DIGITAL MUST-CARRY & THE CASE FOR PUBLIC TELEVISION

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ABSTRACT

This article addresses the must-carry rules in the context of public broadcasting and the digital television transition. Upon examining the litigation, legislative intent, and rulemaking involving the must-carry rules as well as the economic constraints public television (“PTV”) faces, this article argues that PTV should be afforded multicast carriage on cable systems and reviews the voluntary carriage agreement reached between cable operators and public broadcasters. Even without such an agreement, this article contends that a digital multicast must-carry policy for non-commercial broadcasters would be constitutional under the First Amendment.

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INTRODUCTION

While the viewing public anticipates the eventual promise of high definition ("HD") and digital television ("DTV"), thus far the majority of commercial broadcasters, cable operators, and direct broadcast satellite ("DBS") providers have failed to reach any substantive agreements on the airing of digital broadcast channels. Even though approximately eighty-five percent of the country accesses local stations through a multichannel video program distributor, the Federal Communications Commission ("FCC") has ruled that cable operators need only carry an existing analog or a digital-only television station. Such a ruling means that cable operators are required to "carry only one of the multiple streams that are multicast over a digital signal." The FCC regulates cable operators ancillary to broadcasting. As a result, cable operators face significant rules designed to preserve over-the-air television, including providing access and channel capacity to carry the signals of local stations. The Cable Television Consumer Protection and Competition Act of 1992 ("92 Cable Act") codified the "must-carry" rules. The must-carry rules require local cable systems to carry broadcast television stations on respective local cable systems or, in the case of commercial broadcasters, negotiate retransmission consent with the cable operator, whereby stations attempt to receive copyright


payments for the carriage of their programming. The FCC has identified numerous concerns related to must-carry and retransmission consent in the digital context, most notably the method of calculating cable channel capacity, the definition of "primary video," and "program-relatedness," as well as the digital signal format or quality that a local station offers (e.g., material degradation).

Unlike their commercial counterparts, public television ("PTV") stations recently reached a multicast agreement with cable operators that enable the carriage of up to four simultaneous digital program streams. The issue of securing carriage for multicasting on local cable systems is of particular importance to PTV stations that have plans to offer an array of simultaneous programming options to viewers. Unlike commercial broadcasters, PTV stations are non-profit entities that rely on viewer pledge drives, government funding and sponsor underwriting to pay for the operations and programming aired free of charge in service to local communities across the nation. Without secured space on a local cable system, many PTV stations fear they will be unsuccessful in making the digital transition because they would lack the full advantage of the educational and diverse programming opportunities that the DTV spectrum provides.

In light of such concerns, this article will review the importance of cable carriage and application of the must-carry rules to non-commercial PTV stations. This article attempts to make a special case for PTV and digital must-carry. Through its defense of a multicast digital must-carry
policy for non-commercial stations, this article revisits the legislative history and findings of the '92 Cable Act and discusses the economic realities and constraints that public broadcasters face as they transition to digital television.

Part I of this article provides an overview of the digital television transition and important policy considerations that apply to both non-commercial and commercial stations. Part II details the must-carry rules and their legislative history as well as the First Amendment challenges within the Turner cases. After a background on must-carry, Part III reviews the FCC's progress on applying the must-carry rules to DTV for both commercial and non-commercial broadcasters. Part IV reviews the nature of PTV and highlights its unique funding concerns and digital programming strategies. Part V of this article reviews PTV's recent voluntary multicast agreement with the cable industry and articulates why such an initiative, if codified into law, could survive judicial review under the First Amendment as a form of content-neutral regulation.

I. THE DIGITAL TELEVISION TRANSITION

Although the transition from analog to digital was initially slow, it is gaining momentum as both commercial and non-commercial stations attempt to update their facilities and transmit digital programming to meet federal deadlines. FCC regulations required that all full-power commercial television stations in the United States convert to a DTV signal by May 1, 2002. As of October 17, 2002, however, only forty-three percent of commercial television stations were transmitting a digital signal; the remaining stations had filed for extensions. The FCC also required that all non-commercial PTV broadcast stations broadcast digitally by May 1, 2003, but only 152 made the initial transition to digital broadcasting, with the rest filing for extensions. According to the National Association of Broadcasters, as of June 15, 2005, 1,497 stations were broadcasting digital signals in 211 markets, representing more

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18 For an excellent theoretical discussion of PTV and its future in the digital age, see Monroe E. Price, Public Broadcasting and the Crisis of Corporate Governance, 17 CARDOZO ARTS & ENT. L.J. 417 (1999).
21 Id.
22 Id.
23 Public TV is Slow to Convert, MULTICHANNEL NEWS, May 5, 2003 at 30.
than 93 percent of the nation's television stations. As of March 2005, 307 of the 349 non-commercial PTV channels were broadcasting in digital.

While most television stations now transmit a digital signal, not all programming is being shown in high-definition. Among the broadcast networks, CBS airs the largest amount of programming, with digital HD broadcasts available in all of its prime-time scripted entertainment series, as well as many of its national sports broadcasts. ABC offers HDTV broadcasts in nearly all of its prime-time schedule, as well as in some of its sports broadcasts. NBC and FOX offer digital programming as well, and FOX transmits 50 percent of its prime time schedule in HDTV. As a program supplier for PTV, PBS has also been actively acquiring programming for HDTV and multicasts over channels in some local markets. Cable networks producing or planning to produce digital programming include HBO, Showtime, A&E, Discovery, ESPN, Bravo, Cinemax, HDNet, In Demand, and Madison Square Garden. Generally, two factors inhibit content providers from accelerating the production of digital programming. First, because relatively few households have digital televisions, networks have diminished incentive to invest the money to produce digital content. Second, content providers are reluctant to provide digital programming until a digital copyright standard (broadcast flag) is in place.

While growth has occurred, the penetration of DTVs into the American home remains relatively small, with approximately thirteen percent of the roughly 110 million TV households owning digital sets and two percent able to receive digital over-the-air signals. DTV products are now available from several manufacturers that offer varying features and technical characteristics. Currently, most consumers who purchase DTV products are purchasing DTV monitors, available at prices ranging from $500 to $1,000, depending on screen size and other features. Consumers primarily use their digital monitors to watch DVDs, regular analog television and digital programming over a cable television or DBS service.

To facilitate the timely recovery of the analog spectrum by 2006, Congress and the FCC adopted an aggressive policy requiring broadcast-
ers to convert to digital in order to reallocate and auction part of the existing spectrum that is utilized by analog broadcasting. The Balanced Budget Act of 1997 provides an exception for the termination of analog services. A station may extend its analog operation beyond 2006 if the television market in which it is operating has not received an eighty-five percent penetration in DTV viewership. Otherwise analog operation will end when eighty-five percent of households in a given market can receive a digital signal.30

According to a recent General Accounting Office report, several aspects of the “85 Percent Rule” remain undetermined. For instance, the rule fails to specifically define what constitutes a “television market.” A cable-subscribing household counts as receiving DTV when its cable provider transmits at least one digital programming channel from each broadcaster in its market; however, no stipulation is made for households that do not own a DTV-ready television system. Furthermore, it is not yet clear how the number of households receiving DTV in a market will be measured because markets consist of households using cable, satellite, and over-the-air broadcasts to view DTV.31

To further complicate the transition to DTV, consumers have three different options from which to choose for receiving a digital broadcast from local stations. Viewers may access digital broadcast signals by using either an over-the-air antenna, through a digital-to-analog converter box that will enable them to watch digital signals on an analog television set, or through a digital television set that includes a tuner capable of receiving and processing a digital over-the-air signal.32 However, most of the viewing public will be more likely to pursue digital broadcasts through their current multichannel video program distributor provider.33 Once a cable subscriber owns a DTV monitor, lives in a market with stations that are broadcasting digitally, subscribes to a cable/DBS service offering those local digital signals, and obtains a set-top box with the necessary cable/DBS subscription package needed to view digital television, then he or she can begin receiving local broadcast stations digitally.34 As of February 2005, a little more than 500 of the local DTV broadcast stations, or less than one-third, were available on cable.35 Because most people prefer to watch local digital broadcasts through their cable television provider, it is unlikely that the 85 percent rule will be

31 GAO DTV Report, supra note 20, at 11-12.
32 Id. at 12.
33 Id.
34 See id. at 12-13.
met and analog broadcasting will be shut down next year or anytime in the near future.\footnote{Congress is considering whether a hard transition date of December 31, 2008 should be implemented as evidenced by the House Energy and Commerce Committee staff draft legislation entitled, the “Digital Television Transition Act of 2005.” \textit{See} \textit{Kruger}, supra note 24, at 1.}

In order to hasten the transition to DTV, the GAO provided three primary recommendations for executive action in its November 2002 report, paraphrased below:

1. One of the largest problems concerning DTV in the transition is consumer ignorance of the new technology. The GAO recommends exploring options to raise public awareness about the DTV transition and its implications.

2. In order to speed up the transition, the GAO recommends that the FCC bureaus and offices examine the costs and benefits of mandating that all new televisions be digital cable-ready in addition to mandating a digital over-the-air tuner. Two-thirds of the country receive television through a cable provider; therefore, it is important that newly-purchased televisions are capable of transmitting a cable digital signal.

