SHIPS PASSING IN THE NIGHT: THE COMMUNICATIONS ACT AND THE CONVERGENCE ON BROADBAND

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ABSTRACT

The Communications Act of 1934 and its amendments (the "Act"), and the regulations implementing them, have been enormously important to traditional telephony, broadcasting, and multichannel video. Meanwhile, the internet is barely mentioned in the Act. It thus might seem reasonable to conclude that the Act stands as a colossus and that the argument for overhauling it has grown much stronger as the Telecommunications Act of 1996 (the "1996 Act") becomes ever more outdated. In this Article I suggest otherwise. Specifically, I make three claims—one descriptive, one a bit speculative, and one normative. The descriptive claim is that significant portions of the Act and its attendant regulations are dormant, with no significant applications. The slightly speculative claim is that only a few provisions of the Act as applied were necessary (or even important) to the rise of broadband internet service to its current predominance—most significantly, provisions on pole attachments that allowed for deployment of broadband capacity and provisions allowing the FCC to allocate wireless frequencies, which gave the FCC power to create flexible licenses that allowed licensees to offer wireless broadband. Section 230 of the 1996 Act and the FCC's net neutrality regulations may have played a role, but their centrality is (at best) uncertain. Provisions preempting state regulation and providing for federal non-regulation may well have played an important role, but that is not an argument for the importance of a particular regulation; it is an argument for the importance of the absence of regulation. This leads to my third claim. I think the arguments for overhauling the Act have become weaker, not stronger, over the last twenty-five years, because most of the Act's elements are becoming less important as telecommunications moves toward the seemingly inevitable dominance of broadband internet service.

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DOI: https://doi.org/10.15779/Z38GH9B99R

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I. INTRODUCTION

The Communications Act of 1934 and its amendments (the "Act") cover a wide range of subjects, but their heartland is the regulation of traditional telephony, broadcasting, and multichannel video. Much of the regulation is aimed at limiting the ability of incumbent providers of telephony, broadcasting, and multichannel video services from utilizing their market power to harm competition. The assumption underlying most of this regulation was that these services were sufficiently independent of each other that they merited their own regulatory regimes. Each service was separate, giving rise not only to concerns about market power within that service but also to a statutory scheme that is specific to each of the different services.

^{1.} There is some irony in this regulation of market power, as government regulation often helped to create the market power in the first place. See, e.g., STUART MINOR BENJAMIN & JAMES B. SPETA, INTERNET AND TELECOMMUNICATION LAW 222–24 (2018) (discussing the role of government policy in aiding the rise of Bell's telephone monopoly in the early 20th century); James W. Olson & Lawrence J. Spiwak, Can Short-Term Limits on Strategic Vertical Restraints Improve Long -Term Cable Industry Market Performance?, 13 CARDOZO ARTS & ENT. L.J. 283, 287–88 (1995) ("[Cable's] dominant position . . . is the result of government intervention in the form of cable franchises [which] started as nothing more than monopolies granted and protected by municipal authorities, and it was not until the 1992 Cable Act that local authorities were prohibited from unreasonably refusing to award competitive franchises to rivals"). That said, insofar as some of these services were natural monopolies (telephone and cable television are the most obvious candidates), then the monopolies would have arisen anyway, and government regulation made sense. See BENJAMIN & SPETA, supra, at 7–12 (discussing natural monopolies).

The last major revision of the Act was the Telecommunications Act of 1996 (the "1996 Act").² Within a few years of its passage, telephony, broadcasting, and multichannel video providers began calling for Congress to revise the Act. And yet here we are more than twenty-five years later, with no rewrite of the Act.

In this Article I will make three claims about the Act and regulations implementing it—one descriptive, one a bit speculative, and one normative. The descriptive claim is that significant portions of the Act and attendant regulations are zombies: the provisions still exist, but they are dormant, with no significant applications. There are four somewhat overlapping categories of dormant provisions and regulations: (1) those rendered difficult or impossible to implement because of courts' application of First Amendment scrutiny; (2) those whose language (again, as interpreted by courts) is sufficiently constraining that there is little or no room for regulation; (3) those that the Federal Communications Commission (FCC) could have relied on but has chosen not to; and (4) those regulating activities that no longer occur. This last category is probably the biggest, and it relates to the most significant marketplace development in telecommunications services over the last twentyfive years—the rise of broadband internet service and the concomitant diminution in importance of what had been the central telecommunications services (telephony, broadcasting, and multichannel video).³

^{2.} The 1996 Act amended the Act (thus the Act encompasses the 1996 Act), but it was an important piece of legislation in its own right, as it added many important provisions to the statutory scheme. See John C. Roberts, The Sources of Statutory Meaning: An Archaeological Case Study of the 1996 Telecommunications Act, 53 SMU L. REV. 143, 147–48 (2000) (noting that "[t]he 1996 Act amends the 1934 Act but is many times longer" and that the 1996 Act made dramatic changes to the statutory scheme).

Generally, "[t]he term broadband commonly refers to high-speed Internet access that is always on and faster than the traditional dial-up access." Types of Broadband Connections, FCC (June 23, 2014), https://www.fcc.gov/general/types-broadband-connections. Over time, as networks have become faster and consumer expectations have changed, the FCC has increased the speeds that it treats as constituting "broadband." In 1999, the FCC defined "broadband" as download/upload speeds for consumers of at least 200Kbps/200Kbps. The order explained that "[t]his rate is approximately four times faster than the Internet access received through a standard phone line at 56 kbps. We have initially chosen 200 kbps because it is enough to provide the most popular forms of broadband — to change web pages as fast as one can flip through the pages of a book and to transmit full-motion video." Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans, 14 FCC Rcd. 2398, 2406, ¶ 20 (1999). The FCC increased this definition in 2010 to 4Mbps/ 1Mbps, and again in 2015 to 25 Mbps/3Mbps. See 2015 Broadband Progress Report, 30 FCC Rcd. 1375, 1377, ¶ 3 (2015). Since then, many have argued that the baseline of 25Mbps/3Mbps is too slow. See, e.g., Bennet, King, Portman, Manchin Urge Biden Administration to Create Modern, Unified Federal Broadband Standard, MICHAEL BENNET U.S. SENATOR FOR COLO. (Mar. 4, 2021), https://www.bennet.senate.gov/public/index.cfm/press-releases?id=2C769043-69ED-

My second, speculative claim is that most provisions of the Act are irrelevant to the ascendance of broadband internet service. What provisions of the Act (or regulations pursuant to the Act) played a major affirmative role in the ascent of broadband internet service? That is, what parts of the Act, as applied, were necessary (or even important) to the predominant role that broadband now plays in our world? The list is pretty short, I think: provisions on pole attachments that allow for deployment of broadband capacity; provisions allowing the FCC to allocate wireless frequencies, which gave the FCC power to create flexible licenses that allowed licensees to offer wireless broadband; perhaps \$230 of the 1996 Act; and perhaps net neutrality regulations. If we wanted to stretch, we might try to claim a small role for universal service subsidies on the theory that they helped the rollout in the United States. But any role would have to be small because until 2011 those subsidies were aimed at telephone service.

Note what is not on the list of important provisions—almost all the vast panoply of statutory provisions regulating providers of telephony, broadcasting, and multichannel video. The central regulatory provisions of the Act that gave rise to major litigation—for example, the requirement that cable operators carry local broadcasters, the network elements that incumbent local exchange carriers were required to make available to competing carriers, and the prevention of cable operators or their affiliates from using unfair tactics to hurt competing satellite television providers—were of enormous significance for the particular services involved, but any affect they had on broadband

426B-B30A-57981A4BA333 (proposing minimum speeds of 100 Mbps for download and upload).

- 4. 47 U.S.C. § 224.
- 5. 47 U.S.C. §§ 301, 303.
- 6. 47 U.S.C. § 230.
- 7. See Pole Attachments Act, 47 U.S.C. § 224 (2002); Nat'l Cable & Telecomms. Ass'n, Inc. v. Gulf Power Co., 534 U.S. 327 (2002) (holding that the Pole Attachments Act allowed the FCC to set reasonable rates for cable companies' attachments not only for cable television but also for broadband internet access). The FCC has referred to net neutrality by various names over the years, including "open internet" and "utility style regulation," but they all refer to the same principle. See, e.g., Preserving the Open Internet, 25 FCC Rcd. 17,905, 17,907, ¶ 4 (2010) [hereinafter Preserving the Open Internet (2010)]; Protecting and Promoting the Open Internet, 30 FCC Rcd. 5601, 5603, ¶ 1 (2015) [hereinafter Protecting and Promoting the Open Internet (2015)]; Restoring Internet Freedom, 33 FCC Rcd. 311, 312, ¶ 1 (2018) [hereinafter Restoring Internet Freedom (2018)]. "Net neutrality" is the most common term, so this is what I will use in this Article.

^{8.} See Connect America Fund, 26 FCC Rcd. 17,663, 17,668–69, ¶ 5 (2011) (reorienting universal service funding toward broadband services).

rollout was likely trivial. ⁹ It is certainly possible that some of these provisions slightly slowed down or sped up the ascent of broadband internet service—maybe a different regulatory environment would have resulted in cable broadband being deployed a bit more quickly, or would have led to more municipal networks. But it is hard to see how the basic trajectory of broadband internet service's rise to become the predominant platform would have been significantly affected by these statutory provisions. One can never prove what would have happened in an alternate universe, but, as I will discuss below, there is every reason to believe that the convergence on broadband internet service would have occurred in largely the same way if Congress had repealed the vast majority of the Act in 1996 instead of enacting the 1996 Act.

This leads to my third claim: although the Act seems increasingly outdated, the arguments for its overhauling have become weaker, not stronger, over time. As telephony, broadcasting, and multichannel video industries have receded in importance, so, too, have the specifics of their regulation. Although the regulation of these services is still important, not least to the many people and companies involved in their provision, they are becoming less important over time. There of course remain vibrant and impassioned arguments over aspects of the Act—net neutrality regulations and § 230 are probably the two most prominent examples. But resolving those questions does not require a rewrite of the Act. Indeed, each issue can be resolved with narrowly targeted legislation only a few pages long. Most of the Act's elements, creaky as they are, are becoming less significant as telecommunications moves toward the seemingly inevitable dominance of broadband internet service.

^{9.} See 47 U.S.C. §§ 534, 535 (requiring cable providers to carry local television broadcast stations); Turner Broad. Sys., Inc. v. FCC, 520 U.S. 180 (1997) (holding that the must-carry provisions did not violate the First Amendment); infra note 134 (on network elements); 47 U.S.C. § 548(b) (forbidding cable operators, their affiliated "satellite cable programming vendor[s]," and "satellite broadcast programming vendor[s]" from "engag[ing] in unfair methods of competition or unfair or deceptive acts or practices, the purpose or effect of which is to hinder significantly or to prevent any multichannel video programming distributor from providing satellite cable programming or satellite broadcast programming to subscribers or consumers."); Nat'l Cable & Telecomms. Ass'n v. FCC, 567 F.3d 659, 671 (2009) (upholding FCC rulemaking, pursuant to 47 U.S.C. § 548(b), that prohibited exclusivity agreements between cable companies and apartment building owners). Effects on broadband rollout are possible, but very likely trivial. For instance, in theory these regulations of cable providers could have sufficiently reduced cable television operators' income that they lacked the funds to upgrade their networks to provide broadband internet or to pass their cables by a significant number of homes. In reality, given that virtually every cable operator provides broadband internet and that by the early 2000s cable passed more than ninety-seven percent of homes, this seems farfetched.

II. AN ACT FILLED WITH ZOMBIES

Many of the Act's provisions have been enormously consequential, helping to shape (and reshape) markets and engendering of massive litigation along the way. ¹⁰ But today many of those provisions are basically dormant—they no longer have any significant applications.

Some of the dormancy flows from judicial application of First Amendment constraints. For instance, the D.C. Circuit has applied First Amendment scrutiny to the regulation of cable television operators and programmers, with the result that not only have regulations been invalidated but also it would be difficult, if not impossible for a new regulation to pass muster.¹¹

Some of the dormancy flows from the language of the statutory provisions themselves (again, as interpreted by courts). The D.C. Circuit has been the leader here as well, interpreting some provisions in a manner that left the FCC with sufficiently little room that it never pursued them again (under Democratic and Republican administrations).¹²

Some of the dormancy is due to regulatory choices. Notably, under the Trump FCC, Title II of the Act might as well not have existed: the FCC concluded that broadband internet access service is not a telecommunications service and thus not covered by Title II;¹³ and the extensive and intricate regime created by Title II to regulate the massive market power of telecommunications providers was not a focus of significant regulation, litigation, or marketplace developments, because traditional voice telephony providers, far from having market power, are relatively small players who are diminishing in significance with each passing day.¹⁴

This relates to what is probably the biggest factor in the dormancy of many statutory provisions—the rise of broadband internet service and the

^{10.} Notably, the interconnection and competition provisions of the 1996 Act (47 U.S.C. §§ 251–76) changed the telecommunications market and gave rise to seemingly endless litigation. *See infra* notes 134–137 and accompanying text.

