

# Should Internet Protocol-Enabled Video Service Provided over a Telephone Network Be Regulated as a Cable Service?

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*We examine whether, on legal or policy grounds, Internet protocol-enabled video services provided over a telephone network should be regulated as a cable service. We evaluate the history of cable regulation and the services that Congress envisioned to be regulated when it first drafted legislation establishing a regulatory framework for cable television services in 1984. We then examine numerous differences between the IP-enabled video services delivered over a telephone network and those that Congress envisioned when regulating cable television service in 1984 and in subsequent years when it revised the Cable Act of 1984. Finally, we find that municipal franchise requirements for IP-enabled video services provided over telephone networks would reduce consumer welfare. We estimate that, upon ubiquitous deployment by telephone companies of fiber networks to provide video service, cable customers living in areas not yet overbuilt by a wireline distributor of multi-channel video programming would enjoy the benefits of lower prices of roughly \$7.15 per month, or \$85.80 per year. A five-year net present value of the annualized savings would be roughly \$26.52 billion (assuming a five percent discount rate). To the extent that direct broadcast satellite operators respond to lower cable prices with price reductions of their own, the net present value of the welfare benefits from telephone company entry into the market for multi-channel video programming distribution would increase by roughly 50 percent, to nearly \$40 billion. We estimate that, even without considering any welfare gains owing to higher quality, these consumer welfare gains from entry exceed the potential loss in franchise fee revenues to municipalities by a factor of nearly three to one.*

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## I. INTRODUCTION

Beginning around 2004, certain local telephone companies—most notably, AT&T (the former SBC) and Verizon—began to upgrade their local fiber networks to provide a bundle of services consisting of voice over Internet protocol (VoIP), digital video, and high-speed Internet access. Once the fiber upgrade is completed, a local telephone company will have the capability to offer multiple high-quality

television streams that include high-definition television video (HDTV) programming and video-on-demand for each household. These upgraded telephone networks will provide a third pipeline for the delivery of multi-channel video programming (MVPD) services to compete against cable television operators and direct broadcast satellites (DBS), and will provide a comprehensive service package in competition with cable's bundle of voice, video, and data services. In September 2005, the investment firm Sanford C. Bernstein & Co. predicted that by 2010 nearly 40 percent of U.S. households will be able to get video service from their local telephone company.<sup>1</sup>

Verizon has named its new fiber network "FIOS." Verizon plans to invest \$20 billion to lay thousands of miles of fiber-optic cables across its service area from Maine to Florida and into parts of Texas and California.<sup>2</sup> As of the end of October 2005, Verizon had initiated negotiations with roughly 300 municipalities, but it had secured only fourteen franchise agreements (a 4.6 percent initial success rate) for video service.<sup>3</sup> Verizon's low success rate has been attributed to "regulatory holdup"—that is, unrealistic demands made by municipalities in return for franchise approval.<sup>4</sup> According to the Buckingham Research Group, the local franchise requirements will delay telephone entry into video services by between eight and sixteen months.<sup>5</sup> Not only are municipalities seeking to impose onerous requirements on telephone companies, but some are competing directly with local telephone companies for broadband customers by launching citywide wireless fidelity (Wi-Fi) networks.<sup>6</sup> These municipalities (which include Philadelphia, Madison, Minneapolis, Tempe, and Sacramento)<sup>7</sup> have a pronounced incentive to raise the entry cost of rival providers of broadband service.<sup>8</sup> Indeed, the mere threat that the municipality might build a broadband network could be sufficient to extract additional payments from local telephone companies.

Verizon's FIOS project started in the Dallas suburb of Keller, where the company offered video service to residents in September 2005.<sup>9</sup> Verizon planned

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1. Peter Grant, *Getting Your MTV From the Phone Company—Verizon Takes On Cable, Offering Cheaper TV Service*, WALL ST. J., Sept. 21, 2005, at D1 (discussing Sanford C. Bernstein study).

2. Dionne Searcey, *Spotty Reception—As Verizon Enters Cable Business, It Faces Local Static*, WALL ST. J., Oct. 28, 2005, at A1.

3. *Id.*

4. *Id.*

5. The Buckingham Research Group, *Communications Services As RBOC Video Efforts Falter, Outlook Improves for DBS, Cable*, June 13, 2005, at 3 ("Cable operators are subject to local franchise approval processes, an arduous and time consuming process that can take anywhere from 6-18 months depending on the city and state.").

6. Philadelphia announced in October 2005 that it had chosen EarthLink to provide citywide wireless high-speed Internet access. By October 2005, San Francisco received 24 proposals from a range of Internet and telecommunications companies interested in equipping that city for wireless broadband, including a proposal by Google to offer the service free of charge. See Li Yuan & Kevin J. Delaney, *EarthLink Picked By Philadelphia To Provide Wi-Fi*, WALL ST. J., Oct. 4, 2005, at A20. According to muniwireless.com, a portal that tracks municipal wireless projects, the U.S. market for municipal broadband is expected to grow to \$400 million by 2007. See Jesse Drucker, Kevin J. Delaney & Peter Grant, *Google's Wireless Plan Underscores Threat to Telecom—Free Internet Access Proposal In San Francisco Lets Users Bypass Phone, Cable Links*, WALL ST. J., Oct. 3, 2005, at A1.

7. Drucker, Delaney & Grant, *supra* note 6.

8. See David E.M. Sappington & J. Gregory Sidak, *Competition Law for State-Owned Enterprises*, 71 ANTITRUST L.J. 479 (2003) (explaining that entities that do not maximize profit, which would include municipalities, have an increased incentive to attempt to harm competitors).

9. Searcey, *supra* note 2.

to introduce its video service by the end of 2005 in other parts of the country, including Fairfax County, Virginia; the New York City suburb of Massapequa Park; a community outside of Tampa, Florida; and several communities in California.<sup>10</sup> Verizon was charging \$36.90 per month for 140 channels of digital service, and \$43.90 for 185 channels of digital service, including the \$3.95 rental charge for a set-top box.<sup>11</sup> The telecommunications consultancy Kagan Research estimates that the comparable (digital) package from a cable company would cost \$55 per month.<sup>12</sup> UBS Securities estimates that Verizon will spend \$7 billion to offer television service to about one-half of the 32 million homes reached by its network,

AT&T has named its new fiber upgrade initiative “Project Lightspeed.” AT&T plans to launch its video service in early 2006.<sup>13</sup> AT&T predicts that it will be able to provide video service to 18 million homes by the first half of 2008.<sup>14</sup> For new builds, AT&T is extending fiber all the way to the customer’s home. For existing homes, AT&T is extending fiber-optic lines into nodes of those neighborhoods and is using enhanced copper wire to carry video signals the last few thousand feet to the home.<sup>15</sup> Through this choice of network architecture, AT&T projects an initial cost of \$4 to \$5 billion to offer video service.<sup>16</sup>

The technologies used by local telephone operators to offer video service are distinct. Verizon will provide television signals using the same technology that cable companies use, which essentially broadcasts all channels to a set-top box at once.<sup>17</sup> In contrast, AT&T’s video customers will request one channel at a time from off-premises servers, using the same Internet protocol (IP) technology that enables users to access Web pages on their computers.<sup>18</sup> AT&T’s position is that its IP-based, interactive approach using switched network facilities is not a cable service or a cable system subject to the legal requirement under the Cable Act for cable franchises. As of June 2005, a third regional Bell operating company (RBOC), BellSouth, acknowledged that it was working with Microsoft to conduct trials of its own IP-enabled video service,<sup>19</sup> which would more closely resemble AT&T’s switched network architecture than Verizon’s architecture.

This article seeks to evaluate whether IP-enabled video services provided over a telephone network, including but not limited to the technology currently employed by AT&T, are or should be subject to the same regulations as current cable television services. In Part II, we examine the development of cable services. Cable television was primarily retransmitted broadcast signals in its early stages. Cable systems were franchised locally, and the Federal Communications Commission (FCC) initially took a passive stance on several regulatory issues. Rival programming distributors did not emerge until the late 1980s, and incumbent

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10. Grant, *Getting Your MTV*, *supra* note 1.

11. *Id.*

12. *Id.*

13. *Id.*

14. *Id.*

15. Peter Grant, *Technology (A Special Report): Telecommunications—Air Battle: SBC vs. Verizon: The war of the TV wannabes*, WALL ST. J., July 18, 2005, at R8.

16. *Id.*

17. *Id.*

18. *Id.*

19. Peter Grunt, Robert A. Guth & David Pringle, *Phone Companies Using Microsoft Hit TV Service Snags*, WALL ST. J., June 24, 2005, at B1. As of the end of 2005, it was not clear whether the remaining RBOC, Qwest, was developing an IP-enable video service.

cable operators responded by integrating vertically into content and then denying rivals access to that affiliated content.

In Part III, we trace the development of other cable services by cable operators, including cable modem service and cable telephony. We examine the FCC's decisions classifying those ancillary services as non-cable services, which meant that those services were exempt from regulation under Title VI of the Communications Act, as added by the 1984 Cable Act. The FCC concluded that cable modem service was not a cable service because the broadband user controls her experience, whereas the definition of cable service requires the operator to control the user's experience. The FCC's decisions on the scope of cable services have largely withstood scrutiny from the courts.

In Part IV, we analyze the regulatory history of cable service, beginning with the Cable Communications Policy Act of 1984.<sup>20</sup> In the 1984 Act, Congress defined cable service as one-way programming comparable to broadcast television. The Cable Television Consumer Protection and Competition Act of 1992<sup>21</sup> sought to protect consumers by re-regulating cable television rates and ensuring access to affiliated programming by rival programming distributors, but this legislation did not change the definition of cable services. The Telecommunications Act of 1996<sup>22</sup> sought to enhance competition in video programming by removing barriers to entry, including barriers that prevented entry by telephone companies. Although the 1996 Act expanded the definition of cable service, it did not change the fundamental fact that "cable service" is a one-way service.

In Part V, we explain why IP-enabled video service provided over a telephone network differs significantly from traditional one-way cable service. First, IP-enabled video service provided over a switched telephone network is an interstate service. For example, AT&T's video service will use only two headends for AT&T's entire 13-state territory. Second, IP-based video service provided over a telephone network is an interactive, two-way service that is controlled by the user. We also explain several other features that distinguish the IP-based video service provided over a telephone network from cable service. Applying the FCC's reasoning in its recent ruling on cable modem service (which the Supreme Court upheld in June 2005) and the agency's ruling on Internet telephony, one must conclude that IP-based video service provided over a telephone network is not properly classified as a cable service. Clearly, these arguments apply only to those entrants who avail themselves of IP-enabled technologies.

Part VI analyzes how local cable franchising requirements would serve as an entry barrier that would undermine the ability of telephone company entrants to compete effectively with cable operators. The consumer welfare effects of this regulatory entry barrier would be the same for entrants using either IP-enabled technologies or non-IP-enabled technologies. We estimate that, upon ubiquitous deployment by telephone companies of fiber networks to provide video service, cable customers living in areas not yet overbuilt by a wireline provider would enjoy the benefits of lower prices of roughly \$7.15 per month, or \$85.80 per year. A five-year net present value of the annualized savings would be roughly \$26.52 billion (assuming a five percent discount rate). To the extent that DBS providers respond to lower cable prices with price reductions of their own, the net present

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20. Pub. L. No. 98-549, 98 Stat. 2779.

21. Pub. L. No. 102-385, 106 Stat. 1460.

22. Pub. L. No. 104-104, 110 Stat. 56.

value of the welfare benefits from RBOC entry into MVPD markets would increase by roughly 50 percent, to nearly \$40 billion. We estimate that, even without considering any welfare gains owing to higher quality, these consumer welfare gains from entry exceeds the potential loss in franchise fee revenues to the cities by a factor of nearly three to one. Thus, the imposition of cable franchise fees on IP-enabled video provided over telephony networks would generate a substantial excess burden as a matter of public finance policy.

