

losing access to consumers. It would truly be ironic if consumers were to see such cable programming services replaced by broadcast signals that they can already access on cable in analog format and off-air in analog and digital format.”¹⁰⁰ And as Ameritech notes “it would be ironic, to say the least, not to mention completely inconsistent with the goals of the must carry regime, if the must carry rules, which were intended to promote diversity of viewpoints, were applied in a way that allowed broadcasters to obtain carriage for multiple channels of video programming, all of which would be subject to the same editorial control.”¹⁰¹ This would be especially troubling where broadcast stations may simply provide reformatted or time-shifted existing programming.

As cable operators increasingly invest in the creation of new regional and local programming, filling a vital programming need that historically has been at the core of the broadcasters’ mission but which is rapidly diminishing on ‘local’ broadcast stations, the digital must carry regime would have the perverse effect of diminishing localism by reducing the capacity available for such services.¹⁰²

The public interest organizations urge the Commission to “recognize, and place great weight upon,” not only over-the-air broadcast television, but “the diversity of voices that cable can provide.”¹⁰³ These organizations see no “diversity benefit in forcing cable

¹⁰⁰ Time Warner Comments at 9. See also Courtroom Television Network Comments at ii.

¹⁰¹ Ameritech Comments at 16.

¹⁰² See *infra* pages 64-68; NCTA Comments at 45-46.

¹⁰³ Comments of Office of Communications of the United Church of Christ, Inc., Media Access Project, the Benton Foundation, the Center for Media Education and the Civil Rights Forum (collectively “UCC”) at 2.

operators to carry duplicative programming,” especially if “the cost of providing such duplication will be loss of cable programming”¹⁰⁴

A double dose of must carry offers no such benefit. It serves as a disincentive for the development of diverse, high quality national, regional and local programming alternatives.

B. Contrary to NAB’s Claim, There Is No Widespread “Significant Unutilized Channel Capacity” On Cable Systems.

NAB claims that the burden on cable from dual carriage obligations is de minimis and temporary.¹⁰⁵ It argues that “as was the case with NTSC must carry, the burden on cable of adding the DTV signals for the length of the transition will be minimal.”¹⁰⁶ But assessing the digital must carry burden in the context of the NTSC analog must carry burden does not tell the whole story. At the time the 1992 Cable Act must carry provisions were enacted, the vast majority of analog stations were already being carried by cable systems without a government mandate. Digital must carry would require adding a set of largely duplicative broadcast channels.

NAB attempts to diminish the burden of carrying more than one signal of each local broadcast station as only being temporary. Apart from the constitutional problems referred to supra, the record shows there is absolutely no credible reason to believe that double carriage will be short-term -- and, indeed, no guarantee that the transition will *ever* end. As the public interest organizations recognize, “digital receiver penetration is

¹⁰⁴ Id. at 9-10.

¹⁰⁵ NAB Comments at 24.

¹⁰⁶ Id. at 25.

expected to be very slow in the first few years of the transition.”¹⁰⁷ There is no doubt that it is going to take a very long time for the nation to convert to an all-digital television environment, in light of the over 250 million analog television sets in American homes today. While the industries are moving toward digital, state-of-the-art analog television receivers are being sold everyday. Thus, for the foreseeable future and well beyond 2006, there will be two, not one, 6 Mhz broadcast signals for each local broadcast station -- each of which would be legally entitled to carriage under NAB’s argument.

NAB’s assertion that cable systems have adequate capacity to add broadcast digital signals, without jeopardizing carriage of existing cable program networks, is factually wrong.¹⁰⁸ Relying on an analysis of data from Warren Publishing’s Television and Cable Factbook by economists John Haring, Harry Shooshan and Joseph Weber (collectively “Haring”), NAB claims “significant unutilized channel capacity currently exists” on cable systems today in both large and small markets.¹⁰⁹ Haring maintains that, nationwide, the weighted average of unused channels is 4.3 and the unweighted average of unused capacity is 9.4 channels.¹¹⁰ But averages can be deceiving -- and irrelevant. What matters is not whether the hypothetical average system has adequate capacity to add new digital must carry signals during the transition; it is whether a significant number

¹⁰⁷ UCC Comments at 4, citing e.g. testimony of Josh Bernoff, Forrester Research, before Advisory Committee on Public Interest Obligations for Digital TV Broadcasters.

¹⁰⁸ NAB Comments at 25-26.

¹⁰⁹ *Id.* at 27, citing John Haring, Harry M. Shooshan III, Joseph H. Weber, “Cable System Capacity: Implications for Digital Television Must-Carry”, prepared for the National Association of Broadcasters, October 13, 1998 at i, 20 (“Haring II”).

¹¹⁰ Haring II at 13. Weighted average is based on the relative value of each cable system’s basic subscriber count in each group examined.

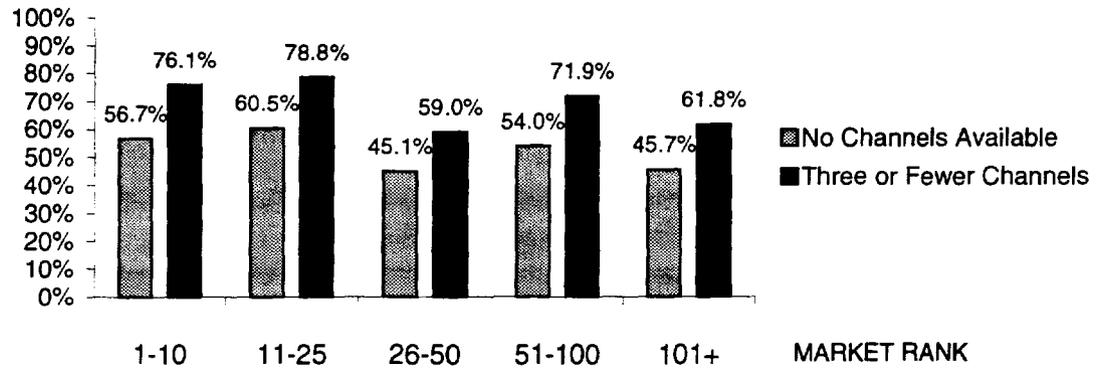
of actual systems serving a significant number of customers will be forced to remove services to accommodate analog and digital must carry.

There are at least two sources of system-by-system channel capacity data -- the Warren Publishing database relied upon by Haring and the A.C. Nielsen database. Both data bases show that a majority of customers are served by systems with no available channels, and that a substantial majority are served by systems with three or fewer available channels. This is the case for systems in markets of all sizes, from the top ten DMAs to the smallest. Those systems would have to drop services to carry new, digital must carry stations, no matter what the “average” data may purport to show. The “average” distorts actual excess capacity.

Moreover, as Haring acknowledged, the Television and Cable Factbook does not include data from approximately 30 percent of cable systems that did not report cable subscribers, channel capacity information or unused channels. Yet Haring assumed that these systems are comparable in terms of capacity as the reporting systems.¹¹¹ Putting this leap in analysis aside, however, the Factbook data still show that 56.7 percent, or over half of customers in the top 10 markets (the first to roll-out broadcast digital television), are served by systems with no excess capacity. And over three quarters, 76.1 percent, of subscribers in these markets are served by systems with three or fewer currently unused channels.

¹¹¹ Id., note 30. There are 10,717 systems included in the Warren Publishing database. The Haring analysis is based on data from only 7,453 systems. In extending these findings to the entire universe of cable systems, Haring simply analyzed the 2,153 systems which reported channel capacity information but did not report unused channels to see if their average channel capacity was comparable to the systems providing complete data. Haring ignored the remaining 1,111 systems and assumed their absence did not bias the results.