^{11.} For example, in Time Warner Ent. Co. v. FCC, 240 F.3d 1126 (D.C. Cir. 2001), the D.C. Circuit invalidated cable vertical concentration limits, and the FCC never again pursued them. *See infra* notes 21–23 and accompanying text.

^{12.} For example, the D.C. Circuit twice rejected the FCC's implementation of statutorily mandated cable horizontal concentration limits. *See* Time Warner Ent. Co. v. FCC, 240 F.3d 1126, 1135 (D.C. Cir. 2001) (rejecting FCC's implementation of horizontal concentration limits); Comcast Corp. v. FCC, 579 F.3d 1, 6 (D.C. Cir. 2009) (same); *infra* notes 24–26 and accompanying text.

^{13.} See Restoring Internet Freedom (2018), supra note 7, at 312, ¶ 2.

^{14.} As of 2018, only 5.3% of U.S. households had a landline as their only form of phone. See Stephen J. Blumberg & Julian V. Luke, Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2018, NAT'L CTR. FOR HEALTH STATS. 5 tbl.1 (2018), https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201906.pdf.

concomitant diminution in importance of traditional telecommunications services (telephony, broadcasting, and multichannel video).

First, as to First Amendment constraints: The recent history of the Supreme Court's First Amendment jurisprudence has been one of expansive application. ¹⁵ A notable case in that regard is *Turner Broadcasting*, in which the Supreme Court held that:

Cable programmers and cable operators engage in and transmit speech, and they are entitled to the protection of the speech and press provisions of the First Amendment. Through "original programming or by exercising editorial discretion over which stations or programs to include in its repertoire," cable programmers and operators "see[k] to communicate messages on a wide variety of topics and in a wide variety of formats."¹⁶

Turner Broadcasting applies First Amendment scrutiny to all laws regulating the editing of substantive communications.¹⁷ Thus a broad range of telecommunications regulations are subject to intermediate scrutiny (for content-neutral regulations) or strict scrutiny (for content-based regulations). The treatment of § 553(b) of the Act, which prohibited local telephone companies from providing video programming directly to subscribers in their telephone service areas, is illustrative. Every court to consider a challenge to this provision not only applied First Amendment scrutiny but also invalidated the statute on First Amendment grounds.¹⁸ The D.C. Circuit has been

^{15.} See Stuart Minor Benjamin, Algorithms and Speech, 161 U. PA. L. REV. 1445, 1456-58 (2013).

^{16.} Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 636 (1994) (alteration in original) (citation omitted) (quoting City of Los Angeles v. Preferred Commc'ns, Inc., 476 U.S. 488, 494 (1986)). As the internal quotation indicates, the Court put forward the same test in City of Los Angeles v. Preferred Commc'ns, Inc., 476 U.S. 488, 494 (1986).

^{17.} See Stuart Minor Benjamin, Transmitting, Editing, and Communicating: Determining What "the Freedom of Speech" Encompasses, 60 DUKE L.J. 1673, 1696–99 (2011).

^{18.} See Chesapeake & Potomac Tel. Co. v. United States, 830 F. Supp. 909 (E.D. Va. 1993) (invalidating 47 U.S.C. § 533(b) on First Amendment grounds because it burdened more speech than necessary to serve the government's interests), aff'd, 42 F.3d 181 (4th Cir. 1994); US West, Inc. v. United States, 855 F. Supp. 1184 (W.D. Wash.) (same), aff'd, 48 F.3d 1092 (9th Cir. 1994); Pacific Telesis Grp. v. United States, 48 F. 3d 1106 (9th Cir. 1994) (same); BellSouth Corp. v. United States, 868 F. Supp. 1335 (N.D. Ala. 1994) (same); Ameritech Corp. v. United States, 867 F. Supp. 721 (N.D. Ill. 1994) (same); NYNEX Corp. v. U.S., No. 93-323-P-C (D. Me.) (Dec. 20, 1994) (same); GTE South, Inc. v. United States, No. 94-1588-A (E.D. Va. Jan. 13, 1995) (ditto); U.S. Tel. Ass'n v. United States, No. 1:94-CV-01961 (D.D.C. Feb. 14, 1995) (yep); Sw. Bell Corp. v. United States, No. 3:94-CV-0193-D (N.D. Tex. Mar. 27, 1995) (lo mismo); S. New England Tel. Co. v. United States, No. 3:94-CV-80 (D. Conn. Apr. 27, 1995) (you get the point). The Supreme Court granted certiorari and heard oral argument in the United States' challenge to the holding in the case involving Chesapeake & Potomac Telephone but the case was mooted by the passage of (wait for it...) the 1996 Act.

particularly aggressive in this regard, treating all regulation of cable operators as raising First Amendment issues, including regulations with no obvious connection to cable operators' exercise of editorial discretion, such as regulation of rates that cable companies could charge subscribers.¹⁹ This means that any form of multichannel video regulation is subject to rigorous scrutiny and may well be invalidated on those grounds. 20 The prospect of invalidation makes formulating a regulation that much less attractive in the first place. One example arises out of a 1992 amendment to the Act directing the FCC to impose vertical integration limits on cable operators.²¹ The FCC promulgated regulations limiting cable operators to carrying no more than forty percent of channels in which they had an attributable interest.²² The D.C. Circuit invalidated these rules on First Amendment grounds, finding that the FCC had failed to adequately justify its choice of forty percent.²³ And there the matter has rested. In the twenty years since, through many different FCC chairs from both political parties, the FCC has never promulgated new vertical integration limits under this provision. The hurdles posed by intermediate scrutiny have apparently been sufficient to dissuade the Commission from investing the time and energy to promulgate new regulations. The provision directing the FCC to impose vertical integration limits on cable operators remains in the U.S. Code, but it is dormant, with no application.

Turning to the second category of reasons for dormancy, courts (again led by the D.C. Circuit) have reached constraining results without relying on the First Amendment and instead focusing on the language of the relevant provision of the Act. For example, the 1992 legislation that mandated vertical cable integration limits also directed the FCC to promulgate horizontal

United States v. Chesapeake & Potomac Tel. Co., 516 U.S. 415 (1996) (remanding for consideration of mootness in light of the 1996 Act).

^{19.} See Time Warner Ent. Co. v. FCC, 56 F.3d 151, 186 (D.C. Cir. 1995) ("[C]able rate regulations are subject to intermediate scrutiny under the First Amendment.").

^{20.} That is, intermediate scrutiny (for content-neutral regulations) or strict scrutiny (for content-based regulations).

^{21.} See § 11(c)(2)(B) of the Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460, codified at 47 U.S.C. § 533(f)(1)(B) (providing that the FCC shall conduct a proceeding "to prescribe rules and regulations establishing reasonable limits on the number of channels on a cable system that can be occupied by a video programmer in which a cable operator has an attributable interest").

^{22. 47} C.F.R. § 76.504(a) ("[N]o cable operator shall devote more than 40 percent of its activated channels to the carriage of national video programming services owned by the cable operator or in which the cable operator has an attributable interest.").

^{23.} See Time Warner Ent. Co. v. FCC, 240 F.3d 1126, 1139 (D.C. Cir. 2001) ("We find that the FCC has failed to justify its vertical limit as not burdening substantially more speech than necessary.").

concentration limits.²⁴ In 2001 the D.C. Circuit rejected the FCC's implementation of horizontal limits under this statutory provision as exceeding the authority that the statute conferred on the FCC.²⁵ And in 2009 the D.C. Circuit rejected the FCC's second attempt at such horizontal limits on the grounds that the FCC had failed to show that its limit would serve the statutory goals of competition and diversity.²⁶ In response, as with the vertical integration limits, the FCC gave up: it has not promulgated new regulations under this provision.

We can argue about whether these cases were rightly decided. Perhaps these cases represent judicial overreach, with courts unreasonably demanding the impossible. Perhaps the cases reflect a congressional desire for the FCC to implement regulations that the FCC was not going to be able to justify in light the relevant level of judicial scrutiny and the state of the market, such that the invalidation of the FCC's resulting efforts were unsurprising and even inevitable. What is clear, though, is that the impact of these cases has been to deprive the relevant statutory provisions of any meaningful application.

Then we get to the third reason for dormancy, involving regulatory choices. The best example arises from the centerpiece of the Act for most of the 20th century: Title II, the section of the Act that regulates common carriers. Under Title II, common carriers are subject to a range of regulations – of the rates that these common carriers charge, the services they offer, their obligations to serve customers, etc.²⁷ The main common carriers under Title

^{24.} See § 11(c)(2)(A) of the Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460, codified at 47 U.S.C. § 533(f)(1)(A) (providing that the FCC shall conduct a proceeding "to prescribe rules and regulations establishing reasonable limits on the number of cable subscribers a person is authorized to reach through cable systems owned by such person, or in which such person has an attributable interest").

^{25.} See Time Warner Ent. Co. v. FCC, 240 F.3d 1126, 1135 ("[W]e conclude that Congress has not given the Commission authority to impose, solely on the basis of the 'diversity' precept, a limit that does more than guarantee a programmer two possible outlets (each of them a market adequate for viability)."). The court found that the horizontal limits were subject to First Amendment scrutiny, but it did not reach the constitutional issue because it could decide the case on statutory grounds. See id. at 1129 ("The horizontal limit interferes with petitioners' speech rights by restricting the number of viewers to whom they can speak.").

^{26.} See Comcast Corp. v. FCC, 579 F.3d 1, 6 (D.C. Cir. 2009) ("In sum, the Commission has failed to demonstrate that allowing a cable operator to serve more than thirty percent of all cable subscribers would threaten to reduce either competition or diversity in programming.").

^{27.} See, e.g., 47 U.S.C. §§ 201, 203, 205 (on rate regulation); 47 U.S.C. §§ 214, 225(d) (on services common carriers offer); 47 U.S.C. §§ 214, 254 (on the obligations of common carriers to serve customers); Peter K. Pitsch & Arthur W. Bresnahan, Common Carrier Regulation of Telecommunications Contracts and the Private Carrier Alternative, 48 FED. COMMC'NS L.J. 447, 448 (1996) ("The Federal Communications Commission has traditionally regulated telephone services under Title II of the Communications Act of 1934, requiring, among other things,

II have been local exchange providers (providers of landline local telephone service through a local loop).²⁸ They provide telecommunications service under Title II, and Title II treats such service as common carriage.²⁹

But there was an alternative: some companies wanted to provide "enhanced" services beyond "basic" telephone service. This distinction came to be embodied in the Act as the difference between "information" and "telecommunications" services. The latter were subject to pervasive regulation under Title II, and the former were covered by Title I and subject to very little regulation. To be in Title I was to be free from pervasive regulation—or any significant regulation at all. At the outset, telecommunications services were the core, and information services were the periphery. That began to change in the late 20th century, but Title II was still essential because of its application to local telephony.

The big flashpoint in the 21st century has been the application of the distinction between telecommunications and information services to broadband internet access providers' provision of service to their customers. As I discuss below, initially the FCC distinguished between internet access service provided by telephone companies (via DSL) and internet access service

that telephone companies as 'common carriers' make their services available to the general public at reasonable rates.").

- 28. See FCC, STATISTICS OF COMMUNICATIONS COMMON CARRIERS, (2006/2007 eds. 2010) (presenting statistics on the prevalence of local exchange carriers among communications common carriers).
- 29. See 47 U.S.C. § 153(50) ("The term 'telecommunications' means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."); 47 U.S.C. § 153(51) ("The term 'telecommunications carrier' means any provider of telecommunications services A telecommunications carrier shall be treated as a common carrier under this chapter only to the extent that it is engaged in providing telecommunications services."); 47 U.S.C. § 153(53) ("The term 'telecommunications service' means 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.").
- 30. See Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer II), 77 F.C.C.2d 384, 417–423, ¶¶ 86–101 (1980) (distinguishing "basic" service (most notably, telephone service) from "enhanced" service (computer services offered over telephone lines)).
- 31. See Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Serv., 545 U.S. 967, 977 (2005) ("The definitions of the terms 'telecommunications service' and 'information service' established by the 1996 Act are similar to the Computer II basic- and enhanced-service classifications."); Fed.-State Joint Bd. On Universal Serv., 13 FCC Rcd. 11,501, 11,511, ¶ 21 (1998) ("[W]e find that Congress intended the categories of 'telecommunications service' and 'information service' to parallel the definitions of 'basic service' and 'enhanced service' developed in our Computer II proceeding.").

provided by cable providers (via cable modem).³² The FCC moved away from Title II in the early 2000s even as it assumed that it still had the ability to require some forms of neutrality under Title I. After D.C. Circuit decisions held that the Commission had little ability to impose antidiscrimination and anti-blocking rules under Title I,³³ the Commission in 2015 reclassified broadband internet access as a telecommunications service under Title II.³⁴ A little less than three years later (under a new presidential administration), the Commission rejected that Order and reclassified broadband internet access as an information service under Title I.³⁵

What is striking is that Title II has been moved not merely from the center to the periphery, but from the center to the wilderness: it is not clear that Title II has any applications that more than a few landline telephone diehards really care about anymore. One of the arguments that net neutrality supporters made against the repeal of the 2015 net neutrality regulations and the reclassification of internet access as an information service was that the logic of such a decision would apply equally to standard telephone service.³⁶ In response, the 2018 net neutrality order stated that "We reject assertions that the analysis we adopt today would *necessarily* mean that standard telephone service is likewise an information service."³⁷ The Commission did not, and was not asked to, specifically conclude that standard telephone service must be treated as a telecommunications service, and I am not expecting the Commission to revisit that question, for a simple reason: the question is of little consequence.