3. The GAO also recommends that an FCC Media Bureau examine the advantages and disadvantages of a policy that would set a date for cable carriage to switch from full carriage of analog signals to full carriage of digital signals. Such a policy would transfer broadcasters’ must-carry rights from analog to digital on that date.\footnote{\textit{Id.} at 39-40.}

Unsurprisingly, in addressing the second recommendation, the consumer electronics and cable industries reached a voluntary agreement to develop digital cable-ready sets that will contain digital over-the-air and cable tuners able to receive the full panoply of digital signal formats that a broadcaster or cable operator may offer.\footnote{\textit{George Leopold,} \textit{Cable, CE Industry Shake on ‘Plug-and-Play’ Spec,} \textit{Electronic Engineering Times, Dec. 23, 2002,} at 6.} The FCC also launched its own consumer awareness campaign in fall 2004\footnote{Press Release, Federal Communications Commission, Chairman Powell Announces Major DTV Consumer Education Initiative “DTV - Get IT!”, Oct. 4, 2004, \textit{at} \texttt{http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-252851A1.doc}; The FCC’s website designed for consumers may be viewed \textit{at} \texttt{http://www.dtv.gov}.} and recently addressed the issue of digital must-carry (see Part III).
The FCC has also proposed a plan that would further define the 85 percent threshold and expedite the digital television transition. Prior to leaving the FCC, Chairman Michael Powell and Media Bureau Chief Kenneth Ferree touted a plan—to be launched in 2009—that would require cable operators to carry digital signals provided by local stations that elect must-carry and down-convert such signals to analog for subscribers who do not have the ability to receive digital signals ("down-converting plan"). Based on the DTV policy model employed in Germany, Ferree and Powell believe the down-converting plan would expedite the transition because existing cable and satellite subscribers who receive local stations may be included in the 85 percent-rule calculation. In addition, such a policy would nullify any need for a dual-carriage requirement for analog and digital signals during the transition.

As will be discussed in Part III, the FCC ruled that under digital must-carry, local broadcasters would have to elect one stream of their programming as their primary video. Thus, under the down-converting plan, broadcasters wishing to multicast would have to negotiate with cable operators to secure carriage for program offerings that do not fall under their single stream of primary video. In addition, if the down-converting plan does take effect, the nineteen percent of TV households that currently receive local broadcast signals on analog sets without the aid of a cable or DBS-subscription service could be disenfranchised and forced to buy either a new DTV set with a digital tuner or a digital converter to continue receiving free, over-the-air broadcast television.

In Germany, the government provided citizens with a subsidy to make such a purchase, but it appears unlikely that the FCC will follow suit.

As it now stands, until the 85 percent rule is met or a local station returns its analog spectrum voluntarily ahead of schedule, a local broadcaster may only elect must-carry for its analog signal. When a station returns its analog spectrum (whether voluntarily ahead of the 85 percent rule or as a result of the 85 percent rule being fulfilled), then a local station may invoke must-carry, but only for the single, primary video

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43 Id. at 11-12.
44 Id.
program (HDTV or standard-definition) it elects. Even if the FCC agrees to and implements the new down-converting plan to speed up the 85 percent rule and DTV transition, such an effort does not guarantee any type of carriage for a local digital station that wishes to secure carriage for its multicast program offerings. Thus, the newly proposed plan appears only to provide a mandatory right for a station’s single, primary video signal.

II. MUST-CARRY RULES

A. MUST-CARRY RULES AS CONTAINED IN THE 1992 CABLE ACT

Part of the difficulty the FCC has encountered in applying the must-carry rules to DTV is that the initial rules were written during a period of analog broadcasting, whereby each station delivered a given program in the same signal format (NTSC, 525 lines, 4x3 aspect ratio) that took up the same amount of channel capacity (6 MHz). With the possibility of 18 different scanning formats within the flexible standards for digital television broadcasting and the ability for a station to multiplex and send four simultaneous digital streams of programming at once, the application of the must-carry rules becomes a policy quagmire.

The '92 Cable Act, which amends the Communications Act of 1934, contains the original rules delineating the local broadcast television signal requirements of cable operators. The original rules delineating the requirements of cable operators that carry local broadcast television signals are found in the '92 Cable Act, which amended the Communications Act of 1934. In general, the '92 Cable Act prohibits cable operators and other multi-channel video programming distributors from retransmitting commercial television, low-power television, and radio broadcast signals without first obtaining the broadcaster’s consent. This permission is commonly referred to as “retransmission consent,” and may involve some compensation from the cable company to the broadcaster for the use of the signal.

Retransmission consent permits commercial broadcasters and cable operators to negotiate a carriage agreement based on business and market factors. When a broadcast station chooses to negotiate a retransmission consent agreement, the cable operator will compensate the station to

47 Id.
place their programming on the cable system.\textsuperscript{48} Network-affiliated broadcasters are better positioned to negotiate retransmission agreements because of the popularity and ratings of their programs. Without these stations on their cable lineup, the cable system would likely lose many customers. It is reasonable to believe that a station would elect the must-carry option when its carriage does not financially benefit the cable system. Estimates show that about eighty percent of commercial television broadcasters chose retransmission consent rather than must-carry in the 1993-96 election cycle.\textsuperscript{49}

Alternately, if a local commercial television station does not believe it has enough clout to receive compensation, then it may require a cable operator to carry its signal for free under the must-carry rules. The '92 Cable Act codified the “must-carry” rules, requiring that local cable operators carry local broadcast stations. Section 4 of the '92 Cable Act specifically states:

(a) Carriage Obligations. Each cable operator shall carry, on the cable system of that operator, the signals of local commercial television stations and qualified low power stations as provided by this section. Carriage of additional broadcast television signals on such system shall be at the discretion of such operator, subject to section 325(b) of this title.\textsuperscript{50}

Cable operators are required to carry at least three local commercial stations if they have twelve or fewer usable activated channels on their cable system.\textsuperscript{51} Under these circumstances, a cable operator may select which local commercial stations to carry.\textsuperscript{52} However, a cable operator, may never select a low-power station over a local affiliate and, if it elects to carry a network’s local affiliate, then it must carry the affiliate nearest the area served by the cable system.\textsuperscript{53} Otherwise, if the cable operator has more than twelve usable activated channels, then it must carry up to one-third of channel capacity in local commercial television signals.\textsuperscript{54}

Once a cable operator carries a local station, the cable operator must carry the entire program schedule, “unless carriage of specific program-

\textsuperscript{48} 47 U.S.C. § 325(b) (2000).
\textsuperscript{50} 47 U.S.C. § 534(a) (2000).
ning is prohibited." Thus, cable operators may not edit the content of local broadcasting stations on their cable systems. The cable operator must place the local commercial stations on the same channels used in the local broadcasting system.

Section 5 of the '92 Cable Act gave non-commercial (public) television stations the authority to demand carriage. Cable systems consisting of twelve or fewer channels are required to carry one qualified local non-commercial station; systems with thirteen to thirty-six channels are required to carry at least one, but not more than three stations; and cable systems with more than thirty-six channels are required to carry at least three stations. To be considered a "qualified" non-commercial educational television station, a station must either be licensed as such, and "owned and operated by a public agency, nonprofit foundation, corporation or association," or owned and operated by a municipality transmitting "predominantly non-commercial programs for educational purposes." Non-commercial stations rely exclusively on must-carry, and, unlike their commercial counterparts, are unable to seek compensation under the retransmission consent provisions.

In the "Findings" section of the '92 Cable Act, Congress cited many justifications for the "must-carry" and retransmission rules. Congress found the cable industry to be highly concentrated and noted that this concentration could lead to barrier of entry problems for new programmers and a reduction of media outlets (i.e. diversity) available to consumers. Congress also contended that the cable industry’s increasing vertically integration—characterized by common ownership among cable operators and cable programmers—caused operators to favor their affiliated programmers. This integration could make it "more difficult

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56 47 U.S.C. § 535 (2000). Some commentators suggest the must-carry provisions protecting PTV were singled out separately from commercial stations because more public stations had been dropped absent must-carry rules. Yet, the courts have failed to treat Section 4 or 5 of the 1992 Cable Act discriminately. See generally Monroe E. Price and Donald W. Hawthorne, Saving PTV: The Remand of Turner Broadcasting and the Future of Cable Regulation, 17 HASTINGS COMM. & ENT. L.J. 65 (1994).
64 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(2)-(5)).
for non-cable affiliated programmers to secure carriage on cable systems.\textsuperscript{65}

Congress also believed there was a "substantial governmental and First Amendment interest in promoting a diversity of views provided through multiple technology media."\textsuperscript{66} More importantly, Congress articulated an important governmental interest by having cable systems carry local stations. The carriage of these stations was necessary to provide a "fair, efficient, and equitable distribution of broadcast services,"\textsuperscript{67} as laid out in Section 307(b) of the 1934 Communications Act. Local origination of programming was seen as a "primary objective and benefit"\textsuperscript{68} of must-carry regulation because local broadcast stations are an "important source of local news and public affairs programming," which are vital to having "an informed electorate."\textsuperscript{69}