TABLE 1 - Analysis of Channels Available *Television & Cable Factbook*



In markets 11- 25, the number of customers served by systems with no available channels increases to 60.5 percent and to 78.8 percent for customers served by systems with three or fewer available channels. Looking across-the-board in the top 100 markets, the data show that there are large and small cable systems that are “channel-locked” or have few available channels for new services. The following provides a breakdown by number of systems and number of subscribers by DMA market rank that would either have no channels available or three or fewer channels available.

Analysis of Channels Available – Warren Publishing Factbook data

DMA Rank	No Channels Available	Three or fewer Channels Available	Total Systems
	# Systems / # Customers	# Systems / # Customers	# Systems / # Customers
	<i>% of Systems / % of Customers</i>	<i>% of Systems / % of Customers</i>	<i>% of Systems / % of Customers</i>
1-10	243 / 7,786,820 <i>38.1% / 56.7%</i>	350 / 10,442,475 <i>54.9% / 76.1%</i>	638 / 13,725,243
11-25	215 / 4,785,393 <i>23.9% / 60.5%</i>	364 / 6,237,998 <i>40.4% / 78.8%</i>	901 / 7,914,225
26-50	289 / 4,005,803 <i>38.1% / 56.7%</i>	456 / 5,247,297 <i>54.9% / 76.1%</i>	1,114 / 8,891,009
51-100	455 / 4,674,027 <i>19.8% / 54.0%</i>	834 / 6,218,337 <i>36.2% / 71.9%</i>	2,303 / 8,651,650
101+	535 / 2,974,734 <i>19.6% / 45.7%</i>	1,009 / 4,021,286 <i>37.0% / 61.8%</i>	2,724 / 6,508,711

Thus, a closer look at NAB’s empirical evidence shows that millions of cable customers are guaranteed to lose existing programming services if the Commission imposed carriage of local broadcast stations’ analog and digital channels on cable systems, as advocated by NAB and other broadcasters.¹¹²

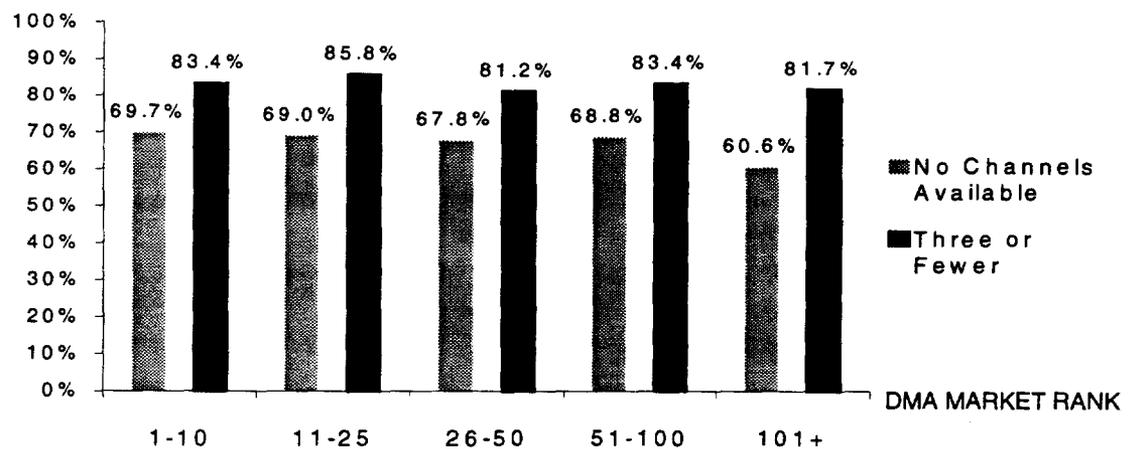
The A.C. Nielsen data cited by the Commission in the Notice provides a more complete picture of the lack of excess cable system capacity. The Nielsen CODE data base contains channel availability information for approximately 98 percent of the

¹¹² See also A&E Networks Comments, Appendix II (demonstrating approximate number of channels lost in top ten DMAs if digital must carry is adopted based on data from Television & Cable Factbook 1998).

nation's cable systems.¹¹³ Nielsen data shows that 69.7 percent of subscribers in the top ten markets are served by cable systems with no excess capacity and 83.4 percent are served by cable systems with three or fewer excess channels.

Going beyond the top ten markets to the Top 100 markets shows little variance in the number of subscribers served by channel-locked or channel-strained systems, i.e., a range of 60 - 69 percent of subscribers with no extra channels and 81 - 86 percent of subscribers with three or fewer extra channels. The Nielsen data also dispels the notion in the Haring study that large, urban markets are more likely to have excess channel capacity.¹¹⁴ Based on the Nielsen data, the majority of subscribers served by cable systems – big and small, urban and rural-- are channel locked. The following is a specific breakdown of the Nielsen data by number of systems and number of customers.

TABLE 2 - Analysis of Channels Available A.C. Nielsen



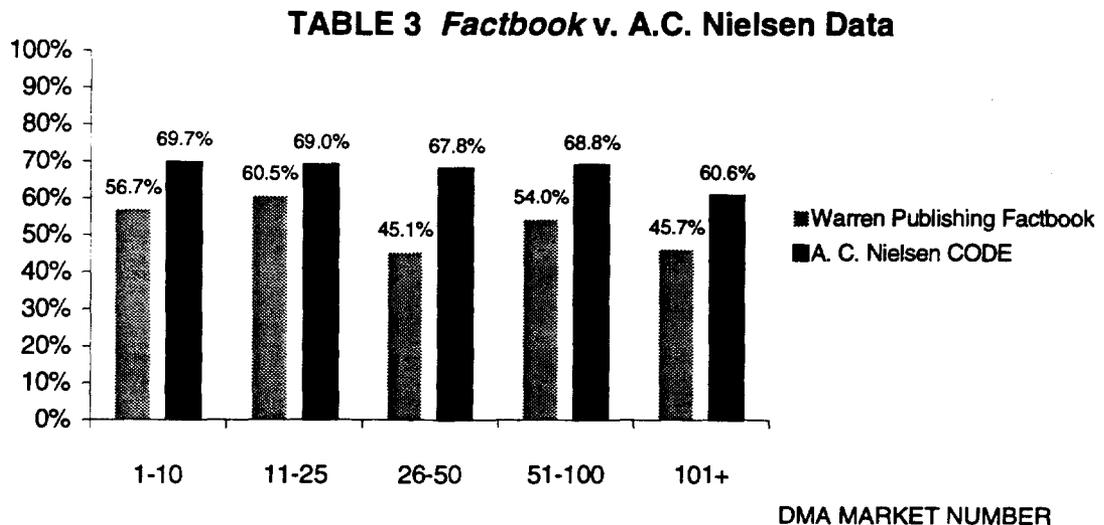
¹¹³ A.C. Nielsen, Cable On-Line Data Exchange (CODE) database data as of October 17, 1998. Of the nation's 11,424 cable systems, the CODE database provides channel availability information for 11,175 systems.

¹¹⁴ See Haring II at 14-15.

Analysis of Channels Available – A.C. Nielsen CODE data

DMA Rank	No Channels Available	Three or fewer Channels Available	Total Systems
	# Systems / # Customers % of Systems / % of Customers	# Systems / # Customers % of Systems / % of Customers	# Systems / # Customers % of Systems / % of Customers
1-10	593 / 13,803,532 58.7% / 69.7%	750 / 16,515,944 74.3% / 83.4%	1,010 / 19,796,036
11-25	699 / 8,481,469 47.4% / 69.0%	942 / 10,539,586 63.8% / 85.8%	1,476 / 12,285,467
26-50	745 / 8,008,956 47.5% / 67.8%	1,002 / 9,584,935 65.2% / 81.2%	1,568 / 11,805,180
51-100	1,614 / 8,634,620 46.3% / 68.8%	2,121 / 10,463,173 60.9% / 83.4%	3,484 / 12,542,044
101+	1,683 / 5,601,396 43.3% / 60.6%	2,241 / 7,552,361 57.7% / 81.7%	3,886 / 9,248,502

Table 3 provides a comparison of the percentage of cable customers served by systems with no channels available for Warren Publishing Factbook and Nielsen CODE



data by market.

