

\*483 MISUSING NETWORK NEUTRALITY TO ELIMINATE COMMON CARRIAGE  
THREATENS FREE SPEECH AND THE POSTAL SYSTEM

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I. Introduction

The legal regulatory regimes for communication technologies have and continue to evolve with technological, economic, and social change. Traditionally, in the United States, multiple regulatory frameworks developed that imposed rules differing substantially with the type of communications technology. However, circumstances have changed dramatically in recent years. Due to advancements in communications technology, communications markets that had been economically distinct are now converging. Furthermore, policymakers are actively seeking to encourage competition and to implement deregulatory policies. Given these developments, the task of developing, evaluating, and implementing appropriate modifications to the historical regulatory regimes has grown increasingly complex.

Current debate regarding revisions to the nation's communications laws includes important issues collectively referred to as network neutrality. As illustrated by the various statements by United States Senators and testimonies of panelists presented at the Senate Commerce, Science and Transportation Committee hearing on February 7, 2006, network neutrality reflects a diversity of concerns. [FN1] Yet, during a press conference with reporters after the hearing, Committee Chairman Senator Stevens is reported to have said that, although network neutrality ought to be a basic principle of legislation, one of the first challenges facing the Committee is to define network neutrality. [FN2]

In a prior article, Cherry describes how distinctive legal principles have evolved to address differing types of access problems with regard to an essential \*484 service or facility. [FN3] Cherry asserts that "essentiality of access"-the historical alignment of access problems to legal principles-should be used as an organizing principle for examining future policy objectives in communications regulation. This is because "[p]olicy problems that have consistently been handled by distinct legal rules for each distinct technology, must now be addressed simultaneously across competing technology platforms." [FN4] Applying an "essentiality of access" typology to issues of broadband access, Cherry demonstrates that differing types of access objectives require reference to distinct legal principles that evolved in response to differing relationships among access recipients to the access providers-as end user customer, competitor, speaker, or audience member. [FN5] Furthermore, these principles at times conflict and require policymakers to choose certain interests over others. [FN6]

The present article extends the prior “essentiality of access” analysis of broadband access issues to disentangle the myriad claims embedded in the network neutrality debate and provides an analytical framework for identifying core problems and appropriate legal principles for government intervention. In so doing, this article shows how the lineage of “essentiality of access” legal principles is being misrepresented in the discourse of network neutrality. More specifically, the discourse of network neutrality is mischaracterizing the law of common carriage-mirroring the general discourse of deregulatory policies in telecommunications-in a manner that conflates the legal bases for addressing access problems for end user customers and competitors. As a result, there is an unsubstantiated over-reliance on antitrust principles to address provider-to-customer access problems. Furthermore, the discourse suffers from a lack of analytical integrity in failing to evaluate policy recommendations for network neutrality in terms of policy sustainability.

The article also discusses how this misleading discourse is affecting the evolving interrelationship of common carriage principles and free speech rights under intermodal competition. Telecommunications carriers are intensifying their efforts to reduce economic regulation through substitution of common carriage obligations with antitrust principles. The FCC has recently rewarded such efforts through elimination of common carriage obligations for broadband Internet access, which is also cited by opponents to resist imposition of network neutrality rules. [FN7] If antitrust principles are insufficient to substitute for the functions that common carriage and public utility obligations have served in providing access to customers, then sustainability problems are created for \*485 viewpoint diversity and free speech rights of individuals in order to further economic interests of corporate owners of broadband facilities. For this reason, the evolution of broadband access policy requires deeper inquiry as to the constitutional rights of natural persons as opposed to corporations.

Furthermore, elimination of common carriage principles affecting broadband access to the Internet may adversely affect the postal system. The financial viability of the United States Postal Service is now being seriously threatened by electronic substitution over the Internet; and, to adapt to this competition, the postal system is modifying its operations and business model to become more Internet-dependent. By allowing the deregulatory trend in telecommunications to deviate significantly from that in transportation, through erosion of common carriage regulation in the former but not the latter, unintended consequences may include de facto erosion of common carriage and deterioration of geographic availability of postal service. In this way, the network neutrality debate also needs to address the evolving, layered infrastructure of the postal system.

The article is organized as follows. Section II describes the complexity of the network neutrality debate and the lack of a concise definition as to its meaning. Section III describes the “essentiality of access” typology, and section IV reviews the results of its application to broadband access issues in a prior analysis. Section V applies the “essentiality of access” analysis to the network neutrality debate, describing how: the discourse has become misleading; the discourse is affecting the evolving interrelationship of common carriage principles and free speech rights under intermodal competition; and the sustainability of the postal system is threatened by changes in broadband access regulation.

## II. Complexity of Network Neutrality Debate

Policy debates that focus on encouraging widespread deployment of broadband technology reflect diversity in alleged benefits and forms of government intervention. Thus, a simple statement in support of 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.” [FN8]

The issues raised under the rubric of network neutrality likewise embody a diversity of alleged goals, problems, and remedies. Proponents of network neutrality rules vary in their characterizations of the essence of the debate. For example, Jeffrey Citron, President and CEO of the Internet phone provider Vonage, asserts that the network neutrality debate is about who will control \*486 innovation and competition on the Internet. [FN9] Earl Comstock, President and CEO of the non-profit trade association COMPTTEL, claims that the prevention of discrimination is at the heart of network neutrality concerns. [FN10] Vinton Cerf, Vice President and Chief Internet Evangelist with Google, describes network neutrality as the preservation of “limited elements of openness and non-discrimination that have long been part of our telecommunications law.” [FN11] Barbara van Schewick, a Non-Residential Fellow of the Center for Internet and Society at Stanford Law School, states that the “common rationale behind the various proposals is to design rules that explicitly forbid network operators and ISPs to use their power over the transmission technology to negatively affect competition in complementary markets for applications, content and portals”. [FN12]

Proponents also advocate a variety of network neutrality rules. For example, Larry Lessig, Professor of Law at Stanford Law School, supports Congressional enactment of former FCC Chairman Powell's four Internet Freedoms [FN13] and a prohibition on access-tiering. [FN14] Vinton Cerf favors rules enabling “an environment much like the one that gave birth to the Internet: where end users can engage in activities such as running applications, employing devices, and accessing content, unfettered by the provider of the underlying network connection.” [FN15] Timothy Wu, Associate Professor of Law at Harvard Law School, proposes a basic principle whereby broadband operators have full \*487 freedom to “police what they own” (the local network) while restrictions based on inter-network indicia be viewed with suspicion. [FN16]

Not unexpectedly, opponents of network neutrality rules characterize the debate differently. For example, the Presidents of the United States Telecom Association [FN17] and the National Cable and Telecommunications Association [FN18] assert that there is no problem that requires legislation; however, the former states that broadband network operators commit not to block, impair, or degrade content, applications, or services. [FN19] Kyle Dixon, Senior Fellow and Director of the Federal Institute for Regulatory Law & Economics at the Progress and Freedom Foundation, claims that the touchstone for resolving network neutrality or any other regulatory debate is consumer welfare, and that by this standard network neutrality mandates would do more harm than good in the absence of demonstrated market power abuses by broadband providers. [FN20] Greg Sidak, Visiting Professor of Law at the Georgetown University Law Center, asserts that network neutrality obligations are incompatible with the economics of telecommunications, imposing harm to economic welfare. [FN21] Christopher Yoo, Professor of Law at Vanderbilt University Law School, states that the key question in deciding whether to impose a network neutrality mandate is not whether network neutrality

provides substantial benefits, but whether deviating from government-mandated network neutrality might yield economic benefits. [FN22] In this regard, Yoo argues that network neutrality proponents, in seeking to \*488 promote competition in applications and content, focus on the wrong policy problem-instead, focus should be on competition in the last mile. [FN23]

Policymakers have responded in various ways to issues raised in the network neutrality debate. In its Cable Modem Declaratory Ruling, [FN24] the FCC classified broadband cable Internet service as an information rather than a telecommunications service, and therefore not subject to the mandatory common carrier regulation under Title II of the federal Communications Act of 1934, [FN25] as amended by the Telecommunications Act of 1996. [FN26] Although reversed by the Ninth Circuit Court of Appeals, [FN27] the Cable Modem Declaratory Ruling was ultimately upheld by the United States Supreme Court in *Nat. Cable & Telecommunications Ass'n v. Brand X Internet Serv.* [FN28]