Given the praise for local broadcasting, Congress continued promoting the availability of free, over-the-air television to the public.\textsuperscript{70} Realizing the shift in audiences from broadcast to cable programming, Congress acknowledged that some advertising revenues would be reallocated to cable.\textsuperscript{71} In effect, cable operators carrying local broadcast stations were competing for advertising revenues on their own systems, and, theoretically, had an economic incentive to terminate the retransmission of broadcast signals or to carry new channels.\textsuperscript{72} Congress contended that absent must-carry requirements, there was a strong likelihood that "additional local broadcast signals will be deleted, repositioned, or not carried."\textsuperscript{73}

\textsuperscript{65} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(5)).
\textsuperscript{66} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(6)).
\textsuperscript{67} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(9)).
\textsuperscript{68} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(10)).
\textsuperscript{69} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(11)).
\textsuperscript{70} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(12)).
\textsuperscript{71} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(14)).
\textsuperscript{72} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(15)).
\textsuperscript{73} Id. Many researchers and commentators have been critical of the findings in the '92 Cable Act and their inclusion as justification for the Supreme Court's upholding of the rules, especially in light of vertical and horizontal integration and how frequently retransmission consent is invoked. Such scholarship, however, is focused on the evidence used for commercial broadcasters and doesn't address public broadcasting directly. See, e.g., Nancy Whitmore, Congress, The U.S. Supreme Court and Must-Carry Policy: A Flawed Economic Analysis, 6 COMM. L. & POL'Y 175–225 (2001); Thomas Hazlett, Digitizing 'must-carry' under Turner Broadcasting v. FCC (1997), 8 SUP. CT. ECON. REV. 141 (2000).
Congress provided more evidence to legitimize the must-carry and retransmission consent rules. Many consumers subscribe to cable television to obtain or receive better reception of their local broadcast stations.\textsuperscript{74} Unfortunately, consumers usually do not maintain antennae or have input-selector switches installed to receive broadcast and cable channels separately.\textsuperscript{75} In addition, the Cable Communication Policy Act of 1984\textsuperscript{76} was "premised upon the continued existence of mandatory carriage obligations for cable systems, ensuring protection for local stations from anticompetitive conduct by cable systems."\textsuperscript{77} Furthermore, Congress believed cable television to be the "single most efficient distribution system for television programming,"\textsuperscript{78} as alternative distribution systems, such as the "A/B" switch, were neither feasible nor in the best interests of the public.

Nonetheless, network broadcast programming remained the most popular programming on cable systems.\textsuperscript{79} Cable consumers benefited from the carriage of network affiliates as well as independent and PTV stations.\textsuperscript{80} Since "channels adjacent to popular off-the-air signals obtain a larger audience than on other channel positions,"\textsuperscript{81} cable systems derive great benefits from local broadcasters "without the consent of the broadcasters or any copyright liability. This has resulted in an effective subsidy of the development of cable systems by local broadcasters."\textsuperscript{82} Congress believed that because cable systems and broadcasters were now competing for audience, advertising, and programming, then the subsidy and imbalance that cable operators enjoy should be remedied through the enforcement of "must-carry" and retransmission consent.\textsuperscript{83} Through its passage of Section 5 in the '92 Cable Act, Congress specifically recognized the value of PTV, describing it as a "local community institution" that is supported through contributions from local and federal tax support.

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\textsuperscript{74} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(17)).
\textsuperscript{75} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(17)).
\textsuperscript{76} Cable Communications Policy Act of 1984, Pub. L. No. 98-549, 98 Stat. 2779 (codified as amended in the scattered sections of 47 U.S.C.). Overall, the Act deregulated cable rates and required operators to provide PEG channels.
\textsuperscript{77} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(17)).
\textsuperscript{78} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(18)).
\textsuperscript{79} 47 U.S.C. § 521 (note following) (Congressional Findings and Policy for Pub. L. 102-385 §2(a)(19)).
\textsuperscript{80} Id.
\textsuperscript{81} Id.
\textsuperscript{82} Id.
\textsuperscript{83} Id.
\end{flushright}
and its local viewer members. In enacting the must-carry provisions for non-commercial stations within the '92 Cable Act, Congress stated that "there is a substantial governmental and First Amendment interest in ensuring that cable subscribers have access to local non-commercial educational stations" and that the "distribution of unique non-commercial, educational programming services advances that interest." In light of its must-carry findings, as articulated in the preceding paragraphs, Congress firmly expressed that "absent carriage requirements there is a substantial likelihood that citizens, who have supported local PTV services, will be deprived of those services." 

In regards to digital television, the House Conference Report interprets the '92 Cable Act as implying that "when the FCC adopts new standards for broadcast television signals, such as the authorization of broadcast of HD, it shall conduct a proceeding to make any changes in the signal carriage requirements of cable systems needed to ensure that cable systems will carry television signals complying with such modified standards." This implies that the must-carry laws were created in order to be flexible as technologies change and improve.

The same conference report may shed light on the intent of section 615 of the '92 Cable Act and aid the FCC in creating regulations consistent with the law. According to the committee's interpretation, "a cable operator shall provide each qualified local non-commercial educational television station whose signal is carried in accordance with this section with bandwidth and technical capacity equivalent to that provided to commercial television broadcast stations carried on the cable system." This implies that if a cable system chooses to carry the digital signal of a local commercial broadcast station, then the system must provide the same service to local non-commercial television stations. According to the articulated intent of the '92 Cable Act, because most cable systems have entered into retransmission consent agreements with commercial broadcast stations, cable systems must provide non-commercial stations with the same quality of carriage.

Provisions in the Telecommunications Act of 1996 codified advanced television, a new system of broadcast television in the U.S. commonly referred to as digital television. In the legislative history of this provision, Congress stated that it did not intend to "confer must carry status on advanced television or other video services offered on desig-
nated frequencies, adding that the issue is to be the subject of a Commission proceeding under section 614(b)(4)(B) of the Communications Act.”

B. ANALOG MUST-CARRY RULES SURVIVE JUDICIAL REVIEW

Unhappy with the new rules set forth in 1992, the cable industry, led by Turner Broadcasting, claimed the rules compelled cable operators to carry speech and were therefore an infringement upon speaker and editorial rights guaranteed under the First Amendment. Upon constitutional challenge, a federal three-judge panel of the U.S. District Court for the District of Columbia rejected challenges to Sections 4 and 5 of the 1992 Cable Act in Turner Broadcasting System, Inc. v. FCC, upholding the newly codified must-carry rules. The court, by a 2-to-1 vote, found the rules to be essentially content-neutral economic regulation that passed constitutional muster under the O’Brien test.

Turner Broadcasting appealed, and the Supreme Court granted certiorari to review the constitutionality of the must-carry rules. Since genuine issues of material fact remained unresolved, a 5-to-4 majority vacated and remanded the district court’s summary judgment.

More importantly, the Court determined the level of scrutiny necessary to determine the constitutionality of the must-carry rules. The Court recognized that heightened First Amendment scrutiny was warranted because the provisions regulate cable speech in such a manner that “reduces the number of channels over which cable operators exercise unfettered control” and, in turn, makes it more difficult for cable pro-

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93 Id.
94 Id. at 40, 46, 47. In 1989, after Quincy and Century, the Supreme Court refined the intermediate scrutiny standard of review. See Ward v. Rock Against Racism, 491 U.S. 781 (1989). The Court amended the O’Brien test, holding that the requirement of narrow tailoring is satisfied if the “means chosen do not ‘burden substantially more speech than is necessary to further the government’s legitimate interests.’” Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622, 663 (1994) (citing Ward, 491 U.S. at 799). This represented a refinement as the original O’Brien standard required that the incidental restriction on speech to be “no greater that is essential to the furtherance of that interest.” U.S. v. O’Brien, 391 U.S. 367, at 377 (1968).
96 Turner I, 512 U.S. at 627.
97 Id.
98 Id. at 637.
grammers to compete for channel capacity. The Court, however, refused to extend the less rigorous scrutiny of broadcasting to cable, claiming that “cable television does not suffer from the inherent limitations that characterize the broadcasting medium” (spectrum scarcity). 99

Although it agreed with the lower court’s determination to apply intermediate scrutiny, the Court rejected the district court’s holding that the rules themselves were constitutional under the O’Brien test. The Court acknowledged Congress’ intentions that the must-carry rules serve important governmental interests. 100 The Court did not agree, that the must-carry rules necessarily furthered these governmental interests. Material issues of fact remained regarding whether the broadcast industry would be in serious financial jeopardy absent must-carry, and whether the rules were narrowly tailored and would actually solve the broadcasting industry’s supposed crisis. 101 While recognizing that Congress is entitled to substantial deference with regard to predictive judgments, the Court found insufficient evidence to conclude that Congress had made reasonable inferences to substantiate the must-carry rules. 102