This empirical evidence on channel-locked systems is borne out by specific examples in the record provided by multiple system operators. Time Warner, for example, demonstrated that on average its systems might be forced to drop 10 non-broadcast signals to accommodate added digital must carry requirements.¹¹⁵ In some markets, such as New York and Orlando, 14 cable program networks would have to be dropped to make room for new digital broadcast signals.¹¹⁶ Ameritech explained that if it were required to carry the digital signals of all the local commercial television stations in its service areas, it “would be forced to drop 8 cable networks from its lineup in Chicago, 5 in Cleveland, 3 in Detroit, and 2 in Columbus.”¹¹⁷ If the digital signals of noncommercial broadcast stations were added, Ameritech stated the number of cable networks that would have to be dropped would increase to 10 in Chicago, 6 in Cleveland, 5 in Detroit and 3 in Columbus.¹¹⁸

¹¹⁵ Time Warner Comments at 9, citing Affidavit of Kevin Leddy, Senior Vice President, Marketing, at Time Warner Cable. Time Warner surveyed largest systems of its 12 largest divisions, including Austin, Texas; Houston, Texas; Los Angeles, CA; (southern region); Mecklenburg County, NC; Milwaukee, Wisconsin; New York, NY (southern Manhattan), Orlando, Florida; Raleigh, NC; Rochester, NY; Syracuse, NY; Tampa, Florida; and Winston-Salem, NC. It also polled the five largest systems in its Denver-National division (Champaign, Ill., Erie, PA, Levittown, PA, Philadelphia, PA and Terre Haute, Ind.) These 17 systems combined serve almost 2.3 million subscribers. Leddy Affidavit at ¶3. Only three of the 17 systems reported having any vacant channels. Based on current channel capacity, if each system were required to carry both the analog and digital signals of broadcast stations currently carried on the system, an average of 10 non-broadcast services would have to be dropped and in some systems as many as 14 non-broadcast services would have to be dropped before reaching the one third cap. Leddy Affidavit at ¶¶6 and 7.

¹¹⁶ Id.

¹¹⁷ Ameritech New Media Comments at 22.

¹¹⁸ Id. Ameritech also pointed out that this burden would be compounded if a cable operator were required to carry digital broadcast signals on their over-the-air channels. The operator would likely have to install a series of traps to ensure that all viewers could view the signals, which would significantly degrade signal quality on adjacent channels and potentially lead to more dropped programming. Id.

Tele-Communications, Inc. (“TCI”) described the potential impact that a transitional dual carriage rule would have on District Cablevision in Washington, D.C. This system, which is currently channel locked, delivers 14 broadcast signals to its customers. Digital must carry requirements would mean that District Cablevision would have to drop 14 cable programming networks. And as TCI noted, at least four of the major stations intend to duplicate their analog programming on their digital broadcast signal, resulting in a net loss, not a gain in program diversity.¹¹⁹

C. Phased-In Must Carry Based on System Upgrades is Equally Harmful and Would Result in the Loss of Programming and Other New Services that Consumers Would Prefer and the Loss of Operator Editorial Discretion

Many broadcasters argue that dual carriage obligations should be imposed on cable systems upgrade facilities and deploy advanced technical capabilities.¹²⁰ NAB, citing Haring, believes cable upgrades and use of digital compression techniques to deploy digital and other telecommunications services “should easily accommodate full DTV must carry and actually reduce the [overall] burden of broadcast signal carriage (in relative terms).”¹²¹ NAB argues that future services, such as high speed Internet access and telephony, are driving upgrades “such that the imposition of full digital television must carry can be expected to have only minimal effect.”¹²² Thus, it asserts that cable

¹¹⁹ Tele-Communications Comments at 21.

¹²⁰ See, e.g., Comments of NAB, MSTV, and ALTV.

¹²¹ NAB Comments at 33, citing Haring II at 34.

¹²² NAB Comments at 32, citing Haring II at 28.

operators will incur “virtually no incremental cost in making certain adequate capacity is available when needed” for a second set of broadcast signals throughout the transition.¹²³

First, as we describe below, NAB grossly overestimates projected channel capacity in cable systems and ignores the substantial costs if digital broadcast signals must be made viewable by every cable subscriber with analog television sets whether a system is upgraded or not.¹²⁴ Second, as discussed in our initial comments, there is no shortage of cable program networks pounding at the door to fill up the first available channel capacity.¹²⁵ As NAB recognizes, cable systems are spending billions of dollars to upgrade their facilities to prepare to offer a range of services, including digital standard and high definition programming, telephony and Internet access. To the extent digital broadcast signals take up valuable shelf space on the cable systems of the future at the expense of these new services, consumers will pay a heavy cost.

1. Haring grossly overstates future cable channel capacity

Haring concludes that the capacity of cable systems is likely to explode within the next few years.¹²⁶ He indicates that the total system capacity is a function of the following factors: the total number of 6 MHz channels (750 MHz = 110 channels); the number of channels converted to digital transmission; the transmission system used, which determines the digital data rate per 6 MHz channel (current maximum of about 38Mbps); and the compression method and signal quality desired (HDTV or SDTV)

¹²³ NAB Comments at 32-33.

¹²⁴ See, e.g., NCTA Comments at 32; Armstrong Holdings and Inter-Mountain Cable Comments at 39-40.

¹²⁵ NCTA Comments at 42-43.

¹²⁶ Haring II at 25.

which determines the number of digital programs sent over a 6 MHz channel (current maximum of 24, assuming 38 Mbps and extensive use of statistical multiplexing).

In an example, Haring maintains that if an 80-channel cable system devoted 4 channels to digital, ran the digital channels at 38 Mbps, and ran 18 multiplexed video signals per channel, then the total system capacity would be 76 plus 4×18 , or 148 program services. Further, even if an additional 20 digital broadcast television channels needed to be carried, these would fit into ten 6 MHz channels, or 6.8 percent of the system's capacity.

This example is based on a system utilizing 256-QAM (or 16-VSB) modulation technology in order to achieve 38 Mbps. However, the cable industry is a long way from widespread deployment of 256-QAM capability and many of the digital set-tops currently in use do not support it. For now, the cable industry is deploying 64-QAM, which is capable of achieving approximately a 12:1 compression ratio for standard definition pictures.

Nevertheless, even assuming that cable operators eventually use 256-QAM modulation in advanced systems, Haring's 80-channel system example grossly exaggerates cable digital capacity. Haring dedicates four analog channels to carrying digital services using 18:1 compression. At that compression ratio, these channels would produce only standard definition pictures. Thus, Haring's calculation does not demonstrate the total system capacity available for carrying digital broadcast signals because these channels are insufficient to deliver high definition pictures. Assuming broadcasters provide some HDTV, which requires one-half of a 6 MHz cable channel (again, assuming the use of highly advanced 256-QAM), the operator cannot yield 18

broadcast signals from the 6 MHz of bandwidth. The cable operator would only yield 8 broadcast channels. Under the more pervasive 64-QAM scenario, full HDTV (e.g. 1080i) would require the operator to dedicate one full 6 MHz channel for each broadcast station.