Finally, we scrutinize the potential economic justification for imposition of additional fees for a telephone company's use of the rights-of-way, which the telephone company already has the right to use. With minor exceptions, there is no incremental burden to the municipality from a local telephone company's use of those rights-of-way to offer IP-enabled video service provided over a telephone network. To the extent that the local telephone company is required to or chooses to pay any franchise fee, we explain why the appropriate percentage should be significantly less than five percent of video gross revenues, which is the maximum amount that federal law permits municipalities to charge cable operators. We also discuss why a uniform national approach to regulating IP-enabled video service provided over a telephone network makes more sense and is more efficient than a patchwork of municipal franchising. Finally, we evaluate the principal arguments that cable operators have made before local regulatory entities in favor of requiring municipal franchises for IP-enabled video service provided over a telephone network.

## II. THE DEVELOPMENT OF CABLE SERVICES

Cable television began as the retransmission of terrestrial broadcast signals. Although the FCC required that a cable system carry all local broadcast signals, the agency was reluctant to intervene on issues such as franchising and rate regulation, which it left to municipalities or the states. Cable operators were largely free from competition in this era, as direct broadcast satellite firms did not establish a viable presence until the early 1990s.

### A. *The Retransmission of Distant Broadcast Signals*

Cable television began in the late 1940s as shared noncommercial community antenna television (CATV) services to improve signal reception in areas where it was poor.<sup>23</sup> An antenna could be installed on a hilltop, and broadcast signals received and retransmitted through a cable that fed the households in valleys and other areas of restricted reception. These early systems could carry only a few channels, and their customers were few. Non-broadcast programming was not offered; audiences accessible through cable were too small, and the cost of distributing to them would have been excessive. By the 1960s, premium programming was offered experimentally to only a few homes. According to a study by Stanley Besen and Robert Crandall in 1981, it took fifteen years—from 1948 to 1963—to connect the first million cable subscribers.<sup>24</sup>

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23. For more extensive analysis of the issues addressed in this section, see ROBERT W. CRANDALL & HAROLD FURCHTGOTT-ROTH, *CABLE TV: REGULATION OR COMPETITION?* (Brookings Institution Press 1996).

24. Stanley M. Besen & Robert W. Crandall, *The Deregulation of Cable Television*, 44 L. & CONTEMPORARY PROBLEMS 79 (1981).

The cable industry began to grow as a result of retransmitting distant broadcast signals through the use of microwave circuitry or very tall antennas. The FCC was concerned that cable television would compete with broadcasters and thereby upset the agency's television spectrum allocations plan, which was meant to encourage localism and required a broadcaster to provide purportedly uneconomical local programming to its community of license. In 1962, the FCC limited cable's encroachment on local broadcasters' monopolies by requiring a microwave carrier to demonstrate that it would carry local signals and not distant ones that duplicated the programming of the local stations.

In 1972, the FCC required that a cable system carry all local broadcast signals.<sup>25</sup> The 1972 rules also severely limited the cable operators' choices. For instance, in offering imported signals, cable operators could not leapfrog nearby stations in favor of large-market independent stations. Premium programming, with its extra cost to viewers, was virtually banned by a separate set of bizarre rules that limited such programming to one feature film more than two years old and less than ten years old per week for one week of each month. The same ruling effectively prohibited all premium exhibitions of live sporting events that had been traditionally available on "free" broadcast television. Many of these rules were eventually rescinded by the FCC or vacated by the federal courts.

Key legislative and regulatory decisions in the 1970s and early 1980s spurred the growth in cable programming. In 1972, the Supreme Court upheld the FCC's assertion of power over cable's origination of programming in *Midwest Video I*.<sup>26</sup> In its 1977 *Home Box Office* decision, the U.S. Court of Appeals for the D.C. Circuit vacated the FCC rules that limited pay television offerings.<sup>27</sup> The court ruled that the FCC's "antisiphoning" rules, which were designed to protect television broadcasters, were an impermissible attempt to regulate cable program formats.<sup>28</sup> The decision cleared the way for expanded cable services. By this time, low-cost satellite transmission replaced terrestrial microwave networks as the principal means of distributing programming to both cable systems and broadcast stations, thereby allowing a major expansion of cable offerings. In 1980, the FCC abolished its restrictive signal-importation rules, which had limited a cable system's ability to import distant signals, and abolished the rules that required program exclusivity on local cable systems.<sup>29</sup> Cable systems were now free to import as many distant signals as they desired without having to black out programs that were also available on local stations.

### *B. Local Franchising of Cable Systems*

The municipal franchising process developed around the building of the first cable television systems in the 1960s and 1970s. Cable service was regulated on an informal basis by municipalities, which controlled the easements under and over public rights-of-way that cable needed to wire local communities.<sup>30</sup> In addition to

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25. Memorandum Opinion and Order on Reconsideration of Cable Television Report and Order, FCC 72-530, 36 F.C.C.2d 326 (1972).

26. *United States v. Midwestern Video Corp.*, 401 U.S. 649 (1972).

27. *Home Box Office v. FCC*, 567 F.2d 9, 21 (D.C. Cir. 1977).

28. *Id.*

29. Cable Television Syndicated Program Exclusivity Rules, 45 Fed. Reg. 60,186 (FCC Sept. 11, 1980).

30. See, e.g., JOHN THORNE, PETER HUBER & MICHAEL KELLOGG, *FEDERAL BROADBAND LAW* 179 (Little Brown & Co. Law & Business 2002).

granting franchises, municipalities also regulated cable rates at the local level. The FCC remained on the sidelines for much of this era. In the 1960s, some states stepped into the power vacuum created by the FCC's hands-off approach and began to regulate cable directly.

Before the 1984 Supreme Court decision in *Capital Cities Cable, Inc. v. Crisp*,<sup>31</sup> there was significant uncertainty over the boundaries between federal and local regulatory jurisdiction of cable television. In *Crisp*, the Supreme Court held that, by banning the importation of alcoholic beverage advertising into Oklahoma, the state had trespassed on the authority of the FCC.<sup>32</sup> In *Community Communications Co., Inc. v. City of Boulder*, the Supreme Court held that the city's three-month moratorium prohibiting the local cable company from expanding was not immune from antitrust scrutiny.<sup>33</sup> As we explain below, the 1984 Cable Communications Act was motivated, in part, to clarify this uncertainty over the proper division of federal and local government jurisdiction over cable television.

### *C. The Emergence of Rival Programming Distributors and Vertical Integration into Programming by Cable Operators*

Notwithstanding rate regulation imposed by municipalities, there were no market forces to constrain the prices of incumbent cable operators. Competitive multichannel distribution technologies, including direct-to-home (DTH) satellite, the predecessor to direct broadcast satellite, did not emerge until 1982.<sup>34</sup> But the DTH business was not viable, and satellite television providers did not become effective competitors of cable until the early 1990s.<sup>35</sup> Because DBS providers did not require local rights-of-way to transmit video programming, they were able to avoid the local franchising requirements imposed on cable operators. But these entrants faced several impediments to competing effectively, including the inability to secure video programming that was owned by incumbent cable operators. By June 1995, all DBS operators combined (DIRECTV, U.S. Satellite Broadcasting, and PrimeStar) had only 1.1 million subscribers.<sup>36</sup> EchoStar entered the market in 1996, and the number of DBS subscribers increased to over 5 million by 1998.<sup>37</sup> Cable operators had pursued a strategy of vertical integration, in part to achieve certain efficiencies, but also to deny downstream rivals the ability to offer compelling content.<sup>38</sup> According to the FCC, 53 percent (56 of 106) of national satellite-delivered cable programming services were vertically integrated in 1993.<sup>39</sup>

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31. 476 U.S. 691 (1984).

32. *Id.* at 704.

33. 455 U.S. 40 (1982).

34. History of Cable Television, the Cable Center (available at <http://www.cablecenter.org/history/timeline/decade.cfm?start=1980>) [hereinafter *Programming History*].

35. See, e.g., PATRICK R. PARSONS & ROBERT M. FRIEDEN, *THE CABLE AND SATELLITE TELEVISION INDUSTRIES 9* (Allyn & Bacon 1998) (explaining that DTH operators caused their original investors to lose hundreds of millions of dollars in the 1980s).

36. Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, Fourth Annual Report, CS Dkt. No. 97-141, 13 F.C.C.R. 1034, 1070-71 (1998) [hereinafter *Fourth MVPD Report*].

37. PARSONS & FRIEDEN, *supra* note 13, at 9.

38. See DAVID WATERMAN & ANDREW A. WEISS, *VERTICAL INTEGRATION IN CABLE TELEVISION* (MIT Press & AEI Press 1997).

39. *Fourth MVPD Report*, *supra* note 36, at 158.



The Cable Television and Consumer Protection Act of 1992, which we discuss below, would address these issues by compelling vertically integrated cable operators to make programming available to rival MVPDs.

#### *D. Consolidation of Cable Operators at Both the National and Local Levels*

Another long-term trend among cable operators is consolidation. In 1985, the top four cable operators—Tele-Communications, Time Inc., Westinghouse, and Storer—accounted for roughly 35 percent of all U.S. cable subscribers.<sup>40</sup> In June 2004, the four largest cable operators—Comcast, Time Warner, Cox, and Charter—accounted for nearly 60 percent of all U.S. cable subscribers.<sup>41</sup> Of the top ten cable operators in 1985, only two—Time Warner and Cox—operated as an independent cable provider as of June 2005.

In addition to consolidating on a nationwide basis, cable operators have sought to collect “clusters” of cable systems within given local areas. A cluster is a combination of geographically contiguous cable systems. According to the FCC, the number of clusters covering a population in excess of 500,000 persons more than doubled during the 1990s, from 16 to 34.<sup>42</sup> As of the end of 2003, slightly more than 53.6 million of the nation’s 66.1 million cable subscribers were served by systems that were part of a cluster.<sup>43</sup> Clustering of territories allows incumbent cable operators to migrate the distribution of affiliated programming from satellite delivery to terrestrial (fiber-optic) delivery, which is advantageous to cable operators because only satellite-delivered affiliated programming is subject to the program access rules created by the 1992 Cable Act.<sup>44</sup> The practical effect of clustering can be to make premium regional programming (particularly regional sports programming) unavailable to DBS providers.<sup>45</sup> In its *2000 Cable Price Report*, the FCC found that cable systems that were part of a cluster charged higher prices than cable systems that were not part of a cluster, even after controlling for other factors that might affect cable prices.<sup>46</sup> The FCC found similar results in its *2001 Cable Price Report*.<sup>47</sup>

### III. THE DEVELOPMENT OF NON-CABLE SERVICES

Cable television providers invested in their networks to offer complementary services, including high-speed Internet access and telephony. The FCC and the courts have concluded that neither of those complementary services is a cable service, and therefore neither should be regulated as such. These rulings are

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40. KAGAN, TOP 70 CABLE SYSTEM OPERATORS, Mar. 31, 1985.

41. Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report, CS Dkt. No. 04-227, 20 F.C.C.R. 2755 ¶ 143 (2005) [hereinafter *Eleventh Annual Report*].

42. Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eighth Annual Report, CS Dkt. No. 01-129, 17 F.C.C.R. 1244 ¶ 67 (2002).

43. *Eleventh Annual Report* ¶ 142.

44. 47 U.S.C. § 548.

45. See, e.g., Andrew Stewart Wise & Kiran Duwadi, *Competition between Cable Television and Direct Broadcast Satellite: The Importance of Switching Costs and Regional Sports Networks*, J. COMP. L. & ECON. 679 (2005).

