoint diversity. These are one-way interconnection problems primarily at the physical and logical layers due to refusals to deal among the network providers. Such refusals to deal among competitors pose obstacles similar to those discussed for competitive ISPs.

Both the third and fifth broadband issues are similar, but they differ in an important respect. The third broadband issue addresses access by ISPs in their economic relationship as competitive ISPs. However, the fifth broadband issue addresses access by competitors who may also be speakers under the First Amendment.\(^{110}\) Therefore, under the fifth broadband issue, the free speech rights of competitors may also be adversely affected.

As discussed in Section IV, where not inconsistent with the constitutional rights of the provider, the government may require providers of electronic mass media to open access to speakers. This is true even if the speaker is a mass media competitor using a different technology platform. Some requirements have already been imposed on cable companies and satellite television carriers to carry local broadcasting stations in support of viewpoint diversity. These are one-way interconnection requirements from local broadcasting stations to cable and satellite systems. Although these requirements do not apply with regard to the provision of broadband, they do provide a precedent for imposing interconnection requirements among competing technology platforms that also have speaker status.\(^{111}\) Evaluation of the government’s interest in imposing access to competitors as speakers will, of course, have to be balanced so, then the problems raised under the third and fifth broadband issues are similar. However, for purposes of analysis here, it is instructive to contrast situations where competitors are non-speakers with those where competitors are speakers. See supra note 104.

\(^{108}\) In re Federal-State Joint Board on Universal Service, Further Notice of Proposed Rulemaking and Report and Order, 67 Fed. Reg. 11998 (2002) (to be codified at 47 C.F.R. pt. 54 (2002)) (considering modifications to the system under which contributions are made by telecommunications carriers—based on assessments against interstate revenues—to fund the federal universal service support mechanisms in light of the existing funding burden). Concerns as to the viability of the existing funding burden are driven, in large part, by declining interstate long distance revenues and the FCC’s lack of authority to assess contributions based on carriers’ intrastate revenues. Texas Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 448 (5th Cir. 1999).

\(^{109}\) See supra note 94; Unilateral and Bilateral Rules, supra note 12, at 39-58.

\(^{110}\) Some might argue that ISPs may also be speakers. If
anced against the free speech rights of the access provider.

F. Summary of Effects on Broadband Access Issues

As the discussion throughout Section V shows, current regulation and likely outcomes of pending proceedings could pose obstacles for achieving the five types of access issues described in Table 2 should broadband be considered an essential service of facility. These obstacles could create adverse effects for the intended access recipients. Table 3 provides an overview of these obstacles based on the analyses of the five broadband access issues conducted in this section. In the first column, each broadband access issue is described as it appears in Table 2. For each broadband access issue, the table then describes: the nature of the current, or pending consideration of, relevant regulation; the likely effect of that regulation, if unchanged, on achieving the type of access at issue; and the likely adverse effects on the intended access recipients in terms of the type of rights affected.

At this juncture, it may be helpful to review the results described in the last two columns. For the first broadband issue, the economic rights of individuals as end users of both narrowband and broadband physical infrastructures may be adversely affected due to intramodal asymmetric regulation of narrowband and broadband infrastructures of wireline (non-cable) providers. For the second issue, the economic rights of communities of individual end users of broadband infrastructure may be similarly diminished.

As for the fourth broadband issue, to the extent that the financial burden of federal universal service support becomes unsustainable, the welfare rights of intended recipients would be adversely affected. Therefore, if the burden is unsustainable under the current definition of universal service, it certainly would not be sustainable upon a broadening of the definition to include broadband service on a wider scale. Furthermore, to the extent that common carrier and public utility regulation for the benefit of the general public (not just disadvantaged individuals or communities) is viewed as an early form of welfare state regula-

tion, welfare rights of individuals and communities under the first two broadband access issues would also be adversely affected.