In sum, while the four channels in Haring's example could conceivably be set aside for digital programming at a highly advanced 18:1 compression ratio in the future, additional 6 MHz channels must still be set aside if HDTV is the preferred broadcaster signal format.¹²⁷ The point is that compression has a trade-off in terms of picture quality. Cable operators will have to engineer their system capacity to accommodate full broadcast HDTV programming, however little of such programming may be offered.

2. Cable program networks waiting for carriage and new telecommunications services will more than fill up new digital capacity.

Cable operators are expending billions of dollars to increase capacity and improve their infrastructure in order to meet customer demand for a range of new programming options, including high definition television. As MediaOne explains, "upgrades are undertaken to enable cable operators to provide consumers with services they have requested, such as new non-broadcast video services, additional premium services, multiplexed versions of existing premium services, multiple channel of pay-per-view, and digital music services, as well as high speed data services, Internet connectivity, and the delivery of competitive telephony services."¹²⁸ All of these services are part of the cable industry's redoubled efforts to meet growing competition for their core video business.

¹²⁷ Haring's 50-channel system example, which passes through ten broadcast digital signals, clearly indicates the burden this method would have on relatively small operators. These are the systems that would most likely use this method and would have to devote channel capacity on a one-for-one basis to carry broadcast signals that no customer can see.

¹²⁸ MediaOne Comments at 3.

Just as capacity comes on line for services viewers want, new digital must carry signals would snap it up. A phased-in or system upgrade approach, which would give digital broadcast signals first priority for carriage on new channel capacity, “would be particularly threatening to emerging programmers who are counting on such added capacity to finally obtain carriage.”¹²⁹ As one programmer, Encore, explained:

[C]hannel capacity is a most precious commodity on all cable systems, which is true in even the most sophisticated, rebuilt and expanded systems. . . . It is clear that even for those cable systems expanding to 750 MHz with an offering of digital service to subscribers, such expanded capacity is no panacea of carriage for the rapidly growing number of competing program networks in addition to analog and digital local broadcast signals.¹³⁰

As NCTA and other commenters pointed out, there are more takers than there is available cable spectrum in even the most advanced system. A phased-in must carry requirement based on system upgrades would deprive consumers of access to much-desired cable program networks that have had little or no distribution and to new cutting edge services that cable’s broadband facilities are able to provide. In Haring’s mixed analog and digital cable system of the future, it would mean that for every one broadcast station carried (transmitting any amount of HDTV programming), many cable networks and other services would be bumped or the opportunity for carriage would be foreclosed. These losses are not imaginary -- as we have documented, there is a surplus of programming networks out there for all available channel space. And none of it “copies” an analog service as simulcast broadcast signals would.

¹²⁹ Ovation Comments at 6.

¹³⁰ Encore Comments at 4, 5 (also describes rapid increase in the number of cable networks since 1993 competing for limited channel space); See also, Weather Channel at 16.

Digital must carry diminishes the value of digital tiers to cable customers, who are paying for such services on an optional basis. To the extent analog channels must be taken off to use for broadcasters in compressed digital, such as with a HITS-type system, it means less available product for analog customers. And if all digital broadcast signals must be made viewable, as we have shown, it means imposing costs on consumers to receive duplicating services.

In sum, whether or not an operator has excess capacity, we believe that mandating carriage of transitional digital broadcast signals on even a phased-in basis will result in American consumers having less, not more, programming choice.

A. Digital Must Carry Is Unfair to Cable Program Networks

1. Broadcasters' desire for an utterly risk-free transition will be a disincentive for others to invest in new programming services.

The broadcast industry -- not cable operators -- asked for \$70 billion worth of free spectrum and got it. Then they got virtually total flexibility to do with it as they wish, including providing non-broadcast services.¹³¹ And they got an open-ended schedule for the give-back of their analog spectrum. Now they want the government to take away all their risks to ensure the success of their digital services, at the expense of cable operators and cable program networks.

They want the government to regulate cable in order to overcome any problems they may have with their over-the-air service.

¹³¹ Ameritech New Media Comments at 1 (quoting Rep. Michael Oxley: "it's important to note that it was the broadcasters, now some 10 years ago, who asked to pursue HDTV, lest the Japanese best us in this area.")

Broadcasters demand cable carriage for digital signals because “this transition is enormously expensive and entails substantial risks.”¹³² ALTV laments that the digital transition has “costs,” and that it is “not likely to prove easy or painless.”¹³³ We agree. Digital television is an uncertain, costly venture in need of market experimentation by all industry participants -- broadcasters, cable operators, and other MVPDs on terms that make business sense. This is why so many commenters urge the Commission to recognize that it is ideally suited to marketplace forces, not a thumb on the scale in favor of one competitive industry over another -- especially where that industry already has the advantage of free over-the-air spectrum, complete flexibility in using that spectrum, and the safety net of mandatory carriage of its primary analog signals.

If digital television is really a viable technology, then it will succeed of its own force. All broadcasters have to do is invest in the transition. If broadcasters cannot meet the government build-out deadlines or if digital does not take off to justify new investments, then their recourse is with the government from which they sought and obtained a sweet deal. Their recourse is not with the cable television industry. Broadcasters have the expertise and resources to develop programming for their new free spectrum. But guaranteeing the success of uncertain services artificially supported by cable is simply wrong-headed policy.

And why give broadcast digital services preference over cable networks, which have no government-subsidized distribution outlet? As many cable program networks made clear, they are struggling to get the first foothold in the multi-channel environment,

¹³² Joint Comments (various public television licensees) at 2.

¹³³ ALTV Comments at 3.

having made substantial up-front investments in a risky and highly competitive marketplace economy. America's Health Network et al. elucidated this point:

Today's cable networks typically operate at a loss for a number of years due to the enormous costs involved in launching a network and the fact that the networks' primary revenue sources – advertising and affiliation fees – are linked directly to subscriber distribution. To generate the revenues needed to turn the corner to profitability, cable networks must increase subscriber distribution substantially in their first five years of operation. The level of distribution needed to recover accumulated investment is even more substantial. To obtain distribution, cable networks need access to scarce channel capacity (“shelf space”) on cable systems.¹³⁴

NAB asserts the importance of must carry for smaller broadcasters in all size markets and those affiliated with emerging and niche networks which particularly need access to the entire audience to grow and thrive.¹³⁵ In arguing for imposing digital must carry on top of analog must carry, it states that “in the context of trying to develop new DTV operations, being blocked from the market can cripple a new operation most particularly, when some stronger broadcast competitors are not so blocked.”¹³⁶ But can that be any less true for cable networks, which have no over-the-air distribution, no guaranteed carriage of their predominant analog channel and all that goes with that to promote a new digital channel? As HBO noted, cable programmers unlike broadcasters must procure their own digital transmission capacity.¹³⁷ A government policy that puts

¹³⁴ America's Health Network et al. Comments, at 14. See also Encore Comments at 4; UCC Comments at 8-9 (the public interest organizations oppose piling on carriage requirements for both analog and digital signals in light of the harm to alternative cable voices).

¹³⁵ NAB Comments at 23.

¹³⁶ Id.

¹³⁷ Home Box Office and Turner Broadcasting Comments at 30-31 (describing transponder capacity costs for digital services).