46. Statistical Report on the Average Rates of Basic Service, Cable Programming Service, and Equipment, MM Dkt. No. 92-266, 16 F.C.C. 346 ¶ 42 (2001).

47. Statistical Report on the Average Rates of Basic Service, Cable Programming Service, and Equipment, MM Dkt. No. 92-266, 17 F.C.C. 6301 ¶ 45 (2002).

noteworthy considering the fact that the new services are provided over the same cable system as the cable video service.

*A. The Development of Cable Modem Service*

In the mid-1990s, most Internet users connected with dial-up modems over telephone lines. Cable's television platform made it an ideal medium for connecting to the Internet at much higher speeds once cable operators deployed the requisite ancillary equipment. According to the National Cable and Television Association (NCTA), between 1996 and 2004 the cable industry's capital expenditures were almost \$95 billion, which equates to roughly \$1,300 per customer spent to upgrade cable systems, introduce new equipment, and launch new broadband services.<sup>48</sup> Cable modem service allowed customers to download information at speeds 50 to 100 times faster than telephone-based modem technologies. Another advantage of cable modem service vis-à-vis dial-up service was its "always-on" feature, as well as the fact that cable modem service did not interfere with normal telephone use. As of the end of the third quarter of 2004, the cable industry served 19.4 million high-speed Internet customers and was the most popular broadband access offering.<sup>49</sup>

*B. The Development of Cable Telephony and the Subsequent Movement toward Voice over Internet Protocol*

In addition to launching high-speed Internet access service, cable operators deployed circuit-switched technologies to provide business and residential telephone services beginning in 1997.<sup>50</sup> Cable operators became certified local exchange carriers offering competitive residential voice services across the country on an essentially unregulated basis. Beginning in 2003, many cable operators launched VoIP service.<sup>51</sup> VoIP provided many of the familiar user characteristics of the public switched telephone network. The NCTA has described the technology as follows:

Calls are placed over an IP-based data network and voice is transmitted with data packets. The IP data packets used by services from some of the Internet telephony providers travel over the public Internet. Facilities-based cable offerings, in contrast, transport IP data packets over their private managed IP networks with end-to-end quality of service monitoring (while still interconnecting with the PSTN as necessary).<sup>52</sup>

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48. National Cable and Television Association, Broadband Services (available at <http://www.ncta.com/Docs/PageContent.cfm?pageID=37>).

49. National Cable and Television Association, High-Speed Internet Access (available at <http://www.ncta.com/Docs/PageContent.cfm?pageID=93>).

50. National Cable and Television Association, Telephone Service (available at <http://www.ncta.com/Docs/PageContent.cfm?pageID=32>) [hereinafter *NCTA Telephone Service Report*].

51. *Id.*

52. *Id.*

At the end of 2003, Bernstein Research raised its cable telephony subscriber forecasts to account for “cable operators’ accelerated telephony rollout plans.”<sup>53</sup> By the third quarter of 2004, cable operators served roughly 2.8 million residential cable telephony customers across the country through a combination of circuit-switched and VoIP technologies.<sup>54</sup> VoIP over cable modem is expected to continue to proliferate. Cable-company VoIP subscribers are projected to overtake cable-company circuit switched voice subscribers in 2006. Bernstein projects that cable voice services will reach 16.4 percent penetration of total U.S. households by 2010 (equal to roughly 18 percent of addressable homes),<sup>55</sup> with 19.5 million cable telephony subscribers by 2010 (including both circuit-switched and IP-based lines), from a base of only 2.8 million at the end of 2003 (nearly all circuit-switched).<sup>56</sup>

### C. FCC and Court Rulings That Cable Modem Service and Cable Telephony Are Not Cable Services

In June 2000, the U.S. Court of Appeals for the Ninth Circuit decided issues related to the classification of cable modem service in *AT&T v. City of Portland*.<sup>57</sup> The court considered whether a municipal government in its capacity as a local franchising authority had the authority, under the Cable Act, to condition its approval of a cable operator’s merger on the operator’s granting open access to unaffiliated Internet service providers (ISPs).<sup>58</sup> The Ninth Circuit held that the cable modem service at issue, @Home, was not a “cable service.”<sup>59</sup> The portion of @Home that was used as an ISP was determined to be an information service, while the portion of @Home that provided subscribers “Internet transmission over its cable broadband facility” was determined to be a separate telecommunications service.<sup>60</sup>

From 1996 through early 2002, the FCC declined to determine a regulatory classification for, or to regulate, cable modem service on an industry-wide basis.<sup>61</sup> In March 2002, however, the FCC concluded in its *Cable Modem Declaratory Ruling* that cable modem service was “properly classified as an interstate information service, not as a cable service, and that there [was] no separate offering of telecommunications service.”<sup>62</sup> In reaching this decision, the FCC

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53. Bernstein Research, U.S. Telecom and Cable: Faster Rollout of Cable Telephony Means More Risk for RBOCs, Faster Growth for Cable, Dec. 17, 2003, at 1-3.

54. *NCTA Telephone Service Report*, *supra* note 50

55. Bernstein Research, *supra* note 53, at Exhibit 1 (projecting that 92 percent of total U.S. households will be passed by either VoIP or circuit-switched systems by 2010).

56. Craig Moffett, *et al.*, Bernstein Research Call, *Cable and Telecom: VoIP Deployment and Share Gains Accelerating; Will Re-Shape Competitive Landscape in 2005*, at 2 (Dec. 7, 2004).

57. *AT&T v. City of Portland*, 216 F.3d 871 (9th Cir. 2000), *reversing* 43 F. Supp. 2d 1146 (D. Ore. 1999).

58. *Id.* at 875.

59. *Id.* at 876.

60. *Id.* at 878.

61. Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Dkt. No. 98-146, 15 F.C.C.R. 20913, 20918 ¶ 8 (2000).

62. Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, GN Dkt. No. 00-185, CS Dkt. No. 02-52, 17 F.C.C.R. 4798, 4799 (2002) [hereinafter *Cable Modem Declaratory Ruling*].

considered the meaning of the term “or use” added to the definition of cable service by the 1996 Telecommunications Act.

As we explain below, the 1996 Telecommunications Act added the words “or use” to the cable service definition, so that a cable service may now include “subscriber interaction, if any, which is required for the selection *or use*” of cable services.<sup>63</sup> The FCC reasoned in its *Cable Modem Declaratory Ruling* that the amendment itself addresses only the use of content otherwise qualifying as cable service.<sup>64</sup> The one-way transmission requirement in that definition, the FCC explained, continues to require that the cable operator be *in control of* selecting and distributing content to subscribers, primarily a medium of mass communications distributing the packages of video programming to all subscribers, and that the content be available to all subscribers generally. When offering cable modem service, a cable operator lacks that requisite control over the selection of the information by the user, and thus “the ultimate control of the experience lies with the subscriber.”<sup>65</sup> The FCC’s determination that cable modem service is not a cable service meant that the service was not subject to regulation under Title VI of the Communications Act, as added by the 1984 Cable Act. Finally, the FCC determined that cable modem service is an interstate service because the points among which cable modem communications travel are often in different states and countries.<sup>66</sup>

In October 2003, the Ninth Circuit ruled on several challenges to the FCC’s *Cable Modem Declaratory Ruling*.<sup>67</sup> The court affirmed the FCC’s ruling that cable modem service is not a cable service, but the court, relying on its previous decision in *Portland*, vacated the FCC’s ruling that cable modem service is not in part a separate telecommunications service. Whether cable modem service is an interstate service was not an issue on appeal.<sup>68</sup> In October 2004, a number of parties sought Supreme Court review of the Ninth Circuit decision, including the National League of Cities, the U.S. Conference of Mayors, the National Association of Counties, the International Municipal Lawyers Association, and the National Association of Telecommunications Officers and Advisors. The local government petitioners argued that the FCC action deprived local governments of their right to require cable operators to pay adequately for their use of public property for private gain.<sup>69</sup> In December 2004, the Supreme Court denied the local governments’ cross petition for certiorari in the *Brand X* case but granted the review sought by other parties.<sup>70</sup> According to the National Association of Counties, the decision would cost local governments more than \$470 million in annual franchise fees associated with cable modem service.<sup>71</sup> In June 2005, the

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63. 47 U.S.C. § 522(6)(B) (emphasis added). Cable operators wanted to ensure that their franchise agreements authorized them to provide other services such as video on demand and game channels, which at the time were more advanced than traditional one-way video offerings.

64. *Cable Modem Declaratory Ruling*, *supra* note 62 at 4832 ¶ 65.

65. *Id.* 61 ¶ 67.

66. *Id.* ¶ 59.

67. *Brand X Internet Services v. FCC*, 345 F.3d 1120 (9th Cir. 2003), *stay granted pending cert.* (April 9, 2004), *petitions for cert. filed*, Nos. 04 277 (Aug. 30, 2004), 04 281 (Aug. 27, 2004).

68. *Id.*

69. Cross Petition for Certiorari, *National League of Cities v. FCC*, No. 04-460 (2004).

70. Certiorari—Summary Dispositions, *National League of Cities v. FCC*, No. 04-460 (2004).

71. *Local Gov’t. Groups Express Disappointment Over Cable Modem Ruling; Could Create Serious Financial Hardships for Nation’s Communities*, U.S. NEWSWIRE, Dec. 8, 2004.

Supreme Court reversed the Ninth Circuit and upheld the FCC's declaratory ruling on cable modem service.<sup>72</sup>

One month before the Supreme Court's decision to deny the cities' petition for certiorari in *Brand X*, the FCC declared that cable VoIP was not subject to traditional state telephony regulation.<sup>73</sup> In particular, the FCC preempted an order of the Minnesota Public Utilities Commission (PUC) applying its traditional "telephone company" regulations to Vonage's VoIP service. The FCC concluded that Vonage's VoIP service could not "be separated into interstate and intrastate communications for compliance with Minnesota's requirements without negating valid federal policies and rules."<sup>74</sup> The Vonage decision was consistent with previous orders adopted by the FCC in 2004, including the *Pulver Declaratory Ruling*<sup>75</sup> and the *AT&T Declaratory Ruling*.<sup>76</sup>

The FCC's decisions with respect to cable broadband and VoIP can be defended on efficiency grounds—namely, a network operator that invests in new technologies should not be subject to legacy regulations that evolved under different market conditions. If a portion of a network operator's revenues associated with a new service is captured by the municipality, or entry is substantially delayed, then the operator might withhold the investment entirely or limit the investment to areas where the expected returns are sufficiently large. The FCC's decisions are consistent with section 706 of the Telecommunications Act of 1996, which instructs the FCC to encourage rapid deployment of new services.<sup>77</sup>

A consistent application of that principle would imply that a telephone operator's video service—which requires a huge capital investment to upgrade facilities and equipment and to acquire programming rights—should not be subject to legacy regulations. Moreover, because telephone companies already have the right to use rights-of-way—just as cable operators already have such authorization under their cable franchises—there are no public safety or other policy grounds to impose additional rights-of-way requirements through a separate franchising process.

#### IV. THE REGULATORY HISTORY OF CABLE SERVICE

Congress defined cable service in 1984 as the one-way transmission to subscribers of video programming, reflecting the cable technology used at that time. Despite the fact that Congress was aware of the two-way capabilities of cable networks in 1984, and despite the fact that Congress revised the Communications Act in 1992 and again in 1996, Congress did not revise the definition of cable services to include that two-way functionality.

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72. *Nat'l Cable & Telecommunications Ass'n v. Brand X Internet Services*, 125 S. Ct. 2688 (2005).