On remand, the three-member district court panel, again by a 2-to-1 vote, held the must-carry provisions to be constitutional. 103 After taking 18 months and “yielding a record of tens of thousands of pages” 104 the Court, applying intermediate scrutiny, found that the must-carry rules furthered the important governmental interest of continuing the viability of free, over-the-air broadcasting. The panel determined that substantial evidence supported the arguments that cable operators had incentives to deny the carriage of local stations, 105 and that local stations without carriage would suffer significant financial harm or peril. 106 Through these findings, the Court concluded that the government had shown enough support to establish that the must-carry rules were necessary to remedy actual threats. In addition, the must-carry rules, while imposing a small burden on cable operators, would further the government’s objective. 107

99 Id. at 639.
100 Id. at 661 (“Congress declared that the must-carry provisions serve three interrelated interests: (1) preserving the benefits of free, over-the-air broadcast television, (2) promoting the widespread dissemination of information from a multiplicity of sources, and (3) promoting fair competition in the market for television programming ... we have no difficulty concluding that each of them is an important governmental interest.”).
101 Id. at 663-67.
102 Id. at 666-68.
104 Id. at 751, 755.
105 Id. at 741.
106 Id. at 734-44.
107 Id. at 743.
According to the court, the goals of must-carry could not be sufficiently served by more speech-liberating approaches. In 1997, the Supreme Court affirmed the district court’s ruling by a 5-to-4 vote, holding the must-carry rules constitutionally valid under O’Brien. The Court examined the two inquiries left open during its prior review: first, whether the factual record developed by the three-judge district court “supports Congress’ predictive judgment that the must-carry provisions further important governmental interests,” and second, whether the rules did “not burden substantially more speech than necessary to further those interests.” Given the amount of factual evidence that had been developed and analyzed by the district court, the majority of the Court concluded that the must-carry rules met the burden of proof necessary to answer the above questions in the affirmative.

In answering the first question, the Court reasserted that the rules furthered three important, interrelated governmental interests: “(1) preserving the benefits of free, over-the-air local broadcast television; (2) promoting the widespread dissemination of information from a multiplicity of sources; and (3) promoting fair competition in the market for television programming.” After considering these interests, the Court determined that preserving multiple broadcast outlets was a substantial governmental objective that the must-carry rules addressed. Accordingly, after reviewing the evidence, the Court held that the mandatory carriage requirements furthered these interests.

The Court exhaustively considered the threats that existed in the absence of must-carry requirements. For instance, the increasing vertical and horizontal integration in cable provided operators with the incentive and ability to favor their affiliated programming services over local broadcasts. Moreover, when cable subscription percentages leveled off, cable operators were expected to compete more aggressively with broadcasters for advertising revenue. The Court also pointed out that

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108 Id. at 747. The court considered and rejected a number of alternatives to the must-carry rules, including: a leased access regime, whereby cable operators would make channels available at a regulated price for both broadcast and cable programmers; A/B switch; more limited must-carry rules, modeled after the FCC’s previous rules; and a set of subsidies to support broadcasting. Id. at 746-49.


110 Id. at 184.

111 Id.

112 Id. at 189.

113 See id.

114 See id. at 213.

115 See id. at 197–98 (quoting the ’92 Cable Act § 2(a)(5) (1992). Horizontal concentration was growing as a small number of multiple system operators (MSOs) were acquiring significant numbers of cable systems nationwide. With regard to vertical integration, many operators owned or had affiliation agreements with cable programmers.

116 See id. at 200–01.
a significant number of broadcasting stations had been dropped during periods without must-carry rules, placing some stations in financial disarray. Although the record revealed evidence that supported the dissenting opinion, the dissent failed to ask whether the legislative conclusion was supported by the record before Congress. In answering this question, the Court could not "re-weigh the evidence de novo, or replace Congress' factual predictions with [its] own." Thus, under intermediate scrutiny, the Court found the provisions to be consistent with the first prong of O'Brien.

Next, the Court examined the second prong of O'Brien, whether the must-carry rules were broader than necessary to accomplish Congress' objective. Upon reviewing the evidence adduced on remand, the Court found that "cable operators had not been affected in a significant manner by must-carry." The Court cited many statistics to support its finding: 87 percent of the time cable operators had been able to meet must-carry requirements through previously unused channel capacity; 94.5 percent of cable systems nationwide did not drop any programming to fulfill their obligations; and cable operators carry an average of 99.8 percent of the programming they carried before enactment of must-carry. While cable operators contended that these figures were overblown, the Court believed the results of must-carry spoke for themselves:

It is undisputed that broadcast stations gained carriage on 5,880 channels as a result of must-carry. While broadcast stations occupy another 30,006 cable channels nationwide, this carriage does not represent a significant First Amendment harm to either system operators or cable programmers.

Moreover, the Court concluded that the provisions were narrowly tailored to meet its objective of preserving "a multiplicity of broadcast stations for the 40 percent of households without cable because the burden imposed by must-carry is congruent to the benefits it affords."

Although narrower must-carry rules that provide more freedom to cable operators may exist, the Court articulated that "content neutral regulations are not invalid simply because there is some imaginable alterna-

117 See id. at 202.
118 See id. at 209.
119 See id. at 210-11.
120 See id. at 211.
122 See id.
123 See id. at 214.
124 See id.
125 See id. at 214-15.
126 See id. at 215-16.
tive that might be less burdensome on speech.”

Nevertheless, the Court analyzed and rejected proposed alternatives to the current must-carry rules. Such remedies included the use of an A/B input selector switch, a leased-access regime system, subsidy mechanisms to support financially weak stations, and anti-trust enforcement or anticompetitive administrative procedures.

III. DIGITAL MUST-CARRY POLICY

A. DTV MUST-CARRY FIRST REPORT AND ORDER

To clearly demonstrate its authority to apply the must-carry rules to digital television, the FCC referred to the legislative history of the ’92 Cable Act. In its First Report and Order and Further Notice of Proposed Rulemaking (“DTV Must-Carry First Report and Order”), the FCC established must-carry for digital-only television stations, and allocation and content to digital operation for digital stations that return their analog spectrum. The Commission found that the ’92 Cable Act “neither mandates nor precludes the mandatory simultaneous carriage of both a television station’s digital and analog signals (dual carriage”).

The FCC also ruled that Congress intended the term “primary video” in the digital context to mean a “single programming stream and other program-related content,” and not the multicast streams that local broadcasters and PTV will offer. As a result, each digital-only station (and those stations that have returned their analog spectrum and converted to digital operations) must elect a single programming stream as its primary video, and the local cable operator must carry this primary video stream.

Despite the substantial governmental interests in preserving free television, providing multiple information sources, and promoting fair com-

127 See id. at 217 (quoting United States v. Albertini, 472 U.S. 675, 689) (quotations omitted).
128 See id. at 217–18.
129 See id. at 218.
130 See Kruger, supra note 24, at 11; DTV Must-Carry R&O/FNPRM, 16 F.C.C.R. 2603 (citing S. H.R. Rep. No. 102-92, at 85 (1991), H.R. Rep. No. 102-862, at 67 (1992), H.R. Rep. No. 102-628, at 94 (1992)). “The relevant language states that ‘when the FCC adopts new standards for broadcast television signals, such as the authorization of broadcast high definition television (HDTV), it shall conduct a proceeding to make any changes in the signal carriage requirements of cable systems needed to ensure that cable systems will carry television signals complying with such modified standards in accordance with the objectives of this section.’” Id. (quoting H.R. Rep. No. 102–862, at 67 (1992)).
131 See DTV Must-Carry R&O/FNPRM, supra note 3.
132 Id. at 2600.
133 Id. at 2622.
134 See id. at 2619–22.
135 See id. at 2622.
petition in the programming market,\textsuperscript{136} the FCC tentatively concluded that forcing cable operators to carry both the analog and digital signals of broadcast stations would place an undue burden on cable operators, and therefore violate their First Amendment rights.\textsuperscript{137} Cable operators are currently required to “carry local television stations on a tier of service provided to every subscriber and on certain channel positions designated in the [‘92 Cable Act.]”\textsuperscript{138} However, under the ‘92 Cable Act, “cable operators are not required to carry duplicative signals or video that is not considered primary.”\textsuperscript{139} During the temporary transition period from analog to digital broadcasting, an increasing redundancy of basic content would exist between the analog and digital signals as the Commission’s simulcasting requirements are phased in.\textsuperscript{140} If the Commission imposes a dual-carriage requirement, cable operators could be required to carry double the number of television signals, carrying identical content, while having to drop various cable programming services where channel capacity is limited.\textsuperscript{141} The broadcast industry generally urges the Commission to impose a dual-carriage requirement during the transition period to ensure that viewers have continued access to all available local television programming, [while cable operators contend that] if they were required to carry digital broadcast signals during the transition, an operator’s channel line-up would consist of blank screens because most consumers would not have digital television receivers or converters enabling them to display digital signals on their analog sets.\textsuperscript{142}