The fourth and perhaps the biggest reason for the dormancy of so many provisions is that many of the underlying activities no longer occur in any meaningful way. This is the central marketplace development in telecommunications over the last twenty-five years. Consider the most

^{32.} See Deployment of Wireline Services Offering Advanced Telecommunications Capability, 13 FCC Rcd. 24,012, 24,028–31, ¶¶ 34–37 (1998) [hereinafter Advanced Telecommunications Capability] (classifying DSL service as a telecommunications service under Title II); Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, 17 FCC Rcd. 4798, 4802, ¶ 7 (2002) [hereinafter 2002 Cable Modem Order] (concluding that cable is an information service under Title II).

^{33.} See Comcast Corp. v. FCC, 600 F.3d 642, 660 (D.C. Cir. 2010) (holding that the FCC did not have the ancillary authority to regulate network management policies for companies that were not common carriers); Verizon v. FCC, 740 F.3d 623, 659 (D.C. Cir. 2014) (vacating the antidiscrimination and anti-blocking rules).

^{34.} Protecting and Promoting the Open Internet (2015), supra note 7, at 5610, ¶ 29.

^{35.} Restoring Internet Freedom (2018), supra note 7, at 312, ¶ 2.

^{36.} See id. at 346, ¶ 56 n.211 (quoting comments submitted to the FCC making this argument).

^{37.} *Id.* at 346, ¶ 56 (emphasis added).

prominent (and lobbied over) provisions of the 1996 Act, which limited the power of incumbent local exchange telephone carriers and attempted to jumpstart meaningful competition in the local loop by assisting competing local exchange carriers. Implementation of these provisions was the biggest telecommunications issue of the late 1990s. It gave rise to multiple massive lawsuits that seemed hugely important at the time. But given the ascent of the internet and the rapid diminution of the importance of the local telephone service, these statutory provisions don't matter much anymore and have faded into the background. The provisions are still on the books, but they have very little application.

Some of this dormancy might change. Most obviously, an FCC with a majority of Democratic commissioners will likely reclassify broadband internet access service as at least in part a telecommunications service under Title II, and Title II will likely no longer be dormant. But other forms of dormancy seem permanent. Notably, it is hard to imagine the circumstances under which the provisions governing the terms under which incumbent local exchange telephone carriers share their network elements with competitive local exchange carriers will once again be significant, because it is hard to imagine the realistic market circumstances in which any such transactions would occur.

III. THE FEW PROVISIONS NECESSARY, OR EVEN IMPORTANT, TO THE ASCENDANCE OF BROADBAND INTERNET SERVICE

The discussion above highlights that many provisions have become dormant, and that some of this dormancy flows from market developments. I

^{38.} See 47 U.S.C. §§ 251–76.

^{39.} See, e.g., AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999); Verizon Commc'ns Inc. v. FCC, 535 U.S. 467 (2002).

^{40.} See FCC, LOCAL TELEPHONE COMPETITION: STATUS AS OF DECEMBER 31, 2013 2 fig.1 (2014), https://docs.fcc.gov/public/attachments/DOC-329975A1.pdf (finding that retail switched access lines (traditional wireline local telephone service) made up less than twenty percent of the market share by the end of 2013 and that such lines declined at ten percent a year for the previous three years).

^{41.} Actually, a reclassification by the Biden FCC would be a re-re-re-reclassification for DSL. In 2005, DSL (which had been classified as a telecommunications service under Title II) was reclassified as an information service under Title I. In 2015, it was re-reclassified back to Title II as a telecommunications service. In 2018, it was re-re-reclassified back to Title I as an information service. So the next turn of the wheel (should it occur) would be a re-re-reclassification. *See infra* notes 95–113 and accompanying text (discussing the orders noted above). It is also possible that the Supreme Court will narrow *Turner Broadcasting* such that regulations like the vertical integration rules will not be subject to First Amendment scrutiny, but there is no reason to believe that the Court is inclined to do so.

now want to turn to a related, but much broader, argument: most provisions of the Act (and regulations pursuant to those provisions) have been bystanders to the broadband internet becoming the predominant service in the United States today. Provisions governing broadcasting, telephony, and multichannel video have been quite important to the development of those services. And the provisions helped lay the groundwork for the ascent of broadband internet service, insofar as they allowed for the buildout of networks (mainly cable television) that could be configured to allow for broadband internet access. But most provisions of the Act were basically irrelevant to the transformation of the internet in the years since the 1996 Act from one player among many to the predominant role it has today.

Internet access service for consumers began as an add-on service mainly provided by the companies providing local exchange telephony and cable television. The initial deployment of internet access thus depended on the existing telephone and cable television networks. And many different laws were relevant to the deployment of telephone and cable television wires. Some of those laws were completely separate from the Act. Notably, local franchising authorities were key regulatory authorities with respect to cable television, and they often pushed for or required widespread availability of cable television in their communities. The communities was a supplied to the communities of the communities with respect to cable television in their communities.

^{42.} See, e.g., Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Third Annual Report, 12 FCC Rcd. 4358, 4416, ¶ 108 (1997) ("[M]any MVPDs [multichannel video program distributors] are beginning to combine their video service offerings with other services (e.g., local or long distance telephony, Internet access, cellular service, paging, music, etc.) in packages designed to win customers. Cable system operators and other MVPDs have shown considerable interest in deploying modems that permit subscribers to receive high-speed access to the Internet").

^{43.} See, e.g., Amendment of Part 74, Subpart K, of the Commission's Rules and Regulations Relative to Community Antenna Television System and Inquiry Into the Development of Communications Technology and Services to Formulate Regulatory Policy and Rulemaking and/or Legislative Proposals, 36 F.C.C.2d 143, 207 (1972) (concluding that it would not attempt to replace the existing regime under which local franchising authorities regulated cable licensing and that "conventional licensing [of cable franchises] would place an unmanageable burden on the Commission"); BENJAMIN & SPETA, supra note 1, at 334 (noting that "local governments for a long time insisted that cable providers apply to them for permission to be a local 'cable franchisee' and local governments would often extract costly concessions from cable providers in exchange for granting those franchise rights"); George S. Ford, Thomas Koutsky & Lawrence J. Spiwak, The Economics of Build-Out Rules in Cable Television, 28 HASTINGS COMM. & ENT L.J. 207, 208 (2006) ("In order to provide multichannel delivered video programming, a new entrant must first obtain a franchise from the local and county governments in every market it wishes to serve. Very often, the franchise contract requires that the new entrant agree to geographic build-out requirements as a pre-condition to receiving a franchise ").

But the Act as implemented also played a role in the deployment of telephone and cable television wires. When early cable providers wanted to provide cable service in a given locality, they not only had to reach agreements with local franchising authorities but also had to find a way to get their cables to users. Telephone and electric utility poles were "virtually the only practical physical medium for the installation of television cables."44 In the 1970s, cable companies presented evidence to Congress that telephone and electric companies were charging monopoly rents, and Congress responded in 1978 by enacting the Pole Attachments Act (codified as part of Title II of the Act).⁴⁵ The Pole Attachments Act directed the FCC to "regulate the rates, terms, and conditions for pole attachments to provide that such rates, terms, and conditions are just and reasonable."46 As the Supreme Court noted, "nothing in the Pole Attachments Act as interpreted by the FCC in these cases gives cable companies any right to occupy space on utility poles, or prohibits utility companies from refusing to enter into attachment agreements with cable operators."47 But pursuant to the Pole Attachments Act the FCC did regulate the prices that pole owners could charge if they reached an agreement with cable operators on pole access, and this seems to have helped cable operators gain access to customers at reasonable pole-payment rates.⁴⁸

The Act also contained universal service provisions that pushed local exchange carriers to provide telephone service widely.⁴⁹ Admittedly, local

^{44.} FCC v. Fla. Power Corp., 480 U.S. 245, 247 (1987).

^{45.} See Pole Attachments Act, 92 Stat. 35 (1978) (codified as amended at 47 U.S.C. § 224); S. Rep. No. 580, at 13 (1977) ("It has been alleged by representatives of the cable television industry that some utilities have abused their superior bargaining position by demanding exorbitant rental fees and other unfair terms in return for the right to lease pole space."); Implementation of Section 703(e) of the Telecommunications Act of 1996, 16 FCC Rcd. 12,103, 12,109, ¶ 7 (2001) (stating that, in the Pole Attachments Act, "Congress sought to constrain the ability of utilities to extract monopoly profits from cable television system operators in need of pole, duct, conduit or right-of-way space for pole attachments.").

^{46. 47} U.S.C. § 224(b).

^{47.} FCC v. Fla. Power Corp., 480 U.S. 245, 251 (1987); see also id. at 251–52 ("The Act authorizes the FCC . . . to review the rents charged by public utility landlords who have voluntarily entered into leases with cable company tenants renting space on utility poles."). The absence of mandatory access was central to the Court's reasoning, as Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982), had held mandatory access to be a per se taking. The Court found Loretto inapplicable because the Pole Attachments Act did not require access. Fla. Power Corp., 480 U.S. at 252–53 ("The line which separates [this case] from Loretto is the unambiguous distinction between a commercial lessee and an interloper with a government license.").

^{48.} See Regulating Cable Television Pole Attachments, 43 Fed. Reg. 36,086, 36,092, ¶ 42 (1978) (offering guidance on what constitutes a "just and reasonable" rate).

^{49.} See 47 U.S.C. § 254(d) ("Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to

exchange carriers and cable operators had their own profit incentives to make their services available to virtually everyone in a given community, so it is possible that these networks would have been developed just as widely in the absence of any push from the government. But it seems reasonable to posit that the governmental push for universal coverage expanded the rollout of these services beyond what the companies would have done absent that push. In any event, the deployment numbers were fairly impressive. As of 1992, before the World Wide Web was in general usage, more than ninety-five percent of Americans had local telephone service⁵⁰ and cable television was available to more than ninety-six percent of houses with televisions.⁵¹

So the Act likely played a significant role in creating some of the preconditions for the initial rollout of internet access. But what about after that? Which provisions of the Act were necessary (or even important) to the rise of the internet from 1993 (when websites for general usage started becoming available) or 1996 (when the 1996 Act was enacted) to its current predominance? Not only is the list short, but it doesn't include the provisions that were the subject of most of the major regulatory and litigation battles of the last twenty-five years, most notably the telephony provisions that were the heart of the 1996 Act.⁵² Those litigation battles attracted most of the attention, and they were important to the development of the services involved. But the litigation and the underlying provisions were fairly inconsequential with respect to the central telecommunications development of the last twenty-five years—the rise of the internet to predominance.

Which provisions (or implementing regulations) were necessary, or at least important? That question, in turn, raises the question of what developments were necessary, or at least important, to the internet's move to predominance over the last twenty-five years. Perhaps the most obvious is the availability of broadband access, and particularly the ability to easily stream video over the internet. Video is the dominant mode of entertainment in American homes.⁵³ In a world of narrowband internet, cable and satellite television had a decisive

the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service.").

^{50.} FEDERAL-STATE JOINT BOARD, MONITORING REPORT 22 tbl.1.2 (1993).

^{51.} Annual Assessment on the Status of Competition in the Market for the Delivery of Video Programming, Seventh Annual Report, 16 FCC Rcd. 6005, app. at 6101 tbl. B-1 (2001) [hereinafter *Seventh Annual Report*].

^{52.} See infra notes 134-137 and accompanying text.

^{53.} See American Time Use Survey—2020 Results, BUREAU OF LABOR STATISTICS (2021), https://www.bls.gov/news.release/atus.nr0.htm ("Watching TV was the leisure activity that occupied the most time in 2020 (3.1 hours per day), up 19 minutes per day compared with 2019.").

advantage. As of 2000, for example, cable and satellite television had a combined market share of more than eighty-three percent of households in large part because they offered streaming video and internet access did not.⁵⁴ As broadband internet access became more available, broadband internet became more important.⁵⁵ I thus turn next to the question of which provisions of the Act were central to the availability of broadband internet access.

A. WAS THE ACT CENTRAL TO DEVELOPING AND ROLLING OUT CAPACITY?

Many developments contributed to the availability of internet access at broadband speeds. Protocols, software, and standards played a major role in attaining higher speeds, but those developments were not led by the FCC and the Act was basically irrelevant to them. To pick a notable example, the development and rollout of DOCSIS 3.0 significantly increased cable modems' data rates and thereby had a dramatic impact, given the centrality of cable modems in providing broadband access. ⁵⁶ CableLabs and a range of (mainly U.S.) cable operators privately developed the DOCSIS 3.0 standard. The main role that governments played in developing the standard was to bless it via the International Telecommunications Union (ITU), a United Nations agency that includes national governments, businesses, universities, and regional

^{54.} See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Seventh Annual Report, 16 FCC Rcd. 6005, 6054, ¶107, 6110 tbl. C-1 (2001) ("[D]espite the evidence of increased interest in Internet video deployment and use, the medium is still not seen as a direct competitor to traditional video services. Television-quality Internet video service requires a high-speed broadband connection of about 300 kbps or higher, which most current broadband providers cannot yet guarantee. In addition, deployment of broadband is not yet ubiquitous.").