73. In the Matter of Vonage Holdings Corporation, Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, WC Dkt. No. 03-211, Memorandum Opinion and Order, 19 F.C.C.R. 22,404 (2004) [*Vonage Declaratory Ruling*].

74. *Id.* ¶ 1.

75. Petition for Declaratory Ruling that pulver.com's Free World Dialup Is Neither Telecommunications Nor a Telecommunications Service, Memorandum Opinion and Order, WC Dkt. No. 03-45, 19 F.C.C.R. 3307 (2004).

76. Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges, Order, WC Dkt. No. 02-361, 19 F.C.C.R. 7457 (2004).

77. Pub. L. No. 104-104, § 706, 110 Stat. 56, 153.

A. *The Cable Communications Policy Act of 1984*

The Cable Communications Policy Act of 1984 was protective legislation for incumbent cable operators. The Act curbed the cities' powers with respect to franchise renewal and rate regulation, yet it preserved some limited role for municipalities. Despite the fact that Congress was aware of cable's ability to offer data and telephony services, the Act defined cable service in a manner that excluded these ancillary non-cable services.

1. *The Act as Protective Legislation for Incumbent Cable Operators*

The 1984 Cable Act was the first attempt by Congress to provide guidance to the FCC on several critical issues relating to cable television.<sup>78</sup> The Act is best understood as a compromise between the interests of cities and cable operators: cities relinquished certain powers in exchange for, among other items, (1) the authority to require cable operators to upgrade and expand their video networks; (2) the authority to establish certain facilities, equipment, and services requirements; (3) continuation of local franchise fees and the ability to obtain the maximum fee without an FCC waiver; and (4) the ability to require cable companies to make available public, educational, and government (PEG) channels. The carrots for the incumbent cable operators were, among other items, (1) freedom from unreasonable demands by municipalities; (2) protection from competition, especially during the franchise renewal process; (3) an end to rate regulation in most markets; and (4) statutory limitations on franchise fees and other cash payments.

Congress wanted to create national rules to govern local franchising procedures with the aim of encouraging the growth and development of cable systems.<sup>79</sup> Before passage of the 1984 Cable Act, the FCC left the franchising process largely to local authorities.<sup>80</sup> The Act established franchising procedures and an orderly franchise renewal process.<sup>81</sup> By the 1980s, exclusivity for incumbent cable operators had become virtually universal in practice.<sup>82</sup> Potential entrants unsuccessfully challenged the exclusivity provisions in franchise agreements under the Sherman Act.<sup>83</sup> The 1984 Act authorized municipalities to grant "one or more" franchises, which the cities often interpreted as allowing them the prerogative to grant merely one, exclusive franchise.<sup>84</sup>

Congress provided other protections from competition for incumbent cable operators because it was evidently concerned that cable operators would be unwilling to risk large amounts of capital to build networks if a local government could unreasonably deny a cable system the opportunity to renew its cable franchise at the end of the franchise period.<sup>85</sup> As a result, Congress created a provision that restricted a franchising authority's ability to deny renewal of an incumbent operator's franchise unless the local government could demonstrate that

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78. 47 U.S.C. § 521(1).

79. See DANIEL L. BRENNER, MONROE E. PRICE & MICHAEL I. MEYERSON, CABLE TELEVISION AND OTHER NONBROADCAST VIDEO ch. 2 § 2.02 (Clark Boardman Callaghan 1996).

80. THORNE, HUBER & KELLOGG, *supra* note 30 at 229.

81. 47 U.S.C. §§ 521(2), 521(5).

82. THORNE, HUBER & KELLOGG, *supra* note 30 at 230.

83. *Id.*

84. *Id.*

85. BRENNER, PRICE, & MEYERSON, *supra* note 79 at § 2.02.

the cable operator or its proposal did not meet one or more of four statutory standards.<sup>86</sup> The 1984 Act did not impose a limit on the duration of a cable franchise.

Finally, by codifying in section 533(b) certain cross-ownership restrictions on local telephone companies,<sup>87</sup> Congress also shielded incumbent cable operators from entry by the local telephone company within the latter's service area, thereby eliminating a significant potential competitor for the incumbent cable operator.<sup>88</sup> (This statutory barrier to entry was later struck down on the grounds that it violated the First Amendment rights of telephone companies.<sup>89</sup>)

Congress also established a ceiling on the fee that cities could charge cable systems for the continued access to public streets. Specifically, this annual franchising fee could not exceed five percent of the cable system's gross revenues, and any non-capital PEG payments and other cash payments were counted against the fee.<sup>90</sup> The cap on franchise fees can be understood as establishing a ceiling on the rate that would emerge under competition among rival cable operators for a given local franchise. For example, in an open competition for a given franchise, competition among rival companies for a de facto monopoly cable franchise could have resulted in a franchise fee that substantially exceeded five percent.<sup>91</sup>

Congress also deregulated rates in the 1984 Cable Act and preempted local, state, and federal rate controls in any community where the FCC found effective competition to exist.<sup>92</sup> In April 1985, the FCC determined that effective competition existed whenever three over-the-air broadcast television systems were available.<sup>93</sup> Given that an overwhelming share of the U.S. population received at least three over-the-air television signals at that time, this decision effectively ended cable rate regulation (for a time) in most of the country.<sup>94</sup>

## 2. *The Act's Definition of Cable Service as One-Way Programming Comparable to Broadcast Television*

In the 1984 Act, Congress sought to establish a regulatory framework for the delivery of the kind of cable programming that existed in 1984. In particular, Congress sought to regulate the one-way transmission to subscribers of video programming or other programming service. Accordingly, the 1984 Cable Act defined cable television service as

- (A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming services, and

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86. 47 U.S.C. § 546.

87. *Id.* § 533(b).

88. PETER W. HUBER, MICHAEL K. KELLOGG & JOHN THORNE, *FEDERAL TELECOMMUNICATIONS LAW 1196-97* (2d ed. Aspen Law & Business 1999).

89. *Chesapeake & Potomac Tel. Co. of Va. v. United States*, 830 F. Supp. 909 (E.D. Va. 1993), *aff'd*, 42 F.3d. 181 (4th Cir. 1994), *cert. granted*, 515 U.S. 1157 (1995), *judgment vacated*, 516 U.S. 415 (1996).

90. 47 U.S.C. § 542(b).

91. See discussion at Section VI.B., *infra*.

92. *Id.* § 552(a).

93. Implementation of the Provisions of the Cable Communications Policy Act of 1984, Report and Order, MM Dkt. No. 84-1296, 50 Fed. Reg. 18,637 (1985).

94. THOMAS HAZLETT & MATTHEW L. SPITZER, *PUBLIC POLICY TOWARD CABLE TELEVISION: THE ECONOMICS OF RATE CONTROLS 54-57* (MIT Press & AEI Press 1997).

(B) subscriber interaction, if any, which is required for the selection of such video programming or other programming service.<sup>95</sup>

The Act defined “video programming” as “programming provided by, or generally considered comparable to programming provided by, a television broadcast station.”<sup>96</sup> Despite their awareness in 1984 of technological developments in the area of cable television—including a cable system’s ability to offer “two way services, such as the transmission of voice and data traffic, and transactional services such as at-home shopping and banking”<sup>97</sup>—Congress defined cable television service to reflect the technology being used for video programming and to exclude “two-way” capabilities. It is reasonable to infer from this decision that Congress did not want to undermine the development of these “non-cable services” by subjecting them to regulation under Title VI of the Communications Act, as added by the 1984 Cable Act. In addition, perhaps Congress did not want to disturb any existing federal and state regulatory authority over the newly emerging non-cable services.<sup>98</sup>

Since 1984, the design of telephone system networks has changed dramatically. Telecommunications carriers have upgraded networks, and new technologies (such as packet switching combined with Internet protocol) have developed. For instance, as discussed in more detail below, an upgraded telephone network that can deliver IP-enabled interactive service is completely different from traditional one-way “video programming” as defined by the 1984 Cable Act. It is therefore implausible to interpret the definitions of a cable system or cable service to cover, respectively, a switched two way local telephone network or an IP-based video service delivered via that network. Although individual states may have had their own definitions of cable services and systems, Congress established national legislation that would promote the growth of, and regulate, all one-way cable television services, not the type of IP-based interactive video services offered over modern, upgraded switched telephone networks. We discuss below why IP-based video service provided over a telephone network transcends anything that Congress envisioned or codified in 1984 or thereafter.

#### *B. The Cable Television Consumer Protection and Competition Act of 1992*

The Cable Television Consumer Protection and Competition Act of 1992 focused on consumer protection, primarily through the re-regulation of cable television rates. The Act also promoted competition in the distribution of programming by mandating that vertically integrated cable operators offer program access to rival programming distributors, and by prohibiting municipalities from unreasonably denying second franchises for cable systems. Importantly, the Act did not change the definition of a cable service.

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95. 47 U.S.C. § 522(5).

96. *Id.* § 522(19).

97. Cable Franchise Policy and Communications Act of 1984, Report on Energy and Commerce, No. 98-934, 47 U.S.C. § 602, Aug. 1, 1984.

98. *Id.* at 29.



1. *The Attempt to Protect Consumers by Re-regulating Cable Television Rates and Ensuring Access of Affiliated Programming to Rival Programming Distributors*

Congress passed the Cable Television Consumer Protection and Competition Act of 1992<sup>99</sup> to address the perceived problems created by the structure of the MVPD industry. By 1992, it became clear that Congress had added to cable's substantial monopoly power by enacting the 1984 Cable Act, resulting in numerous consumer complaints about cable rate increases and poor customer service.<sup>100</sup> In an attempt to constrain this monopoly power, Congress re-regulated cable rates, prohibited exclusive franchising, and imposed vertical and horizontal ownership limits.

The 1992 Cable Act imposed new responsibilities on the FCC to regulate cable television service.<sup>101</sup> To stimulate competition, downstream competitors such as DBS operators were granted access to all satellite-delivered programming provided by vertically integrated cable networks.<sup>102</sup> Despite findings by the FCC<sup>103</sup> and the Department of Justice<sup>104</sup> that entry into video programming by local telephone companies would be procompetitive on balance, Congress ignored the opportunity to eliminate the restriction on telephone-company video services that it had included in the 1984 Cable Act.

Congress reinstated rate regulation in 1992 by allowing both state and local governments and the FCC to assert control over the rates for non-premium services that cable systems could charge their customers.<sup>105</sup> The 1992 Cable Act established a complex system for regulating cable rates. Local rate regulation generally affected only the basic service tier. Regulation of the higher tiers was to be conducted by the FCC in response to complaints. Premium channels, however, were exempt from regulation.<sup>106</sup>

Congress also empowered the FCC to impose both horizontal and vertical ownership limits on cable companies. Specifically, horizontal limits capped the total share of U.S. households that could receive multichannel programming from a single operator,<sup>107</sup> whereas vertical limits restricted the share of its channels that a system operator could use to offer programming services in which it had an attributable ownership interest.<sup>108</sup> In 1993, the FCC set that channel-occupancy limit at 40 percent and defined attributable interest to be five percent or more of total equity in a programming service.<sup>109</sup> The objective of the vertical restrictions

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99. 47 U.S.C. § 543.

100. See, e.g., PAUL SIEGEL, COMMUNICATION LAW IN AMERICA 469 (Allyn & Bacon 2002).

101. 47 U.S.C. § 533(f).

102. *Programming History*, *supra* note 34.

103. Recommendations to Congress and Second Further Notice of Proposed Rulemaking, Telephone Company-Cable Television Cross-Ownership Rules, Second Report and Order, 7 F.C.C.R. 5784, 5847-51 (1992).