In order to make a final determination on dual-carriage, the Commission raised numerous questions around the seven DTV proposals\textsuperscript{143}

\begin{itemize}
  \item[136] \textit{See id.} at 2600.
  \item[137] \textit{See id.}
  \item[138] \textit{Id.} at 2602 (citing 47 U.S.C. § 534(b)(6); 47 U.S.C. § 35(g)(5)).
  \item[139] \textit{Id.} at 2602 (citing 47 U.S.C. § 534(b)(3)(A); 47 U.S.C. § 535(g)).
  \item[140] \textit{Id.} at 2603.
  \item[141] \textit{Id.}
  \item[142] \textit{Id.} at 2604.
  \item[143] \textit{See} DTV Must-Carry R\&O/FNPRM, \textit{supra} note 3. Initially, the FCC proposed seven DTV must-carry models in its DTV Must-Carry Notice of Proposed Rulemaking. Each model was designed to address specific problems arising from the rule-making, but based upon the factual record gathered, none achieved the balance necessary to accomplish the government’s objectives in the DTV transition.
  \begin{enumerate}
    \item The Immediate Carriage Proposal: requiring all cable systems, regardless of channel capacity, to carry all digital signals of commercial broadcast must-carry stations up to the one-third statutory cap.
    \item The System Upgrade Proposal: requiring only cable systems with higher channel capacity to carry DTV signals of broadcast stations.
  \end{enumerate}
and requested further comment on other digital must-carry concerns, including the evaluation of digital carriage agreements, retransmission consent and market forces;\textsuperscript{144} the calculation of cable system channel capacity;\textsuperscript{145} and the identification and application of "program-relatedness" in a multiple-signals environment.\textsuperscript{146} Once this information is analyzed, a more concrete decision can be reached.\textsuperscript{147} In the interim, the FCC allowed stations flexibility to negotiate for full or partial carriage of its digital TV signal.\textsuperscript{148} The FCC also allowed a commercial station that negotiates retransmission consent of its analog signal to tie carriage of its digital signal to carriage of its analog signal.\textsuperscript{149}

The FCC addresses PTV briefly in the DTV Must-Carry First Report and Order.\textsuperscript{150} The FCC finds that "the government's interest in ensuring the availability of local non-commercial educational television on cable systems is manifest."\textsuperscript{151} In addition, it asserts that "the digital signals of noncommercial stations are to be treated like their commercial counterparts for cable carriage purposes."\textsuperscript{152} Therefore, non-commercial stations broadcasting in digital are entitled to immediate carriage by cable systems, subject to the parameters set forth in Section 615 of the '92 Cable Act.\textsuperscript{153} Additionally, in keeping with its decision with regard to commercial television stations, the Commission declined "to ad-

\textsuperscript{144} See id. at 2600, 2655.
\textsuperscript{145} See id. at 2652-54.
\textsuperscript{146} See id. at 2651–52.
\textsuperscript{147} Id. at 2647-48.
\textsuperscript{148} Id. at 2611-12.
\textsuperscript{149} Id. at 2613.
\textsuperscript{150} Id. at 2606-09.
\textsuperscript{151} Id. at 2608.
\textsuperscript{152} Id.
\textsuperscript{153} Id.
dress the dual carriage issue for [non-commercial stations] in this phase of the proceeding.” 154 The report does indicate, however, a decision on the use of available public, educational, and government (PEG) cable channels not in use for their designated purposes, namely that the carriage of digital non-commercial educational stations on unused PEG channels should be permitted by local cable operators.155 The FCC contends that this policy “will promote program diversity by enabling [non-commercial educational] analog and digital signals, that otherwise may not be afforded carriage, to reach their intended audiences.” 156 While the FCC rejected multicasting as fitting within “primary video,”157 it nevertheless requested further comment on whether PTV’s educational multicast programming streams could fall within the provision’s definition of “program-relatedness.”158

B. DTV MUST-CARRY SECOND REPORT AND ORDER

In February 2005, the FCC reaffirmed its earlier decisions in its Second Report and Order and First Order on Reconsideration ("DTV Must-Carry Second Report & Order").159 Specifically, the Commission reconsidered and ruled against the dual must-carry requirement.160 The Commission also reconsidered the definition of “primary video,” determining that it only constitutes one programming stream, rather than the full-bit stream of a local digital broadcast station’s combined multicast signals.161

The FCC refuted the contention that a number of governmental interests would not be met absent a dual-carriage requirement during the digital television transition.162 In light of the Supreme Court’s application of immediate scrutiny in Turner I, Turner II, the FCC examined whether or not a mandatory dual-carriage requirement would preserve free over-the-air television and promote “widespread dissemination of information from a multiplicity of sources.”163 Based upon the FCC’s analysis, the record does not clearly demonstrate that the interests of viewers who wish to see local, over-the-air broadcast stations would be threatened without a dual must-carry requirement. Indeed, “cable carriage is not needed to ensure that non-cable households have access to

154 Id.
155 See id. at 2636-37.
156 Id.
157 Id. at 2622.
158 Id. at 2651-52.
159 See DTV Second R&O, supra note 3.
160 Id. at ¶ 9-27, at 4520-31.
161 Id. at ¶ 29-44, at 4530-38.
162 Id. ¶ 15, at 4523-24.
163 Id. ¶ 14-19, at 4523-26.
digital broadcast [stations],” given that nearly all local analog stations are already carried under retransmission consent or must-carry. 164 In addition, “the absence of a dual carriage requirement might in fact encourage broadcasters to produce a ‘rich mix of over-the-air programming’ in order to convince cable operators to voluntarily carry their digital signal.” 165 Furthermore, dual-carriage results in duplicative programming (the same program in both analog and digital), and therefore does not necessarily promote the widespread dissemination of information from a multiplicity of sources. 166 Furthermore, evidence suggests that dual-carriage would not necessarily expedite the DTV transition. 167 As of the beginning of 2005, cable operators offer a HDTV program package option in 184 of the 210 designated market areas (DMAs) and carry more than 500 local DTV stations nationwide. 168 In addition, eighteen cable networks now offer some form of HDTV programming during part of their schedule. 169 As a result, the FCC believes the above trends will be more likely to spur the sales of DTV equipment, and as a consequence, the transition to DTV, than the imposition of a dual-carriage requirement. 170

After declining to impose a dual-carriage requirement, the FCC examined what must-carry policy should be implemented after the DTV transition is completed for local stations who engage in multicasting. Although the FCC acknowledged that Congress’ intended meaning of “primary video” in the digital context is unclear, the FCC nevertheless examined whether an alternative interpretation would further the important governmental interests of preserving free over-air-television, promoting the “‘widespread dissemination of information from a multiplicity of sources’” and facilitating the digital television transition. 171 According to the FCC, Congress and the broadcast industry have failed to demonstrate that free local broadcasting would be jeopardized without multicast carriage. 172 Since a local broadcaster will still have a presence on the local cable system with the single program-stream carriage requirement, then requiring additional broadcast streams from the same broadcaster “would not promote diversity of information sources” and would “arguably diminish the ability of other, independent voices to

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164 Id. ¶ 18, at 4525.
165 Id. ¶ 18, at 4525-26.
166 See id. ¶ 19, at 4526.
167 Id. ¶¶ 23-25, at 4527-29.
168 Id. ¶ 24, at 4528.
169 Id. ¶ 24, at 4529.
170 See Id. ¶ 25, at 4529.
171 Id. ¶ 33, at 4532.
172 Id. ¶ 37, at 4534.
173 Id. ¶¶ 37-41, at 4534-36.
174 Id. ¶ 38, at 4534-35.
be carried on the cable system."\textsuperscript{175} The FCC noted cable operators' desire to carry local HDTV broadcast content, a scenario still possible under the single program stream carriage requirement, and then indicated its belief that high quality digital programming will best facilitate the transition.\textsuperscript{176}

Because the FCC ruled against dual and multicast carriage,\textsuperscript{177} it declined to explore or reach any conclusions on the merits of the Fifth Amendment taking arguments made by cable operators.\textsuperscript{178} In addition, the FCC deferred the issue of program-relatedness in the context of digital must-carry for a subsequent Report and Order.\textsuperscript{179} Following the spirit of the DTV Must-Carry First Report & Order, the FCC did not distinguish between commercial and non-commercial broadcasters, but did make reference to the carriage deal struck between public broadcasters and cable operators.\textsuperscript{180}

IV. THE NATURE OF PUBLIC TELEVISION

Unlike commercial stations, which seek to maximize profits, public broadcasting's motivation for operating is to educate and enhance the community that it serves. PTV is the only over-the-air medium that promises to deliver local, educational, and diverse television programming to its viewers. In comparison, commercial broadcast stations' main responsibility is to bring audiences to advertisers,\textsuperscript{181} a process that arguably fails to provide a high-quality educational or aesthetic experience to viewers.