“broadcasters first” over any cable network will not only harm established networks but be a disincentive to further investments in new programming services.¹³⁸

Entire business plans have been built around gaining access to new digital capacity. Discovery Communications, for example, launched its new niche services on compressed digital when “confronted with the channel shortage reality” and the unlikelihood of securing carriage for these services.¹³⁹ It believes that “any rule that would reduce extant channel capacity, especially one that could have an enormous impact like digital must carry, will certainly cause DCI and other cable programmers to reconsider plans to launch new networks, and will undoubtedly cause many plans to be scrapped altogether.”¹⁴⁰ A similar view is offered by the Weather Channel: “transitional digital must carry will reduce cable operators’ ability to make non-broadcast startup services more widely available to consumers, as well as diminish incentives to create new programming for consumers.”¹⁴¹

¹³⁸ See, e.g., NCTA Comments at 48; Tele-Communications, Inc. Comments at 19-21; A&E Networks Comments at iii. In its comments, C-SPAN provided an extensive study which projects the harm to C-SPAN networks under digital must carry based on a probability model that estimates cable operators’ decision to carry or not carry these networks. C-SPAN Comments at 6-9.

¹³⁹ Discovery Comments at 5.

¹⁴⁰ *Id.* at 24; See also Lifetime Comments at 14 (decisions to launch new programming services are linked directly to projections about obtaining carriage. Faced with competition from digital broadcasters armed with a government-granted right to carriage, many entrepreneurial cable programmers would reconsider or scrap altogether plans to launch new networks.)

B. The Broadcasters' Supposedly Unique Role in Local News and Public Affairs Is Greatly Diminished.

ALTV touts the need for expanded must carry regulation because broadcast television is “not just another video medium.”¹⁴² It proclaims its entertainment, sports, local and national news, election results, weather advisories, children’s and public interest programming sets it apart from other video delivery media. As stated by broadcast licensee, Lee Enterprises, Inc., “if the Commission’s diversity mandate means anything, it surely must direct the agency to preserve the availability of many competing local outlets for news and public affairs programming” on broadcast television.¹⁴³

This argument is an overtly content-based justification that would trigger strict constitutional scrutiny under the First Amendment. In any event, the argument is completely disconnected from the facts of today’s video marketplace. The evidence shows that it is cable, not broadcasting, that is playing the increasingly prominent role in providing local programming, particularly news and public affairs, in serving the needs and interests of children, and in meeting the long-standing public interest goals of localism and diversity.¹⁴⁴

The evidence is undeniable that broadcasters have retrenched from devoting air-time to local and national public affairs and election coverage and that cable television has stepped up to fill the void. And as we pointed out in our initial comments, local and regional cable news channels around the country are providing up-to-the-minute news and information, analysis of state and local government issues and unfiltered access to

¹⁴¹ Weather Channel Comments at 2; See also ZDTV Comments at 4.

¹⁴² ALTV Comments at 4.

¹⁴³ Lee Enterprises, Inc. Comments at 5.

candidates. Cable's coverage of politics takes many forms, including candidate debates, issues-oriented public affairs programming, live, interactive "town hall" forums, documentaries on past and present political figures, behind-the-scenes looks at decision-makers, and in-depth state and local election analysis.

For example, Michigan Government Television, a non-profit cable network covering state government, works to reverse the trend in low voter turnout and lack of citizen interest in their government.¹⁴⁵ In cooperation with local cable operators, MGTV also provides its programming to the state's schools, including live phone-in programs with state officials, coverage of the legislature and the state Supreme Court. Similar networks serve the citizens of such states as Pennsylvania and California. In addition to the growing number of regional and local 24-hour news channels, national 24-hour news networks including America's Voice, C-SPAN, C-SPAN-2, CNN, CNBC, Fox News and MSNBC devote hours and hours of airtime to the coverage of national politics.¹⁴⁶

1998 election coverage demonstrated that cable television provides the most comprehensive coverage of the candidates, their views and the electoral process at the national and local level. As the attached highlights of cable's election coverage show, cable networks, not broadcast stations, were the place to turn for in-depth coverage.¹⁴⁷

¹⁴⁴ See, e.g., NCTA Comments at 45-46.

¹⁴⁵ MGTV Comments at 3 (describing how the loss of MGTV and other state government networks "silences the voices of state legislators and leaders since no other medium will offer the chance for their entire session or press conference or committee or argument to be heard without editing or biased analysis.")

¹⁴⁶ See, e.g., C-SPAN Networks Comments at 1-2.

¹⁴⁷ See, e.g., "Cable Scoops TV Networks", New York Post, November 4, 1998 ("the fact that the [broadcast networks] waited until 10 o'clock to air their reports is a clear sign that competitive network news is a thing of the past. They're sitting back and letting cable TV run away with news"); "TV Guide: For the Latest, Turn to Cable", Wall Street Journal, November 3, 1998 ("with no presidential race this year, the TV networks are

Here are just a few examples of the types of election coverage provided by cable television systems nationwide:

- New York 1 News produced “Inside City Hall”, an hour-long political program, which aired every weeknight. The show featured in-studio and remote interviews with politicians, political observers, commentators and others involved in New York politics. It carried at least eight debates during primary season featuring candidates for Senate, House, attorney general and State Assembly.
- Pennsylvania Cable Network (PCN), which serves more than 2 million subscribers on 88 cable systems, provided 220 hours of election-related programming since September 1, 1998. It produced 15 live viewer call-in programs, and covered candidate debates, interviews, and speeches.¹⁴⁸
- News 12, five regional news networks which serve New York, New Jersey and Connecticut covered many smaller local and state-wide races in communities largely ignored by broadcast TV stations, including producing debates, and town meetings.
- NewsChannel 8, which serves the greater Washington, D. C. area, aired weekly forums and six local, state and Congressional debates.
- ChicagoLand TV (CLTV), Pittsburgh Cable News Channel, New England Cable News, CN 8: The Comcast Network (NJ, PA and MD) and Orange County NewsChannel (CA) provided continuous election night coverage.

See Appendix B.

In the nation’s capital, for example, cable’s election night coverage was far more extensive than that of the local broadcast stations. Two local stations had no election coverage between 6:30 PM and 12:30 AM (ET); each of the three public broadcast stations in the market had only minimal coverage during these hours and no local station

going light. The Big Three won’t interrupt programming until 10 pm ET for their election reports, except to call some races in short reports. The cable news networks plan far more expansive coverage”); “The TV Column”, *The Washington Post*, November 3, 1998 (“the cable news networks are, not surprisingly, taking the lead on today’s election coverage”); “Viewers elect for cable news”, *Electronic Media*, November 9, 1998 (“while the broadcast networks blew off election night coverage for the most part, cable news networks more than picked up the slack”).

¹⁴⁸ See Pennsylvania Cable Networks Comments at 4 (noting that of the 46 commercial and noncommercial broadcast stations in Pennsylvania, none has a bureau assigned to cover the activities of state government.)

had more than an hour and a half of exclusive election coverage.¹⁴⁹ By comparison, five national cable networks had continuous election coverage during most of the night and NewsChannel 8 covered the elections all evening – with heavy emphasis on local elections.¹⁵⁰

Thus, the factual underpinnings of broadcaster localism that lies at the core of the case for extending digital must carry are shaky. With respect to the recent election coverage, cable television, not broadcast television, played a “tangible, demonstrable, and assured”¹⁵¹ role in the area of local news and public affairs. ALTV comments about digital broadcasters’ public interest responsibilities (which have yet to be defined in the digital era), yet some broadcasters are resisting any specific obligations commensurate with the additional valuable free digital spectrum and other perquisites that they have been given.¹⁵² There is no indication that broadcasters intend to provide any new local programming on their DTV channels. And the stations that are likely to demand must carry are the least likely to provide any news or public affairs programming at all, if their analog service is a predictor.

The public interest organizations urge the Commission to “clearly state” that “if local programming continues to disappear, a primary element of the Supreme Court

¹⁴⁹ Letter from Decker Anstrom, President and CEO, NCTA to Honorable William Kennard, November 12, 1998, attached.

¹⁵⁰ Id.