Subsequently, in its Wireline Broadband Access Order, [FN29] the FCC established a new regulatory framework for broadband Internet access services offered by wireline facilities-based providers. To provide regulatory parity with cable modem Internet access, the FCC eliminated the obligation on wireline facilities-based providers to offer the transmission component of wireline broadband Internet access service on a stand-alone common carrier basis. [FN30] Yet, the FCC did not eliminate the wireline carriers' ability to offer wireline broadband transmission on a Title II common carriage basis, thereby enabling carriers to offer broadband Internet access transmission in alternate ways. [FN31] Furthermore, to address broader network neutrality concerns, on the same day the FCC also adopted a Policy Statement intended "to ensure that broadband \*489 networks are widely deployed, open, affordable, and accessible to all consumers." [FN32] The Policy Statement sets forth four-albeit legally unenforceable-principles: (1) consumers are entitled to access the lawful Internet content of their choice; (2) consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement; (3) consumers are entitled to connect their choice of legal devices that do not harm the network; and (4) consumers are entitled to competition among network providers, application and service providers, and content providers. [FN33]

Opponents of network neutrality rules support the FCC's approach in the Cable Modem Declaratory Ruling, Wireline Broadband Access Order, and Policy Statement. [FN34] On the other hand, proponents of network neutrality assert that the "FCC's new approach will prove catastrophic precisely because the Internet depends on basic common carrier rules to ensure the availability of an essential ingredient, namely the transmission capacity over which Internet applications reach businesses and consumers." [FN35] Instead, they assert that network neutrality requires preservation of the original architectural design upon which the Internet evolved, [FN36] particularly in light of broadband providers' pursuit of access-tiering as a result of their increasing market concentration. [FN37]

There is also legislative activity before Congress related to revising the Communications Act. For example, several bills have been introduced or are being drafted in response to various pressures. [FN38] One source of pressure consists of parties' efforts to reverse, modify, or preserve-depending upon one's interests-actions by the FCC, state commissions, or the courts while implementing the Telecommunications Act. Another arises from further technological, economic, and social changes that have exacerbated implementation problems, including developments unforeseen in 1996 such as the importance of the Internet to commercial activities and as a medium for free speech. In addition, the Senate Commerce, Science and Transportation \*490 Committee has announced a series of fourteen hearings to be held on Internet,

telecommunications, spectrum, and broadcasting issues during January through March, 2006. [FN39] One of these hearings, specifically devoted to the topic of network neutrality, was held on February 7, 2006. [FN40]

The diversity of goals, problems, and remedies raised under the rubric of network neutrality poses difficult challenges for constructive discourse. Yet, through an “essentiality of access” analysis, the myriad claims embedded in the network neutrality debate can be disentangled, providing an analytical framework for identifying the core problems and appropriate legal principles for government intervention.

### III. Describing “Essentiality of Access” Typology

In the United States, distinctive legal principles have evolved to address differing types of access problems with regard to an essential service or facility. [FN41] These problems arise from varying forms of discrimination or circumstances yielding lack of equal opportunity by individuals to an essential service or facility. [FN42] Distinct legal principles evolved to address these problems, utilizing different forms of government intervention—such as the imposition of ex ante obligations, the creation of ex post remedies, or the provision of economic subsidies. [FN43] They also created different types of legal rights—economic, welfare, and free speech. [FN44] “Essentiality of access” refers to the historical alignment of such access problems to legal principles. [FN45]

Table 1 provides a summary of the mapping of access problems to legal principles. [FN46] Each access problem is identified by the reason for which 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. [FN47] The corresponding legal principle(s) is then provided, briefly describing the associated obligations of the access provider that developed to address the access problem. [FN48]

\*491 Table 1: Legal Principles to Address Different Access Problems Regarding Essential Services or Facilities

Access is Needed to Sustain What	Relationship of Access Recipient to Access Provider	Underlying Purpose or Problem	Legal Principle(s)	Obligations of Access Provider
Provision of essential service, not adequately supplied in a competitive market, throughout the community.	Customer as end users.	Economic coercion; dependence of customer requires protection.	Common carrier; public utility; business affected with a public interest.	Provide access to essential service with-out discrimination, at reasonable rates, and with adequate skill and care.
Viable competition in a related market of a monopolist.	Competitors.	Economic characteristics of supply require access to	Prohibit refusal to deal with competitors (e.g. essential	Provide access to essential facility (input) under

		monopolist's essential facilities.	facilities doctrine).	reasonable prices, terms and conditions.
Equality of access to essential services.	Targeted customers as end users.	High cost of providing service; indigence of customers.	Universal service as a form of welfare benefit.	Contribute funds to and/or provide subsidized essential services.
Legitimacy of, and citizen's participation in, democracy.	Speaker as end user or competitor (for benefit of audience).	Viewpoint diversity and channel provider's potential refusal to deal with speaker.	Free speech rights.	Provide access to channel of communication.

As described in Table 1, distinctive legal principles evolved in response to differing relationships of access recipients-as end user customer, competitor, speaker, or audience member-relative to the access provider. [FN49] These legal principles, in turn, created differing rights-economic, welfare, or free speech-\*492 for access recipients according to the nature of the relationship with the access provider. [FN50]

Legal principles affecting economic rights arose from evolving concepts of economic coercion for which government intervention was deemed necessary to provide access to an essential service or facility. [FN51] To protect customers (as end users) from economic coercion or exploitation-not necessarily derived from monopoly power of the access provider-the common law of common carriage imposed tort obligations of nondiscrimination, just and reasonable prices, and a standard of adequate skill and care on access providers. [FN52] Upon the grant of monopoly franchises by government, the common law of public utilities evolved, supplementing common carriage obligations with entry and exit barriers and an affirmative obligation to serve (often referred to as the carrier of last resort). [FN53] The common law regimes were later codified by federal and state statutory regimes, to which additional obligations were added, such as a tariffing system for rates, terms, and conditions of service.

The Sherman Antitrust Act was enacted in 1890 to regulate a broader concept of economic coercion-"to encompass the collective refusal to deal, and . . . the loss of market opportunities that competition would have afforded" [FN54]-than had been recognized under the common law. [FN55] Under the Sherman Act, some claims have been brought by competitors alleging collective or unilateral refusals to deal. [FN56] Over time, with regard to such claims, judicial interpretation of the Sherman Act has led to prohibitions of refusals to deal with a broader set of businesses than recognized under the common law as well as the development of the essential facilities doctrine, which requires a monopolist to share with competitors at a reasonable price an input that is deemed essential for viable competition in a related market. [FN57]

Legal principles affecting welfare rights represent government efforts to institutionalize some minimum level of rights with regard to access to essential goods and services. [FN58] Examples include the provision of essential services for all citizens such as education, as well as programs established during the New Deal \*493 era for "needy" individuals. [FN59] Modern

universal service policy with regard to telecommunications services has characteristics of both, providing nondiscriminatory and reasonable rates for all customers of telecommunications services as well as funding mechanisms to subsidize access for targeted groups. [FN60]

As for free speech rights, the Free Speech Clause of the United States Constitution provides that “Congress shall make no law . . . abridging the freedom of speech,” [FN61] which has also been held applicable to the states under the Due Process Clause of the Fourteenth Amendment. [FN62] Judicial interpretation of the Free Speech Clause reflects the dual role of the Clause to protect the interests of individuals and to sustain a constitutional democracy. [FN63] The courts recognize this dual role when addressing constitutional challenges to governmentally imposed mandates to provide access to channels of communication. [FN64] First, known as the viewpoint diversity principle, government intervention may be permissible to enable the widest possible dissemination from diverse sources in order to promote free speech in the nation's constitutional democracy. [FN65] Second, in determining the constitutionality of a given access mandate, the courts review the impact on the free speech rights of the party bearing obligations to provide access to other speakers. [FN66] Viewpoint diversity has been the basis for justifying government mandates that owners of channels of mass communication open access to their facilities to certain speakers. [FN67] Examples include equal time rules for political candidates imposed on broadcasters, [FN68] and must-carry requirements imposed on cable companies to dedicate some of their channels to local broadcast television stations. [FN69]

However, there are important differences in the free speech rights of electronic mass media and telecommunications carriers. [FN70] Telecommunications \*494 carriers are not considered speakers in their capacity as providers of telecommunications services because-as both common carriers and public utilities-they are required to provide nondiscriminatory access to all customers. [FN71] On the other hand, providers of electronic mass media-such as broadcasting and cable companies-are considered speakers entitled to some First Amendment protection. [FN72]

#### IV. “Essentiality of Access” Typology Applied to Broadband Access Issues

The “essentiality of access” typology can be used as an organizing principle for examining future policy objectives in the communications industry in order to better enable the adoption of appropriate government interventions. [FN73] As well-established types of access problems recur with technological change and other changes in circumstances, reference to historical legal principles that evolved to address such problems are instructive for future policy design. For example, to the extent that specific legal principles have consistently been applied and deemed successful to address a given type of access problem, policy choices or proposals to address current manifestations of the given type of access problem that deviate from such principles should be closely scrutinized. In this regard, assumptions and arguments underlying such policy choices or proposals to justify deviation from historical legal principles should be rigorously analyzed. Furthermore, potential long-term consequences of deviating from historical legal principles-particularly when assumptions or arguments are unsubstantiated, erroneous, or unconvincing-should be carefully studied.