^{55.} Compare Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans, 14 FCC Rcd. 2398, 2400–01, ¶¶ 2–3, 2442, ¶ 86 (1999) (noting the increased demand for broadband access and the potential for broadband to provide new and improved services to consumers when only an estimated 30 million homes had a narrowband internet subscription in 1998), with 2015 Broadband Progress Report, 30 FCC Rcd. 1375, 1377, ¶ 2, 1417, ¶ 79 (2015) (stating that eighty three percent of Americans had broadband access as of 2013 and that "today, Americans turn to broadband Internet access service for every facet of daily life"), and Connect America Fund, 26 FCC Rcd. 17,663, 17,667–68, ¶¶ 3–4 (2011) (suggesting that broadband internet access has had huge impacts, including that "broadband ha[s] become crucial to our nation's economic growth, global competitiveness, and civic life.").

^{56.} See Eighth Broadband Progress Report, 27 FCC Rcd. 10,342, 10,385, ¶ 92 (2012) (discussing the role of DOCSIS 3.0 in increasing cable modem speeds); Series J: Cable Networks and Transmission Of Television, Sound Programme And Other Multimedia Signals, ITU-T Rec. J.291, 14 (/Nov. 2006) ("The near-term need to increase bandwidth, especially on the downstream, can be achieved via the implementation of DOCSIS 3.0 channel bonding."); DOCSIS stands for Data Over Cable Service Interface Specification.

organizations.⁵⁷ The United States is a member of the ITU,⁵⁸ but its role as one of more than a thousand ITU members in the approval and rollout of DOCSIS 3.0 was small. Crediting the Act or the regulations implementing it for DOCSIS 3.0 would be a bit absurd. The same is true for the global domain name system (DNS) and the development of top-level domains. The Internet Corporation for Assigned Names and Numbers (ICANN) has had responsibility for both since 1998.⁵⁹ Although the Department of Commerce played a significant role in setting up ICANN,⁶⁰ the FCC and the Act were bystanders.

By contrast, the Act (and the FCC) did seem to be important to a different precondition for broadband access—the deployment of the physical capacity (bandwidth and electromagnetic frequencies) that supported broadband to the home. Providing higher speeds to homes was a huge problem to overcome. The most obvious possible providers were the companies that already had wires to homes—cable and telephone providers. But the last mile problem, as it was known, was a major hurdle to the development of broadband capacity. By the 1990s networks had laid enough wires to provide broadband access between cities and to nodes within those cities. But getting that access to individual homes required massive investment. Cable providers and wireless

^{57.} About International Telecommunication Union (ITU), INT'L TELECOMM. UNION, https://www.itu.int/en/about/Pages/default.aspx (last visited Feb. 23, 2021) ("ITU's global membership includes 193 Member States as well as some 900 companies, universities, and international and regional organizations.").

^{58.} *Member States*, INT'L TELECOMM. UNION, https://www.itu.int/en/myitu/Membership/ITU-Members/Member-States (last visited Feb. 23, 2021).

^{59.} What Does ICANN Do?, INTERNET CORP. ASSIGNED NAMES NUMBERS, https://www.icann.org/resources/pages/what-2012-02-25-en (last visited Oct. 9, 2022) (describing ICANNs role in managing the DNS and top-level domains).

^{60.} See Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers, https://www.icann.org/resources/unthemed-pages/icann-mou-1998-11-25-en (last visited Oct. 9, 2022) (agreement under which the Department of Commerce provided for ICANN management of the domain name system).

^{61.} James B. Speta, Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms, 17 YALE J. REG. 39, 41 (2000) ("Traditional copper telephone lines . . . simply do not have enough transmission capacity . . . to deliver [high speed internet] services to individual consumers [Congress] had no idea how the limited capacity (or "narrowband") local telephone lines could be upgraded to, or replaced with, systems that have greater capacity ("broadband" systems).").

^{62.} *Id.* at 45–48 (describing the last mile problem wherein the "last mile" of the telephone network causes a bottleneck because existing infrastructure can only support low speeds for data transmission based on the bandwidth of voice communications).

^{63.} See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans, 14 FCC Rcd. 2398, 2414, ¶ 34 (1999) ("Before broadband")

carriers were prepared to invest in higher capacity to homes, but there were elements that were beyond their control. This brings us back to pole attachments.

In 1991, the FCC interpreted the Pole Attachments Act to apply to pole attachments for non-video services, such that the regulated rate for cable television service also applied to attachments enabling internet access service, and the D.C. Circuit upheld the FCC's interpretation. ⁶⁴ Congress effectively ratified this interpretation in the 1996 Act (which amended the Pole Attachments Act). In response to the 1996 Act, the FCC in 1998 not only reaffirmed its interpretation with respect to cable companies' internet service but also concluded that the Pole Attachments Act applied to attachments by wireless providers. ⁶⁵ Thus the FCC prevented pole owners from charging unreasonable rates for wired and wireless access to their poles (and the Supreme Court upheld the FCC in NCTA v. Gulf Power Company). ⁶⁶

It is impossible to know what would have happened in the absence of the Pole Attachments Act and its implementation, but there is reason to believe that the utility companies would have exercised their monopoly power to extract monopoly rents in the absence of that act, as they had before it was enacted in 1978.⁶⁷ The implementation of the Pole Attachments Act, in other words, seems to have made a significant difference in enabling (or, at least, speeding up) the rollout of wired and wireless broadband access.

capability can be made available to customers, communications companies must modify existing facilities or construct new ones, both of which can require substantial investment.").

- 64. See Heritage Cablevision Assocs. Of Dallas, L.P., & Tex. Cable TV Ass'n, Inc. Complainants, 6 FCC Rcd. 7099, 7106, ¶ 32 (1991) ("TU Electric [the utility] lawfully may not charge TCI [the cable company] different pole attachment rates depending on the type of service being provided over the equipment attached to its poles, and we find that TU Electric's imposition of a separate charge for so-called 'non-cable television pole attachments' is unjust and unreasonable under [the Pole Attachments Act]."); Tex. Utils. Elec. Co. v. FCC, 997 F.2d 925, 927 (D.C. Cir. 1993) (finding the Pole Attachments Act ambiguous as to its application to attachments for nonvideo communications, and deferring to the FCC's interpretation under Chevron, U.S.A. Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984)).
- 65. See Implementation of Section 703(e) of the Telecommunications Act of 1996: Amendment of the Commission's Rules and Policies Governing Pole Attachments, 13 FCC Rcd. 6777, 6798 (1998).
- 66. See Nat'l Cable & Telecomm. Ass'n, Inc. v. Gulf Power Co., 534 U.S. 327, 342 (2002) ("The attachments at issue in this suit—ones which provide commingled cable and Internet service and ones which provide wireless telecommunications—fall within the heartland of the [Pole Attachments] Act. The agency's decision, therefore, to assert jurisdiction over these attachments is reasonable and entitled to our deference.").
- 67. See, e.g., S. Rep. No. 580, at 13 (1977), reprinted in 1978 U.S.C.C.A.N. 109 ("[P]ublic utilities by virtue of their size and exclusive control over access to pole lines, are unquestionably in a position to extract monopoly rents . . . in the form of unreasonably high pole attachment rates.").

The Pole Attachments Act was not the only significant element of the Act that helped enable the rise of wireless broadband. Private use of the electromagnetic spectrum, which is controlled by the FCC, affected the rise of wireless broadband as well.⁶⁸ For companies to offer wireless broadband services, the FCC needs to allocate frequencies sufficient to allow for broadband service and to allocate those frequencies for services that encompass wireless broadband.⁶⁹ Historically, the FCC had allocated spectrum for specific uses (such as broadcast television), and with licenses too narrow for broadband.⁷⁰ Beginning in 1992, however, the Commission moved toward flexible licenses, with allocations (and assignments of licenses within those allocations) broad enough to allow for broadband services.⁷¹

By the turn of the century, flexible licenses and large allocations became the norm, with the result that carriers could begin to offer wireless broadband services. As with the Pole Attachments Act, this seems to have been quite

^{68.} See 47 U.S.C. § 301 (providing that the federal government controls the spectrum and that the government will permit "the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority"). Congress could have kept the FCC out of spectrum management and instead relied entirely on private ordering subject to common law adjudication, or, after having initially provided for FCC control, at some later point removed FCC control and left future developments to private ordering. See, e.g., Thomas W. Hazlett, The Rationality of U.S. Regulation of the Broadcast Spectrum, 33 J.L. & ECON. 133 (1990) (arguing that common law adjudication would have been preferable to FCC control); PETER HUBER, LAW AND DISORDER IN CYBERSPACE: ABOLISH THE FCC AND LET COMMON LAW RULE THE TELECOSM (1997) (the title summarizes the book). Indeed, Congress could have refrained from enacting any part of the Act (or, at some point after enacting it, repealed the Act in its entirety) and left everything to some form of private ordering. I cannot rule out the possibility that the absence of any government role over spectrum (or all of telecommunications) would have produced a rise of the internet similar to what has in fact occurred. The ramifications of the nonexistence of the entire Act (or the provisions giving the FCC control over spectrum) are not only particularly speculative but also beyond the scope of this Article's focus on identifying which of the Act's provisions were central to the rise of the internet, given that the Act in fact existed. A counterfactual world without the Act is an interesting one, but not one that I am addressing here.

^{69.} See Stuart Minor Benjamin, The Logic of Scarcity: Idle Spectrum as a First Amendment Violation, 52 Duke L.J. 1, 8 (2002) (describing how the FCC parcels use of the spectrum).

^{70.} See, e.g., Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, Notice of Proposed Rulemaking, 7 FCC Rcd. 1542, 1542–43, ¶¶ 2–6 (1992) (describing previous allocations of spectrum for specific uses like cellular radio and broadcast television, and highlighting a need to allocate more and reallocate existing spectrum to support new and emerging technologies like broadband wireless telephony); Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, First Report and Order and Third Notice of Proposed Rulemaking, 7 FCC Rcd. 6886 (1992) [hereinafter Redevelopment of Spectrum] (allocating, for the first time, spectrum sufficient to support broadband wireless telephony).

^{71.} See Redevelopment of Spectrum, supra note 70.

significant. Although decades later wireless broadband is still not an equal competitor to wired broadband, wireless broadband does offer a viable alternative to wired broadband in many places. Flexible licenses covering large swaths of spectrum enabled that competition. And the availability of wireless broadband (even if only as a complement rather than a substitute for wired broadband) made internet broadband more attractive and thus aided the rise of internet broadband access to its current predominant position.

What about the FCC's universal service regime? Was it necessary, or even important, to the ascent of broadband internet service to its current predominance? It's hard to see how the answer is yes. From its inception until 2011, the universal service regime subsidized narrowband telephone services for those who might have difficulty paying the full cost. ⁷² Only in late 2011 did the FCC broaden the universal service regime to include broadband services. ⁷³ But by 2011, broadband was already well on its way toward its current predominance. ⁷⁴ And the post-2011 regime was not exactly transformational: the funding was only enough to cover a relatively small percentage of homes. Universal service programs likely produced a modest increase in the percentage of rural and low-income households with broadband access, and in that way may have sped up a bit the time it took for broadband to become predominant. ⁷⁵ But there is no basis for claiming anything beyond that.

^{72.} See Milton Mueller, Telecommunications Access in the Age of Electronic Commerce: Toward A Third-Generation Universal Service Policy, 49 FED. COMM. L.J. 655, 655–58 (1997) (describing the history of the FCC's Universal Service Regime); BENJAMIN & SPETA, supra note 1, at 665–74.

^{73.} See Connect America Fund, 26 FCC Rcd. 17,663, 17,668–69, ¶ 5 (2011) (reorienting universal service funding toward broadband services).

^{74.} See Eighth Broadband Progress Report, 27 FCC Rcd. 10,342, 10,374, ¶ 60, 10387 tbl.17 (2012) (finding that, as of 2011, more than ninety-four percent of Americans had access to fixed broadband, and sixty-four percent of Americans had adopted fixed broadband).

^{75.} See Connect America Fund Broadband Map, UNIVERSAL SERV. ADMIN. Co., https://data.usac.org/publicreports/caf-map/ (last visited. Oct. 27, 2021) (showing a total of 13.6 million locations receiving disbursements that provided support for broadband access through 2020). In addition, the Lifeline Program for Low-Income Consumers provides a modest subsidy to low-income consumers. It was not until 2016 when the FCC moved to "transition from primarily supporting voice services to targeting support at modern broadband services" in the Lifeline program. Lifeline & Link Up Reform & Modernization, 31 FCC Rcd. 3962, 3964, ¶ 6 (2016). Since 2016, the program has had up to 10.7 million annual participants who received subsidies and subscribed to broadband services. Lifeline Subscribers by State or Jurisdiction January 2017 Through June 2017, UNIVERSAL SERV. ADMIN. Co., https://www.usac.org/about/reports-orders/fcc-filings/ (last visited Oct. 28, 2021); Program Data, Lifeline Subscribership by County by Service Type, UNIVERSAL SERV. ADMIN. Co., https://www.usac.org/lifeline/resources/program-data/ (last visited. Oct. 29, 2021) (showing the different types of services that participants subscribe to, including broadband, bundled broadband, and voice-only services).