¹⁵¹ In remarks before the International Radio and Television Society on September 15, 1998, Chairman Kennard asked what makes broadcasters unique “as cable operators create local programming, particularly news and public affairs shows”? He asked “is this uniqueness significantly tangible, demonstrable, and assured to justify requiring cable carriage?”

¹⁵² See, e.g., “Gore Panel takes middle ground, broadcasters balk at free airtime, loss of editorial control”, *Broadcasting & Cable*, December 21, 1998.

rationale to uphold must carry will disappear, too.”¹⁵³ They warn that “if local programming continues to shrink or remain non-existent and if the Commission fails to require even a minimal amount of such programming, the agency will find it extremely difficult to justify carriage of the analog and digital signals in the face of a constitutional challenge.”¹⁵⁴

As a policy matter, the evidence shows that policies based on local broadcasters’ “unique role” in local news and information are losing their factual foundation compared to cable. On this weakening policy base, the government should not construct a new must carry regime.

IV. IT IS FAR TOO EARLY FOR THE COMMISSION TO DEFINE SPECIFIC STATUTORY TERMS IN THE MUST CARRY PROVISIONS OF THE ACT THAT WOULD APPLY ONLY AFTER THE TRANSITION.

As we demonstrated in Sec. I, digital broadcast signals are not legally entitled to any must carry rights during the transition. They do not automatically gain certain rights under Sec. 614 that apply to the carriage of analog stations eligible for must carry today. Thus, there is no reason for the Commission to address issues raised by certain commenters relating to such matters as what constitutes “primary video,” or “material degradation” of the digital signal; what content is “program-related”; where “ancillary and supplementary services” begin and end for carriage purposes; and what channel positioning rights are applicable during the transition.¹⁵⁵

¹⁵³ UCC Comments at 3; *Id.* at 6.

¹⁵⁴ *Id.* at 6 (emphasis in original).

¹⁵⁵ *See, e.g.*, Comments of NAB, NBC, Zenith Electronics, and Thomson Consumer Electronics.

And even assuming mandatory carriage rules survive the transition to digital, it is far too early for the Commission to lock in rules under Sec. 614 and other provisions of the Act. Digital broadcasting is barely off the ground.

The broadcasters are not even confident that their digital signals will work very well over-the-air. The early introduction of the service is plagued with reception problems.¹⁵⁶ For example, one broadcaster noted that “recent industry tests have indicated that there are substantial technical problems in receiving HDTV signals off-the-air in urban areas.”¹⁵⁷ It maintains that only with cable carriage will the viewing public, who have DTV receivers and cannot receive DTV reception over-the-air, be able to reap the benefits of DTV.¹⁵⁸ Another broadcaster notes “serious technical problems with DTV” and that “viewers may be averse to the new technology if required to rely on 30-foot antennas or the like for reception purposes.”¹⁵⁹ It believes that “immediate DTV cable carriage” will fix the problem and “assure stations that their investment in the DTV roll-out, substantial though it is, will not have been for naught.”¹⁶⁰

While over-the-air reception problems may be worked out, there is still uncertainty about what digital broadcasting will entail and what content and services will be offered.¹⁶¹ How can the Commission adopt rules that will define, for example, program-related material and primary video when no one knows what combination of

¹⁵⁶ See, e.g., ALTV Comments at 30.

¹⁵⁷ Shockley Communications Corporation Comments at 3.

¹⁵⁸ Id.

¹⁵⁹ Cordillera Communications, Inc. Comments at 5.

¹⁶⁰ Id.

¹⁶¹ “Some Digital Services Face 5% U.S. Tax”, New York Times, November 20, 1998 (NAB’s Dennis Wharton said “I have yet to hear of any broadcaster which has a definite business plan.”)

services the open-ended digital broadcasting medium will offer? The public interest organizations zeroed in on this uncertainty in opposing digital must carry at this stage of the transition. They believe such rules are at best premature given “the unanswered technological questions, broadcasters’ inability to develop clear business plans, the pendency of private agreements and undefined scope of public interest obligations.”¹⁶² They argue that “mandating must carry prior to the resolution of these technological issues could have the effect of stifling growth of new DTV services, postponing viewer acceptance of digital TV, and delay in the return of analog spectrum.”¹⁶³

Microsoft Corporation states that “because of unresolved technical issues, adopting must carry obligations now for DTV would be premature and impractical.”¹⁶⁴ It describes several key technology factors that require further development, including end-to-end copy protection, the carriage of data via Internet protocol, and “incomplete, inefficient and costly” cable carriage options.¹⁶⁵ The public interest groups too recognize that “technological uncertainties concerning DTV are numerous and evolving,” noting “the need for effective copy protection, for standards to support Internet Protocol Transmission, and for affordable ‘pass-through’ and ‘remodulation’ techniques.”¹⁶⁶

Digital broadcasting is a medium whose technology and consumer interest is “totally untested in the marketplace.”¹⁶⁷ Sony Electronics believes that “market forces, as

¹⁶² UCC Comments at 2.

¹⁶³ Id. at 5.

¹⁶⁴ Microsoft Comments at i.

¹⁶⁵ Id.; See also Comments of MediaOne, Time Warner and NCTA on complexity in new broadband facilities.

¹⁶⁶ UCC Comments at 5, 19.

¹⁶⁷ Cable Telecommunications Association Comments at 2.

evidenced by the ongoing collaboration between the broadcasting, cable, programming, and electronic equipment industries, will effectively deal with most of the technical issues referenced” in the Notice.¹⁶⁸ The Commission should not attempt to define the detailed statutory parameters of this new service under the must carry provisions until the transition is completed. It is far too early – by a decade or more – to set into law rules that may be widely out of sync with the ultimate deployment of digital broadcasting.

V. NCTA IS COMMITTED TO CONTINUING TO WORK WITH CEMA TO DEVELOP VOLUNTARY INTER-INDUSTRY STANDARDS FOR DIGITAL CABLE-READY RECEIVERS BUT OPPOSES PROPOSALS THAT WOULD IMPEDE EFFICIENT, COST-EFFECTIVE AND HIGH QUALITY DELIVERY OF SERVICES TO CUSTOMERS.

The Consumer Electronics Manufacturer’s Association (“CEMA”), Thomson Consumer Electronics, Philips Electronics North America Corporation, and NAB urge the Commission to adopt technical requirements for the retransmission of broadcast signals under the must carry provisions or other technical rules.¹⁶⁹ They seek rules that would require operators to, among other things, retransmit broadcast signals in a particular resolution, retransmit all data in the 6 MHz channel, including program and system information protocol (“PSIP”) information, with no alteration, and require operators to deliver an 8 VSB signal to DTV receivers. As discussed above, we believe that the 1992 Cable Act must carry provisions accord no rights to digital broadcast

¹⁶⁸ Sony Comments at i.

¹⁶⁹ CEMA Comments at 7-14; Thomson Comments at 8-16; Philips Comments at 10-12; NAB Comments at 46-48, citing Attachment G. Sony Electronics believes that “government regulation should be kept to an absolute minimum,” and that the FCC should not mandate set top box down-conversion capability, DTV receiver standards, or copy protection standards. Sony Comments at i.

signals during the transition and, in any event, defining the technical parameters of carriage of digital broadcast signals after the transition is far too premature.