For both the third and fifth issues, the free speech rights of individuals as citizens of a democracy could be adversely impacted. This is because, as to both issues, government’s failure to require interconnection with competitive ISPs or among broadband networks could undermine its interest in facilitating viewpoint diversity for American citizens. Furthermore, failure to require interconnection could also adversely affect the speech rights of individuals and competitive ISPs in their status as speakers. In this way, as will be discussed in Section VI.D., the free speech rights of broadband network providers as corporations could be permitted to trump those of natural persons as citizens.

VI. CONSTITUTIONAL RIGHTS OF INDIVIDUALS VERSUS CORPORATIONS

If access to broadband is deemed essential, changes in regulation would be required to prevent the adverse effects on intended access recipients summarized in Table 3. If the historical legal principles mandating access to essential services or facilities discussed in Section IV are invoked, possible remedies for each of the five broadband access issues, include: (1) imposing common carrier obligations on all broadband providers of the physical layer; (2) imposing some duty to serve (build-out) obligations on broadband providers, which could vary among communities with the possible inclusion of some financial relief to mitigate the financial burden; (3) compelling broadband providers to provide access to competitive ISPs; (4) changing the method of recovering contributions for the federal universal service support mechanisms, such as including assessment against telecommunications carriers’ intrastate revenues, or having funding come from general tax revenues; and (5) requiring interconnection among broadband networks at whatever layer is necessary.

However, for any suggested remedy that imposes additional burdens on broadband access providers, constitutional challenges will

112 See generally Cherry Telecomm Address, supra note 71.
Table 3: Obstacles to Achieving “Essentiality of Access”
For Broadband Access Issues

<table>
<thead>
<tr>
<th>Broadband Issue</th>
<th>Current or Pending Regulation</th>
<th>Adverse Effect of Current Regulation</th>
<th>Adversely Affected Rights of Access Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enduser access to physical infrastructure of broadband network.</td>
<td>Government may impose intramodal asymmetric regulation of telecommunications carriers’ narrowband and broadband physical layers.</td>
<td>Erosion of common carrier regulation for narrowband physical layer, and potential unavailability of access to broadband physical layer.</td>
<td>Economic (and welfare)* rights of individuals as endusers of narrowband and broadband access.</td>
</tr>
<tr>
<td>2. Physical and/or logical infrastructures of broadband network need to be ubiquitously available throughout the community.</td>
<td>Government imposes no affirmative duty to serve communities, or portions thereof, with broadband physical layer.</td>
<td>Some communities, or portions thereof, may not have access to broadband physical infrastructure.</td>
<td>Economic (and welfare)* rights of communities of individuals as endusers of broadband access.</td>
</tr>
<tr>
<td>3. Access to the physical layer, through interconnection at the logical layer, for ISP’s who are competitors at the logical layer.</td>
<td>Government imposes no obligation on cable modem access providers to provide access to competitive ISP’s. BOC’s may not have to unbundle transmission component of broadband service.</td>
<td>Goal of viewpoint diversity could be undermined.</td>
<td>Free speech rights of individuals as citizens of democracy (reflected in government interest in viewpoint diversity) and possibly also as speakers.</td>
</tr>
<tr>
<td>4. Access to physical, and possibly logical, infrastructure of broadband service within definition of universal service.</td>
<td>Existing funding burden of federal universal service support for Internet access to eligible schools and libraries and rural health care providers is large. Funding burden would increase if support is expanded for broadband services to individuals.</td>
<td>Unsustainability of federal universal service support mechanisms, and therefore unavailability of reasonably priced broadband service.</td>
<td>Welfare rights of intended beneficiaries.</td>
</tr>
<tr>
<td>5. Interconnection among broadband networks.</td>
<td>Government may not impose necessary interconnection requirements among broadband networks.</td>
<td>Goal of viewpoint diversity could be undermined.</td>
<td>Free speech rights of: (a) individuals as citizens of democracy (reflected in government interest in viewpoint diversity) and possibly also as speakers; and (b) competitors as speakers.</td>
</tr>
</tbody>
</table>

* Welfare rights would also be applicable if one considers common carrier and public utility regulation to be an early form of welfare state regulation. See note 72, supra.

emerge. To address the effects on their economic interests, the most likely challenges will be under the Due Process Clause of the Fourteenth Amendment and the Takings Clause of the Fifth Amendment.