104. Reply Comments of the U.S. Department of Justice at 44, Telephone Company-Cable Television Cross-Ownership Rules Sections 63.54-63.58, FCC Dkt. No. 87-266 (filed Mar. 13, 1992).

105. 47 U.S.C. § 543(a)(2).

106. For a detailed analysis of price regulation resulting from the 1992 Act, see HAZLETT & SPITZER, *supra* note 94 at 68.

107. 47 U.S.C. § 533(f).

108. *Id.*

109. Implementation of Sections 11 and 13 of the Cable Television Consumer Protection and Competition Act of 1992, MM Dkt. No. 92-264, 10 F.C.C.R. 4654 (1995). In 2001, both the

was to reduce the incentive of vertically integrated cable operators to favor their affiliated content to the disadvantage of unaffiliated services.<sup>110</sup>

## 2. *The Absence of Any Change in the Definition of Cable Services*

The 1992 Cable Act did not redefine cable television service.<sup>111</sup> Although Congress did not consider the *content* to have changed significantly between 1984 and 1992, it did consider the downstream distribution platform to have expanded beyond delivery of video programming services by cable systems. The 1992 Cable Act defined a new service provider known as the multi-channel video programming distributor (MVPD).<sup>112</sup> This category was created to assist the FCC in determining whether the incumbent cable operator faces “effective competition.” The FCC subsequently ruled that MVPDs include cable, multichannel multipoint distribution service (MMDS), DBS, and a telephone company that provides pure video dialtone transport.<sup>113</sup> The issue of a cable operator’s market power was addressed once more in the Telecommunications Act of 1996.

### C. *The Telecommunications Act of 1996*

The Telecommunications Act of 1996 encouraged the ubiquitous deployment of advanced services. The Act sought to remove entry barriers and open markets to competition. The Act expanded the definition of cable service but did not change the fundamental nature of cable service as a one-way service. As we explained above, the FCC referred to the 1996 Act amendment in its *Cable Modem Declaratory Ruling*, reasoning that the amendment addresses only the use of content otherwise qualifying as cable service, and that a cable operator lacks that requisite control over the selection of the information by the cable modem user.

#### 1. *The Decision to Enhance Competition in Video Programming by Removing Barriers to Entry*

The video provisions of the Telecommunications Act of 1996 served to promote competition in the cable industry by deregulating any cable operator that was subject to effective competition,<sup>114</sup> and by promoting entry among rival

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horizontal and vertical limits adopted by the FCC were subsequently overturned by the U.S. Court of Appeals for the D.C. Circuit. *See* Time Warner Entertainment Co. v. FCC, 240 F.3d 1126 (D.C. Cir. 2001). The FCC subsequently issued a notice of proposed rulemaking to consider whether new limits should be imposed. Second Further Notice of Proposed Rulemaking, MM Dkt. No. 92-264 (May 17, 2005).

110. WATERMAN & WEISS, *supra* note 38, at 13. By comparing the practices of vertically integrated cable operators with non-vertically integrated operators, Waterman and Weiss found empirical evidence that vertically integrated cable operators favored affiliated programming (either by more frequent carriage or by lower pricing) and tended to offer fewer numbers of cable networks to subscribers.

111. 47 U.S.C. § 522(5).

112. *Id.* § 522(12).

113. *See* THORNE, HUBER & KELLOGG, *supra* note 30 at 144.

114. *See* HAZLETT & SPITZER, *supra* note 94 at 68.

MVPDs, including local telephone companies.<sup>115</sup> Congress established a sunset date of March 1999 for all rate regulation but the basic tier of cable television services, and it phased out the remaining rate controls that had been imposed on larger system operators.<sup>116</sup> The Telecommunications Act immediately deregulated small cable systems,<sup>117</sup> which served about 20 percent of the estimated 61 million cable households in the United States. The Act also allowed local telephone companies to provide video service within their service territories, a provision that we examine in greater detail below.

Through the Telecommunications Act of 1996, Congress gave a cable operator the freedom to increase rates without prior notice to its customers if the operator's costs rose because of a change in a regulatory fee or franchise fee imposed by any federal agency or franchising authority.<sup>118</sup> An operator of an "open video system" (OVS), which we describe below, was subjected to the payment of fees on the "gross revenues of the operator for the provision of *cable service* imposed by a local franchising authority or other governmental entity, in lieu of the franchise fees permitted under section 622."<sup>119</sup>

The 1996 Act did change the limitation on franchise fees paid by cable operators by adding the phrase "to provide cable services" to the sentence, "For any twelve-month period, the franchise fees paid by a cable operator with respect to any cable system shall not exceed 5% of such cable operator's gross revenues derived in such period from the operation of the cable system *to provide cable services*."<sup>120</sup> Finally, Congress prevented a local franchising authority from ordering a cable operator to discontinue the operation of a cable system "to the extent such cable system is used for the provision of a telecommunications service, by reason of the failure of such cable operator or affiliate thereof to obtain a franchise or franchise renewal under this title with respect to the provision of such telecommunications service."<sup>121</sup>

The Telecommunications Act of 1996 also removed many of the barriers that had previously prevented local telephone companies from competing as video operators.<sup>122</sup> As explained above, the 1996 Act explicitly exempted OVS service from franchise fees and from certain other Cable Act requirements, including the requirement to obtain a local franchise. The Act's definition of OVS service allowed for 33 percent affiliated programming, with the remaining capacity devoted to leased access on an open, nondiscriminatory basis.<sup>123</sup> In particular, if demand by unaffiliated video programmers exceeds capacity, then an OVS operator is limited to providing programming to one-third of the capacity of its own system, and it is obligated to allocate the other two-thirds to unaffiliated video program providers.<sup>124</sup>

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115. For a review of the extant video prospects for local exchange carriers in 1994, see LELAND L. JOHNSON, *TOWARD COMPETITION IN CABLE TELEVISION* 53-84 (MIT Press & AEI Press 1994).

116. 47 U.S.C. § 543(c)(4).

117. *Id.* § 543(m).

118. *Id.* § 542(g).

119. *Id.* § 573(c)(2)(B) (emphasis added).

120. *Id.* § 542(b) (emphasis added).

121. *Id.* § 541(b)(3)(C)(ii).

122. See SIEGEL, *supra* note 77, at 469-70.

123. 47 U.S.C. § 573.

124. *Id.* § 573(b)(1)(B).

In exchange for this heavier access burden, OVS providers were exempted from leased access, the federal requirement for local franchising, rate regulation, and an array of other regulations imposed upon cable systems.<sup>125</sup> OVS remained subject to rules requiring PEG access and to must-carry obligations.<sup>126</sup> The limitations on vertical integration and new prohibitions on competitive buyouts between cable and telephone companies applied to OVS.<sup>127</sup> Finally, the 1996 Act eliminated the requirement that a local telephone company obtain from the FCC a section 214 certificate of public convenience and necessity before it could construct or operate a video system.<sup>128</sup>

The 1996 Act directed the FCC to promulgate regulations to prohibit OVS operators from “unjustly or unreasonably” discriminating among those video program providers.<sup>129</sup> In 1996, the FTC and DOJ advised the FCC that it should not require OVS operators to carry the programming of in-region cable operators, explaining that “mandated access for in-region cable systems could result in less effective entry from OVSs than would otherwise be the case.”<sup>130</sup> The antitrust agencies told the FCC that competition in video programming distribution would increase if the OVS operators were allowed to refuse access to their systems by “dominant, in-region cable competitors.”<sup>131</sup>

The 1996 Act sought to enhance competition in video programming by removing barriers to entry, especially those that stymied entry by telephone companies. The 1996 Act tried to facilitate telephone company entry into video services. But that experiment failed. To the extent that enhancing competition in video markets remains an important objective for Congress, existing barriers to telephone company entry, including cable franchise requirements, should be removed.

## 2. *Expansion of the Definition of Cable Service, But Not in a Manner That Changed the Fundamental Understanding of It as a One-Way Service*

The 1996 Telecommunications Act slightly amended the definition of cable service. In particular, Congress amended section 522 by inserting “or use” after “the selection” so that the updated definition now reads:

- (A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming services, and
- (B) subscriber interaction, if any, which is required for the selection *or use* of such video programming or other programming service.<sup>132</sup>

In its *Cable Modem Declaratory Ruling*, the FCC explained that the inclusion of the phrase “or use” did not imply that cable modem service was a cable service subject to regulation under Title VI of the Communications Act, as added by the

125. *Id.* § 573(c).

126. *Id.* § 573(c)(2)(B).

127. *Id.* § 573(c).

128. *Id.* § 571(c).

129. *Id.* § 573(b)(1)(A).

130. FCC Press Release, July 19, 1996 (available at <http://www.ftc.gov/opa/1996/07/ovs.htm>).

131. *Id.*

132. *Id.* § 522(6) (emphasis added).

1984 Cable Act. Cable service continues to be defined as the *one-way* transmission to subscribers of video programming or other programming service.

The 1996 Act also narrowed the definition of a cable system by expressly excluding more services. First, the phrase “(B) a facility that serves only subscribers in 1 or more multiple unit dwellings under common ownership, control, or management, unless such facility or facilities uses any public right-of-way” was removed from section 522, and was replaced with the phrase “(B) a facility that serves subscribers without using any public right-of-way.” Second, the exclusions that apply to telephone facilities were further expanded so that such facilities providing video programming may avoid Title VI regulation if they are used “solely to provide interactive on-demand services.” Third, open video systems were excluded from the definition of a cable system. The term “interactive service” was defined as “service providing video programming to subscribers over switched networks on an on-demand, point-to-point basis, but does not include services providing video programming prescheduled by the programming provider.”<sup>133</sup> Hence, the 1996 Act amended the prior definition of a cable system to exclude (1) telephone facilities used *solely* to provide interactive on-demand services and (2) facilities used to provide OVS service. Finally, the 1996 Act provided that video programming provided in any other manner would be subject to those requirements of Title VI that apply.

As explained further below, an IP-enabled video service provided over a switched telephone network is not a cable service and Title VI does not apply because IP video service is interactive, it is two-way, and it is designed to be accessed at the subscriber’s discretion.<sup>134</sup> This is in contrast to the definition of cable service, which is a one-way transmission of video programming broadcast to all subscribers, along with the subscriber selection and use of specific programming from such one-way transmission.

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133. *Id.* § 533(b)(2)(C)(12).

134. We understand that the network architecture for AT&T’s video service is designed to permit maximum on-demand flexibility so that consumers can customize and order programming sent to their premises at their discretion. The service allows the subscriber to individually select which programming should be delivered (that is, transmitted) by first sending an upstream signal to the AT&T video hub office—unlike the mass media delivery system of cable operators, which is fundamentally a one-way transmission of all programming. The extent to which consumers will be able to access certain programming at different time slots will depend on when AT&T secures the appropriate copyright licenses from content owners to permit such use. An independent content owner—that is, one that is not vertically integrated into a cable network—will generally seek the largest possible downstream distribution for its content.

In late 2005, several on-demand transactions were announced by content providers, including broadcast television owners. *See, e.g.*, AOL Press Release, AOL And Warner Bros. Announce ‘In2TV,’ New Broadband Network On AOL.com, Delivering The Largest Offering Of Long-Form Television Programming Online, Nov. 14, 2005, available at [http://media.timewarner.com/media/newmedia/cb\\_press\\_view.cfm?release\\_num=55254474](http://media.timewarner.com/media/newmedia/cb_press_view.cfm?release_num=55254474). In addition to music videos, Apple’s iTunes Music Store features select Disney and ABC television shows for \$1.99 per episode. *See* Your 24-7 Video Store, available at <http://www.apple.com/itunes/videos>. These transactions indicate that content owners are availing themselves of the new distribution opportunities opened up by new technologies.