B. DID THE ACT DRIVE CONTENT?

I haven't yet mentioned the content that was transmitted over the internet. Did content drive the success of the internet and thus, presumably, broadband internet service? If so, were some provisions of the Act necessary, or at least important, to that content? The answer to the first question is unclear and would occupy an article (or book). But we can have more confidence about the second question: with the possible exception of § 230, the Act played no meaningful role in aiding the ascent of the internet by increasing the quality or quantity of the content transmitted over the internet. Congress's main attempts at direct regulation of internet content involved limits on internet indecency, and the courts largely invalidated such legislation. There was no Fairness Doctrine or Personal Attack and Political Editorial Rules for the internet. There was no equivalent of the program access rules or the must-carry regime. There were no compulsory copyright licenses for internet intermediaries.

The one provision of the Act that plausibly could have been essential to the rise of the internet to predominance is § 230 (a provision on which books could be and have been written). Although most everything about § 230 is contested territory, it is reasonable to posit that the internet (and in particular content hosts like social media platforms and other intermediaries like internet service providers) would look quite different without § 230, through some combination of (1) greater restraints on individuals' ability to post materials that could expose intermediaries to liability (e.g., potentially defamatory material) and (2) much greater investment on the part of the intermediaries in content moderators whose job it was to remove user-generated content that could expose the intermediaries to liability. The first possibility would have

^{76.} See Reno v. ACLU, 521 U.S. 844 (1997) (invalidating key provisions of the Communications Decency Act on First Amendment grounds).

^{77.} See Report on Editorializing Broadcast Licensees, 13 F.C.C. 1246 (1949) (Fairness Doctrine); Amendment of Part 73 of the Rules to Provide Procedures in the Event of a Personal Attack of Where a Station Editorializes as to Political Candidates, 8 F.C.C.2d. 721 (1967) (Personal Attack and Political Editorial Rules).

^{78.} See 47 U.S.C. § 548(c) (program access provisions); Revision of the Commission's Program Access Rules, 27 FCC Rcd. 12,605 (2012); 47 U.S.C. §§ 534, 535 (must carry provisions); Turner Broad. Sys. v. FCC, 520 U.S. 180 (upholding the constitutionality of the must carry rules).

^{79. 17} U.S.C. § 111 (establishes compulsory licenses in favor of cable operators who want to retransmit copyrighted broadcast content).

^{80.} See, e.g., Jeff Kosseff, The Twenty-Six Words That Created the Internet (2019).

^{81.} See, e.g., Derek E. Bambauer, What does the day after Section 230 reform look like?, BROOKINGS (Jan. 22, 2021), https://www.brookings.edu/techstream/what-does-the-day-

reduced the freewheeling nature of content hosts like social media platforms, and the second would have imposed significant costs that might have reduced the growth of social media, internet service providers, and other intermediaries. Thus it may be that the internet in general and social media in particular would have achieved less explosive growth in the absence of § 230.

There are two obvious complications with this narrative: the existence of many services unaffected by § 230 and the experiences of other countries. As to the former: perhaps an internet with tamer user-generated content would be no less predominant. Many people value user-generated content, and it was likely what pulled many of the first users onto the internet, but it is not clear that user-generated content was necessary for the internet to attain predominance. As noted above, the availability of high-quality streaming video created by production companies has been a key ingredient to the internet's rise vis-à-vis multichannel video.82 And those production companies would be sensitive to their own possible liability and thus avoid uploading materials that could give rise to liability.

Of course, it is impossible to know what would have happened in the United States without § 230. But this relates to the second complication: § 230 is a U.S. statute, but the internet is predominant in developed countries around the world.⁸³ Indeed, even in China, which greatly restricts user-generated

after-section-230-reform-look-like/ (stating that, absent § 230, internet sites would be more hesitant about allowing user-generated content and those sites that allowed user-generated content would have to spend more money on reviewing and policing such content).

^{82.} And perhaps the pathbreaking genre of video was porn. It is a commonplace among technologists that sexual content has been a key driver for the uptake of many new technologies—notably including VCRs, cable television, and the internet. See, e.g., Laurence H. Winer, Review: The Old Order Changeth, 45 JURIMETRICS 333, 346 (2005) (reviewing MONROE E. PRICE, MEDIA AND SOVEREIGNTY: THE GLOBAL INFORMATION REVOLUTION AND ITS CHALLENGE TO STATE POWER) ("Every new technology from the VCR, to cable and satellite, to the Internet thrives on porn.").

^{83.} Individuals Using the Internet, INT'L TELECOMM. UNION (2020), https://www.itu.int/ en/ITU-D/Statistics/Pages/stat/default.aspx (estimating that as of 2019, 86.7% of the developed world use the internet); Percentage of Households with Internet Access at Home and With a Computer, INT'L TELECOMM. UNION (2020), https://www.itu.int/en/ITU-D/Statistics/ Pages/stat/default.aspx (estimating that as of 2019, 85.2% of households have internet access at home in the developed world).

content,⁸⁴ the internet has become dominant.⁸⁵ It is therefore difficult to attribute the rise of the internet over the last twenty-five years to § 230.

This relates to a broader and more fundamental point: any narrative that attributes the current predominance of the internet in the United States to a U.S.-specific factor has to contend with the internet's predominance in so many other countries. If one claims that any provision of the Act or FCC regulation was central to the current predominance of the internet, one must confront the question why countries that lack such laws also have a predominant internet. There are possible responses, of course. One obvious response is that most other countries did have laws similar to those in the Act. That is not true of § 230, but it is at least partially true of spectrum allocation. The United States was a leader in moving toward flexible licenses for large swaths of spectrum, enabling the development of wireless broadband internet access. But other countries also had legal regimes for spectrum licensing that allowed them to follow suit, and to a significant degree many of them did

^{84.} See, e.g., Cybersecurity Law of the People's Republic of China (promulgated by the NPC Standing Comm. Nat'l People's Cong., Nov. 7, 2016, effective June 1, 2017) art. 12, translated in Rogier Creemers, Paul Trilio & Graham Webster, Translation: Cybersecurity Law of the People's Republic of China, NEW AMERICA (June 29, 2018), https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-cybersecurity-law-peoples-republic-china/ ("Any person and organization using networks shall abide by the Constitution and laws, observe public order, and respect social morality; they must not endanger cybersecurity, and must not use the Internet to engage in activities endangering national security, national honor, and national interests; they must not incite subversion of national sovereignty, overturn the socialist system, incite separatism, break national unity, advocate terrorism or extremism, advocate ethnic hatred and ethnic discrimination, disseminate violent, obscene, or sexual information, create or disseminate false information to disrupt the economic or social order, or information that infringes on the reputation, privacy, intellectual property or other lawful rights and interests of others, and other such acts.").

^{85.} See Jun Xia, The Chinese Model Of Universal Service Policy: A Two-Decade Retrospect Based on an Integrated Framework, 22nd Biennial Conference for the International Telecommunications Society (June 2018), https://www.econstor.eu/bitstream/10419/190374/1/D1_1_Xia.pdf (detailing China's programs for universal telecommunications services over the last two decades); Wenyu Zhao, Broadband Development Status and Trend in China, CHINA ACAD. OF INFO. AND COMMC'NS TECH. 5 (2018), https://www.ieee802.org/3/ad hoc/ngrates/public/ 18_11/zhao_nea_01_1118.pdf ("China has 1.1 billion 4G users and 73.5% penetration, ranking the top five in the world, far higher than the average level of OECD countries and the world."); Yang Zongyou, Broadband Coverage Reaches 98 pct of Rural Chinese Villages, CHINA DAILY 2019), http://www.chinadaily.com.cn/a/201908/02/ (Aug. WS5d43f3c6a310cf3e355639b3.html (noting the success in China's universal telecom services programs); Individuals Using the Internet (% of Population) – China, WORLD BANK (2019), https:// data.worldbank.org/indicator/IT.NET.USER.ZS?locations=CN (showing that as of 2019, 64% of the Chinese population uses the internet).

follow suit.⁸⁶ A second possible response is that the United States is so dominant that other countries were bound to follow its lead in how the internet developed (and thus became predominant) in their countries. Many other countries, however, did not follow our lead in internet regulation but still have a predominant internet. The most obvious example is China.⁸⁷ So the central point still has considerable force: any explanation that relies on factors unique to the United States is questionable given the predominance of the internet in so many other countries.

C. WERE NET NEUTRALITY REGULATIONS CENTRAL TO THE RISE OF BROADBAND INTERNET SERVICE?

A reader may look at the list of regulations discussed above and notice a particular omission: What about net neutrality regulations? That is, what about the FCC's regulations pursuant to the Act preventing internet access providers from blocking, throttling, or otherwise discriminating against internet traffic? These regulations have given rise to litigation, legislative proposals, and more commentary than any human could read. But it is not clear that these regulations significantly aided the internet's ascent to predominance.

At the outset, it bears noting that users' desire for openness on the internet has played a huge role in the development of the internet. Many Americans' introduction to the online world was via Compuserve, Prodigy, and America Online.⁸⁸ These "online service companies" offered only closed proprietary content. Users dialed in to the company's computers and had access only to

^{86.} See Reinhold Fahlbeck, Flexibility: Potentials and Challenges for Labor Law, 19 COMP. LAB. L. & POL'Y J. 515, 518 (1998) ("The U.S. is at one end of a 'flexibility spectrum' in terms of actual scope of and potential for flexibility. The U.K. comes close to that same end."); A STATEMENT ON SPECTRUM LIBERALISATION 1 www.ofcom.org.uk/consultations-and-statements/category-2/liberalisation2 (stating that Ofcom is proceeding with spectrum flexibility, which it termed "liberalisation" and defined as "the removal and reduction of restrictions on spectrum use"); OFCOM, SPECTRUM Framework REV. (2005),https://www.ofcom.org.uk/consultations-and-statements/ category-1/sfr (adopting liberalization); DEP'T OF COMMC'NS, SPECTRUM POL'Y FRAMEWORK FOR CAN., 9 (2007), https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08776.html (adopting a framework for spectrum policy that includes "permitting the flexible use of spectrum to the extent possible" and noting that "[a] number of countries, such as Australia, the United Kingdom and the United States have undertaken extensive reviews of their spectrum management programs, and are currently implementing changes As a result of these reviews, these countries are taking steps to evolve from a prescriptive style of spectrum management to an approach that embraces more flexibility and a greater reliance on market forces.").

^{87.} See supra notes 84–85 and accompanying text.

^{88.} See, e.g., Peter H. Lewis, The Compuserve Edge: Delicate Data Balance, N.Y. TIMES, Nov. 29, 1994 (identifying Compuserve, Prodigy, and America Online as the "Big Three information services").

material created by or affiliated with that company; users could not go directly onto the World Wide Web.⁸⁹ As I have previously written: "As the Web continued to develop, however, these companies could not attract customers (or keep the ones they had) unless they provided open access to it."⁹⁰ Consumers rejected these walled gardens; they wanted access to the whole Web.⁹¹ Even after the demise of these walled gardens, some providers offered internet access services designed to serve as portals that would highlight affiliated content. Users would be able to access the internet, but the idea was that consumers would want (or at least be happy to have) a landing page that, the companies hoped, would keep consumers on the webpages of their affiliates.⁹² That, too, proved unpopular. Users wanted an open internet. Indeed, the original idea behind net neutrality regulations was to embody in regulations the openness that had largely characterized the internet after the market failure of the walled garden approach.⁹³

- 89. See Jonathan L. Zittrain, The Generative Internet, 119 HARV. L. REV. 1974, 1990–91 (2006) ("The first large-scale networking of consumer PCs took place through self-contained walled garden' networks like CompuServe, The Source, and Prodigy. Each network connected its members only to other subscribing members and to content managed and cleared through the network proprietor."); Anthony Ciolli, Chilling Effects: The Communications Decency Act and the Online Marketplace of Ideas, 63 U. MIAMI L. REV. 137, 166 (2008) ("The most popular Internet service providers of the mid-1990s used a walled garden to direct subscribers to proprietary online forums or third-party content that cannot be accessed by non-subscribers in order to generate profit In addition to directing subscribers to exclusive content within the walled garden, such walled-garden Internet service providers would also take measures to make it difficult to access, and sometimes even outright prevent their users from accessing, content outside the walled garden.").
- 90. Stuart Minor Benjamin, Spectrum Abundance and the Choice Between Private and Public Control, 78 N.Y.U. L. REV. 2007, 2087 (2003).
- 91. See Ciolli, supra note 89, at 169 ("A variety of factors converged to greatly reduce the prominence of walled-garden Internet service providers in the early twenty-first century. These factors—greater demand for broadband Internet access, increased demand for communities outside of the walled gardens, and technological improvements—were necessary to cause the transition from the age of walled-garden providers to the era of the decentralized Internet and Web 2.0."); Austin Bunn, Death of a Child Prodigy, VILL. VOICE (Oct. 26, 1999), https://www.villagevoice.com/1999/10/26/death-of-a-child-prodigy/ (noting that Prodigy went from 1.13 million subscribers in 1995 to under 200,000 by 1999 and abandoned its walled garden approach).
- 92. Does anyone remember Excite@Home? To refresh your memory, see Frank Rose, The \$7 Billion Delusion, WIRED (Jan. 1, 2002), https://www.wired.com/2002/01/excite/("Excite@Home promised to merge the search geeks and the cablecos to become the AOL of broadband. Then the tragedy of reality set in.").
- 93. See, e.g., Mark A. Lemley & Lawrence Lessig, The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era, 48 UCLA L. REV. 925, 930 (2001) ("[T]he extraordinary growth of the Internet rests fundamentally upon its design principles. Some of these principles relate to the openness of the Internet's standards and the openness of the

Unsurprisingly, the concepts behind net neutrality were (and are) quite popular among users. ⁹⁴ And the openness of the internet (after the demise of walled gardens) likely has been central to its growth. The question I am asking is different: how essential were net neutrality regulations to the ascent of broadband internet service?