Constitutional challenges by broadband access providers will require the courts to weigh the competing interests of broadband providers and access recipients. This will pose difficulties for the courts in conducting the necessary constitutional analyses. Some difficulties will arise from the need to address conflicts in the differing legal regimes among now-competing technology platforms. However, this section discusses difficulties that appear to have been previously unraised in broadband policy debates. More specifically, the constitutional disparate treatment of a regulation among broadband providers. However, the Equal Protection Clause is not discussed here for two reasons. First, the distinction in constitutional rights of natural persons and corporations will most likely arise in disputes between access recipients and access providers, not in disputes among broadband access providers. Second, the same jurisprudence applies for determining corporations’ constitutional rights as “persons” under the Due Process and Equal Protection Clauses of the Fourteenth Amendment. See infra note 120, and accompanying text.

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113 In fact, constitutional challenges are more likely to arise when government responds to changes in communications technology by transitions from monopoly-based to deregulatory policies. See Cherry & Wildman 2000, supra note 12, at 66-93.

114 Challenges may also be brought under the Equal Protection Clause of the Fourteenth Amendment, which provides that no state shall "deny to any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV, §1. Such claims would be based on allegations of un-
utionality of broadband regulation may depend upon the characteristics of the corporate form of broadband providers.

A. No Consistent Theory of Constitutional Rights for Corporations

It is well established that corporations do have constitutional rights but they are not coextensive with those of individuals as natural persons. In some instances, corporations have no constitutional rights whatsoever. For example, a corporation is not a “citizen” protected by the Privileges and Immunities Clause of Article IV, Section 2 or of the Fourteenth Amendment of the United States Constitution, nor is it a “person” with a right against self-incrimination under the Fifth Amendment. Yet, use of the phrase “citizen” or “person” in the United States Constitution is not definitive in determining a corporation’s rights. For example, individual citizens can sue or be sued in their corporate name for purposes of invoking the diversity jurisdiction of the federal courts, and a corporation has been considered a “person” protected by the Due Process and Equal Protection Clauses of the Fourteenth Amendment.

However, the “[United States Supreme] Court has never adopted a single test for applying constitutional rights to corporations, at least in part because it has never agreed upon a single understanding of what a corporation is for constitutional purposes.” In early cases, the Court viewed the corporation as an artificial legal entity with a distinct bundle of rights and obligations. Under this theory, “government’s power to create corporations also implies and assumes pervasive government power to regulate corporations. This, in turn, provides a basis for denigrating the constitutional protection of corporate activities.” In

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116 Paul v. Virginia, 75 U.S. 168 (1868) (holding that “Citizens” under the Privileges and Immunities Clause of Article IV, Section 2 applies only to natural persons; corporations are citizens only for the purpose of determining court jurisdiction).

117 W. Turf Ass’n v. Greenberg, 204 U.S. 359 (1907) (holding that “Citizens” under the Privileges and Immunities Clause of the Fourteenth Amendment does not include corporations).

118 Hale v. Henkel, 201 U.S. 43 (1906) (holding that the Fifth Amendment privilege against self-incrimination is personal to the witness and cannot be invoked by a corporation where the witness is an officer or employee).

119 Bank of the U.S. v. Deveaux, 9 U.S. 61 (1809) (holding that a corporation is not a citizen and cannot sue or be sued in courts of the United States unless the rights of the individual members can be exercised in their corporate name).