V. IS IP-ENABLED VIDEO SERVICE PROVIDED OVER A TELEPHONE NETWORK A  
FUNDAMENTALLY DIFFERENT SERVICE THAN TRADITIONAL ONE-WAY CABLE  
SERVICE SUBJECT TO THE CABLE ACT?

The relevant statutory language and its interpretation by the FCC and the courts do not include the IP-enabled video service provided over a telephone network as a “cable service,” nor is the upgraded switched telephone network a cable system. Even putting aside these definitional issues, there is little doubt that IP-enabled video service provided over a telephone network is significantly different from the types of services Congress intended to cover under the Cable Act. Although the analysis in this section is based on AT&T’s network, the same arguments could be made for any IP-enabled video service provided over a telephone network.

A. *IP-Enabled Video Service over a Telephone Network as an Interstate Service*

The architecture of an IP-enabled video service over a telephone network, such as AT&T’s network, is significantly different from that of a cable system. The construction of AT&T’s video service is based on a telephone network, which does not conform to municipal boundaries. Indeed, the AT&T network will have more in common with a national video delivery system like DBS than with a cable system. When cable systems were first launched, they were deployed in one community at a time, with headends in each community. Cable operators could pick and choose which community they would serve. In contrast, AT&T will deploy two headends for its entire 13-state territory. The two headends distribute certain satellite and other programming to approximately 41 video hub offices, which serve regional areas within AT&T’s 13-state territory. To obtain video service, a subscriber communicates with a video hub office, which may or may not be located in the same city (or in some cases, the same state) as the subscriber. To obtain other services that are integrated with the video service, a subscriber may send signals to equipment housed in still other states in AT&T’s territory, depending on what service is being requested. Ultimately, subscribers will also be able to manage their suite of services, including video services, from remote locations both inside and outside their home states. In this sense, AT&T’s video service is an interstate service, no different from cable modem service as defined in the FCC’s *Cable Modem Declaratory Ruling*,<sup>135</sup> a service which is capable of delivering a stream of video to the subscriber. Recall that the FCC determined that cable modem service was an interstate service because the points among which cable modem communications travel are often in different states and countries.<sup>136</sup> The FCC also concluded that Vonage’s VoIP service could not “be separated into interstate and intrastate communications for compliance with Minnesota’s [state public utilities law] requirements without negating valid federal policies and rules.”<sup>137</sup> For similar reasons, IP-enabled video service provided over a telephone network is properly characterized as an interstate service subject to exclusive federal jurisdiction.

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135. *Cable Modem Declaratory Ruling*, *supra* note 62

136. *Id.* ¶ 59.

137. *Vonage Declaratory Ruling*, *supra* note 73 at 1 ¶ 1.

*B. IP-Enabled Video Service over a Telephone Network as an Interactive Service That Is Controlled by the User*

AT&T's video service will use a two-way, interactive network. AT&T's network architecture requires a two-way platform because the subscriber uses his set-top box to request specific individual video streams from AT&T's servers. This two-way functionality fundamentally differs from the one-way functionality of a cable television system, which transmits the entire array of possible video channels to the subscriber's set-top box. AT&T's video service is a tailored digital feed. Only by coincidence would multiple subscribers receive the same video program, and *no* subscriber will receive a digital feed consisting of a broadcast of all program offerings. Unlike a subscriber on a cable television system, both the AT&T video subscriber, and the AT&T network itself, will be able to interact continuously with AT&T's IP-based video, as the video server responds immediately to the subscriber's upstream signal requesting a specific channel.

AT&T's video service will provide customers with several options to customize their viewing experience. For example, AT&T has stated that its subscribers will be able to customize their channel lineups and video on-demand features.<sup>138</sup> Additionally, subscribers will be able to simultaneously view multiple camera angles and statistics during live events.<sup>139</sup> AT&T will also offer many interactive options that are not available through cable services. For example, subscribers will be able to program their television sets to display pop-up reminders to begin watching a particular television show. The Microsoft TV IPTV Edition platform will provide customers with picture-in-picture functionality, which will allow subscribers, among other things, to preview shows and channels while their primary channel continues to run in the background.<sup>140</sup> AT&T will offer some features that are not available even on the most advanced cable platform. For example, because of its single IP platform, AT&T's video service will provide functional integration with Cingular wireless service for voice, video, and data applications.<sup>141</sup>

The FCC reasoned in its *Cable Modem Declaratory Ruling* that the one-way transmission component of the cable service definition requires that the cable operator be *in control of* selecting and distributing content to subscribers and that the content be available to all subscribers generally. The FCC explained that while offering cable modem service, a cable operator lacks that requisite control over the selection of the information by the user, and thus "the ultimate control of the experience lies with the subscriber."<sup>142</sup> Similarly, while offering switched, point-to-point interactive video service, AT&T will lack the requisite control over the selection of the content by its subscribers. Because the "ultimate control of the experience lies with the subscriber," AT&T's video service is not properly characterized as a mass-delivered one-way cable service.

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138. Patrick Seitz, *Fancy Media Players, TV Sets Will Take Center Stage At CES; The Largest Tech Show In U.S.; Sony PlayStation Portable, iPod accessory products also likely to get good play*, INVESTOR'S BUS. DAILY, Jan. 5, 2005, at A4.

139. As noted above, see note 134 *supra*, although AT&T's network will have the capability to permit such subscriber-directed functions, the timing and extent of availability of such functions will depend on contractual negotiations with content owners.

140. *SBC Communications at Deutsche Bank Securities Inc. Media Conference—Final*, FAIR DISCLOSURE WIRE, June 8, 2005.

141. *Id.*

142. *Cable Modem Declaratory Ruling*, *supra* note 62 ¶ 67.

*C. Other Critical Differences between IP-Enabled Video Service over a Telephone Network and Cable Service*

IP-enabled video service provided over a telephone network will differ from cable television service in several other significant ways. First, it will offer consumers far more choice of content. AT&T will include hundreds of channels and thousands of video-on-demand channels. AT&T's capacity is essentially unlimited because of its use of digital bandwidth. "Channel" choices are limited only by the amount of bandwidth that can be brought to the home. From a customer's perspective, AT&T's video service will change the way the customer obtains programming. Because of the large number of options available to the consumer, web surfing may be a closer analogy to the AT&T experience than watching traditional broadcast television. It is anticipated that the typical customer will be able to store an entire season of network television programming at the provider's network.<sup>143</sup> AT&T expects that its storage capabilities will continually increase as its content expands.

Second, AT&T will use a switched video network rather than a broadcast network. The traditional broadcast video system that cable has used continuously—and which is the basis of the definition of a cable television service in the 1984, 1992, and 1996 legislation—sends content to every customer's home, and the video is displayed on the television as the cable operator generates and distributes it. In contrast, a switched IP video network transmits only the content that the customer requests, thereby freeing bandwidth for other applications. In AT&T's network, video will be stored centrally at IP-video hub offices, and switching will specifically occur at switches and routers.

AT&T also improves upon the current cable-system architecture, which requires set-top boxes to receive the complete channel schedule at all times. Channel changing on a cable television system occurs within the set-top box, which must tune to a different frequency within the schedule of channels that it is already receiving. In contrast, on AT&T's switched video network a set-top box receives only one video program at a time, which it displays on the television receiver. The set-top box requests the data stream for that video program, and program changes occur at the instruction of the set-top box.

Third, AT&T relies on an IP network. Rather than rely on multiple service-specific networks, as a cable television system does, AT&T's network integrates video, digital television, high-speed Internet, and VoIP into one network. All services that AT&T will offer will be IP-based. In contrast, a cable television system uses an analog broadcast for analog channels, a digital broadcast for premium channels, and a switched digital video network for video-on-demand. AT&T's integrated IP network can offer its customers a quick delivery of advanced services as a result of its flexible infrastructure.

Finally, AT&T's video service is delivered over facilities that are already authorized to be in the right-of-way. In Part VI.C. below, we explain that a telephone company has already been granted the use of rights-of-way for the placement of telephone facilities and equipment. By contrast, cable television providers were not previously authorized to deliver services when they originally

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143. Rana Foroohar, *Changing Channels; The idea of sitting in front of a box in your living room is becoming obsolete. For the TV industry, technology is creating vast opportunities—and risks*, NEWSWEEK INT'L, June 6, 2005, at 42.



launched cable television service. This difference proves to be critical when determining the appropriate franchise fee, if any, for telephone operators and whether there is any public policy need for local franchising.

VI. ON PUBLIC POLICY GROUNDS, SHOULD IP-ENABLED VIDEO SERVICE PROVIDED OVER A TELEPHONE NETWORK BE TREATED AS CABLE SERVICE?

Public policy considerations counsel that video service provided over a telephone network should not be subject to cable regulation. Telephone company entry would produce immediate consumer benefits in video markets. These consumer welfare gains would substantially exceed the potential loss in franchise fee revenues to municipalities. Furthermore, with some minor exceptions, there is no incremental burden to the municipality from the local telephone company's use of existing rights-of-way to offer video service. To the extent that the local telephone company pays any franchise fee, the appropriate percentage should be substantially less than the prevailing five percent. The cable franchise requirement probably would significantly delay the local telephone company's deployment of advanced services and, in the worst case, could discourage the local telephone company's investment in fiber.

A. *The Consumer Welfare Gains from Price Reductions by Cable Operators in Response to Entry of IP-Enabled Video over Telephone Networks*

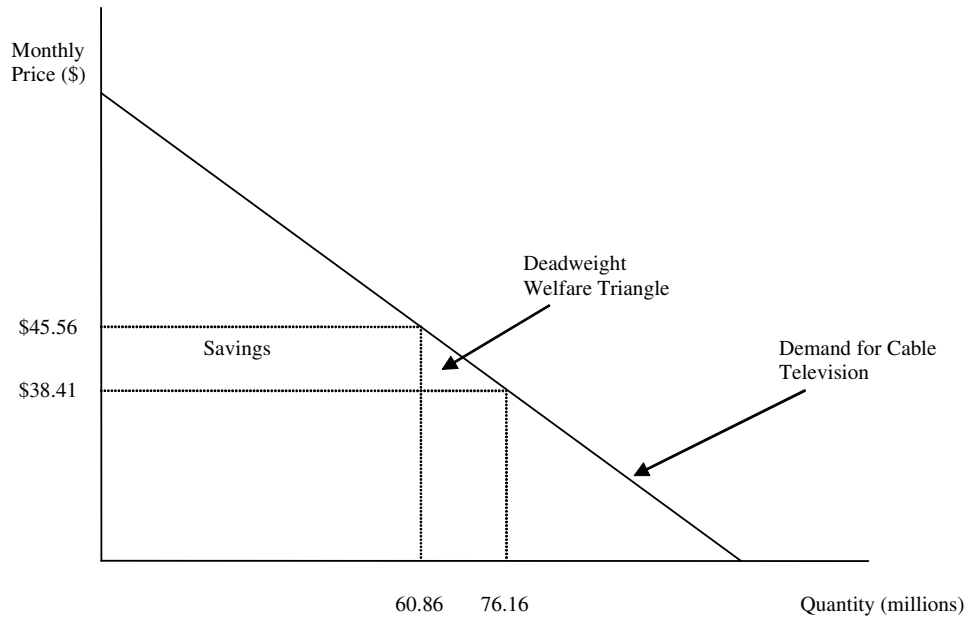
Existing cable and DBS customers would benefit from entry in the form of IP-enabled video delivered over telephone networks. Upon ubiquitous deployment by telephone companies into the local MVPD markets, all cable customers would enjoy the benefits of lower prices that currently are available only to consumers in geographic areas with wireline overbuilders. To calculate the savings to current cable subscribers from such entry, one needs estimates of (1) the number of cable households that are in a position to benefit from additional entry and (2) the monthly savings in cable television service from RBOC entry. We estimate the number of cable subscribers in currently non-competitive areas by multiplying the number of basic cable subscribers in June 2004 from the FCC's *Eleventh Annual Report* (66.1 million) by the percentage of cable subscribers in "non-competitive" communities (92.07 percent) in the FCC's 2005 *Report on Cable Industry Prices* survey sample.<sup>144</sup> Using these figures, 60.86 million cable subscribers in "non-competitive" areas paid an average monthly price of \$45.56 for cable service in 2004. In contrast, monthly cable prices were 15.7 percent lower in geographic markets with a wireline overbuilder than in areas where cable operators do not face such competition.<sup>145</sup> Therefore, if cable subscribers in non-competitive areas were to realize a \$7.15 decrease in the monthly price of cable television service (equal to 15.7 percent of \$45.56) as a result of the telephone companies' entry into the

144. In the Matter of Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, MM Dkt. No. 92-266, 20 F.C.C.R. 2718, Attachments 1 and 6, Report on Cable Industry Prices (2004) [hereinafter *2004 FCC Cable Pricing Study*]; In the Matter of Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming, Eleventh Annual Report, MB Dkt. No. 04-227, 20 F.C.C.R. 2755, 2759 (2005) (available at <http://www.fcc.gov/mb/csrptpg.html>) [hereinafter *Eleventh Annual Report*].