Cherry has previously applied the “essentiality of access” typology to a sampling of broadband access issues. [FN74] Some of these broadband access issues address access problems that are embedded in the network neutrality debate. [FN75] Given this commonality, results of the previous analysis are utilized here to identify ways in which some network neutrality issues

have been misframed as well as to discuss how deviation from historical legal principles yields potential problems that have thus far been inadequately explored.

\*495 In the prior analysis, broadband access issues were selected to provide examples of the four types of access problems identified in Table 1. In some cases, a given broadband issue may in fact relate to more than one access problem—for example, to both economic and free speech problems. However, to simplify exposition, each issue was analyzed with regard to one, arguably the primary, access problem. The results of this more simplified analysis are reviewed in this section. Some of the effects of broadband access issues simultaneously embracing multiple access problems will be discussed in section V.

The prior “essentiality of access” analysis considered the following four broadband issues: (1) to ensure that all individual end user customers have access to the physical layer of the broadband network; (2) to ensure that all communities have access to the physical infrastructure of the broadband networks; (3) to ensure that competitive ISPs have access to the broadband network through interconnection at the logical layer; and (4) to expand the definition of universal service to include access to broadband service. [FN76] To provide a foundation for the discussion of network neutrality issues, the structure of the analysis and an overview of the results as to the first three broadband access issues are described here. [FN77]

For each access issue, it is assumed that the relevant aspect of broadband access is considered an essential service or facility, [FN78] and that the circumstances are such that the underlying purpose or problem requires some form of government intervention. [FN79] The analysis proceeds in the following steps. The first step identifies the type of access problem that the given broadband access issue poses, and then maps that issue to the corresponding legal principle that historically evolved to address that type of problem. The second step identifies what government actions have actually been taken, or are pending, to address the given broadband issue. The third step compares the results of the first two steps. Consistencies in the results between steps one and two indicate how current or pending government regulation as to the given broadband issue is similar to historical legal treatment of that type of access problem, whereas inconsistencies in the results between the two steps indicate how current or pending government regulation deviates from the historical legal treatment. The inconsistencies are then examined to identify how current or pending regulation may pose obstacles \*496 -from the perspective of the historical mapping of access problems to legal principles-to achieving the desired form of broadband access, and thereby adversely affect the rights of access recipients. An overview of the results is provided in Table 2. [FN80]

Table 2: Applying “Essential of Access” to Broadband Access Issues

Broadband Issue	Relationship of Access Recipient to Access Provider	Underlying Purpose of Problem	Applicable “Essentiality of Access” Legal Principles	Current Regulation	Potential Adverse Effect of Current Regulation	Adversely Affected Rights of Access Recipients
1. End user access to physical infrastructure of broadband network	Individual end user customers.	Economic coercion or exploitation due to inequality of bargaining power.	Non-discriminatory access at reasonable rates and with adequate standard of care (common carrier or public utility regulation).	Cable modem access service is not a common carrier service; wireline broadband access service not required to be common carrier service.	Erosion of common carrier regulation for narrowband physical layer; potential unavailability of access to broadband physical layer.	Economic* rights of individuals as end users of narrowband and broadband access.
2. Physical and/or logical layers of broadband network need to be ubiquitously available throughout the community.	Communities of end user customers.	Potential unavailability of essential service in portions of community	Duty to serve (build-out requirement; exit barrier); government subsidization or privilege (e.g. franchise) to address financial burden of requirements.	For narrowband service, carriers have build-out requirements and eligible carriers must serve the entire area; cable companies have build-out requirements for cable service in franchise area.	Some communities, or portions thereof, may not have access to broadband physical infrastructure.	Economic* rights of communities of individuals as end users of broadband access.

3. Competitive ISPs have access to the broadband network through interconnection at the logical layer.	Competitors.	Viewpoint diversity principle; provider's refusal to provide access to its essential facility with competitors in a related market.	Mandate access to address refusal to deal.	Cable modem access providers not required to provide access to competitive ISPs; wireline broadband access providers not required to unbundle & tariff transmission component.	Goal of viewpoint diversity could be undermined.	Free speech rights: (a) of individuals, as citizens of democracy, to have access to diverse viewpoints; and (b) of competitors as speakers.
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\*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 Cherry, note 40 supra.

As shown in Table 2, the first broadband access issue is to ensure that all individual end user customers have access to the physical layer of the broadband network. [FN81] The underlying problem that may impede such access is economic coercion arising from inequality of bargaining power between the access provider and the end users. [FN82] Economic coercion could be exercised by practices such as refusals to deal, excessively high prices, unreasonable terms and conditions, and unreasonable discrimination among similarly situated customers. [FN83] Referring to Table 1, the historical legal solution to address this type of access problem has been to impose on the provider of the essential service the (common law) obligations of common carriers. [FN84] By contrast, under the Cable Modem Declaratory Ruling and the Wireline Broadband Order, the FCC has refused to apply or has eliminated common carriage obligations on providers of cable modem Internet access and wireline broadband Internet access, respectively. [FN85] These FCC actions expressly reject application of the historical legal principles for this type of access problem. Absent compelling justifications for this deviation from basic (common law) common carriage requirements, the FCC's actions raise the concern that the desired broadband \*498 access may not be available to all end user customers [FN86]. The FCC's orders also create intramodal asymmetric regulation between telecommunications carriers' narrowband and broadband networks-with common carriage required for the former but not the latter. [FN87] "It is not clear whether such intramodal asymmetric regulation is sustainable[;]" rather, such asymmetry may ultimately lead to the unavailability of any common carriage-provided service, whether narrowband or broadband. [FN88] Thus, overall, the economic [FN89] rights of individuals as end user customers of both narrowband and broadband services could be adversely affected.

The second broadband access issue is to ensure that all communities have access to the physical infrastructure of the broadband network. [FN90] While the first broadband issue was analyzed in terms of access to existing facilities, the second issue assumes that broadband facilities or services may not yet exist for some communities or some areas within a community. [FN91] The underlying problem for the second issue is that providers may refuse to invest in and serve certain areas. [FN92] Providers may refuse to invest for reasons such as expected unprofitability or to target more highly profitable areas. [FN93] This problem is one for which franchises and public utility regulation have historically been used to impose an affirmative duty to serve and exit barriers on the provider. [FN94] Under current regulation, for narrowband services the telecommunications carriers have build-out requirements and exit restrictions, [FN95] and eligible carriers for universal service funding purposes are required to serve throughout the entire service area. [FN96] In addition, cable companies typically have build-out requirements in their franchise agreements with local units of government in order to make cable \*499 service available throughout the franchise area. [FN97] However, no provider of broadband services is required to build out physical infrastructure and to serve specific communities or areas. [FN98] The failure, at least thus far, to impose affirmative obligations on any providers to build out broadband facilities is inconsistent with the historical use of public utility-type requirements to address this form of access problem. [FN99] As with the first issue, in the absence of compelling justifications, this deviation from the historical solution raises the concern that broadband facilities may not be available for some communities or at least some portions thereof. [FN100] As a result, the economic rights of communities of individuals as end users of broadband services could be adversely affected.

Given that the first two broadband access issues affect the economic rights of individual end user customers, the third issue was selected to address the role of free speech in a democracy. [FN101] This issue also secondarily addresses economic rights of competitors requiring access to an essential facility. [FN102] The third broadband issue is to ensure that competitive ISPs have access to the broadband network through interconnection at the logical layer. [FN103] The primary purpose of seeking to ensure such access is the government's interest in viewpoint diversity. [FN104] Viewpoint diversity is furthered by encouraging diversity of applications and content to be available to individuals through broadband access. [FN105] Diversity in applications and content can be achieved through competition among ISPs. [FN106] The primary problem is that broadband access providers may refuse to deal with unaffiliated, competitive ISPs. [FN107] The historical legal principle that evolved to address such refusals to deal is, subject to constitutional limitations, to mandate that access be provided to other speakers who may be competitors. [FN108] Access mandates have been imposed for both free speech and economic purposes, on owners of channels of communication to other speakers in support of viewpoint diversity and on owners of essential facilities to competitors in a related market, respectively. However, in the Cable Modem Declaratory Ruling, the FCC refused to compel cable modem access \*500 providers to provide access to competitive ISPs. [FN109] Furthermore, in the Wireline Broadband Access Order, the FCC relieved the Bell Operating Companies from the Computer Inquiry requirements to unbundle the transmission component for sale under tariff. [FN110] Thus, FCC has expressly rejected application of the historical legal principle to mandate access to competitors as alternative speakers. Absent compelling justification for this deviation, the concern is that the goal of viewpoint diversity will be undermined. [FN111] As a result, the free speech rights of individuals as citizens of a democracy may be adversely affected, as well as the rights of competitive ISPs as speakers.