120 County of Santa Clara v. S. Pac. R.R. Co., 118 U.S. 394 (1886), is cited as the case that established this interpretation of the Fourteenth Amendment even though no such holding is contained in the Court’s opinion. Dissenting opinions in subsequent cases have illuminated the flaw of this attribution. See Connecticut Gen. Life Ins. Co. v. Johnson, 303 U.S. 77, 85-87 (1938) (Black, J., dissenting) (discussing the Slaughter House cases decided in 1873, in which the Court found that the Fourteenth Amendment was passed following freedom of a race from slavery and applied only to natural persons, and concluding that “the language of the amendment itself does not support the theory that it was passed for the benefit of corporations”); Wheeling Steel Corp. v. Glander, 337 U.S. 562, 576-81 (1949) (Douglas, J., dissenting; Black, J., concurring in the dissent) (asserting that a corporation as a “person” within the meaning of the Equal Protection Clause of the Fourteenth Amendment was not a holding in the opinion in Santa Clara, but merely an assertion by then Chief Justice Waite from the bench during oral argument). Nonetheless, the Santa Clara case is still cited, although improperly so, as having settled the issue that corporations were persons within the meaning of the Fourteenth Amendment. See, e.g., First Nat’l Bank of Boston v. Bellotti, 435 U.S. 765, 780 n.15 (1978); Charles R. O’Kelley, Jr., The Constitutional Rights of Corporations Revisited: Social and Political Expression and the Corporation After First National Bank v. Bellotti, 97 Geo. L.J. 1347, 1355-55 (1979) (stating that the Santa Clara decision is noted for holding that all constitutional guarantees for individuals are applicable to corporations as well).

121 Henning, supra note 115, at 807.

122 Trustees of Dartmouth Coll. v. Woodward, 17 U.S. 518, 636 (1819) (providing the most famous expression of the corporation as an artificial legal entity, which is often referred to as the corporate person theory).

A corporation is an artificial being, invisible, intangible, and existing only in contemplation of law. Being the mere creature of law, it possesses only those properties which the charter of its creation confers upon it, either expressly, or as incidental to its very existence. These are such as are supposed best calculated to effect the object for which it was created. Among the most important are immortality, and, if the expression may be allowed, individuality; properties, by which a perpetual succession of many persons are considered as the same, and may act as a single individual. Id.

123 Ribstein, supra note 115, at 96.
the late nineteenth and early twentieth centuries, the view of incorporation as a privilege granted by the sovereign came into disfavor due to concerns of monopoly and corruption.124 "As access to corporate status became a right of the many [through State general incorporation statutes], the corporation came to be regarded progressively less as a creation of the sovereign and increasingly more as a product of contractual agreement."125 Under this view, the corporation is simply a device for referring to the summary of rights and duties of the private parties who contractually agreed to create it, and therefore should be afforded the same constitutional protections as natural persons.126

The determination of corporate constitutional rights does depend on the theory of the corporation that is used. Yet, the Court has never provided an overall unifying theory of the corporation to explain its holdings.127 Nonetheless, some preliminary conclusions can be made regarding likely constitutional challenges that will be brought by broadband access providers. First, treatment of claims related to takings of private property for public use without just compensation will be independent of the corporate form. Second, policy makers’ views of necessary regulation may depend on the unique attributes of the corporate form, and the constitutionality of such regulation under the Due Process Clause of the Fourteenth Amendment will depend upon the characteristics of the affected business. Third, addressing competing free speech rights between corporate broadband providers and natural persons will likely be the most contested area. There is precedent for restricting free speech rights of corporations to a greater extent than for natural persons.128 However, the extent to which greater restrictions can be placed on media-related corpora-

tions is unclear. Addressing conflicts in free speech interests among broadband providers and natural persons (as the intended access recipients of broadband policies) will likely be the most compelling and complex challenge for policy makers and the courts.

B. Takings of Private Property: Constitutional Rights Independent of Corporate Form

One of the most fundamental limits on actions by the federal and state governments is that government may not take private property for public use without providing just compensation. This prohibition applies to the federal government under the Takings Clause of the Fifth Amendment of the United States Constitution,129 and to the state governments under the Due Process Clause of the Fourteenth Amendment.130 This prohibition protects the owners of private property, regardless of the form by which the owners may be organized. Valid takings claims arise not only when government exercises its eminent domain power to take real property, but also when exercise of its regulatory powers is considered confiscatory. Classic examples of the latter are public utility cases in which the financial viability of the utility is threatened by requirements of state and/or federal regulatory requirements.131 More recent examples are cases regarding physical collocation requirements imposed on incumbent local exchange companies.132

The imposition of historical legal principles for mandating access to essential services or facilities discussed in Section IV to the second (access for communities of individual end users), third (access for competitors) and fifth (access by speaker as end user or competitor) broadband issues discussed in Section V could generate takings claims

124 Constitutional Rights of the Corporate Person, supra note 115, at 1647. This assertion refers to some of the problems that resulted in the passage of the Interstate Commerce Act and the Sherman Act, as discussed supra Sections IV.B.2 and B.3.