There is a long regulatory history that I will very briefly summarize here. key statutory noted above, a distinction was "telecommunications" services that were subject to pervasive regulation and "information" services that were subject to little regulation. 95 In the late 1990s, the FCC subjected incumbent local exchange telephone carriers to rules requiring interconnection and unbundling for their nascent DSL service, treating the services they offered as telecommunications services.⁹⁶ By contrast, the FCC refrained from imposing any significant regulations on cable modem internet service. And, in response to a 2000 Ninth Circuit opinion concluding that cable modem service was a telecommunications service, in 2002 the FCC classified cable modem service as information services and continued with its policy of imposing no meaningful regulation on cable modem service.⁹⁷ In 2005 the Commission ended this difference in its regulatory treatment of DSL and cable modem service, "establish[ing] a minimal regulatory environment for wireline broadband internet access services" and classifying internet access provided over the telephone network as an information service. 98 At the same time, it issued a five-paragraph nonbinding policy statement in which it articulated four fairly minimal principles,

software that implemented those standards The tremendous innovation that has occurred on the Internet, in other words, depends crucially on its open nature.").

- 95. See supra note 31 and accompanying text.
- 96. See Advanced Telecommunications Capability, supra note 32, at 24028–31, ¶¶ 34–37 (1998) (classifying DSL service as a telecommunications service under Title II).
- 97. 2002 Cable Modem Order, supra note 32, at 4802, ¶ 7 (2002) ("[W]e conclude that cable modem service, as it is currently offered, is properly classified as an interstate information service, not as a cable service, and that there is no separate offering of telecommunications service.").
- 98. Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, 20 FCC Rcd. 14,853, 14,855, ¶ 1, 14,857, ¶ 4 (2005), petition for review denied by Time Warner Telecom, Inc. v. FCC, 507 F.3d 205 (3d Cir. 2007).

^{94.} Paul Bischoff, *Do I Support Net Neutrality*, COMPARITECH (Mar. 18, 2019), https://www.comparitech.com/blog/vpn-privacy/supporting-net-neutrality/ (detailing the results of a nationwide survey showing that eighty-two percent of Americans support net neutrality); Mozilla, *Poll: Americans Overwhelmingly Support Net Neutrality*, MEDIUM (Jun. 6, 2017), https://medium.com/mozilla-internet-citizen/poll-americans-overwhelmingly-support-net-neutrality-98b6b77f6cfe (showing the results of a public opinion poll finding that seventy-six percent of Americans support net neutrality).

all of which were "subject to reasonable network management." In 2008, in response to Comcast interfering with some subscribers' use of peer-to-peer networking applications, the Commission issued its next action on net neutrality, in the form of an adjudicative order. Comcast had argued that it merely delayed (rather than blocked) peer-to-peer traffic, and that the 2005 policy statement prohibited only blocking, but the FCC concluded that Comcast had indeed blocked peer-to-peer traffic. Comcast also argued that "even if its practice is discriminatory, it qualifies as reasonable network management," but the FCC rejected that argument as well. The FCC ultimately imposed only a modest remedy, in significant part because Comcast committed to end the practice of interfering with peer-to-peer networking applications by "institut[ing] a protocol-agnostic network management technique": the order required Comcast to make disclosures detailing its new approach and the implementation of that approach. That order was short-lived, as the D.C. Circuit rejected it on jurisdictional grounds in early 2010.

In late 2010, the FCC responded with a new order that, like its predecessors, relied on Title I. The order imposed antidiscrimination, antiblocking, and transparency requirements on broadband internet access service providers. The transparency requirements were relatively uncontroversial and modest. The antidiscrimination rules and, to a lesser extent, the antiblocking rules were the heart (and controversial elements) of the rules. Notably, these rules did not impose blanket bans. The anti-blocking rule prohibited broadband access providers from "block[ing] lawful content, applications, services, or non-harmful devices, subject to reasonable network management," and the antidiscrimination rule provided that they "shall not unreasonably discriminate in transmitting lawful network traffic over a consumer's broadband internet access service. Reasonable network

^{99.} The four principles were as follows: consumers are entitled to "access the lawful Internet content of their choice," "run applications and use services of their choice, subject to the needs of law enforcement," "connect their choice of legal devices that do not harm the network," and "competition among network providers, application and service providers, and content providers." Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Policy Statement, 20 FCC Rcd. 14,986, 14,988, ¶ 4 (2005).

^{100.} Formal Compl. of Free Press & Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, 23 FCC Rcd. 13,028 (2008).

^{101.} *Id*. ¶ 44.

^{102.} *Id.* ¶ 45.

^{103.} *Id.* ¶ 54.

^{104.} Comcast Corp. v. FCC, 600 F.3d 642, 660-61 (D.C. Cir. 2010).

^{105.} See Preserving the Open Internet (2010), supra note 7, at 17,906, ¶ 1.

^{106.} The transparency rules merely required that broadband access providers "publicly disclose accurate information regarding the network management practices, performance, and commercial terms of [their] broadband Internet access services." *Id.* at 17,937, ¶ 54.

management shall not constitute unreasonable discrimination." ¹⁰⁷ In addition to allowing "reasonable network management," the rules did not prohibit paid prioritization (allowing edge providers to pay extra for better service), but instead simply said that such prioritization was unlikely to satisfy the antidiscrimination standard. ¹⁰⁸

In 2014, the D.C. Circuit invalidated the antidiscrimination and antiblocking rules. ¹⁰⁹ In 2015, the FCC issued new net neutrality regulations. One huge element of the 2015 rules was that, for the first time, the FCC reclassified broadband internet access service as a telecommunications service under Title II (while it also forbore from applying some provisions of Title II, such as section 251's requirement that network elements be unbundled). ¹¹⁰ And the substance of the 2015 rules went beyond the 2010 rules. Most notably, the FCC created three "bright-line rules" that flatly prohibited blocking, throttling, and paid prioritization. The more flexible approach of the 2010 rules was gone, replaced by clear prohibitions. ¹¹¹

Two and a half years later, in early 2018, the FCC adopted an order repealing the 2015 rules and reclassified broadband internet access service back to being an information service under Title I.¹¹² The 2018 rules also eliminated all the substantive rules in the 2015 order, although it did return to the 2010 transparency rule.¹¹³

The various alternatives to net neutrality regulation were not much more than no regulation at all. The principles articulated in 2005 required nothing. The transparency requirements in the 2018 rules actually require something (disclosure), but what they require is quite modest, and ISPs did not oppose them. ¹¹⁴ And that's all the 2018 rules required. I emphasize this because the

^{107.} *Id.* at 17,942, ¶ 63, 17,944, ¶ 68.

^{108.} *Id.* at 17,947, ¶ 76. The order laid out the following rule on "reasonable network management": "A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service." *Id.* at 17,952, ¶ 82.

^{109.} Verizon v. FCC, 740 F.3d 623, 659 (D.C. Cir. 2014).

^{110.} Protecting and Promoting the Open Internet (2015), supra note 7, at 3757–58, ¶¶ 355–56.

^{111.} *Id.* at 5607, ¶ 14. The 2015 rules also promulgated a broader transparency rule and a "General Conduct Rule" that prohibited broadband access providers from "unreasonably interfere[ing] with or unreasonably disadvantage[ing] (i) end users' ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice, or (ii) edge providers' ability to make lawful content, applications, services, or devices available to end users." *Id.* at 5609, ¶ 21.

^{112.} See Restoring Internet Freedom (2018), supra note 7, at 312, ¶ 2.

^{113.} *Id.* at 313, ¶ 3.

^{114.} It seems that ISPs wanted to present themselves as transparent for their own market reasons (particularly after the very negative public reaction to Comcast's secret throttling).

question I am asking is what sections of the Act played an important affirmative role in the rise of broadband internet service. As I discuss more fully below, insofar as the answer is that deregulatory provisions—provisions that blocked or dismantled regulations or gave the FCC the authority to do the same—were important, the Act is not playing an affirmative role.

ISPs disclaimed interest in blocking and did not fight transparency requirements. The real flashpoint with respect to net neutrality was over antidiscrimination rules. ¹¹⁵ Antidiscrimination rules were and are the heart of net neutrality. ¹¹⁶

Antidiscrimination rules, and Title II more generally, applied to DSL service until 2005, but cable modem service has consistently been the predominant provider of broadband internet access service, and cable modem service was not subject to any rules until 2010. And even as to the 2010-2017 period when net neutrality rules did apply to cable modem internet access service, there were two different regimes. The 2010 rules allowed for reasonable network management and did not forbid all forms of payment for priority. It was the 2015 rules that forbade all forms of paid prioritization. So not only were net neutrality rules in effect for only seven years, but also for five of those years the prohibition was weaker.

Virtually every empirical aspect of net neutrality regulation is contested ground. Did the imposition of net neutrality regulations reduce investment in broadband infrastructure? Perhaps yes, ¹²⁰ perhaps no. ¹²¹ Assuming that ISPs will prioritize favored traffic in the absence of net neutrality regulations (e.g., now), will that prioritization harm the growth of the internet? The theory underlying net neutrality regulations is that they enhance innovation and

^{115.} Actually, what scared ISPs the most was the prospect of price regulation of broadband internet access under Title II, but that never happened.

^{116.} See Preserving the Open Internet (2010), supra note 7; Protecting and Promoting the Open Internet (2015), supra note 7.

^{117.} See Preserving the Open Internet (2010), supra note 7; 2002 Cable Modem Order, supra note 32, at 4803, ¶ 9 ("Throughout the brief history of the residential broadband business, cable modem service has been the most widely subscribed to technology, with industry analysts estimating that approximately sixty eight percent of residential broadband subscribers today use cable modem service.").

^{118.} See Preserving the Open Internet (2010), supra note 7, at 17,948, ¶ 77.

^{119.} Protecting and Promoting the Open Internet (2015), supra note 7, at 5603, ¶ 4.

^{120.} See, e.g., Anna-Maria Kovacs, The Effect of Title II Classification on Wireless Investment (July 2017) https://cbpp.georgetown.edu/publications/publications-policy-papers/; Hal J. Singer, 2016 Broadband Capex Survey: Tracking Investment in the Title II Era (Mar. 1, 2017), https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era/.

^{121.} See, e.g., Restoring Internet Freedom (2018), supra note 7, at 367–68, ¶ 97 (discussing Internet Association economic study).

investment among edge providers and ultimately benefit consumers by giving them offerings that reach them at the same speed. 122 Net neutrality opponents beg to differ, of course. 123 But assuming that preventing prioritization does have these benefits, the question remains how much difference preventing prioritization made in the rise of the internet to predominance. After all, it may both be true that net neutrality regulations protected edge providers and that this protection had little if any impact on the internet's ascent, because (1) users would have flocked to the internet whether it had a few dominant edge providers or a greater number of edge providers and/or (2) users' experience of the edge providers would not have changed much (because the difference in, for example, loading speeds would have been measured in milliseconds) resulting in edge providers that would have been a bit weaker but still available.

I am not claiming that net neutrality regulations made no difference. And I certainly am not claiming that the principles of net neutrality (as opposed to net neutrality regulations) made no difference. My point is simply that the back-and-forth history of net neutrality regulation, and the difficulty of settling on any empirical conclusions, makes it hard to confidently ascribe an essential role to net neutrality regulations in the ascent of broadband internet to its current predominance. The answer to the question of the importance of net neutrality regulations to the current position of the internet is, I think, a resounding "quite possibly."