## V. Applying “Essentiality of Access” Analysis to the Network Neutrality Debate

The results of the prior “essentiality of access” analysis of broadband access issues reviewed in section IV shows that the FCC has thus far declined to apply to broadband those legal principles that have historically been applied to similar access problems. More specifically, the FCC has declined to impose the following requirements on broadband access providers: common carriage obligations; public utility-type obligations, such as build-out requirements and restrictions on exit; and access to competitive ISPs. As to these broadband issues, the FCC's decisions are consistent with the arguments of opponents of network neutrality rules described in section II. Furthermore, the potential adverse consequences of the FCC's actions discussed in section IV are reflected in the concerns raised by the proponents of network neutrality rules. In this way, the prior “essentiality of access” analysis maps nicely onto the network neutrality debate, providing a roadmap for disentangling the myriad claims and assessing appropriate policy design.

### A. Misleading Discourse in the Network Neutrality Debate

This section shows how the lineage of legal principles that evolved to address differing forms of access problems is being misrepresented in the network neutrality debate. The law of common carriage has and continues to be mischaracterized, leading to a conflation of the legal bases for addressing access problems for end user customers and competitors. As a result, there is a preoccupation with regulation of the provider-to-provider relationship, and unsubstantiated reliance on antitrust principles to address provider-to-customer access problems. The analytical errors arising from mischaracterizations of the original common carriage legal regime are better understood when policy recommendations are evaluated in terms of their likely sustainability. However, \*501 opponents of network neutrality rules are resisting attempts to frame the debate in policy sustainability terms, so as to steer discourse away from rigorous evaluation of proponents' claims.

#### 1. Misidentification of the original regulatory regime of common carriage

Mischaracterizations of the law of common carriage and its relationship to other bodies of law are creating a foundational problem for constructive discourse of network neutrality. The common law of common carriers evolved to address problems in the economic relationship between the carrier and customers as end users, but not to address access problems between the carrier and its competitors in complementary markets nor the interconnection among carriers. [FN112] Statutory obligations were ultimately created to address the problems of access by competitors and for interconnection among carriers. [FN113] Yet, in the network neutrality debate, common carriage is sometimes characterized as the legal basis for ensuring access for both end users and competitors. [FN114] Although such a characterization is correct for the statutory version of common carriage under Title II of the Communications Act, it is factually incorrect for the common law of common carriage.

The confusion arises when reference to the statutory version-rather than the common law origins-of common carriage is used as the frame of reference for considering proposed network neutrality rules. By conflating the legal bases of access to end user customers and competitors in terms of the statutory regime, the original common law regime has tended to be ignored, thereby masking its significance for the carrier (provider)-to-customer relationship. The discourse then

permits opponents of network neutrality rules to leverage arguments pertaining to the provider-to-competitor relationship to issues related to the provider-to-customer relationship. For example, assertions that common carriage obligations are not required to provide access to competitive ISPs are also unquestioningly applied for access to end users. [FN115] As a result, analysis of regulation governing the provider-to-customer relationship is inadequately explored and potential adverse consequences are simply ignored.

The misuse of the statutory regime of common carriage as the frame of reference for purposes of evaluating future policy options is not confined to the \*502 network neutrality debate. Cherry [FN116] explains how this phenomenon is affecting the general discourse of deregulatory policies for communications technologies. For example, the failure to use the original common law regime for common carriage as the basis for evaluating deregulatory policy proposals has led to mischaracterization of the evolution of the transportation deregulatory regimes-claiming that common carriage regulation has been eliminated, when in fact some statutory elements have been modified but the common law elements have been expressly preserved by Congress-and thereby misinforming implications for telecommunications deregulatory policies. [FN117] In this regard, such analyses have tended to focus primarily on regulation governing the provider-to-provider relationship rather than the provider-to-customer relationship, resulting in misleading conclusions for the former but inadequate exploration of the latter. [FN118] As a consequence of this preoccupation with the wholesale relationship, recommendations for deregulatory telecommunications regimes place primary reliance on antitrust principles to address problems of providers' market power. [FN119] Nuechterlein and Weiser's book expresses this bias. [FN120]

It is therefore not surprising that opponents of network neutrality rules also advocate that regulation, if necessary, be based on antitrust principles. [FN121] However, whether for purposes of network neutrality or deregulation generally, to advocate primary reliance on antitrust principles ignores important historical facts. Common carriage regulation, both under the common law and statutorily, evolved prior to antitrust regulation. [FN122] Thus, antitrust law subsequently evolved to augment-that is, to address issues and situations not already encompassed by-common carriage. [FN123] Furthermore, common carriage regulation evolved into industry-specific regimes (e.g. railroads, telegraph, telephone, airlines) under agency jurisdiction, whereas antitrust law evolved to apply to general businesses. [FN124] Advocates of a regime based solely on antitrust fail to explain how the issues pertaining to the provider-to-customer relationship, that have been governed by the ex ante rules of industry-specific common carriage regulation, will be adequately addressed by antitrust ex post remedies. This is particularly troublesome given that the evolution of the Internet relied on common carriage regulation of the telecommunications carriers' physical \*503 infrastructure, and proponents of network neutrality have repeatedly stressed this historical reality. [FN125]

## 2. Analytical failure to consider policy sustainability

The preoccupation with antitrust theory is symptomatic of an analytical failure to consider policy change in terms of policy sustainability. In numerous articles and papers, Cherry has stressed in varying ways that sustainable regulatory telecommunications policies require simultaneous satisfaction of economic viability and political feasibility constraints, and that satisfaction of these constraints is particularly challenging for regulatory regimes based on competition rather than monopoly. [FN126] Some articles have examined sustainability of specific regulatory policies, such as universal service, [FN127] rate rebalancing, [FN128] and the

effects of detariffing on liability rules. [FN129] Others have broadened the scope of inquiry, looking at sustainability problems arising from fundamental attributes of the U.S. governance structure, [FN130] including-and particularly relevant here-efforts to retrench from public utility regulation [FN131] and to resist extension of common carriage obligations to broadband access \*504 services. [FN132]

Although beyond the scope of this article to recount fully here, Cherry explains how the legacy of public utility regulation in the United States constrains the adoptability and retention of new regulatory models for certain essential services, such as telecommunications. [FN133] To be able to continuously satisfy the joint conditions of political feasibility and economic viability, deregulatory policy affecting an essential infrastructure, such as telecommunications, will likely require retention of certain attributes of the common law of common carriage and public utilities. [FN134] In other words, sustainable deregulatory telecommunications policies will likely require retention of longstanding legal principles that had evolved to address political-economic problems, such as the access problems reflected in the “essentiality of access” typology. [FN135] The need to retain elements of common law principles of common carriage and public utilities for policy sustainability is supported by subsequent analysis of the deregulatory regimes for transportation carriers. [FN136]

An important implication of sustainability analysis for the network neutrality debate is that, although antitrust regulation does play an important role-as reflected in the Kingsbury Commitment [FN137] and the Modified Final Judgment [FN138]-it is unlikely to be capable of substituting in whole for the principles embodied in common carriage and public utility law. Unfortunately, opponents of network neutrality regulation seek to deter discussion of policy sustainability problems, thereby masking likely long-term inadequacies of reliance on antitrust-type remedies. In this regard, opponents characterize ex ante network neutrality rules as premature [FN139] and as calling for a legislative solution in the absence of a problem. [FN140] Such characterizations attempt to truncate discussion of potential long-term consequences, an inquiry that is critical for policy sustainability. Other opponents assert reliance on antitrust remedies based solely on economic \*505 criteria, [FN141] such as consumer welfare, [FN142] or economic benefits of deviating from government-mandated rules. [FN143] These assertions fail to incorporate political feasibility and long-term economic viability constraints into their analyses, which are foundational considerations for policy sustainability.

As discussed in section II, proponents of network neutrality rules have attempted to raise issues of long-term consequences. For example, Cerf stresses that key network principles of the Internet-such as its end-to-end design, layered architecture, and open standards-need to be preserved in order for the Internet to flourish, [FN144] and that elements of openness and non-discrimination that have long been part of the telecommunications law need to be preserved. [FN145] Yet, thus far, opponents of network neutrality regulation have declined to engage such proponents' arguments on the merits. Inertia of the status quo does favor opponents' political strategy to steer discourse away from rigorous evaluation of proponents' claims, because the FCC's rulings in the Cable Modem Declaratory Ruling and the Wireline Broadband Access Order have already eliminated some common carriage rules that proponents seek. [FN146]

## B. Evolving Interrelationship of Common Carriage and Free Speech

While the communications technology platforms remained distinct, the applicability of common carriage obligations relative to free speech rights of communications providers followed simple rules. Telecommunications carriers, as providers of only transmission facilities,

bear the obligations of common carriers but possess no First Amendment rights. [FN147] Conversely, mass media, as providers of information content over their own facilities, are not common carriers and possess free speech rights. [FN148] With the elimination of technological entry barriers between telecommunications and mass media, the interrelationship of common carriage and free speech principles is becoming more complex. [FN149] This section discusses how intermodal competition poses new challenges for maintaining a sustainable balance of common carriage obligations and free speech rights.