The FCC's Sixth Report and Order authorized 242 channels for educational television, and was adopted on April 14, 1952.\textsuperscript{182} However, the creation of a means for funding educational radio and television in the United States had to wait for passage of the Public Broadcasting Act on November 7, 1967.\textsuperscript{183} The means created by the Act was the Corpora-

\begin{itemize}
\item \textsuperscript{175} Id. \textsection 39, at 4535.
\item \textsuperscript{176} See Id. \textsection 40, at 4536.
\item \textsuperscript{177} For further analysis on whether dual and multicast carriage policies for local broadcasters are constitutional, see Joel Timmer, \textit{Broadcast, Cable and Digital Must Carry: The Other Digital Divide}, 9 Comm. L. & Pol'y 101 (2004); Michael M. Epstein, \textit{"Primary Video" and Its Secondary Effects on Digital Broadcasting: Cable Carriage of Multiplexed Signals Under the 1992 Cable Act and the First Amendment}, 87 Marq. L. Rev. 525 (2004).
\item \textsuperscript{178} DTV Second R&O, supra note 3, \textsection 26, at 4529.
\item \textsuperscript{179} Id. \textsection 44, at 4537.
\item \textsuperscript{180} See Id. \textsection 38, at 4534-35.
\item \textsuperscript{182} Current Online, Timeline: 1650s-60s, from A History of Public Broadcasting, at http://www.current.org/history/timeline/histime2.html
\item \textsuperscript{183} Id.
tion of Public Broadcasting (CPB), which promotes public telecommunications services (television, radio, and online) for the American people.\textsuperscript{184} CPB is a private, nonprofit organization that funds more than 1,000 public television and radio stations nationwide using an annual appropriation from Congress.\textsuperscript{185} It also funds producers, educators and technology experts for the development of new public television and radio programming.\textsuperscript{186} Two years after its own formation, CPB formed the Public Broadcasting Service (PBS).\textsuperscript{187} Today, PBS is a private, non-profit corporation, owned and operated by the nation's 349 PTV stations.\textsuperscript{188}

As a faithful and trusted community resource, PBS and its 358 member stations\textsuperscript{189} “use the power of non-commercial television to . . . enrich the lives of all Americans through quality programs and education services that enlighten, inspire and [satisfy].”\textsuperscript{190} Available to 99 percent of American households, PBS is watched by more than 95 million people each week.\textsuperscript{191} Its diverse programming examines the contributions and experiences of all races, including African-Americans, Latinos and Latinas, Asian-Americans, Native Americans and Pacific Islanders,\textsuperscript{192} and thereby reaches out to all Americans. PBS is the leading source of programming-based educational materials used in elementary schools and secondary schools, and provides a variety of other educational services to classrooms and many community outreach services including higher education classes and media services to the visually impaired.\textsuperscript{193}

As a result, PBS has a wide array of functions that must be maintained by proper financial support. Although it does not produce programming, PBS funds the creation and acquisition of program materials and distributes them to its member PTV stations.\textsuperscript{194} PBS also leads the way in developing educational initiatives for PTV and keeps pace with

\textsuperscript{184} Corporation for Public Broadcasting, What is the Corporation for Public Broadcasting? at http://www.cpb.org/aboutcpb/whatis.html.

\textsuperscript{185} Id.

\textsuperscript{186} Id.


\textsuperscript{188} Public Broadcasting Service, About PBS, at http://www.pbs.org/aboutpbs/ [hereinafter About PBS].

\textsuperscript{189} PBS Corporate Facts, supra note 187.

\textsuperscript{190} About PBS, supra note 188.

\textsuperscript{191} Id.


\textsuperscript{194} See PBS Corporate Facts, supra note 187.
developing content and services brought on by digital technologies and new media. 195

As detailed in the chart below, PBS is funded by several federal, state, and local sources. 196 Fewer than one-third of public broadcasting’s total revenues come from tax-based sources, such as federal, state, and local governments. 197 The remaining two-thirds are from private sources, such as memberships, businesses, and foundations. 198 In addition, CPB receives an annual appropriation from the federal government, ninety-five percent of which, by law, support local television and radio stations, programming, and improvements to the public broadcasting system as a whole. 199 About one-fourth of all support for public broadcasting comes from members’ donations. Businesses and foundations, through underwriting, contribute roughly 22 percent, and colleges and universities account for about 8 percent of public broadcasting’s revenues. 200

PUBLIC BROADCASTING FUNDING SOURCES

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<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Percentage</th>
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<tr>
<td>Membership</td>
<td>$609,210,000</td>
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<tr>
<td>Business</td>
<td>$351,398,000</td>
<td>15.1%</td>
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<tr>
<td>State Governments</td>
<td>$317,482,000</td>
<td>13.6%</td>
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<tr>
<td>CPB Appropriation</td>
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<tr>
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<td><strong>100.0%</strong></td>
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Current estimates indicated that funding the digital transition for all of PTV will require $1.7 billion dollars. 201 As of February 2003, PTV

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195 Id.
196 For more on the funding concerns facing PTV, see GAO Federal Funding for Public Broadcasting Report, supra note 181, at 49-62.
198 See id.
199 Id.
200 Id.
had raised $1 billion dollars for the digital conversion.\textsuperscript{202} In terms of acquiring digital funding, approximately $473 million has been allocated by 45 states in widely differing amounts set aside for individual PTV stations, as well as for multi-station state systems to make the digital transition. State allocations range from $66 million in North Carolina to $350,000 in Washington.\textsuperscript{203} At the federal level, Congress appropriated $20 million in FY2001 and $25 million in FY2002 for CPB to use to assist stations in the digital transition. In addition, Congress appropriated $43.5 million in both FY2001 and FY2002 for Public Telecommunications Facilities Program (PTFP) grants from the U.S. Department of Commerce. In September 2002, 52 public TV stations were awarded $36.2 million (out of a total of $43.5 million in overall PTFP funds) for digital transition projects, and in September 2001, 52 public TV stations were awarded $34.7 million. Public broadcasters sought $70 million in PTFP funding for FY2004. At the local level, private capital campaigns initiated by many local stations have raised approximately $260 million for their transition to digital television.\textsuperscript{204}

A. Public Television's Digital Multicasting Strategy

Multicasting enables stations to send multiple program and data streams within a television station’s digital channel capacity. The transition to digital television will make multicasting possible, because of the digitization of signals (information transmitted in 1s and 0s) and compression. Whereas a standard NTSC broadcast television picture would take up 6 MHz, a digital broadcaster may send as many as six standard-definition NTSC-like programs containing CD-quality sound within the same channel capacity, or one high-definition program that contains a wider, theater-like 16x9 picture and twice the lines of resolution.\textsuperscript{205}

Ninety-five percent of PTV stations plan to carry at least one educational multicast service, and seventy-five percent plan to offer two or more of these channels while offering four programming streams simultaneously.\textsuperscript{206} For example, Twin Cities Public Television (TPT), which holds licenses to two public stations (KTCA, KTCI) in the Minneapolis-
St. Paul Area, currently offers five digital multicast options in standard-definition on one of its stations, KTCI:

- **TPT KIDS**, a 24-hour service presenting children’s programming from PTV shows.
- **TPT-YOU**, a learning channel that broadcasts educational content for adults 24-hours a day.
- **TPT 2D**, station’s simulcast of analog programming that presents a mix of local and PBS productions.
- **TPT 17D**, station’s simulcast of analog programming that presents a mix of local and PBS productions during primetime and weather during other parts of the day.
- **TPT Wx**, a channel broadcasting weather reports full-time. 207

Meanwhile, KTCA provides Twin Cities viewers the opportunity to see high-definition PBS programs throughout the day. 208 Through multicasting, a majority of public broadcasters like KMNE in Albuquerque plan to use their only digital station to multicast during the day and to offer wide-screen or high-definition programming during the evening. 209

The potential airing of multiple programs through local stations is just one of the valuable contributions PTV has envisioned for the digital future. Beyond educational video programming, public broadcasters also plan to use part of their multicast strategy to “provid[e] access to all Americans to educational services” on “dedicated” portions of digital bandwidth.” 210 PTV stations would commit 4.5 Mbps of Digital Television (DTV), translating to twenty-five percent of digital channel capacity, to deliver formal education services in exchange for federal support of the digital build-out. 211 Reaching more people than current “last-mile” services, such as cable modems and digital subscriber lines (“DSL”), fully DTV-converted PTV systems could provide digital, video and data services over the air, covering ninety-nine percent of the population. 212 Many public stations, including New Jersey Network and KCPT Kansas City, Mo., are already deploying asymmetric networks. 213

In ensuring the speedy development of these networks, neither the National Telecommunication Information Association nor the FCC should

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208 Id.
209 PTV Ex Parte Comments, supra note 202 at 5-7, 53.
210 APTS Seeks DTV Classification, TELEVISION DIGEST, Feb. 11, 2002.
211 Id.
212 Id.
213 Id.
“unnecessarily constrain” definition of broadband in ways that could delay deployment of those services.\textsuperscript{214}

As DTV reaches its maximum potential, datacasting will also thrive among PTV stations. Examples of potential DTV datacasting include corporate training courses, government agency information made available for public downloading, current weather conditions that are continuously streamed from the local weather radar, medical documents and videos, and large software applications available for download.\textsuperscript{215} Multicasting programming strategy makes it possible for PTV stations to “compete” and to “market” to niche audiences.\textsuperscript{216}

Multicasting is essential to help PTV achieve greater financial support from national and local underwriters, state and local governments, foundations, colleges and universities, and PTV member-supporters. A direct correlation exists between multicasting and the support PTV has already received to make its digital transition. For example, in states like Maryland, PTV stations have pooled their resources to acquire a state appropriation support of $35 million that is incumbent upon multicasting and airing educational programming.\textsuperscript{217}

Similarly, national underwriters will financially support a program only after minimum of seventy percent of American households have cable coverage.\textsuperscript{218} Without cable carriage of PTV stations, the capability of PTV stations to reach seventy percent of households is impossible, which compels public broadcasters to seek funding from other sources. Without funds to supply free, over-the-air broadcast service to the American public, the purpose of serving the government interest noted in \textit{Turner II} crumbles.\textsuperscript{219} Multicasting is the economically-viable answer for PTV to ensure a smooth transition into the digital world and a reliance on financial sources other than the federal government. Without mandatory cable carriage, multicast programming will be terminated because of lack of viewer access, and other financial sources will be discontinued.\textsuperscript{220} Furthermore, PTV might become extinct.