125 Constitutional Rights of the Corporate Person, supra note 115, at 1647.

126 Id. at 1647-48. See also Ribstein, supra note 115, at 96.

127 See supra note 115. In each of these articles, the author offers his own theory or model for viewing the corporation in the twentieth century.

128 See Ribstein, supra note 115, at 124-38 (discussing the justifications for restricting speech more so for corporations than for natural persons).

129 The Takings Clause provides in relevant part: "nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V. See also Cherry & Wildman 2000, supra note 12, at 69-74 (discussing the applicability of the Takings Clause to communications policies).


132 See Bell Atl. Tel. Cos. v. FCC, 24 F.3d 1441, 1447 (D.C. Cir. 1994) (finding the FCC order of physical collocation to be a physical taking of property under the Fifth Amendment); GTE N.W. Inc. v. Pub. Util. Comm'n of Oregon, 900 P.2d 495, 506 (Or. 1995) (holding that the state commission's order of physical collocation constituted a taking).
under certain circumstances. For example, imposition of an affirmative duty to serve could be confiscatory if the cost of providing broadband physical infrastructure far exceeds the price that customers could reasonably pay.\footnote{138} A requirement to provide access to facilities to competitors or to interconnect with other broadband providers could be confiscatory if reasonable compensation is not required to be paid to cover relevant costs. Failure to provide for compensation was a main defect of the physical collocation cases.\footnote{134} Consideration of confiscation claims under such circumstances would not be a function of whether or not the affected broadband provider was a corporation.

C. Due Process Affecting Private Property Rights: Policy Rationale Affected by Corporate Form

Aside from takings claims, a corporation’s property interests are further protected by the Due Process Clause of the Fourteenth Amendment, which provides that no State shall “deprive any person of life, liberty, or property, without due process of law.”\footnote{115} Economic regulation under a State’s police power must be consistent with due process.

As discussed in Sections IV.B.2 and B.3, Congress passed the Interstate Commerce Act and the Sherman Act to expressly address economic abuses that it attributed to the development of the modern corporation. Historically, the corporate form has been relevant to legislators’ views of appropriate economic regulation.

Furthermore, the scope of permissible economic regulation for a given business depends on the specific circumstances in each case. There is a well-established line of cases that upholds a natural, not artificial, persons. \textit{W. Turf Ass’n v Greenburg}, 204 U.S. 359, 363 (1907).

\footnote{138} Takings claims in this context would be similar to those that have been raised at times by public utilities. See Cherry & Wildman 2000, supra note 12.
\footnote{134} See id. at 132 and Cherry & Wildman 2000, supra note 12, at 102.
\footnote{115} U.S. Const. amend. XIV, §1. However, the applicability of the Due Process and Equal Protection Clauses of the Fourteenth Amendment to the property interests of corporations is not without controversy. See THOM HARTMANN, Unequal Protection: The Rise of Corporate Dominance and the Theft of Human Rights (2002). In any event, protection of liberty under the Due Process Clause applies only to natural, not artificial, persons. W. Turf Ass’n v Greenburg, 204 U.S. 359, 363 (1907).

As for the legal principles affecting economic interests in Section IV, it appears that the corporate form of the broadband providers may be relevant to policy makers’ decisions of what obligations to impose. The greater the abuses associated with the corporate form, the greater the justification for economic regulation. Furthermore, so long as broadband providers bear characteristics similar to those of “businesses affected with a public interest,”\footnote{136} application of these legal principles for the benefit of end users should not pose any problems under the Due Process Clause. The legal obligations to deal with competitors could also be deemed consistent with interpretation of the Sherman Act.