Moreover, as described in a technical paper attached to these comments, the various approaches advocated principally by CEMA and NAB for the carriage of digital broadcast signals would be costly to implement and would fail to take into account the unique attributes and complexity of cable's transmission scheme. These proposals would severely limit a cable operator's ability to optimize the delivery of services over the cable distribution network for the cable consumer's benefit.¹⁷⁰

For example, CEMA urges the Commission to require cable operators to deliver an "ATSC-compliant" or 8 VSB signal to DTV receivers until the industries agree on technical standards for cable-ready DTV receivers. However, 8-VSB modulation is not an effective solution for cable systems because, as noted earlier, the cable industry is utilizing QAM modulation. Simply passing the broadcasters' 8-VSB signal through would be an inefficient use of cable channel capacity because it would take up one 6 MHz analog channel on the system for one full resolution HDTV channel. With 64-QAM, the cable operator would be able to deliver one HDTV channel and multiple SDTV channels in the same bandwidth.¹⁷¹ In addition, under CEMA's approach, cable customers would not be able to receive on-screen display information while tuned to 8-VSB.

Another approach proposed, which involves the remodulation of the QAM signal to VSB in the digital set top output in first generation VSB-only digital receivers, would

¹⁷⁰ See "NCTA Response to CEMA and NAB on Technical Issues," William A. Check, Ph.D., NCTA Vice President, Science and Technology, and Andy Scott, NCTA Director of Engineering, Appendix C.

impose burdensome and unnecessary costs.¹⁷² It would also fail to protect copyrighted content, a critical concern for the cable and motion picture industries.

The cable industry and the consumer electronics industry are working to resolve compatibility issues in the next generation of DTV receivers. As described in the technical paper attached, NCTA and CEMA reported to Chairman Kennard that the industries reached an agreement on October 30, 1998 regarding the specifications for an interface between the digital set top box and the digital receiver, the IEEE 1394. This interface will enable cable systems to use QAM modulation without requiring the inclusion of expensive computing power in the set top box and will support the use of digital copy protection technology. NCTA also continues to work with CEMA to develop voluntary inter-industry standards for digital cable-ready TV sets under the auspices of the Digital Standards Subcommittee of the NCTA/CEMA Joint Engineering Committee (JEC).

The foregoing issues and other complex technical matters are being addressed by the inter-industry standards-setting organizations and in on-going negotiations between cable companies and broadcast companies. We urge the Commission not to intervene in this process.

¹⁷¹ Id. at 2.

CONCLUSION

Broadcasters, cable operators, DBS operators and other video delivery media and content providers are entering the digital world. As the industries navigate through this complex transition, broadcasters – unlike cable program networks – will be protected with guaranteed carriage of the signal that generates the advertising revenues and audience: the analog signal.

Cable television should not be forced to prop up digital broadcasting at the expense of consumers, cable operators and cable program networks.

Respectfully submitted,



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December 22, 1998

APPENDIX A

National and Regional Cable Program Networks

Network	Launch Date
A&E Television Networks (A&E)	February 1984
Adam & Eve	February 1994
Adultvision	July 1995
All News Channel	November 1989
American Movie Classics	October 1984
America's Health Network	March 1996
America's Voice	December 1993
ANA Television	December 1991
Animal Planet	October 1996
Arabic Channel, The	April 1991
Asian American Satellite TV	January 1992
Automotive Television Network	September 1995
BayTV	July 1994
BBC America	March 1998
BET	January 1980
BET Action Pay Per View	September 1990
BET Movies/Starz! ³	February 1997
Bet on Jazz: The Cable Jazz	January 1996
Bloomberg Television	January 1995
Box, The	December 1985
Bravo Cable Network	December 1980
C-SPAN	March 1979
C-SPAN2	June 1986
C-SPAN Extra	September 1997
C/net: the computer network	April 1995
Cable TV Network of New Jersey	July 1983
Cable Video Store	April 1986
California Channel, The	February 1991
Canal Sur	August 1991
Cartoon Network	October 1992
Casa Club TV	July 1997
CBS Eye On People	March 1997
CBS TeleNoticias	December 1994
Celtic Vision	March 1995
ChicagoLand Television News	January 1993
Cine Latino	December 1994
Cinemax	August 1980
Classic Arts Showcase	May 1994
CMT: Country Music Television	March 1983
CNBC	April 1989
CNN	June 1980
CNN Headline News	January 1982
CNN/SI	December 1996

National and Regional Cable Program Networks

Network	Launch Date
CNNfn - the financial network	December 1995
CNNi (CNN International)	January 1995
Comcast SportsNet	October 1997
Comedy Central	April 1991
Consumer's Choice	December 1994
County TV Network San Diego	July 1996
Court TV	July 1991
Deep Dish TV	1986
Discovery Channel	June 1985
Discovery Civilization	October 1996
Discovery en Espanol	August 1998
Discovery Health Channel	July 1998
Discovery Home & Leisure	October 1996
Discovery Kids	October 1996
Discovery Science	October 1996
Discovery Wings Channel	July 1998
Disney Channel	April 1983
Dream Network, The	December 1994
E! Entertainment Television	June 1990
Ecumenical Television Channel	1983
Empire Sports Network	December 1990
Encore	April 1991
Encore Thematic Multiplex SM	July 1994
ESPN	September 1979
ESPN Classic	May 1995
ESPN2	October 1993
ESPNEWS	November 1996
Ethnic-American Broadcasting	1992
EWTN	August 1981
Family Channel	July 1997
Filipino Channel, The	April 1994
FIT TV	December 1993
Flix	August 1992
Food Network	November 1993
FOX Family Channel	April 1977
Fox News Channel	October 1996
Fox Sports Américas	November 1993
Fox Sports Arizona	September 1996
Fox Sports Bay Area	April 1990
Fox Sports Chicago	January 1984
Fox Sports Detroit	September 1997
Fox Sports New England	January 1998
Fox Sports Northwest	November 1988
Fox Sports Ohio	February 1989

National and Regional Cable Program Networks

Network	Launch Date
Fox Sports Pittsburgh	April 1986
Fox Sports Rocky Mountain	November 1988
Fox Sports South	August 1990
Fox Sports Southwest	January 1983
Fox Sports West	October 1985
Fox Sports West 2	January 1997
Free Speech TV	June 1995
FX (Fox Basic Cable)	June 1994
FXM: Movies from Fox	November 1994
Galavisión	October 1979
Game Show Network	December 1994
Gay Entertainment Television	December 1995
Gems International Television	April 1993
Golf Channel, The	January 1995
Good Life TV Network	1985
Great American Country	December 1995
GRTV Network	January 1996
HBO	November 1972
Hip Hop Network	January 1997
History Channel, The	January 1995
Home & Garden Television	December 1994
Home Shopping Network	July 1985
Home Team Sports	April 1984
Hot Choice	June 1986
HTV	August 1995
Idea Channel, The	January 1992
Independent Film Channel	September 1994
Inspirational Network, The	1990
Interactive Channel, The	November 1993
International Channel	July 1990
International Television	April 1986
Kaleidoscope Network, Inc.	September 1990
Knowledge TV	November 1987
La TV Internationale, TV 5	January 1998
Ladbroke Racing Network	November 1984
Las Vegas Television Network	November 1991
Learning Channel, The	November 1980
Lifetime Television	February 1984
Lightspan Partnership, Inc., The	February 1995
Locomotion Channel, The	November 1996
Lottery Channel, The	November 1995
M2: Music Television	August 1996
Madison Square Garden Network	October 1969