\textsuperscript{214} \textit{Id.}
\textsuperscript{215} \textit{Id.}
\textsuperscript{216} PTV Ex Parte Comments, \textit{supra} note 202 at 8-9.
\textsuperscript{217} \textit{Id.} at 58-62.
\textsuperscript{218} \textit{Id.} at 10.
\textsuperscript{219} \textit{Id.} at 14-16.
\textsuperscript{220} \textit{Id.}
V. PTV DIGITAL CABLE CARRIAGE POLICY

A. VOLUNTARY DIGITAL CARRIAGE AGREEMENT BETWEEN CABLE AND PTV

Just prior to the FCC's DTV Second Order, public broadcasters and the cable industry reached an agreement to carry PTV stations' digital signals. The ten–year contractual agreement includes carriage of PTV stations both before and after the transition to digital television. Each PTV station will be allowed to multicast and transmit up to four channels of digital programming.221 The voluntary agreement, which takes effect in late 2005, establishes digital carriage222 on more than ninety percent of cable systems in the country.223 During the digital transition, when PTV stations broadcast both analog and digital signals, cable systems that can offer HDTV will carry up to four streams of free, non-commercial DTV programming from at least one local public television station per market. Once PTV stations abandon analog broadcasting, participating cable systems will carry up to four streams of programming from every local public television station. The agreement also establishes that if a PTV station decides to stop its analog broadcasts early, then its digital carriage rights begin.224

B. WHY PTV DIGITAL CARRIAGE WOULD BE CONSTITUTIONAL UNDER THE FIRST AMENDMENT

Although separate sections for commercial and non-commercial stations were specified in the '92 Cable Act, local stations have generally been treated together when interpreting and applying the must-carry rules.225 While this policy may have worked within the analog context, the preceding section demonstrates that PTV stations have unique economic conditions and structural limitations to raising money for the digital transition. PTV's non-profit "business plans" attempt to provide supporters, viewers, underwriters, and taxpayers with a wide range of


225 Some commentators suggest the must-carry provisions protecting PTV were singled out separately from commercial stations because more public stations had been more frequently dropped in the absence of must-carry rules. Yet, the courts have failed to treat Section 4 or 5 of the 1992 Cable Act discriminately. See Monroe E. Price and Donald W. Hawthorne, Saving PTV: The Remand of Turner Broadcasting and the Future of Cable Regulation, 17 HASTING COMM/ENT L.J. 65 (1994).
multicast educational programming and services.\textsuperscript{226} Simply stated, without carriage on cable systems, PTV will fail to reach the audiences necessary to generate support for its stations and programming as it fully transitions to digital. Since PTV stations are in jeopardy and operate under different conditions than their commercial counterparts, non-commercial stations are worthy of a preferred digital must-carry that includes a multicasting requirement, both during and after the digital transition, for non-duplicative programming.

Such support and endorsement for PTV already exists. While the '92 Cable Act does not provide a clear roadmap for applying must-carry to digital television, it nevertheless gives a ringing endorsement of the need to preserve the economic viability of PTV.\textsuperscript{227} The very fact that the '92 Cable Act enacted retransmission consent for commercial stations along with must-carry indicates that Congress did not regard television as a monolithic system. Instead, Congress realized that because of their high ratings and network affiliations, some commercial broadcasters would be lucrative to cable operators and would not need to invoke must-carry status.\textsuperscript{228} By contrast, Congress did not make retransmission consent an option for PTV stations.\textsuperscript{229}

\textsuperscript{226} For an additional argument on why public television should be treated separately from commercial broadcasters in terms of digital must-carry, see Cotlar, supra note 15 at 65-73.

\textsuperscript{227} Section 2(a)(7), (8)(A)-(D) of the '92 Cable Act reads:

(7) There is a substantial governmental and First Amendment interest in ensuring that cable subscribers have access to local non-commercial educational stations which Congress has authorized, as expressed in section 396(a)(5) of the Communications Act of 1934. The distribution of unique non-commercial, educational programming services advances that interest.

(8) The Federal Government has a substantial interest in making all nonduplicative local PTV services available on cable systems because —

(A) PTV provides educational and informational programming to the Nation's citizens, thereby advancing the Government's compelling interest in educating its citizens;

(B) PTV is a local community institution, supported through local tax dollars and voluntary citizen contributions in excess of $10,800,000,000 since 1972, that provides public service programming that is responsive to the needs and interests of the local community;

(C) the Federal Government, in recognition of PTV's integral role in serving the educational and informational needs of local communities, has invested more than $3,000,000,000 in public broadcasting since 1969; and

(D) absent carriage requirements there is a substantial likelihood that citizens, who have supported local PTV services, will be deprived of those services.

\textsuperscript{228} See id; 47 U.S.C. § 532.

\textsuperscript{229} See id; 47 U.S.C. § 531.
In support of non-commercial broadcasting, the must-carry rules serve the congressional goals "of furthering the educational development of all citizens and protecting the nation’s substantial investment in and commitment to PTV services." Upon examining the need for must-carry in the '92 Cable Act, the House Committee revealed the structural and economic underpinnings of how cable operators were likely to deny carriage to PTV stations:

Because cable operators are for-profit enterprises, they necessarily seek to provide customers with the package of programming and services that will maximize the operators' profits. As commercial enterprises, cable operators ordinarily lack strong incentive to carry programming that does not attract sufficient dollars or audiences. Traditionally, PTV has provided precisely the type of programming commercial broadcasters and cable operators find economically unattractive. For this reason, the Committee believes that, without "must carry" provisions, PTV service increasingly will become unavailable to cable subscribers.

As written into the findings of the law, section 5 of the '92 Cable Act is based upon concerns over the market power possessed by cable systems, attempts to ensure that citizens may access the educational and diverse nature of programming provided by local PTV, and the viability of local PTV stations as a vital community link in which the nation has made a large monetary investment.

In 1992, then-Senator Fritz Hollings summarized the predictive evidence regarding the incentives of cable operators with respect to PTV stations:

Cable systems are for-profit enterprises and naturally seek to carry programming which maximizes dollars and audience. PTV, in fulfilling its mandate to serve those audiences not served by commercial enterprises, carries much programming that cable systems find economically unattractive.

Congress' main purpose in enacting the non-commercial must-carry rules was to preserve and make PTV broadly available in the shadow of the market economy.
economic conditions that clouded citizens' access to non-commercial programming.234

Differentiating non-commercial stations from commercial stations may appear to raise content-based claims that would trigger strict scrutiny under the First Amendment. However, a preferred digital must-carry policy for PTV is not justified on the basis of content; rather, the policy evolves from the economic and fundraising characteristics of PTV and specifically from the need to make the best use of monetary support from the government and viewers. A favored must-carry approach is not content-based simply because it fosters the viability of free over-the-air PTV programming. Although there are interests in promoting the diverse local, educational, and community nature of PTV programming and services, such interests may be construed as institutional rather than content-based. Such interests are analogous to those served by public schools or libraries, and are not directly associated with any particular speech or point of view. After all, government support for a library or school does not constitute government preferential treatment for the contents of the library books or school curricula. Similarly, the preferred DTV multicast must-carry policy for PTV does not dictate the specific content of PTV programming that must or must not be carried by cable operators. Most of all, governmental support for the institution of PTV does not offend the First Amendment; rather, the rationale is based on PTV's non-profit and government-supported nature.235

The multicast digital must-carry proposal for PTV may be deemed content-neutral. Such a regulation would not single out messages because of viewpoint or content.236 Indeed, all multicast video programming streams from PTV stations would be carried by cable operators. Whereas content-based laws are reviewed under strict scrutiny and require a compelling governmental interest and "least restrictive means" test, content-neutral laws fall under the less rigorous test of intermediate scrutiny set forth in *U.S. v. O'Brien*.237 Under the *O'Brien* test, the proposal for PTV and digital must-carry must: "1) future substantial or important governmental interests unrelated to the suppression of free

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235 A similar argument was raised initially to treat PTV differently than commercial broadcasters. See Brief of Intervenors-Appellees APTS, PBS & CPB, Turner Broadcasting System Inc. v. FCC, 512 U.S. 622 (1994) (No. 93-44), 1993 U.S. BRIEFS 44.