D. NONREGULATION AND PREEMPTION DO NOT CONSTITUTE AN AFFIRMATIVE ROLE FOR REGULATION

There is a different category of the Act's provisions and accompanying regulations that arguably was the most important in enabling the ascent of broadband internet service: provisions preempting state (and local) regulation, and provisions allowing for (or requiring) federal non-regulation. One possible way to inhibit any service is to impose so many regulatory requirements that its growth is greatly impeded. This could have happened with respect to broadband internet service, and provisions in the Act preempting state

^{122.} See, e.g., Preserving the Open Internet (2010), supra note 7, at 17,910–11, ¶ 14 (arguing that net neutrality regulations "enable[] a virtuous circle of innovation in which new uses of the network—including new content, applications, services, and devices—lead to increased enduser demand for broadband, which drives network improvements, which in turn lead to further innovative network uses.").

^{123.} See, e.g., Verizon v. FCC, 740 F.3d 623, 649 (D.C. Cir. 2014) (noting Verizon's argument that the net neutrality rules "will necessarily have the opposite of their intended effect because they will 'harm innovation and deter investment by increasing costs, foreclosing potential revenue streams, and restricting providers' ability to meet consumers' evolving needs.").

regulations and preventing some forms of federal regulation arguably helped prevent that from happening.

The FCC has relied on a range of provisions to preempt state regulation of broadband. For instance, 47 U.S.C. § 152(b) allows the FCC to preempt state regulation of a service if its interstate and intrastate components are not separable. On that basis, the FCC preempted state attempts at regulating internet services, notably VoIP communications. 47 U.S.C. § 332(c)(3)(A) preempted state regulation of entry into the mobile telephone market or the rates charged by mobile providers. And other preempting provisions exist.

Perhaps the most significant deregulatory element of the Act is the information services category and the Commission's treatment of it: the FCC routinely applied a policy of "nonregulation" to information services under *Computer III*, and the Act. ¹²⁷ That is, the Commission interpreted its statutory authority as providing for "unregulated information service[s]," and it accordingly left such services unregulated. ¹²⁸

^{124.} See La. Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 368 (1986) (finding a basis for Commission preemption "where compliance with both federal and state law is in effect physically impossible"); Minn. Pub. Utils. Comm'n. v. FCC, 483 F.3d 570, 576 (8th Cir. 2007) (§ 152 "allows the FCC to preempt state regulation of a service which would otherwise be subject to dual federal and state regulation where it is impossible or impractical to separate the service's intrastate and interstate components, and the state regulation interferes with valid federal rules or policies").

^{125.} See Minn. Pub. Utils. Comm'n., 483 F.3d at 576.

^{126.} See, e.g., 47 U.S.C. § 253(a) ("No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."); 47 U.S.C. § 543(a) (preempting state or local regulation of cable television rates).

^{127.} See Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), 104 F.C.C.2d 958, 104, ¶ 351 (June 16, 1986) ("retain[ing] the general enhanced and basic service framework of Computer II and reaffirm[ing] the unregulated status of enhanced services").

^{128.} See, e.g., Petition for Declaratory Ruling that pulver.com's Free World Dialup Is Neither Telecommunications nor a Telecommunications Service, 19 FCC Rcd. 3307, 3307, ¶ 1 (2004) ("[W]e declare pulver.com's . . . offering to be an unregulated information service subject to the Commission's jurisdiction We formalize the Commission's policy of nonregulation to ensure that Internet applications remain insulated from unnecessary and harmful economic regulation at both the federal and state levels."); id. at 3316, ¶ 15 ("We determine, consistent with our precedent regarding information services, that FWD is an unregulated information service and any state regulations that seek to treat FWD as a telecommunications service or otherwise subject it to public-utility type regulation would almost certainly pose a conflict with our policy of nonregulation."); Vonage Holdings Corp., 19 FCC Rcd. 22,404, 22,416 (2004) (identifying "the Commission's long-standing national policy of nonregulation of information services"); John Blevins, The Use and Abuse of "Light-Touch" Internet Regulation, 99 B.U. L. REV. 177, 204 (2019) (stating that "The non-regulation of 'information services' merely continued the historical non-regulation of enhanced services.");

This rejection of regulation of information services was quite significant as a matter of regulatory policy. Some have argued that the FCC's nonregulation of internet access service pursuant to Title I enabled the ascent of broadband internet service. 129

But this argument does not provide an affirmative role for the Act: the nonregulatory approach under Title I is one set of provisions blocking all others and thus leaving the underlying service as unregulated as it would be if no jurisdiction attempted to regulate it in the first place. We can credit Congress and the FCC for creating regulatory restraints like this, but it seems strange to treat this as a triumph of regulation: the whole point was to have these services subject to no meaningful government control at all. To say that law X was useful because it allowed for the negation of law Y is not much of an endorsement of the legal regime that contains them both and doesn't attribute much value to the regime that contains them both. To put the point differently, insofar as the only important regulations under the Act are those that blocked other regulations, we have not generated much justification for the legal regime.

Some might object that focusing on affirmative regulations is needlessly constricting, and that these regulation-blocking provisions (as implemented) deserve pride of place. I have no quarrel with that perspective. My point is simply that this is not an argument for the importance of a particular regulation under the Act to the rise of broadband internet service. Instead, it is an argument for the importance of nonregulation.

To be clear, I am not claiming that most provisions of the Act are irrelevant. The sections regulating telephony, broadcasting, and multichannel video are important to the services they regulate, and even in a diminished state those services are significant. For instance, broadcasters are less central to the lives of Americans than they were in the 1970s, but broadcasters still play a major role for many Americans and their regulation (for example, media ownership rules) can thus be quite important. The provisions on universal service are particularly important in rural areas. The Act is not only relevant but vital in many spheres. Beyond that, the services regulated by the Act (particularly cable television, landline telephony, and cellular telephony) were

Fed.-State Joint Bd. on Universal Serv., 13 FCC Rcd. 11,501 (1998) (Statement of Commissioner Susan Ness) (noting "the success of the policy of non-regulation of information services).

^{129.} See, e.g., Antonia M. Apps & Thomas M. Dailey, Non-Regulation of Advanced Internet Services, 8 GEO. MASON L. REV. 681, 718 (2000) (arguing that "The FCC should continue [its] policy of non-regulation with respect to Internet services in the broadband era."); Lawrence J. Spiwak, The Preemption Predicament over Broadband Internet Access Services, 21 FEDERALIST SOC. REV. 32 (2020).

the launching pad for broadband internet service, and without successful cable and telephony industries the initial rollout of internet access might have been delayed. Insofar as the Act's provisions helped, for instance, cable television pass the vast majority of homes by the early 1990s, ¹³⁰ they helped create the conditions that allowed for the launching of internet services. My point instead is that the ascent of broadband internet services from mere significance to their current predominance relied on a fairly small number of the Act's provisions.

IV. THE UPSHOT: THE CASE FOR REWRITING THE ACT HAS GROWN WEAKER OVER THE YEARS

So what should we make of the discussion above? I would identify three related strands. First, the crafting of the provisions of the Act were the focus of much lobbying, but in the end some of those provisions have been dormant, and many more have been relevant to industries that themselves are becoming less important as time goes on because of the ascendance of the internet. Second, and quite similarly, provisions of the Act became the focus of massive litigation battles between and among providers of telephony, broadcasting, and multichannel video that were the focus of these companies even as broadband internet service was diminishing the importance of those battles. The companies focused on the existing industries and seemed to fail to focus on the changes that broadband would unleash for their businesses. But, third, perhaps the predominance of broadband internet service was inevitable. In light of all these developments, the case for rewriting the Act is weaker today than it was in the earlier part of this century.

As to the first point, telephony and multichannel video were the subjects of major lobbying efforts in the 1980s through the early 2000s. There was a massive push for cable deregulation that culminated in the Cable Communications Policy Act of 1984 and a massive push for more cable regulation that produced the Cable Television Consumer Protection and Competition Act of 1992. There were several acts regulating satellite multichannel video, most notably the Satellite Home Viewer Act of 1988 and the Satellite Home Viewer Improvement Act of 1999. And the biggest lobbying frenzy surrounded the most important telecommunications legislation since the 1934 Act—the 1996 Act. The lobbying was intense because the scope of the 1996 Act was so broad. It changed rules on the terms and renewal of broadcast licenses, changed media ownership rules, and

^{130.} See supra note 51 and accompanying text.

^{131.} After all, its predominance is the norm in much of the world. See supra notes 83–85 and accompanying text.

provided for a transition to digital television broadcasting.¹³² It also regulated internet indecency (though the Supreme Court rejected such regulation on First Amendment grounds).¹³³ But the center of the 1996 Act, and of the lobbying over the 1996 Act, was the provisions governing telephony.

The time and money spent in lobbying may have been exceeded by the time and money spent in litigation over the implementation of the statutory provisions. The provisions and accompanying FCC rules generated massive and extended litigation—over (to pick a few of the greatest hits) what network elements incumbent local exchange telephone carriers had to offer to competitive local exchange carriers, what prices they could charge for those elements, the circumstances under which the regional bell operating

^{132.} See 1996 Act §§ 201-04.

^{133.} See 1996 Act § 502 (containing the Communications Decency Act); Reno v. ACLU, 521 U.S. 844 (1997) (holding that the central indecency provisions of the Communications Decency Act violated the First Amendment).

^{134.} See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 FCC Rcd. 15,499, 15,627-49 (1996) (establishing, in a 680-page rulemaking (excluding appendices) implementing the central telephony provisions of the 1996 Act, the terms under which incumbent local exchange carriers had to offer network elements to competitive local exchange carriers); AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 389-92 (1999) (finding that the 1996 FCC rulemaking unreasonably interpreted the 1996 Act in determining which network elements were "necessary" and the absence of which would "impair" competitors); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, 15 FCC Rcd. 3696 (1999) (on remand, adopting new interpretation of "impair"); USTA v. FCC, 290 F.3d 415, 427 (D.C. Cir. 2002) (rejecting the FCC's revised impairment standard); Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC. Rcd. 16,978, 17,035 (2003) (on remand, revising again the FCC's impairment standard); USTA v. FCC, 359 F.3d 554 (D.C. Cir. 2004) (rejecting the FCC's re-revised impairment standard); Unbundled Access to Network Elements, 20 FCC Rcd. 2533 (2005) (on remand, revising the impairment standard yet again); Covad Commc'ns. Co. v. FCC, 450 F.3d 528 (2006) ("The [FCC] has thrice attempted unsuccessfully—to implement the 'unbundling' provisions of the [1996 Act] Because we conclude the Commission's fourth try is a charm, we deny all of the petitions for review.").

^{135.} See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 FCC Rcd. 15,499 (1996) (requiring that prices for unbundled network elements be set under a cost methodology known as TELRIC (Total Element Long Run Incremental Cost); Iowa Utils. Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997) (vacating pricing rules on jurisdictional grounds); AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999) (holding that the FCC did have jurisdiction to prescribe such pricing rules); Iowa Utils. Bd. v. FCC, 219 F.3d 744 (8th Cir. 2000) (on remand, rejecting use of TELRIC methodology); Verizon Comme'ns, Inc. v. FCC, 535 U.S. 467 (2002) (upholding the TELRIC methodology).

companies could offer long distance telephone service, ¹³⁶ and the intercarrier compensation rates for completing a call. ¹³⁷

This sets up the second point: this litigation occurred while the underlying business models were changing dramatically, and in some cases collapsing. The litigation over traditional telephony is the most obvious example: massive litigation continued through the early 2000s even as consumers were abandoning their landlines in such large numbers that the litigation resembled fighting over the deck chairs on the Titanic.¹³⁸ Somewhat less dramatically,

136. See, e.g., Application of Verizon, New England Inc., Bell Atlantic Communications, Inc. NYNEX Long Distance Company, and Verizon Global Networks, Inc.. for Authorization to Provide In-Region, InterLATA Services in Massachusetts, 16 FCC Rcd. 8988, 8990, ¶1 (2001) (approving Verizon's application to offer long distance service); WorldCom, Inc. v. FCC, 308 F.3d 1, 11 (2002) (rejecting WorldCom's challenge to FCC order); Joint Application by SBC Communications, Inc. Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc., for Provision of In-Region InterLATA Services in Kansas and Oklahoma, 16 FCC Rcd. 6237, 6239, ¶1 (2001) (approving SBS Communications' application to provide long distance service in Kansas and Oklahoma); Sprint Commc'ns. Co. v. FCC, 274 F.3d 549, 562 (2001) (affirming FCC decision and rejecting Sprint's challenge); Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York, 15 FCC Rcd. 3953, 3955, ¶1 (1999) (approving Bell Atlantic's application to offer long distance service); AT&T v. FCC, 220 F.3d 607, 633 (D.C. Cir. 2000) (affirming FCC order and rejecting AT&T's challenge).