145. *2004 FCC Cable Pricing Study*, *supra* note 144, at 2727.

delivery of video services, then the annual savings across all such subscribers would be \$5.22 billion. Because the decrease in prices would spur additional cable customers, an additional surplus of \$0.613 billion per year would be created by the telephone companies' entry.<sup>146</sup> Figure 1 depicts the gain in consumer welfare (equal to the savings by existing cable customers plus the welfare gains by new cable customers).

FIGURE 1: CONSUMER WELFARE GAINS FROM UBIQUITOUS TELEPHONE COMPANY DEPLOYMENT OF FIBER NETWORKS TO PROVIDE VIDEO SERVICES



The savings correspond to the rectangular area bounded by the old and the new monthly price for cable television. The deadweight triangle gains correspond to the triangular area below the demand curve bounded by the old and the new monthly price for cable television.

The annual welfare increase among existing cable subscribers living in non-competitive areas from ubiquitous RBOC deployment of fiber networks to provide video services would total \$5.83 billion (equal to \$5.22 billion plus \$0.613 billion). A five-year net present value of the annualized savings would be roughly \$26.52 billion (assuming a 5 percent discount rate). Of course, this estimate presumes that all MVPD households in “non-competitive” areas are passed by RBOCs on the first day of the first year in the five-year window. Finally, to the extent that DBS

146. Assuming an elasticity of demand for cable television of -1.5, 14.3 million new cable television customers would emerge in response to a \$7.15 price decrease. For estimates of the elasticity of demand for cable television, see In the Matter of Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992 Statistical Report on Average Rates for Basic Service, Cable Programming Services, and Equipment, MM Dkt. No. 92-266, 15 F.C.C.R. 10,927, 10,946, Report on Cable Industry Prices, (2000) (“The estimated price elasticity of cable according to this equation is 1.31, which indicates that the demand for cable services is somewhat price elastic.”). The monthly increase in surplus for these new customers is equal to one-half of the product of the change in price and the change in customers. These calculations ignore the benefits from innovative interactive services that the telephone companies’ new video service will deliver to consumers.

providers responded to lower cable prices with price reductions of their own, the welfare benefits from RBOC entry in video markets would increase by roughly 50 percent to nearly \$40 billion.<sup>147</sup>

To the extent that local franchise requirements delay telephone company entry into the MVPD market, consumers will not receive the benefits resulting from greater video competition. Franchise requirements would harm consumer welfare in related markets as well. Telephone companies are the most effective competitor to the cable companies' triple-play offering of voice, video, and data. Hence, the inability of telephone companies to enter video markets quickly will undermine their ability to compete effectively for the bundle of complementary services currently offered by cable firms. Thus, consumers will be denied the benefits of the lower prices that competition can bring.

The cable franchise requirement could also discourage the local telephone company from investing in fiber. A local telephone company's incentive to invest in fiber depends critically on its ability to provide video service: without the margins from video service, the investment might not be warranted.<sup>148</sup> If local telephone companies decide not to upgrade their network or to delay such upgrades, then the deployment of broadband services will be slowed.

Finally, cable operators are not currently subject to franchise requirements in broadband or VoIP services. The FCC and the courts recognized that the social costs of regulating new services (in terms of forgone innovation) outweighed any benefits (such as greater proceeds generated by the franchise fee). Subjecting a telephone company's video offering to cable service regulation would be inconsistent with federal policy to promote deployment of new and advanced services. It makes no economic sense to saddle telephone companies with legacy regulations from a monopoly era as they enter video markets as one of several competing providers. Neither cable operators nor telephone companies should be discouraged from upgrading their networks to deliver new services by the threat of legacy regulation developed under entirely different circumstances than the market conditions that exist today. Nor does it serve any public policy objective to regulate the third entrant in MVPD services behind cable operators and DBS providers.

*B. The Excess Burden on Taxpayers from Imposition of Franchise Fees on IP-Enabled Video Services Provided over Telephone Networks*

As we explained above, the annual welfare increase among existing cable subscribers living in non-competitive areas from ubiquitous RBOC deployment of fiber networks to provide video services would total \$5.83 billion. This potential welfare gain must be weighed against the potential loss in cable franchise revenues collected by municipalities. After all, the worse-case scenario for municipalities is that the RBOCs lure 100 percent of existing cable subscribers to their video

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147. The total number of DBS customers (27 million) in the United States is equal to roughly half the number of cable customers in areas not yet overbuilt (61 million). Because the welfare calculations are linear transformations of the number of affected customers, the welfare gain of DBS subscribers is equal to 44 percent (27 million ÷ 61 million) of the welfare gain for cable subscribers in areas not yet overbuilt.

148. *National Video Franchise, Local Broadband Attract Conflicting Viewpoints from Industry*, REGULATION & LAW, July 21, 2005, at A-14. According to Brent Olson, assistance vice president of regulatory policy at AT&T, "this [AT&T] network doesn't get built without video." *Id.*

offerings and pay the cities no franchise fee. Using a 2004 FCC estimate of 66 million total cable subscribers in the United States,<sup>149</sup> and using Comcast's 2004 estimate of average monthly video revenue from a cable subscriber of \$50 per month,<sup>150</sup> the total annual revenue raised under the cable franchise fee across all cities was roughly \$1.98 billion (equal to 5 percent franchise fee  $\times$  \$50 per subscriber per month  $\times$  12 months  $\times$  66 million cable subscribers). Hence, without considering any welfare gains owing to higher quality, the potential benefit from RBOC entry into video services in the form of consumer welfare gains exceeds the potential loss in franchise fee revenues to the cities by a factor of nearly three to one. In the language of public finance, a municipality's efforts to protect the incumbent cable operator and the associated cable franchise revenues generates an "excess burden" on taxpayers—that is, by impeding RBOC entry, the franchise fee could generate welfare losses that exceed the revenues raised by the franchise fee.<sup>151</sup>

Moreover, the fraction of the typical city's budget that depends on cable franchise revenue is miniscule. For example, the general fund revenue for Austin in 2004 was \$452 million.<sup>152</sup> Cable franchise revenues were \$6.5 million, which amounts to roughly 1.4 percent of total general revenues.<sup>153</sup> Table 1 shows the revenue generated from cable franchise fees and the cable franchise contribution to total city revenue for a sample of U.S. cities.

TABLE 1: CABLE FRANCHISE REVENUE AS A PERCENTAGE OF TOTAL REVENUE

City	Sample Year	Cable Franchise Fees (1)	Total Revenues (2)	Cable Franchise Fee Contribution = (1) / (2)
Austin	2004	\$6,500,000	\$452,000,000	1.4%
Chicago	2005	\$14,500,000	\$5,092,000,000	0.3%
Denver	2005	\$3,830,000	\$739,000,000	0.5%
San Francisco	2003	\$6,980,000	\$2,310,493,214	0.3%
Washington, D.C.	1999	\$2,565,000	\$354,600,000	0.7%

Sources: City of Austin, Financial Performance Report for Six Months Ending March 31, 2005; Government of the District of Columbia, Mayor's Financial Report, Coming Together, Working Together, 2001; City of San Francisco Comptroller, Tax Revenue Report, April 2005 (estimating that all franchise tax revenue, including cable franchise fees, represents approximately 0.57 percent of the city's general fund resources); City of Chicago, 2006 Budget, Nov. 3, 2005. The City and County of Denver, 2005 Adopted Budget Summary, Oct. 18, 2004.

As Table 1 shows, cable franchise fees rarely contribute more than one percent of a city's total revenues. Given the historical trend of increasing DBS share of the MVPD market, the contribution of cable franchise fees to city budgets is expected to decline regardless of the impact of RBOC entry in video services. Hence, it is

149. *Eleventh Annual Report*, In the Matter of Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming, MB Dkt. No. 04-227, 20 F.C.C.R. 2755, 2759 (2005) (available at <http://www.fcc.gov/mb/csrptpg.html>).

150. COMCAST CORP. 2004 ANNUAL REPORT, SEC FORM 10-K at 24-25 (filed Feb. 23, 2005) (showing average monthly revenue per video subscriber increasing from \$47.11 in 2003 to \$49.87 in 2004).

151. See, e.g., HARVEY S. ROSEN, PUBLIC FINANCE 305 (McGraw-Hill 7th ed. 2005).

152. City of Austin, Financial Performance Report for Six Months Ending March 31, 2005, at 3.

153. *Id.* at 10.

curious why so many cities have vigorously opposed RBOC entry. Although the gains from RBOC entry (in terms of lower prices and higher quality of video service) are not captured directly by city officials, their desire to protect revenues from cable franchise fees seems penny-wise and pound-foolish.

*C. The Absence of Economic Justification for the Imposition of Additional Fees for a Telephone Company's Use of Rights-of-Way*

Local telephone companies have already been granted the use of rights-of-way for the placement of telephone facilities and equipment. With the minor exception of the placement of limited equipment, there is no incremental burden to the municipality from the local telephone company's use of those rights-of-way to offer its video service. The local telephone company already compensates public owners for the use and occupation of public rights-of-way for the delivery of telephone service, albeit at the state level (and in certain cases, at the local level); consequently, the imposition of local franchise fees for video services delivered over the same network would amount to double recovery by local and state governments. The fact that the local telephone company is offering a new service—that is, a service other than local telephone service—over the same platform does not require a second franchise.<sup>154</sup> If telephone companies are discouraged from entering video markets by having to pay twice (once for a telephone franchise and a second time for a cable television franchise) for the use of such rights-of-way, consumers will continue to pay supracompetitive rates for video service. And in those local markets where telephone companies enter but pass along the duplicative tax in the form of higher rates, consumers will be denied the full price-constraining effect that local telephone companies have offered in other industries that they have entered, such as long-distance telephony.<sup>155</sup>

To the extent that a local telephone company is required to pay *any* franchise fee before it may offer IP-enabled video service, the appropriate percentage should be significantly less than five percent. Local franchise fees can be analogized to an auction by municipalities for the rights to offer video service. When the municipality effectively guaranteed monopoly provision of cable television, it could demand the franchise fee associated with the monopoly price for cable television. Indeed, free of federal intervention and other payments to government employees, the franchise fee in equilibrium could be bid up to one penny less than 100 percent of the present discounted value of net cash flows associated with monopoly provision of cable television. The equilibrium fee associated with the monopoly provision of cable television reached by cities and cable operators was five percent. Permitting local telephone companies to supply video programming represents a repudiation by the municipality of its prior commitment to protect the incumbent cable operator from competitive entry. Stated differently, had the incumbent cable operator known *ex ante* that the municipality would not protect its monopoly status, the cable operator would have paid less than five percent of its gross operating revenues to secure a franchise. Hence, it makes no economic sense

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154. Telephone companies are already required by the Pole Attachment Act to make their *private* “poles, ducts, conduits, and rights-of-way” available to cable television systems on a nondiscriminatory basis. 47 U.S.C. § 224(f)(1).