236 Ward v. Rock Against Racism, 491 U.S. 781, 791 (1989) ("The principal inquiry in determining content neutrality . . . is whether the government has adopted a regulation of speech because of disagreement with the message it conveys."); Id. (citing Clark v. Cmty. for Creative Non-Violence, 468 U.S. 288, 293 (1984)) ("Government regulation of expressive activity is content neutral so long as it is 'justified without reference to the content of the regulated speech.'")

speech and 2) not burden substantially more speech than is necessary to further those interests."\textsuperscript{238}

To meet the first prong, the government must demonstrate that the policy addresses a real harm and alleviates such harm in a material manner.\textsuperscript{239} Under the second prong, the government must show that the policy "promotes a substantial government interest that would be achieved less effectively absent the regulation."\textsuperscript{240}

In applying the first prong, the Court would find the substantial governmental interest in preserving the viability of free, over-the-air PTV to viewers, making efficient use of the digital spectrum and effectively utilizing the governmental monetary and viewer support PTV receives as a non-profit entity. Admittedly, such an interest would require a clear legislative intent and the careful gathering of factual evidence to survive judicial review\textsuperscript{241} and would best be bolstered through the passage of a federal law enacting a digital multicast must-carry law designed specifically for PTV.

Supporting evidence demonstrating real harms to PTV absent a digital multicast must-carry policy would include a clear articulation of its non-commercial nature and the function of multicasting as a fundraising tool, both of which were articulated in Part IV. Another real harm that may be cited would be the noticeable trend that PTV and cable operators have failed to reach a large number of digital carriage agreements (assuming the recent industry-carriage agreement was not in effect).\textsuperscript{242}

Because public television stations have no retransmission consent bargaining rights, PTV stations may only rely on invoking must-carry for mandatory carriage or seek voluntary agreements. Prior to the industry-wide agreement reached between cable operators and public broadcasters, only three cable multiple system operators (MSOs) had negotiated system-wide digital carriage agreements with their PTV stations.\textsuperscript{243} Beyond MSO-wide carriage agreements, in some of the nation's largest

\textsuperscript{238} Turner II, 520 U.S. 180, 189 (1997).
\textsuperscript{239} Turner Broadcasting System, Inc. v. FCC (Turner I), 512 U.S. 622, 663-64 (1994) ("The recited harms are real, not merely conjectural, and that the regulation will in fact alleviate these harms in a direct and material way.")
\textsuperscript{241} See Philip M. Napoli, Foundations of Communications Policy: Principles and Process in the Regulation of Electronic Media 276-78 (2001) (arguing for expanding communications policy analysis, including developing quantifiable data to support principles behind guiding frameworks).
\textsuperscript{242} When asked about issues impeding PTV's transition to digital, dual carriage and multicasting was cited by 91 percent and 98 percent of PTV stations who responded to a government survey. See U. S. Gen. Accounting Office, Issues Related to Federal Funding for Public Television by the Corporation for Public Broadcasting at 88, Report No. GAO-04-284 (April 2004); Cotlar supra note 15, at 62.
\textsuperscript{243} See Cotlar, supra note 15.
markets, a handful of local cable operators like Comcast have signed voluntary carriage agreements to carry one public television station.\textsuperscript{244}

In further meeting the first prong of \textit{O'Brien}, a digital multicast must-carry regulation would be found to alleviate the harm that is proposed.\textsuperscript{245} Through multicasting, non-commercial television stations are ensured carriage on cable systems and may be viewed by citizens. Such availability will enable pubic television to execute its strategic mission to best utilize the spectrum. This will fulfill the wishes of current and future government and member supporters who provide the funding that make the educational and community programming and services possible.

Applying the second prong of \textit{O'Brien}, a digital multicast must-carry policy for PTV does not burden substantially more speech than necessary to ensure the viability of free over-the-air PTV. First, the policy only applies to non-commercial broadcasters. Applying current channel capacity guidelines, a cable operator would be required to carry the multiple streams of anywhere from one to three PTVs within their system's area. While a dual must-carry strategy would admittedly occupy greater channel capacity during that transition, such a burden is small when compared to the original rules passed in the '92 Cable Act, because many cable systems have since upgraded their capacity and digitized their systems.\textsuperscript{246} In fact, cable operators like Comcast have recently announced plans to offer subscribers digital-only programming that would require viewers to attach digital set-top boxes or purchase digital cable-ready sets.\textsuperscript{247} Upon going digital, anywhere from six to twelve channels of video may be compressed into the channel capacity of 6 MHz that is currently required to transmit one analog video channel.\textsuperscript{248} Public broadcasters have argued, "digital streams occupy less cable capacity than the analog signals \textit{Turner II} held the Commission could require cable systems to carry."\textsuperscript{249} As a result, a multicast must-carry strategy for PTV during and after the transition could occupy even less capacity than the 6

\textsuperscript{244} See Eleventh MVPD Video Competition Report, \textit{supra} note 2, at ¶ 43.

\textsuperscript{245} Prior to the passage of the must-carry rules in the '92 Cable Act, Congress gathered a large amount of evidence demonstrating that, absent must carry, "significant numbers" of PTV stations were likely to be denied carriage on cable systems. See \textit{Turner I}, 512 U.S. at 666.

\textsuperscript{246} See Eleventh MVPD Video Competition Report, \textit{supra} note 2, at ¶ 24. As of January 2004, more than 85 percent sampled cable systems (both competitive and non-competitive systems) have facilities that provide bandwidth of 750 MHz or above and offer an average of 73 analog and 150 digital channels of video programming to subscribers. \textit{Id}. As of Jan. 2004, roughly 23 million households in the U.S. subscribed to digital cable. \textit{Id} at ¶ 37.

\textsuperscript{247} Matt Stump & Karen Brown, \textit{Cable Sees a Lot to Like in an All-Digital World}, MULTICHANNEL NEWS, May 19, 2003, at 1.

\textsuperscript{248} See Eleventh MVPD Video Competition Report, \textit{supra} note 2, at ¶ 24.

\textsuperscript{249} PTV Ex Parte Comments, \textit{supra} note 202, at 15.
MHz taken up by the analog must-carry rules that were upheld by the Supreme Court.

CONCLUSION

This article seeks to contribute to the debate over how to apply the analog must-carry rules of the '92 Cable Act to digital television. In addition to making a specific case for a digital multicast must-carry policy for PTV, the article reviewed the provisions, legislative history, and First Amendment review of the must-carry rules. Furthermore, through its review of the current status of digital transition policy, this article articulates why must-carry needs to be addressed to further the availability of local broadcast television in the digital age. Without cable carriage, the institution of PTV will be handicapped in trying to best utilize its spectrum and obtain the necessary support it needs to make the digital conversion. Likewise, with the industry-wide agreement between PTV and cable, the majority of the viewing public will be able to receive the multitude of educational and community programming and services that non-commercial stations wish to offer.

The cable industry should be lauded for the agreement it reached with public broadcasting. Admittedly, it may not have been easy for the FCC or Congress to provide PTV with preferential must-carry treatment over commercial broadcasters, especially considering the FCC’s rulings concerning primary video and dual carriage as well as the fear of judicial review. But in a period during which the FCC is considering relaxing ownership restrictions for broadcasters and cable operators, thereby enabling commercial electronic media to become even more horizontally and vertically integrated, PTV should not be an afterthought for policymakers and the telecommunications industry. In the past, Congress has

\footnotesize{\textsuperscript{250} In June 2003, the FCC proposed to revise the newspaper-broadcast and radio-television cross-ownership rules, the local television and radio multiple ownership rules and the national television ownership rule. See \textit{In the matter of 2002 Biennial Regulatory Review—Review of the Commission’s Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996}, 18 F.C.C.R. 13620 (2003); Congress changed the national television ownership rule so that a group owner’s combined stations can reach no more than 39 percent of all TV households. \textit{See 2004 Consolidated Appropriations Act, Pub. L. No. 108-199, § 629, 118 Stat. 3, 99} (2004). The Third Circuit remanded the local television and radio ownership rules and cross-media ownership limits back to the FCC. \textit{See Prometheus Radio Project v. FCC}, 373 F.3d 372 (3rd Cir. 2004).

\textsuperscript{251} The FCC is in the processes of revising its horizontal and vertical ownership rules that apply to cable systems. \textit{See In the Matter of The Commission’s Cable Horizontal and Vertical Ownership Limits, Further Notice of Proposed Rulemaking, 16 F.C.C.R. 17312} (2001); \textit{In the Matter of The Commission’s Cable Horizontal and Vertical Ownership Limits, Second Further Notice of Proposed Rulemaking, 2005 FCC LEXIS} 2785 (2005). Such a review was necessitated by the D.C. Circuit Court of Appeals. \textit{See Time Warner Entertainment Co. v. FCC}, 240 F. 3d 1126 (D.C. Cir. 2001) (reversing and remanding the horizontal and vertical ownership limits and benchmarks for greater supportive evidence to the FCC).}
been supportive of PTV. If necessary in the future, Congress may amend the Communications Act and effectively enact proactive multicast must-carry legislation for non-commercial broadcasters. Quite simply, without multicast carriage for PTV, citizens will be deprived of free, over-the-air educational programming and community services that the government and PTV member supporters have designated as a goal worth preserving.