#### \*506 1. Deregulatory Trend May Erode Free Speech Rights of Individuals

The deregulatory era for infrastructure industries in the United States began in the 1970's, commencing with the transportation sector. [FN150] It reflected a bipartisan political movement favoring deregulation coupled with significant developments, such as containerization, in intermodal transportation competition. [FN151] The deregulatory trend coupled with technological change enabling intermodal competition was later mirrored in the communications sector. [FN152]

One of the consequences of digital convergence is that telecommunications carriers can use their facilities to also provide video programming. [FN153] As a result, telecommunications carriers acquired free speech rights as providers of content in markets complementary to the traditional common carriage market. [FN154] This enabled telecommunications carriers to leverage their free speech claims to limit or invalidate economic regulation imposed on them. [FN155] An early example is the telephone companies' successful judicial challenges to invalidate the federal telephone-cable cross-ownership ban as a violation of their free speech rights to provide video programming. [FN156]

Ostensibly consistent with a deregulatory philosophy, the FCC has resisted extension of common carrier obligations to broadband access providers in the Cable Modem Declaratory Ruling. [FN157] Telecommunications carriers have successfully leveraged this result to obtain a "lighter regulatory touch" from the FCC in the Wireline Broadband Access Order, which lifted the obligatory common carriage requirements from the provision of wireline broadband Internet access service. [FN158]

In the network neutrality debate, telecommunications carriers are intensifying their efforts to reduce economic regulation. More specifically, telecommunications carriers assert their economic interests—the need to attract investment capital in a competitive broadband market—as the basis for eliminating ex ante rules of common carriage to their broadband service. [FN159]

\*507 As discussed in section V.A, this strategy is being utilized to justify reliance on antitrust principles rather than forms of ex ante network neutrality rules.

As previously discussed, the elimination of common carrier regulation for the provision of traditional telecommunications services is likely to be unsustainable. The failure to apply common carriage obligations to broadband service poses the question of whether free speech objectives, such as viewpoint diversity, are sustainable. If antitrust principles are insufficient to substitute for the functions that common carriage and public utility obligations have served in providing access, then free speech rights of individuals will be sacrificed to serve economic interests of corporate owners of broadband facilities.

For this reason, Cherry stresses that broadband access issues require deeper inquiry as to the constitutional rights of natural persons as opposed to corporations. [FN160] Given that the constitutional rights of corporations are not coextensive with those of natural persons, it would be permissible for the corporate form to be a factor in weighing the competing interests of

broadband providers and access recipients. [FN161] For example, in *Austin v. Michigan Chamber of Commerce*, [FN162] the United States Supreme Court upheld a Michigan statute that prohibited certain corporations from using corporate treasury funds for independent expenditures in support or opposition of candidates in state elections. [FN163] The Court found that the State had a compelling interest in preventing a specific type of corruption in the political process by corporations due to “the corrosive and distorting effects of immense aggregations of wealth that are accumulated with the help of the corporate form and that have little or no correlation to the public's support for the corporation's political ideas.” [FN164] Applying a similar rationale to issues of economic regulation, the free speech rights of individuals as citizens in a democracy could provide the legal basis for government to limit the exercise of economic and political power by corporations to influence broadband policy.

## 2. Deregulatory Trend May Threaten the Sustainability of the Postal System

To advocate a competitive intermodal communications legal regime based on the elimination or erosion of common carriage obligations and increased reliance on antitrust principles is inconsistent with deregulatory policies in the transportation sector. [FN165] Deregulatory transportation regimes—for railroads, air lines, and motor carriers—still impose common carriage obligations, although in \*508 varying ways both across and within transportation modes. [FN166] Furthermore, to serve public utility functions that address provider-to-customer access problems, additional requirements are imposed on carriers and funding programs have been created to support provision of service to targeted customers and serving areas. [FN167]

The significance of this inconsistency is that deviation in key attributes of economic regulation for communications relative to transportation infrastructure may ultimately lead to devastating, unintended consequences for the United States Postal Service (USPS). [FN168] The effects of deregulatory broadband policies on the financial sustainability and ubiquitous deployment of the postal system has not been raised in the network neutrality debate, but needs to be included as part of the general evaluation of policy sustainability problems.

“The postal business has always been one of information transportation [and] throughout history, it has been challenged to adapt to new technologies, from the telegraph, to the telephone, to the fax machine, to the rise of private overnight delivery services and, now, the Internet.” [FN169] However, the financial viability of the USPS is now being threatened, in large part, by electronic substitution of correspondence over the Internet. [FN170] “Historically, the Service's [USPS] business model depended on revenues from increasing mail volumes to cover its expanding infrastructure. This model has proven more difficult to sustain because of the decreasing mail volumes, particularly in First-Class Mail.” [FN171] Total mail volume has decreased by about 1.8 billion pieces from fiscal year 2000 to 2004. [FN172] For the first time in history, First-Class Mail volumes have declined for three years in a row. [FN173] The decline in First-Class Mail revenues—about 5 per cent from fiscal year 2000 to 2004—is particularly troublesome because First-Class Mail contributes the majority of revenue to institutional costs. [FN174]

\*509 To address the financial unsustainability of the USPS's current business model, the President's Commission Report [FN175] recommends that the USPS become a “digital postal network” by taking “full advantage of the Internet and other technological advances to perfect value-added services that will better serve the needs of its customers.” [FN176] In this regard, the President's Commission recommends that the USPS become more Internet-dependent, both

for coordinating internal operations and for providing value-added services to customers. [FN177] Intelligent Mail would apply a powerful hybrid of leading-edge information technology to the delivery of physical correspondence, [FN178] and full-service post offices would be increasingly replaced by the provision of postal services to businesses and homes over the Internet. [FN179] The USPS has already made significant changes to its operations and service offerings through increased reliance on electronic network technology and the Internet. [FN180]

Given the unprecedented effect of the Internet on the financial viability of the USPS, the implications of broadband access policies for the postal system can be dramatic. Therefore, an appropriate inquiry as to sustainability of policies affecting broadband access to the Internet must include questions related to consequences for the postal system. How will elimination of common carrier obligations in the provision of broadband access to the Internet affect the postal system? Will there be de facto erosion of common carriage of the postal system that adversely affects customers? [FN181] Will the geographic availability of postal service significantly deteriorate? [FN182] What will be the implications for free speech rights? [FN183] How might government interest in viewpoint diversity be adversely impacted-keeping in mind that postal policies have long played a significant role in the evolution of the press and other print media? [FN184] How might individuals' free speech rights as speakers be adversely affected? It certainly seems incongruous to eliminate common carriage obligations for \*510 providers of broadband Internet access while simultaneously increasing the dependence of the USPS, a common carrier itself, on the Internet. The network neutrality debate also needs to address implications for the evolving, layered infrastructure of the postal system.

## VI. Conclusion

The legal regulatory regimes for communications technologies are evolving in response to technological, economic, and social change. Current debate regarding revisions to U.S. communications laws includes issues collectively referred to as network neutrality. The network neutrality debate is complex, as the concept of network neutrality is ill-defined and embodies a diversity of goals, problems, and remedies.

Through the lens of “essentiality of access”—that is, the historical alignment of access problems to legal principles for an essential service or facility—the analysis here shows how the discourse of network neutrality is misleading. As with the general discourse of deregulatory policies in telecommunications, discourse of network neutrality mischaracterizes the law of common carriage. The statutory, rather than the original common law, regime for common carriage is inappropriately used as the frame of reference for considering proposed network neutrality rules. In so doing, the legal bases for access to end user customers and competitors have been erroneously conflated, thereby masking the significance of the common law regime for the carrier (provider)-to-customer relationship. The discourse then permits opponents of network neutrality rules to leverage arguments pertaining to the provider-to-competitor relationship to issues related to the provider-to-customer relationship. As a result, there is an unsubstantiated over-reliance by opponents on antitrust principles to address provider-to-customer access problems.

The preoccupation with antitrust theory is also symptomatic of an analytical failure to consider policy change in terms of policy sustainability. Although proponents of network neutrality rules have attempted to raise issues of long-term consequences, opponents have thus far declined to engage such proponents' arguments on the merits. A skewed discourse that fails to

squarely address concerns of policy sustainability has unfortunately been enabled by the FCC's rulings in the Cable Modem Declaratory Ruling and the Wireline Broadband Access Order. [FN185]

The misleading discourse and recent FCC rulings also affect the evolving interrelationship of common carriage principles and free speech rights under intermodal competition. If antitrust principles are insufficient to substitute for the functions that common carriage and public utility obligations have historically served in providing access to customers to an essential service or facility, then sustainability problems are created for viewpoint diversity and free \*511 speech rights of individuals, all in order to further economic interests of corporate owners of broadband facilities. For this reason, the evolution of broadband access policy requires deeper inquiry as to the constitutional rights of natural persons as opposed to corporations.