155. See, e.g., Jerry A. Hausman, Gregory K. Leonard & J. Gregory Sidak, *Does Bell Company Entry into Long-Distance Telecommunications Benefit Consumers?*, 70 ANTITRUST L.J. 463 (2002).

to require a local telephone company to compensate the city at the monopoly-era rate of five percent of gross operating revenues when the market has at least three competitors. The city should be guaranteed no more than its forgone revenues (opportunity costs) under the assumption of competitive entry—not its forgone revenues under the assumption of monopoly maintenance. And the city's opportunity cost associated with competitive entry would be significantly less than five percent of gross operating revenues after telephony company entry.<sup>156</sup> After one determines that lower rate, it is then necessary to subtract the rate at which the telephone company already compensates the municipality for the rights-of-way (indirectly through state fees).<sup>157</sup>

*D. The Consumer-Welfare Justification for a Uniform National Approach to Video Franchising*

From the perspective of an individual customer, the value of subscribing to a network that delivers interactive services such as telephony, broadband, and interactive television increases as the number of subscribers on the network increases. Economists refer to this phenomenon as a network effect.<sup>158</sup> The presence of network effects in the provision of interactive video services requires a wider geographical domain of regulation of local telephone operators, to the extent that any regulation is justified. Simply put, a local regulator would not take these benefits, which spill across municipal boundaries, into consideration when setting fees and other rules. Purely municipal regulation of franchising would result in franchise fees that were ineffectively high from the perspective of maximizing societal benefits.<sup>159</sup>

Finally, state and local governments would benefit from increased infrastructure investment by telephone companies. Because every dollar invested in telecommunications infrastructure generates jobs and income through the multiplier effect when a local economy is not at full employment, the planned fiber investment by local telephone companies will generate tens of thousands of new jobs per year and will contribute tens of billions of dollars to the U.S. economy between 2005 and 2010.<sup>160</sup> Removal of franchise restrictions could further

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156. In reality, the cable operator may be locked into a long-term contract with the city at the monopoly rate of five percent. But upon renegotiation or renewal of its contract, the cable operator would insist on a payment significantly less than five percent.

157. For illustrative purposes only, suppose that a cable operator would pay only a three percent franchise fee under the assumption of telephone company entry. Suppose further that the telephone company currently compensates the city for the rights-of-way (directly or indirectly through state fees) at a rate of two percent of telephone revenues. The appropriate franchise fee for the telephone company would therefore be one percent (equal to the three percent opportunity cost less the two percent existing payment for the rights-of-way), adjusted for any relevant differences in the revenue base on which the percentages are calculated.

158. See, e.g., JEFFREY H. ROHLFS, *BANDWAGON EFFECTS IN HIGH TECHNOLOGY INDUSTRIES* (MIT Press 2001).

159. Purely municipal regulation of franchising could also result in double marginalization: A municipality issuing a video franchise in Los Angeles will reduce output without taking into account the output reduction effected by anticompetitive municipal franchising in New York. To the extent that a Los Angeles consumer interacts with a New York consumer over a broadband video platform, the (perceived) monopoly margin will have been extracted twice. Aggregate output will be lower than under a single franchising authority.

160. See, e.g., Robert W. Crandall & Hal J. Singer, *The Effect of Ubiquitous Broadband Adoption on Investment, Jobs, and the U.S. Economy*, Sept. 17, 2003.

contribute to expanded growth. Clearly, anything that delays these benefits from materializing, including the imposition of local franchise fees on telephone companies providing IP-enabled video services, should be rejected.

#### *E. Public Policy Arguments of Cable Operators*

In several forums, incumbent cable operators have argued on both antitrust and public policy grounds that video service provided over a telephone network should be subject to local cable franchise requirements. For example, in November 2005, the New England Cable and Telecommunications Association Inc. (NECTA) submitted testimony to the Connecticut Department of Public Utility Control (DPUC) during the agency's review of regulatory requirements applicable to the offering of video programming in Connecticut by ILECs in general and AT&T in particular.<sup>161</sup> The cable operators argued that "the [AT&T] network will operate like a cable television system and, from a subscriber's perspective, provide a service identical to cable television service."<sup>162</sup> They argued further that "[a]ll of the ancillary on-demand and other interactive features (picture in picture, multiple camera angles) which [AT&T] touts as justifying deregulation either are being implemented or have been implemented by cable operators, or are technically feasible on a cable system."<sup>163</sup> If the issue before the DPUC was whether cable television service and IP-enabled video service offered by a telephone operator were in the same antitrust product market, then these considerations might be relevant. But the reason that franchise requirements should not apply to IP-enabled video systems offered over telephone networks, however, is not based on the substitutability between video services offered by the telephone company and the incumbent cable operator. Indeed, consumer preferences for certain advanced services, such as video on demand, will likely induce all MVPDs to offer a similar (if not the same) set of services. Telephone companies that use IP-enabled technologies to deliver video service should be free of regulation for the same reason that cable companies were exempted from franchise requirements for offering VoIP and Internet access service—namely, that the FCC and several courts chose to take a deregulatory approach to IP-based services. The rationale for such a hands-off approach is that the FCC and the courts understood that a heavy-handed approach could undermine advanced services or IP-based business plans in their infancy, and thereby could deprive consumers of large welfare gains. The same logic applies to *all* video entrants who avail themselves of IP-based technologies—not just the telephone companies.

In addition to these antitrust-based arguments, incumbent cable operators have suggested at least four adverse policy implications of allowing AT&T and other telephone companies to be free of cable franchise regulation. First, proponents of franchise requirements for telephone companies claim that picking IP-enabled video over a telephone network as a technology "winner" would induce cable operators to make similar network changes solely to avoid the burdens associated with cable franchise regulation.<sup>164</sup> But if IP-enabled video service over a telephone network is not subject to franchise regulation, and if these networks are deployed

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161. See, e.g., Pre-Filed Testimony of Dr. Jeffrey A. Krauss for the New England Cable and Telecommunications Association Inc.

162. *Id.* at 3.

163. *Id.*

164. *Id.* at 4.

ubiquitously, then municipalities will be under tremendous pressure from the cable operators to renegotiate their franchises. Any new arrangements with the cable providers should, in theory, involve smaller franchise fees or reduced regulatory burdens or both because the former monopoly protection offered by the municipality would be eliminated. As the difference between the franchise fees paid by the incumbent carrier and the telephone operator decreases, any incentive of a cable operator to “pick IP as a technology” will diminish. In the ideal state, the franchise fee paid by the telephone operator for the rights to offer a bundle of video, high-speed Internet access, and telephony should equal the franchise fee paid by the cable operator for the rights to offer the same bundle. To the extent the telephone operator already pays a fee for the rights-of-way to offer telephony, and because the telephone operator cannot be guaranteed a local monopoly on video service, the appropriate franchise fee for video service paid by the telephone operator should be less than five percent.

Second, cable operators argue that failure to impose franchise requirements on telephone companies would “leave unprotected a number of important social policy goals recognized in federal and state law, including requirements for serving all households in a franchise area without regard to economic factors.”<sup>165</sup> The suggestion that the telephone company serve all households in a franchise area “without regard to economic factors” is no different from the argument used successfully by incumbent cable operators to prevent overbuilders from entering several local MVPD markets. The basic economic principle of Pareto efficiency requires that any transaction (such as adding a competitor in a single neighborhood) that increases the welfare for some constituency (residents in that neighborhood) without making any other constituency worse off (residents in unserved neighborhoods) should be implemented at once. If the cable operators’ argument were taken to its logical extreme, then not a single neighborhood in the United States would be eligible to receive a second wireline MVPD unless all neighborhoods in the United States were served by a second wireline MVPD.

Third, cable operators argue that failure to impose franchise requirements on telephone companies would encourage these video entrants to eliminate important “public” services such as parental control, closed captioning, and PEG channel capacity, which are currently provided (due to franchise requirements or applicable law or both) by cable operators. It is not clear why regulation is needed to encourage telephone operators or any other MVPD entrant to offer any of these services. For example, parental control of channels is a benefit that is fully captured by the MVPD customer. Hence, it is no surprise that DIRECTV voluntarily offers this feature to its customers.<sup>166</sup> Basic principles of economics show that so long as consumers can internalize or fully capture the benefit of a service, the unregulated market will produce the socially optimal amount of that service. Regulation that corrects a market failure (too much or too little of the service produced) is needed only when customers cannot fully capture the benefits of a service—that is, some benefits from consuming the service spill over to the general public. If a positive externality is proven to exist for a given service or feature, then it may be appropriate to consider regulatory intervention that would

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165. *Id.*

166. We understand that Congress may be investigating parental control as part of its larger review of indecency issues. But Congress is not responding to a market failure relating to parental control, and factors other than marketplace considerations are likely to influence any possible Congressional action in this area.



affect all MVPDs. And to the extent that a telephone company chooses not to offer a specific “public service” such as PEG channel capacity, the small social cost of that alleged market failure would be dwarfed by the large social benefits (in terms of lower prices and higher quality) of having a second facilities-based MVPD entrant.<sup>167</sup>

Fourth, cable operators argue that failure to impose franchise requirements on telephone entrants would cause a severe loss of tax and franchise fee revenues. This argument fails to recognize that municipalities can no longer provide franchisees the level of monopoly protection that they once did. Hence, municipalities ought not to be compensated at the same level. Even if maximizing public revenues were the (perverse) objective of social policy, it is not obvious whether the decrease in franchise fees would exceed the increase in tax revenues from greater employment (by telephone companies) and greater expenditures on video services, and the economic benefits to the community from more sophisticated communications infrastructure. Social policy should be designed to maximize social welfare, not tax proceeds. And with that proper objective, it is clear that consumers would be better off with greater competition in the delivery of MVPD services.

#### CONCLUSION

For the same reasons that a cable operator is not subject to second and third franchise requirements to distribute cable modem and VoIP telephony services over its existing network, a telephone company should not be subject to a second franchise requirement to distribute IP-enabled video service over its existing network. These arguments apply not only to AT&T, the first telephone company to implement an IP-based approach to video, but to any other telephone company (such as BellSouth) or any facilities-based entrant with rights-of-way authority (such as an electric utility) that avails itself of IP-enabled technologies to deliver video service. If a company is already authorized to place facilities in the public rights of way, then additional franchising cannot be justified on economic or policy grounds. IP-enabled video service provided over a telephone network is a significantly different service from traditional one-way cable service, especially due to (1) its interstate nature, (2) its high degree of interactivity, (3) the fact that it is delivered over a switched network, and (4) its customer-specific control features. Moreover, a cable franchise requirement would serve as an entry barrier that would undermine the ability of telephone company entrants to compete effectively with cable operators across video, voice, and broadband markets. Payment of franchise fees would be duplicative of payments already made to state and local governments. To the extent that a telephone company is required to pay any franchise fee before it may offer IP-enabled video service in its existing territory, the appropriate percentage is significantly less than five percent.

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167. Moreover, in the case of PEG, the public policy need or rationale for “obligating” such requirements should be reevaluated by municipalities in light of the development of the Internet as an effective means of expression and communications.