137. See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Inter-Carrier Compensation for ISP-Bound Traffic, 14 FCC Red. 3689, 3689-90, ¶ 1, 3693, ¶ 7 (1999) (applying "end-to-end" analysis to exclude ISP calls from reciprocal compensation requirement (compensation for a local exchange carrier that completes a call originating in the same area) because ISP calls were not "local"); Bell Atlantic Tel. Cos. v. FCC, 206 F.3d 1 (D.C. Cir. 2000) (vacating FCC order because Commission did not explain why "end-to-end" analysis was relevant); Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic, 16 FCC Rcd. 9151, 9151–52, \P 1–2 (2001) (on remand, implementing a similar rate cap system but relying on different authority); WorldCom, Inc. v. FCC, 288 F.3d 429, 430 (D.C. Cir. 2002) (rejecting the Commission's reliance on its proffered statutory authority but declining to vacate "[b]ecause there may well be other legal bases for adopting the rules chosen by the Commission"); In re Core Commc'ns, Inc., 531 F.3d 849, 850 (D.C. Cir. 2008) (directing the FCC to explain the legal basis for its ISP-bound compensation rules within six months); Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Developing a Unified Intercarrier Compensation Regime, Intercarrier Compensation for ISP-Bound Traffic, 24 FCC Rcd. 6475, 6478–79, ¶¶ 6–7 (2008) (adjusting its intercarrier compensation rules); Core Commc'ns, Inc. v. FCC, 592 F.3d 139, 141 (D.C. Cir. 2010) (upholding FCC order, thus putting an end to this litigation 14 years after the passage of the 1996 Act).

138. See Stephen J. Blumberg & Julian V. Luke, Wireless Substitution: Early Release of Estimates Based on Data from the National Health Interview Survey, July – December 2006, CENTER FOR DISEASE CONTROL 4 tbl.1 (2007), https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless200705.pdf (showing that between 2003 and 2006, the percentage of American

regulation and litigation on cross-ownership of broadcasters and newspapers proceeded while the newspaper industry cratered so badly that the value proposition of broadcasters joining with newspapers became weaker with each passing day. ¹³⁹

That leads to the third strand: inevitability. One take on this history is that the major players were myopic, fighting their longstanding battles among existing services while failing to appreciate the full force of the incoming broadband tsunami. There is some foundation for this argument. For example, entertainment companies and multichannel video providers battled fiercely over channels and programs while seeming to treat broadband internet video as a relatively small player.¹⁴⁰

The counterargument is that the ascendance of the internet was inexorable once streaming video became available. So, on this argument, once broadband internet service became widely available, it was only a matter of time before the other services were overtaken. There was nothing they could do about it.

Both arguments could be correct: perhaps the existing players were fighting the last war, but the predominance of broadband internet service was still inevitable, so that their failure to respond to the challenge posed by the internet at most hastened the transformation that was coming anyway.

Arguments about inevitability are dangerous, of course. We have only the one universe, so we cannot know what would have happened in an alternate universe. But the argument for inevitability seems reasonably strong in light of the ascendance of broadband internet service around the world. Broadband

households with only a landline dropped precipitously from 43% to just 29.6% and that the overall subscription to landline phones decreased over 11%).

139. See 2006 Quadrennial Regulatory Review—Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, 23 FCC Rcd. 2010, ¶ 13 (2008) (relaxing the newspaper/broadcast cross-ownership ban); BENJAMIN & SPETA, supra note 1, at 473 ("The year immediately after the FCC issued its 2008 order saw serious financial difficulties for many newspapers, leading to cutbacks in coverage and major cuts in staff. Some major newspapers ceased publication (e.g., the Rocky Mountain News and the Seattle Post-Intelligencer), and others had near-death experiences (e.g., the San Francisco Chronicle and the Boston Globe). And many commentators—including newspaper publishers—expressed skepticism about the long-term viability of newspapers."); see also Elaine C. Kamarck & Ashley Gabriele, The News Today: 7 Trends In Old And New Media, BROOKINGS (Nov. 2015), https://www.brookings.edu/wp-content/uploads/2016/07/new-media.pdf (showing the general decline of newspaper readership and performance over time).

140. See, e.g., Michael Schneider & Kate Aurthur, R.I.P. Cable TV: Why Hollywood Is Slowly Killing Its Biggest Moneymaker, VARIETY (July 21, 2020), https://variety.com/2020/tv/news/cable-tv-decline-streaming-cord-cutting-1234710007/ ("As the MVPDs and entertainment companies battled, they were distracted from coming up with a plan to fight the imminent OTT [over-the-top] threat").

internet service has become predominant in different countries with different political, economic, and social systems.¹⁴¹ As I have noted, that highlights the problem with focusing on U.S.-specific factors for the rise of broadband in the United States. The corollary is that it suggests that broadband internet service was going to become predominant under most any legal regime.

This is not to suggest that the exact shape of the various internet markets—access, content, applications, etc.—was inevitable. For example, under a different regime there might have been a strict separation between carriage and content, and that might have made a significant difference in various aspects of the internet, and perhaps sped up or delayed the internet's ascent to predominance. But in light of where things stood in the mid-1990s in terms of the initial rollout of internet access, the provisions discussed above (like the Pole Attachments Act), and the strictures on content regulation imposed by the First Amendment, it seems overwhelmingly likely that broadband internet service was going to become the predominant telecommunications service.

These points lead me to conclude that the case for rewriting the Act has grown weaker over the last twenty-five years. As I noted above, within a few years of the 1996 Act's passage there were calls for its overhaul. The provisions on telephony provoked the most energetic debate. But, more broadly, many players had a sense that the marketplace for telephony, multichannel video, and broadcasting was changing in ways that the Act had not anticipated and was not well-suited to efficiently resolve. As those industries have receded in importance, so, too, have the specifics of their regulation. The regulation of telephony, multichannel video, and broadcasting is still important, not least to the many people and companies involved in their provision. But they are becoming less important over time.

There of course remain vibrant and impassioned arguments over aspects of the Act—the possible application common carriage regulation to broadband internet access service and § 230 are probably the two most prominent examples. But resolving those questions does not require rewriting the Act. Indeed, each issue can be resolved with narrowly targeted legislation only a few pages long. 142 Simply stated, as time goes on, the case for a new Act

^{141.} See supra notes 83–85 and accompanying text; Jacob Poushter, Smartphone Ownership and Internet Usage Continues to Climb in Emerging Economies, PEW RSCH. CTR. (Feb. 22, 2016), https://www.pewresearch.org/global/2016/02/22/internet-access-growing-worldwide-but-remains-higher-in-advanced-economies/.

^{142.} For example, fourteen bills have been introduced in this congressional session to amend § 230. Most are less than 750 words. The longest, coming in at 3,446 words, is less than a tenth of the 44,727 words of the 1996 Act. *See* Meghan Anand, Kiran Jeevanjee, Daniel Johnson, Brian Lim, Irene Ly, Matt Perault, Jenna Ruddock, Tim Schmeling, Niharika

becomes weaker. Most of its elements, creaky as they are, are becoming less significant as telecommunications moves toward the seemingly inevitable dominance of broadband internet service.

V. CONCLUSION

The 1996 Act soon came to be seen as outdated. And it became clear over time that Congress, in failing to focus on the rise of broadband internet service, missed the central development of the last twenty-five years. But Congress had company: in the 1990s and the early 2000s there was a broad consensus among market players that streaming internet video would be a niche player, because consumers would always want a dedicated multichannel video service. 143 Cable

Vattikonda, Noelle Wilson & Joyce Zhou, All the Ways Congress Wants to Change Section 230, 2021), https://slate.com/technology/2021/03/section-230-reformlegislative-tracker.html (presenting a comprehensive list of proposed legislation to amend Accountability and Consumer Transparency www.congress.gov/bill/116th-congress/senate-bill/4066/text?format=xml (bill 3446 words); 1996 Act (Act contains 44,727 words); Stop Shielding Culpable Platforms Act, https://www.congress.gov/bill/117th-congress/house-bill/2000/ text?q=%7B%22search%22%3A%5B%22jim+banks%22%5D%7D&r=4&s=5 (bill contains 430 words).

143. Throughout the 1990's and early 2000's the FCC did not consider internet streaming to be a strong competitor to MVPDs. See Annual Assessment of the Status of the Competition in the Market for the Delivery of Video Programming, Fourth Annual Report, 20 FCC Rcd. 2275, 2811, ¶ 97 (1998) ("Video over the Internet, however, is not comparable in quality to broadcast video provided by MVPDs, and it is unclear whether the needed improvements will be made to make video service over the Internet a viable competitor."); Annual Assessment of the Status of the Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report, 20 FCC Rcd. 2755, 2817-18, ¶ 114 (2005) ("Streaming video is currently most viable when delivered over broadband networks, but some industry watchers believe that it will only become a fully competitive consumer application if connection speeds significantly increase over those achieved over cable and DSL broadband."). It was not until the thirteenth report, published in early 2009 but approved in late 2007, that the FCC presented Internet streaming as a serious competitor to linear programming, and even then its language was a bit guarded. See Annual Assessment of the Status of the Competition in the Market for the Delivery of Video Programming, Thirteenth Annual Report, 24 FCC Rcd. 542, 613, ¶ 153 (2009) ("Several commenters observe that established models for the distribution of video programming are being challenged by these technological advancements and consumers' ability to receive video programming via alternative means, not just from traditional linear networks."). The world is of course quite different today. See, e.g., Christopher Zara, Cord Cutting Was So Bad Last Year That Pay-TV Penetration Is Down to 1994 Levels, FAST Co. (Mar. 2, 2021), https://www.fastcompany.com/90609976/cord-cutting-was-so-bad-lastyear-that-pay-tv-penetration-is-down-to-1994-levels (reporting that in 2020 cable and satellite companies lost 6 million subscribing households, a decline of 7.3%); Sara Fischer, Pay-TV's Death Spiral, AXIOS (Oct. 27, 2020), https://www.axios.com/cable-tv-subscribers-downpandemic-e179bfe7-9b3b-42cc-85e7-869591354a46.html (the title pretty much summarizes the article). Shira Ovide, Cable TV Is the New Landline, N.Y. TIMES (Jan. 6, 2022), https://

companies were happy to offer Netflix to their cable modem subscribers, secure in the knowledge that internet video would not undermine their cable television subscriber model. Cable companies saw their biggest competitor as DBS, and vice-versa. Simply stated, any lack of foresight in Congress about the rise of broadband internet service was widely shared.

None of this should surprise anyone. To quote either Niels Bohr or Yogi Berra, "It is very difficult to make an accurate prediction, especially about the future." Of course almost everyone's predictions in 1996 were wrong—that is the norm. Perhaps the degree of wrongness was notable, especially if measured by the many billions of dollars won and lost on bets about the future of telecommunications. But in a fast-moving world, the only constant is change, and confident predictions about technological developments are a fool's game. 146 Such a critique of predictions has some additional bite for this Article. First, this critique supplies an additional reason not to rewrite the Act. Given that future developments will render at least some of our current assumptions and suppositions incorrect, a Telecommunications Act of 2022 (or 2032) is likely to suffer a fate similar to that of the 1996 Act. With any luck a new Act won't miss anything as big as the 1996 Act missed the rise of the internet, but it will assuredly rely on some premises that change. So I think the best framing is that the choice is not between an outdated 1996 Act and an upto-date 2022 Act, but instead between an outdated 1996 Act and a soon-to-beat-least-somewhat-outdated 2022 Act.

www.nytimes.com/2022/01/06/technology/cable-tv.html (stating that "it's clear that the cable TV system that for decades brought joy and headaches to tens of millions of Americans is petering out"); Gavin Bridge, *Cord-Cutting Q1 2022 Review: The Cycle of Decline Continues*, VARIETY (May 13, 2022), https://variety.com/vip/cord-cutting-q1-2022-review-the-cycle-of-decline-continues-1235265504/ (noting an accelerated rate of decline in MVPD subscriptions).

144. See, e.g., Annual Assessment of the Status of the Competition in the Market for the Delivery of Video Programming, Eighth Annual Report, 17 FCC Rcd. 1244, 1249, ¶ 13 (2002) (breaking down the video marketplace with cable and DBS having the largest market shares); ANDREW STEWART WISE & KIRAN DUWADI, COMPETITION BETWEEN CABLE TELEVISION AND DIRECT BROADCAST SATELLITE – IT'S MORE COMPLICATED THAN YOU THINK 4-5 (2005) https://www.fcc.gov/reports-research/working-papers/competition-between-cable-television-and-direct-broadcast-satellite- (treating the key video competition as between cable and DBS).

145. See Stuart Minor Benjamin, Proactive Legislation and the First Amendment, 99 MICH. L. REV. 281, 363 n. 269 (2000) (noting uncertainty as to which of these two great 20th century thinkers should be credited with this sentiment).

146. See Stuart Minor Benjamin, Stepping into the Same River Twice: Rapidly Changing Facts and the Appellate Process, 78 TEX. L. REV. 269, 270–72, 372–73 (1999) (discussing the ways that rapid changes in technology undermine factual predictions and assertions).

But, for this Article, a second aspect of the danger of predictions hits closer to home: I am assuming in this Article that the services that are the focuses of the Act—traditional telephony, broadcasting, and multichannel video—will not revive such that one or more of them become the predominant service(s), overtaking broadband internet. If they do, then the Act would be much more relevant, and the case for amending it would be stronger.

I accept the very real possibility that my assumption is wrong, and that the case for amending the Act will in the future become much stronger. But I also believe that a revival of telephony, broadcasting, and/or multichannel video leading to their predominance is sufficiently unlikely that the prospect does not justify an overhaul of the Act now. I think we can (Netflix and) chill.