Furthermore, the elimination of common carriage obligations for broadband access to the Internet may adversely affect the postal system. The financial viability of the United States Postal Service is now being seriously threatened by electronic substitution over the Internet; and, in order to adapt to this competition, the postal system is becoming increasingly Internet-dependent. It is unclear how common carriage of the postal system can remain sustainable while increasing its dependence on a competing, non-common carriage broadband Internet infrastructure. Instead, unintended consequences may include de facto erosion of common carriage and deterioration of geographic availability of postal service. In this way, the network neutrality debate also needs to address the evolving, layered infrastructure of the postal system.

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[FN1]. See generally Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006), available at <http://commerce.senate.gov/hearings/witnesslist.cfm?id=1705> (Mar. 25, 2006).

[FN2]. See Cheryl Bolen, In Debate Over 'Net Neutrality,' More Bandwidth Could Be Solution, Pike & Fischer Internet L. & Reg., Feb. 8, 2006, at 4; Lynn Stanton, Senators Differ on How to Balance Internet 'Openness,' Network Investment, Telecomm. Rep. Daily, Feb. 7, 2006.

[FN3]. Barbara A. Cherry, Utilizing "Essentiality of Access" Analyses to Mitigate Risky, Costly and Untimely Government Interventions in Converging Telecommunications Technologies and Markets, 11 CommLaw Conspectus 251 (2003).

[FN4]. Id. at 251.

[FN5]. Id. at 262-68.

[FN6]. Id. at 251.

[FN7]. See Cable Modem Declaratory Ruling, *infra* note 24; Wireline Broadband Access Order

infra note 29; infra note 34.

[FN8]. See supra note 3, at 254.

[FN9]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Jeffrey A. Citron, Chairman and CEO of Vonage Holding Corp., at 1-2), available at <http://commerce.senate.gov/pdf/citron-020706.pdf> (Mar. 25, 2006).

[FN10]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Earl W. Comstock, President and CEO COMPTTEL, at 15), available at <http://commerce.senate.gov/pdf/comstock-020706.pdf> (Mar. 25, 2006)

[FN11]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Vincent G. Cerf, Vice President and Chief Internet Evangelist, Google Inc., at 7), available at <http://commerce.senate.gov/pdf/cerf-020706.pdf> (Mar. 25, 2006).

[FN12]. Barbara van Schewick, Towards an Economic Framework for Network Neutrality Regulation, Paper presented at The 33rd Research Conference on Communication, Information and Internet Policy (TPRC 2005) at 1 n. 8, Arlington, VA (Sept. 20, 2005) (on file with author).

[FN13]. Chairman Powell's Internet Freedoms, outlined in a speech in 2004, are: (1) consumers should have access to their choice of legal content; (2) consumers should be able to run applications of their choice; (3) consumers should be permitted to attach any devices they choose to the connection in their homes; and (4) consumers should receive meaningful information regarding their service plans. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Lawrence Lessig, C. Wendell, Professor at Law, Stanford Law School, at 6-7), available at <http://commerce.senate.gov/pdf/lessig-020706.pdf> (Mar. 25, 2006).

[FN14]. Access-tiering refers to a policy whereby network owners condition content or service providers' right to provide content or service to the network upon the payment of some fee that is independent of basic Internet access fees. See Lessig, supra note 13, at 2 n. 2.

[FN15]. See Cerf, supra note 11, at 7. Cerf attributes the success of the Internet to the simple network principles of end-to-end design, layered architecture, and open standards. Id.

[FN16]. Timothy Wu, Network Neutrality, Broadband Discrimination, 2 J. Telecomm. & High Tech. L. 141, 165 (2003).

[FN17]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Walter B. McCormick, Jr., President and Chief Executive Officer United States Telecom Association, at 1), available at <http://commerce.senate.gov/pdf/mccormick-020706.pdf> (Mar. 25, 2006).

[FN18]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Kyle McSlarrow, President & CEO, National Cable and

Telecommunications Association, at 2 ), available at <http://commerce.senate.gov/pdf/mcslarrow-020706.pdf> (Mar. 25, 2006).

[FN19]. See McCormick, *supra* note 17, at 1.

[FN20]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of Kyle D. Dixon, Senior Fellow and Director, Federal Institute for Regulatory Law & Economics, The Progress & Freedom Foundation, at 2-4), available at <http://commerce.senate.gov/pdf/dixon-020706.pdf> (Mar. 26, 2005).

[FN21]. See Net Neutrality: Hearing Before the S. Comm. On Commerce, Sci. & Transp., 109th Cong. (2006) (testimony of J. Gregory Sidak, Visiting Professor at Law, Georgetown University Law Center, at 2), available at <http://commerce.senate.gov/pdf/sidak-020706.pdf> (Mar. 25, 2006). Sidak lists six economic considerations of telecommunications: substantial sunk investment; economics of scale; economies of scope; differential pricing, such as Ramsey pricing, to increase economic welfare; joint demand; and susceptibility to congestion. See *id.* at 2-5.

[FN22]. Christopher S. Yoo, Promoting Broadband Through Network Diversity, Research Paper prepared for the National Cable and Telecommunications Association at 2 (Feb. 6, 2006), available at [http://www.ncta.com/a\\_la\\_carte/Yoo\\_Network\\_Neutrality\\_%202-6-06.pdf](http://www.ncta.com/a_la_carte/Yoo_Network_Neutrality_%202-6-06.pdf) (Mar. 28, 2006).

[FN23]. See generally *supra* note 22. Yoo bundles the following proposals under the rubric of network neutrality: (1) requiring network owners to adhere to the nonproprietary protocol currently used on the Internet (TCP/IP); (2) prohibiting network owners from entering into exclusivity arrangements with content and applications providers; and (3) prohibiting network owners from imposing use restrictions on end users. *Id.* at 1.

[FN24]. Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities; 67 Fed. Reg. 18,848, 18,907 (Apr. 17, 2002) [hereinafter Cable Modem Declaratory Ruling]. The Cable Modem Declaratory Ruling evolved in response to the cable “forced access” debate. The issues raised in the forced access debate and the subsequent litigation related to the Cable Modem Declaratory Ruling have become a component of—as well as a catalyst for—the network neutrality debate. See, e.g., Timothy Wu, *supra* note 16, at 145-49 (discussing the fact that network neutrality is a goal, and open access is one kind of remedy); Yoo, *supra* note 22, at 36-37 (discussing the fact that open access to cable modem systems by unaffiliated ISPs represented the first round in the network neutrality debate).

[FN25]. 48 Stat. 1064, as amended, 47 U.S.C. § 151 et seq.

[FN26]. See generally Telecommunications Act of 1996, Pub. L. No 104-104, 110 Stat. 56 (1996).

[FN27]. See *Brand X Internet Services v. Fed. Communications Comm'n*, 345 F.3d 1120 (9th

Cir. 2003).

[FN28]. See 125 S. Ct. 2688 (2005).

[FN29]. In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers, CC Docket no. 02-33, Report and Order and Notice of Proposed Rulemaking, 2005 WL 2347773 (F.C.C.), (2005) [hereinafter Wireline Broadband Access Order].

[FN30]. *Id.* at ¶¶ 2, 5, 12, 17.

[FN31]. *Id.* at ¶ 86.

[FN32]. In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers, CC Docket no. 02-33, Policy Statement, 2005 WL 2347767 (F.C.C.), at ¶ 4 (2005) [hereinafter Policy Statement].

[FN33]. *Id.*

[FN34]. In fact, cable companies and wireline broadband access providers specifically sought the outcomes of the Cable Modem Declaratory Ruling and Wireline Broadband Access Order, respectively. See also Dixon, *supra* note 20, at 7-8; Yoo, *supra* note 22, at 20-21.

[FN35]. See Comstock, *supra* note 10, at 4.

[FN36]. See Cerf, *supra* note 11, at 7. See also, Lessig, *supra* note 13, at 4-5. The premise of the open access requirement for ISP's imposed upon telecom providers was to enable competition in broadband access that would prevent any compromise in end-to-end neutrality. *Id.*

[FN37]. See Lessig, *supra* note 13, at 8-9.

[FN38]. See Digital Age Communications Act of 2005, S. 2113, 109th Cong. (2005) (introduced by Senator Jim DeMint in Dec. 2005; draft telecommunications bill released by the House Commerce Committee-and primarily the work of staffers for Commerce Chairman Joe Barton and ranking member John Dingell-in Sept. 2005, which was later updated in Nov. 2005); See also Broadband Investment and Consumer Choice Act, S. 1504, 109th Cong. (2005) (introduced by Senator John Ensign and Senator John McCain in July 2005).