D. Free Speech Rights: Constitutional Rights Affected by Corporate Form

As discussed in Section IV.D, the courts recognize the dual role of the First Amendment in protecting the interests of individuals and helping to sustain a democracy.\footnote{137} Recognizing this dual role, in some cases, the courts have upheld governmentally-imposed access requirements on electronic mass media in furtherance of viewpoint diversity even though it would limit the medium owner’s First Amendment rights.\footnote{138}

The jurisprudence in this area is very complex for various reasons.\footnote{139} First, the level of judicial scrutiny applied to regulation affecting the speech rights of the mass media differs among technology platforms.\footnote{140} In other words, a given regulation may be constitutional for one technol-
ology platform, but not for another. Secondly, the jurisprudence for any given technology platform is uncertain. For example, the traditional justification for a lower level of judicial scrutiny for broadcasting—spectrum scarcity—no longer seems appropriate. In addition, the United States Supreme Court has refused to unambiguously state the First Amendment status of cable companies, only able to reach its decision in Turner II (must carry requirements) by plurality. Third, convergence among technology platforms only serves to heighten the complexity of applying First Amendment analysis to the media. The convergence between telecommunications carriers as non-speakers with the electronic mass media as speakers is an example, as discussed in Section IV.D.

Today, the need to address the First Amendment status of competing communications technology platforms is receiving much attention. Many recent articles have focused on the free speech rights among information infrastructure providers.

The discussion as to the third (access for competitors) and fifth (access by speaker as end user or competitor) broadband issues in Section V also illustrates the great potential for regulation to cause conflicting free speech interests between access recipients and broadband providers. To date, analyses regarding conflicting free speech rights of access recipients and broadband providers have primarily focused on open access requirements as applied to cable broadband service providers.

141 See Matthew L. Spitzer, The Constitutionality of Licensing Broadcasters, 64 N.Y.U. L. Rev. 990 (1989). Furthermore, changing views of spectrum scarcity is shifting the regulatory regime for spectrum allocation from administrative hearings to auctions. See FCC, OPP WORKING PAPER, A PROPOSAL FOR A RAPID TRANSITION TO MARKET ALLOCATION OF SPECTRUM, (authored by Evan Kwerel and John Williams), 38 FCC Rcd. 16-24 (2002).

142 See supra note 87.

143 See supra note 85.


145 See, e.g., David Wolitz, Open Access and the First Amendment: A Critique of Comcast Cablevision of Broward County, Inc. v. Broward County, 4 YALE SYMP. L. & TECHN. 6 (2001) (arguing that open access regulation of cable operators to allow all ISPs to lease bandwidth on cable lines at nondiscriminatory rates is consistent with the Free Speech Clause of the First Amendment under an intermediate scrutiny test); Harold Feld, Whose Line is it Anyway? The First Amendment and Cable Open Access, 8 COMMLAW CONSPECTUS 23 (2000) (arguing that Internet access through cable providers should be treated as a common carrier service from a First Amendment point of view).

146 See supra note 115.


149 Id. at 668-69.

150 Id. at 660. The statute applied only to independent expenditures from corporate treasuries for which the means of amassing the funds had little correlation to the public’s support for the corporation’s political ideas. Corporations could make expenditures through separate segregated funds where contributions are made by people based on the understanding that the funds would be used solely for political purposes. Id. at 659-60.
cal expenditures will undermine the integrity of the political process."\textsuperscript{151} Therefore, because the government had a compelling interest in preventing the erosion of the political process, the court ruled that the prohibition was warranted. As the court stated, "the unique state-conferred corporate structure that facilitates the amassing of large treasuries warrants the limit on independent expenditures."\textsuperscript{152}

In \textit{Austin} the statute did exempt media corporations from the expenditure restriction.\textsuperscript{153} The Court upheld this exemption under the Equal Protection Clause because "[a] valid distinction . . . exists between corporations that are part of the media industry and other corporations that are not involved in the regular business of imparting news to the public."\textsuperscript{154} However, the Court further stated: "[A]lthough the press' unique societal role may not entitle the press to greater protection under the Constitution, it does provide a compelling reason for the State to exempt media corporations from the scope of political expenditure limitations."\textsuperscript{155} By this statement, the Court implied that placing the same restrictions on the press—the form of mass media with the highest level of First Amendment protection—may be constitutional. Although clearly not definitive, the Court's opinion reflects that the Court may be open to placing limitations on the free speech rights of mass media providers for reasons related to characteristics unique to the corporate form.