[FN39]. Hearings are available at <http://commerce.senate.gov/hearings/index.cfm> (Mar. 31, 2006).

[FN40]. See also *supra* text accompanying notes 1 and 2.

[FN41]. See generally Cherry, *supra* note 3.

[FN42]. *Id.*

[FN43]. Id.

[FN44]. Id.

[FN45]. Id.

[FN46]. See Cherry, *supra* note 3, at 255, Table 1.

[FN47]. Id.

[FN48]. Id.

[FN49]. Id.

[FN50]. Id.

[FN51]. See Cherry, *supra* note 3, at 254-62.

[FN52]. For a discussion of common carrier and public utility regulation to address economic interests of end user customers, see Cherry, *supra* note 3, at 256-58.

[FN53]. Id. at 258.

[FN54]. See generally Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application* §§101-03 (2d ed. 2001).

[FN55]. For a discussion of antitrust law to address economic interests of competitors, see Cherry, *supra* note 3, at 258-59.

[FN56]. See Cherry, *supra* note 3, at 258-59 & n.51.

[FN57]. The essential facilities doctrine is a judicial doctrine crafted by lower courts, which the United States Supreme Court has thus far declined to recognize or repudiate. *Verizon Communications, Inc. v. Trinko*, 540 U.S. 398, 410-11 (2004).

[FN58]. For a discussion of government intervention to address welfare interests of individuals, see Cherry, *supra* note 3, at 260-61.

[FN59]. Id. at 261.

[FN60]. See *id.* See also Barbara A. Cherry, *The Political Realities of Telecommunications Policies in the U.S.: How the Legacy of Public Utility Regulation Constrains Adoption of New Regulatory Models*, 2003 *Mich. St. Dcl. L. Rev.* 757, 768-71 (2003) (discussing how public utility regulation can also be viewed as an early form of welfare state regulation in providing universalistic, as opposed to residualistic, benefits).

[FN61]. U.S. Const. amend. I.

[FN62]. See, e.g., *Near v. Minnesota*, 283 U.S. 697, 707 (1931).

[FN63]. For a more in-depth discussion of the following description of free speech jurisprudence, see *Cherry*, *supra* note 3, at 261-62.

[FN64]. *Id.* at 261.

[FN65]. *Id.*

[FN66]. *Id.*

[FN67]. *Id.*

[FN68]. See generally Michael Botein, *Regulation of the Electronic Mass Media: Law and Policy for Radio, Television, Cable and the New Video Technologies* 499-508 (3d ed. 1998) (discussing the FCC rules regarding political broadcasts) [*hereinafter* Botein].

[FN69]. *Turner Broad. Sys., Inc. v. FCC*, 520 U.S. 180 (1997) (*Turner II*).

[FN70]. Although it is beyond the scope of this article to discuss the complexities of free speech jurisprudence, it is important to recognize that courts apply different tests among forms of mass media when considering the constitutionality of media regulation. In general, strict scrutiny applies to the print media, intermediate scrutiny applies to cable companies, and minimal scrutiny applies to broadcasting companies. See generally Botein, *supra* note 68, at 292-456 (discussing different constitutional standards in the mass media context).

[FN71]. Yet, telecommunications carriers do have free speech rights with regard to the provision of video programming over their own facilities. See *Chesapeake & Potomac Tel. Co. v. Nat. Cable Television Ass'n*, 42 F.3d 181 (4th Cir. 1994), cert. granted, *United States, FCC v. Chesapeake & Potomac Tel. Co.*, 515 U.S. 1157 (1995), judgment vacated, *U.S. v. Chesapeake & Potomac Tel. Co.*, 516 U.S. 415 (1996) (case rendered moot due to the passage of the Telecommunications Act of 1996).

[FN72]. See *supra* note 70.

[FN73]. See generally *Cherry*, *supra* note 3.

[FN74]. *Id.*

[FN75]. *Id.*

[FN76]. See *id.* at 262-68.

[FN77]. Modifications to federal universal service policy-such as whether to expand the definition of universal service to include access to broadband services-have tended to be treated separately from network neutrality issues in recent legislative and regulatory proposals and proceedings. For this reason, the fourth issue is not included in the discussion here.

[FN78]. The assertion that broadband access should be considered an essential service or facility is less contentious now than at the time this analysis was conducted.

[FN79]. This latter point simply means that some government intervention is needed to alter prevailing conditions in order to address the access problem. Such intervention could even include deregulatory actions.

[FN80]. Table 2 is based on consolidation of Tables 2 and 3 in Cherry, *supra* note 3, at 264 & 269, with modifications to reflect updates in government actions that transpired since the article's publication.

[FN81]. For the analysis of the first broadband access issue, see Cherry, *supra* note 3, at 263-65, 268.

[FN82]. *Id.* at 263.

[FN83]. *Id.*

[FN84]. *Id.*

[FN85]. See *supra* notes 24 & 29 and accompanying text.

[FN86]. See Cherry, *supra* note 3, at 263-65.

[FN87]. See Barbara A. Cherry, *Regulatory and Political Influences on Media Management and Economics*, in *Handbook of Media Management And Economics* 91-111, at 108 (Alan B. Albarran, Sylvia M. Chan-Olmstead, & Michael O. Wirth, eds.) (2006).

[FN88]. *Id.*

[FN89]. The welfare rights of individuals are also adversely affected if one considers public utility regulation to be a form of welfare state regulation. See Cherry, *infra* note 131, at 768-71.

[FN90]. For the analysis of the second broadband access issue, see Cherry, *supra* note 3, at 265, 268.

[FN91]. *Id.* at 265.

[FN92]. *Id.*

[FN93]. *Id.*

[FN94]. Public utility regulation also includes other legal mechanisms to enable the provider to fulfill its obligations, such as entry barriers or some form of subsidization through the rate structure or funding mechanisms. See generally Barbara A. Cherry, *The Crisis in Telecommunications Carrier Liability: Historical Regulatory Flaws and Recommended Reform* 52-56 (1999); see also 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* 39-56, at 42-48 (B. Cherry, A. Hammond, & S. Wildman, eds.) (1999).

[FN95]. These requirements are often referred to as carrier of last resort obligations and are usually imposed under state law. *Id.*

[FN96]. 47 U.S.C. § 214(e).

[FN97]. See Cherry, *supra* note 3, at 265.

[FN98]. *Id.*

[FN99]. *Id.*

[FN100]. *Id.*

[FN101]. *Id.* at 265-66.

[FN102]. See Cherry, *supra* note 3, at 266.

[FN103]. For the analysis of the third broadband access issue, see generally Cherry, *supra* note 3, at 265-68.

[FN104]. *Id.* at 265.

[FN105]. *Id.*

[FN106]. *Id.* at 266.

[FN107]. *Id.* at 267.

[FN108]. For constitutional limitations on the government's ability to impose access mandates given the free speech rights of the owners of communication channels, see *supra* note 70.

[FN109]. See generally *supra* note 24.

[FN110]. Wireline Broadband Access Order, *supra* note 29, at ¶ 86. For a discussion of the history of the FCC's Computer Inquiry proceedings and requirements, see *id.* at ¶¶ 21-31.

[FN111]. See Cherry, *supra* note 3, at 265-66.

[FN112]. See James B. Speta, A Common Carrier Approach to Internet Interconnection, 54 Fed. Comm. L. J. 225, 258 (2002); see also note 54-55.

[FN113]. See Speta, *supra* note 112, at 260-68.

[FN114]. See Comstock, *supra* note 10, at 9.

[FN115]. The FCC has contributed to the confusion by the manner in which it discusses why a provider of wireline broadband Internet access service does not have to provide the transmission component on a common carriage basis to ISP's or end users. See generally Wireline Broadband Access Order, *supra* note 29, at ¶¶ 102-07. Some opponents of network neutrality rules then cite the Wireline Broadband Access Order in support of their position. See, e.g., Dixon, *supra* note 20, at 8; Yoo, *supra* note 22, at 4, 19-20, 44, 47.

[FN116]. See generally Barbara A. Cherry, Back to the Future: How Transportation Deregulatory Policies Foreshadow Evolution of Communications Policies, Paper presented at the 33rd Telecommunications Policy Research Conference (TPRC 2005), Arlington, VA (Sept. 23, 2005) (on file with the author).

[FN117]. *Id.* at 2.

[FN118]. *Id.*

[FN119]. *Id.* at 11.

[FN120]. See generally Barbara A. Cherry, Digital Crossroads: American Telecommunications Policy in the Internet Age, *J. of Media Econ.*, 137 (2006) (book review).

[FN121]. See Sidak, *supra* note 21; Dixon, *supra* note 20; Yoo, *supra* note 22.