Thus, \textit{Austin} does support the possibility of allowing the government to place restrictions on broadband access providers' free speech rights for reasons related to characteristics unique to corporations. A compelling governmental interest could be viewpoint diversity, as discussed with regard to the third (access by competitors) and fifth (access by speaker as end user or competitor) broadband access issues in Section V. This would present conflicts between the free speech rights of access recipients and broadband providers. In balancing the interests of the access recipients and access providers, a justification for imposing restrictions on the providers' free speech rights could be the various forms of economic coercion discussed under the first three (access by individual end users, communities of individual end users or competitors) broadband issues discussed in Section V. The economic abuses of media corporations could be considered particularly acute given their corporate form, much as Congress found for railroads and large industrial enterprises when it enacted the Interstate Commerce Act and the Sherman Act.\textsuperscript{156}

\textbf{CONCLUSION}

In various contexts the government has intervened to ensure that essential services and facilities are provided to the public. The legal principles employed have varied with the type of access problem—what services or facilities are deemed to be essential, for whom they are deemed essential, the nature of the relationship between the intended access recipient and the access provider, and the circumstances impeding the accessibility of the service or facilities. The mapping of access situations bearing similar characteristics to the historical legal principles applied to them is referred to here as an "essentiality of access" typology. "Essentiality of access" is a valuable organizing principle for evaluating future public policy objectives affecting the technologically converging communications industries, because policy problems that have been previously handled by distinct legal rules for any given technology must now be addressed simultaneously across competing technology platforms.

Applying "essentiality of access" typology to current broadband access issues demonstrates how pursuit of broadband policy objectives requires recognizing the various relationships between access recipients and the access providers that affect different categories of legal rights: economic, welfare and free speech rights. Different categories of rights implicate different legal principles, which, at times, may conflict. This requires policy makers to choose some interests over others. Furthermore, pursuit of multiple broadband access objectives makes the selection of appropriate government interventions a tremendously complex endeavor.

"Essentiality of access" analysis shows that if

\textsuperscript{151} \textit{Id.} at 668.
\textsuperscript{152} \textit{Id.} at 660.
\textsuperscript{153} \textit{Id.} at 667-87.
\textsuperscript{154} \textit{Id.} at 668.
\textsuperscript{155} \textit{Id.} at 668 (emphasis added) (internal citations omitted).
\textsuperscript{156} \textit{See supra} Sections IV.B.2 and B.3.
broadband should later be considered an essential service or facility, current or pending policy actions affecting broadband could create adverse effects for the economic, welfare and free speech rights of intended access recipients. For example, lack of a common carriage requirement on cable modem access and wireline broadband Internet access providers could adversely affect the availability of broadband and narrowband services at reasonable rates. Lack of an affirmative duty to serve communities with broadband infrastructure could leave some areas without any broadband access. In addition, lack of a requirement on broadband providers to share their physical infrastructure with competitive ISPs, or the lack of interconnection requirements among broadband physical or logical infrastructures, could diminish viewpoint diversity—a longstanding government interest.

“Essentiality of access” analysis also shows that there is an even more fundamental challenge for policymakers and the courts. The constitutionality of broadband policies—such as under the Due Process Clause or free speech under the First Amendment—may depend on characteristics of broadband providers that are unique to the corporate form. It has long been established that the legal rights and duties of individuals and corporations are not synonymous under United States law, and that the government has created legal principles to specifically address abuses of power by corporations. The courts will need to clarify the principles for determining the constitutional rights of corporations under the United States Constitution in order to address the constitutional challenges that new broadband policies will likely engender.