[FN122]. See Cherry, *supra* note 3, at 256-58.

[FN123]. *Id.*

[FN124]. *Id.*; See Cherry, *supra* note 116, at 6-9.

[FN125]. See Cerf, *supra* note 11, at 2-4; Comstock, *supra* note 10, at 15; American Civil Liberties Union (ACLU), No Competition: How Monopoly Control of the Broadband Internet Threatens Free Speech, report available at <http://www.aclu.org/FilesPDFs/ACF72A9.pdf> (July 7, 2002), at 3 (Mar. 21, 2006); John Windhausen, Jr., Good Fences Make Bad Broadband, report released by Public Knowledge at 40-42 (2006), available at <http://www.publicknowledge.org/content/papers/pk-net-neutrality-whitep-20060206> (Mar. 21, 2006).

[FN126]. Reflective of this line of research, see *infra* notes 127-132, Cherry defines sustainable policies “as rules that are politically adoptable and for which the desired policy goals are reasonably likely to be achievable.” Barbara A. Cherry, *The Telecommunications Economy and Regulation as Coevolving Complex Adaptive Systems: Implications for Federalism*, paper presented at the 32nd Telecommunications Policy Research Conference at 5, Arlington, VA (2004) (on file with the author).

[FN127]. Cherry & Wildman, *supra* note 94.

[FN128]. See generally Barbara A. Cherry, *The Irony of Telecommunications Deregulation: Assessing the Role Reversal in U.S. and EU Policy*, in *The Internet Upheaval: Raising Questions, Seeking Answers in Communications Policy* 355-85 (Ingo Vogelsang & Benjamin M. Compaine, eds.) (2000); Barbara A. Cherry & Johannes Bauer, *Institutional Arrangements and Price Rebalancing: Empirical Evidence from the United States and Europe*, 14 *Info. Econ. & Policy* 495 (2002).

[FN129]. Cherry, *supra* note 85; Barbara A. Cherry, *Improving Network Reliability-Liability Rules Must Recognize Investor Risk/Reward Strategies*, in *Rethinking Rights and Regulations: Institutional Responses to New Communication Technologies* 309-33 (Lorie Faith Cranor & Steven S. Wildman, eds.) (2003).

[FN130]. See *supra* Cherry, note 94; Barbara A. Cherry & Steven S. Wildman, *Preventing Flawed Communication Policies by Addressing Constitutional Principles*, 2000 *L. Rev. Mich. St. U. Det. C.L.* 55 (2000).

[FN131]. See generally Barbara A. Cherry, *The Political Realities of Telecommunications Policies in the U.S.: How the Legacy of Public Utility Regulation Constrains Adoption of New Regulatory Models*, 2003 *Mich. St. Dcl L. Rev.* 757 (2003).

[FN132]. Cherry, *supra* note 3; Cherry, *supra* note 87.

[FN133]. See Cherry, *supra* note 131.

[FN134]. *Id.*

[FN135]. *Id.*

[FN136]. Cherry, *supra* note 116.

[FN137]. In 1912 the U.S. Department of Justice filed an antitrust suit against AT&T, which had refused to interconnect with any other telephone company. AT&T entered into an agreement that, among other things, would allow such interconnection. This agreement became known as the Kingsbury Commitment because of a letter sent to the U.S. Attorney General by Nathan Kingsbury. See Letter from Nathan C. Kingsbury to Attorney General J.C. McReynolds (Dec. 19, 1913) reprinted in 1913 AT&T Annual Report, available at <http://www.att.com/history/milestones.html> (Mar. 27, 2006).

[FN138]. *United States v. AT&T.*, 552 F. Supp. 131 (D.D.C. 1982), cert. denied, 460 U.S. 1001 (1983) [hereinafter Modified Final Judgment] (antitrust consent decree that divested AT&T of the Bell Operating Companies, imposed line of business restrictions, and modified the 1956 antitrust consent decree).

[FN139]. McCormick, *supra* note 17, at 4; McSlarrow, *supra* note 18, at 2.

[FN140]. McSlarrow, *supra* note 18, at 2.

[FN141]. Sidak, *supra* note 21.

[FN142]. Dixon, *supra* note 20, at 2.

[FN143]. Yoo, *supra* note 22, at 2.

[FN144]. Cerf, *supra* note 11, at 1.

[FN145]. *Id.* at 7.

[FN146]. See generally *supra* notes 24 & 29.

[FN147]. Under common carriage regulation, content is separated from the conduit, and common carriers have no editorial discretion. See T. Barton Carter, Marc A. Franklin, & Jay B. Wright, *The First Amendment And The Fourth Estate: The Law of Mass Media* 954-55 (8th ed. 2001); *But cf.*, *supra* note 71.

[FN148]. However, the variance in free speech rights across mass media technologies is less clear and still evolving. See *supra* note 70.

[FN149]. See Cherry, *supra* note 87, at 106-109.

[FN150]. See Cherry, *supra* note 116, at 13.

[FN151]. *Id.*

[FN152]. See *id.*

[FN153]. *Id.* See also *supra* note 71.

[FN154]. *Id.*

[FN155]. *Id.*

[FN156]. *Id.*

[FN157]. See generally *supra* note 24.

[FN158]. The FCC describes the framework it established for wireline broadband Internet access service as a “lighter regulatory touch.” See *supra*, note 29, at ¶ 3.

[FN159]. See McCormick, *supra* note 17, at 3-5; Online Extra: At SBC, It's All About “Scale and Scope”, *Businessweek* (interview with SBC CEO Edward Whitacre) (Nov. 7, 2005), available at [http://www.businessweek.com/print/magazine/content/05\\_45/b3958092.htm?chan=gl](http://www.businessweek.com/print/magazine/content/05_45/b3958092.htm?chan=gl). (Mar. 31, 2006); Similar assertions are made by McSllarrow, *supra* note 18, Sidak, *supra* note 21, and Dixon, *supra* note 20.

[FN160]. Cherry, *supra* note 3, at 268-74.

[FN161]. See Cherry, *supra* note 3, at 270.

[FN162]. 494 U.S. 652 (1990).

[FN163]. *Id.* at 668-69.

[FN164]. *Id.* at 660.

[FN165]. Cherry, *supra* note 116, at 10-20.

[FN166]. The statutory regimes of common carriage were revised and still retained the essential obligations of common carriage under the common law. See Cherry, *supra* note 116, for an in-depth analysis of the deregulatory regimes for the transportation sector and comparison with evolution of communications deregulatory regimes.

[FN167]. The public utility functions are addressed through a combination of modest entry and exit requirements, government ownership of transportation infrastructure and of some carriers (e.g. Amtrak), and universal service subsidy programs for the benefit of targeted groups of customers and geographic areas (e.g. Essential Air Service Program). See *id.*

[FN168]. See notes 169-180, *infra* and accompanying test.

[FN169]. *Embracing the Future: Making the Tough Choices to Preserve Universal Mail Services*, Report of the President's Commission on the United States Postal System at 145 (2003) [hereinafter *President's Commission Report*], available at <http://www.ustreas.gov/offices/domestic-finance/usps/pdf/report.pdf> (Mar. 22, 2006)

[FN170]. *Id.* at 6-8.

[FN171]. United States Government Accountability Office, *U.S. Postal Service: The Service's Strategy for Realigning Its Mail Processing Infrastructure Lacks Clarity, Criteria, and Accountability*, GAO-05-261 at 14 (2005), available at

<http://www.gao.gov/new.items/d05261.pdf> (Mar. 22, 2006).

[FN172]. Id. at 3.

[FN173]. Id. at 1.

[FN174]. Id. at 14.

[FN175]. See supra note 169.

[FN176]. Id. at 143.

[FN177]. Id. at 143-157.

[FN178]. Id. at 146.

[FN179]. Id. at 153.

[FN180]. United States Postal Service, Transformation Plan: Progress Report (2004), available at <http://www.usps.com/strategicplanning/transformation/tppr2004/welcome.htm>. The Report is also available at [http://www.usps.com/strategicplanning/\\_pdf/TPPRFINAL2004.pdf](http://www.usps.com/strategicplanning/_pdf/TPPRFINAL2004.pdf)

[FN181]. This question poses the same type of access problem as the first broadband access issue discussed in the essentiality of access analysis in section IV.

[FN182]. This question poses the same type of access problem as the second broadband access issue discussed in the essentiality of access analysis in section IV.

[FN183]. This question, as well as the following two questions, poses the same type of access problem as the third broadband access issue discussed in the essentiality of access analysis in section IV.

[FN184]. See Paul Starr, *The Creation of the Media: Political Origins of Modern Communications* 88-90, 142-43, 261-62 (2004) (low postal rates for newspapers; free exchange among newspapers; second class rates for magazines that encouraged their use by business as an advertising medium; discount rates for books).

[FN185]. See supra notes 24 & 29.