National and Regional Cable Program Networks

Network	Launch Date
Main Street	January 1988
MediaOne	December 1995
Midwest Sports Channel	March 1989
Military Channel	July 1998
Moody Broadcasting Network	May 1982
MOR Galleria	September 1992
Movie Channel, The (TMC)	December 1979
MOVIEplex	October 1994
MSNBC	July 1996
MTV Networks Latin America	October 1993
MTV: Music Television	August 1981
MuchMusic USA	July 1994
Music Choice	May 1990
My Pet TV	September 1996
NASA Television	January 1980
National & International Singles TV	April 1995
National Jewish Television	May 1981
Neshama	December 1998
New England Cable News	March 1992
New England Sports Network	March 1984
New York 1 News	September 1992
News 12 Bronx	June 1997
News 12 Connecticut	June 1995
News 12 Long Island	December 1986
News 12 New Jersey	March 1996
News 12 Westchester	November 1995
News Plus	December 1984
NewsChannel 8	October 1991
Newsworld International	September 1994
Nick at Nite's TV Land	April 1996
Nickelodeon/Nick at Nite	April 1979
Nippon Golden Network	January 1982
NorthWest Cable News	December 1995
NTN Network	1984
Oasis TV	September 1997
Odyssey Channel	September 1988
Ohio News Network	May 1997
Orange County NewsChannel	September 1990
Outdoor Channel, The	April 1993
Outdoor Life Network	July 1995
Ovation - The Arts Network	April 1996
Pass Sports	April 1984
Pennsylvania Cable Network	September 1979
Pittsburgh Cable News Channel	January 1994

National and Regional Cable Program Networks

Network	Launch Date
Planet Central Television	May 1995
Playboy TV	November 1982
Praise Television	December 1996
Product Information Network	April 1994
Q2	September 1994
QVC	November 1986
Real Estate Network, The	N/A
Recovery Network	June 1998
Romance Classics	January 1997
Sci-Fi Channel	September 1992
Scola	August 1987
Seminar TV	N/A
Shop at Home	June 1986
Showtime	July 1976
SingleVision	June 1994
Six News Now	July 1995
Sneak Prevue	May 1991
Speedvision Network	December 1995
Spice	May 1989
SportsChannel Florida	December 1987
Starnet	January 1989
Starz!	February 1994
Starz! ²	March 15, 1996
Student Film Network	November 1994
Style.	October 1998
Sundance Channel	February 1996
Sunshine Network	March 1988
Superaudio Cable Radio Service	September 1987
TBS Superstation	December 1976
Telemundo	January 1987
TNN: The Nashville Network	March 1983
TNT	October 1988
Toon Disney	April 1998
Total Communication Network	November 1995
Travel Channel, The	February 1987
Trinity Broadcasting Network	May 1973
Trio	September 1994
Turner Classic Movies	April 1994
TV Asia	April 1993
TV Guide Channel	January 1988
TV JAPAN	April 1991
TVN Digital Cable	February 1998
U Network	October 1989
Univision	September 1976

National and Regional Cable Program Networks

Network	Launch Date
USA Network	April 1980
UPTV/KTLA	March 1988
UPTV/WGN	November 1978
UPTV/WPIX	May 1984
ValueVision	October 1991
VH1	January 1985
Video Catalog Channel	October 1991
Viewer's Choice	November 1985
Wam! America's Kidz Network	September 1994
Weather Channel, The	May 1982
Wisdom Network	July 1996
WorldJazz	July 1995
Worship Network, The	September 1992
WSBK	February 1988
Yesterday USA	1985
Z Music Television	March 1993
ZDTV	May 1998

Planned Cable Program Networks

Network	Expected Launch Date
American Legal Network	N/A
American West Network, The	TBD
Anthropology Programming	N/A
Anti-Aging Network, The	TBD
Applause Networks	TBD
Arts & Antiques Network (AAN)	N/A
Auto Channel, The	TBD
Baby TV	TBD
Black Women's TV	February 1999
Boating Channel, The	TBD
Booknet	N/A
Boyz Channel, The	1999
Catalogue TV	N/A
Ceo Channel, The	N/A
Children's Fashion Network	March 1999
Chop TV	TBD
Collectors Channel	TBD
ComedyNet	1999
Conservative Television Network	N/A
Do-It-Yourself	May 1999
Documentary Channel, The	1999
Ecology Communications	N/A
Enrichment Channel, The	May 1998
Eurocinema	N/A
Fad TV	Fall 1999
Fashion Network	N/A
Fitness Interactive	N/A
Football Network TFN, The	July 1999
FoxNet	N/A
Getv Program Network	N/A
Girlz Channel, The	1999
Global Village Network	N/A
Gospel Network, The	N/A
Hobby Craft Communications	TBD
Home Improvement TV	N/A
Investment TV	February 1999
Local News Network	N/A
Love Network, The	N/A
MBC Gospel Network, The	N/A
MBC Movie Network	N/A
Museum Channel, The	April 1999
Museum World	Fall 1999
Native American Nations Program Network (NAN TV)	N/A
Orb TV	N/A
Outlet Mall Network, The	N/A
Parent Television	N/A

Planned Cable Program Networks

Network	Expected Launch Date
Parents Channel, The	N/A
Performance Showcase	N/A
Pet Television Network, The	N/A
Premier Horse Network	1999
Puppy Channel, The	October 1999
Skywatcher Channel	January 1999
Spice Hot	N/A
Sun TV	N/A
Theater Channel, The	N/A
Therapy Channel Network	N/A
Wingspan Air and Space Channel	N/A
World African Network	N/A
Youth Sports Broadcasting Channel	N/A

APPENDIX B



NATIONAL CABLE TELEVISION ASSOCIATION

DECKER ANSTROM
PRESIDENT & CHIEF EXECUTIVE OFFICE

November 12, 1998

The Honorable William Kennard
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Mr. Chairman:

Several weeks ago, in a speech before the International Radio and Television Society, you posed the following question to those broadcasters who are demanding mandated cable carriage of digital broadcast signals:

"As cable operators create local programming, particularly news and public affairs shows, and with almost three quarters of Americans actually paying to receive these channels, what remains that makes broadcasters unique? And is this uniqueness significantly tangible, demonstrable, and assured to justify requiring cable carriage?"

To help answer this question, we looked at television coverage of Election '98 in the nation's capital last Tuesday, November 3. As you can see from the attached materials, cable's election night coverage was far more extensive than that of the local broadcast stations.

- Two local stations had no election coverage between 6:30 PM and 12:30 AM (ET).
- The three public broadcast stations had only minimal coverage during these hours.
- And no local station had more than an hour and a half of exclusive election coverage.

By comparison, five national cable networks (CNN, CSPAN, MSNBC, CNBC, and Fox News Channel) had continuous election coverage during most of the night. In addition, News Channel 8, a regional cable news channel, covered the elections all evening – with heavy emphasis on local elections.

Print journalists were quick to pick up on the difference in this coverage. In the November 9 Electronic Media, Lee Hall wrote, "While the broadcast networks blew off

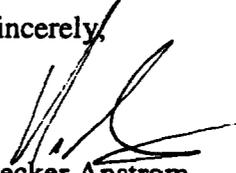
The Honorable William Kennard
November 12, 1998
Page 2

election night coverage for the most part, cable news networks more than picked up the slack." Similar stories appeared in the Wall Street Journal, the Washington Post, the Washington Times and the New York Post.

Clearly, Mr. Chairman, it was cable, not broadcasting, that played a "tangible, demonstrable, and assured" unique role in meeting the public interest on Election Night '98 here in Washington, D.C. The role cable has taken in covering our local and national elections is just one more example – in addition to the legal, constitutional and public policy arguments we have outlined in the Commission's current must carry proceeding – of why there is no rationale for mandating a "double dose" of must carry during the transition from analog to digital television and for putting *every* broadcast station in line ahead of *any* cable network.

Thank you for your ongoing consideration of this important issue.

Sincerely,



Decker Anstrom

Enclosures

cc: Commissioner Susan Ness
Commissioner Michael Powell
Commissioner Harold Furchtgott-Roth
Commissioner Gloria Tristani
Deborah Lathen, Chief, Cable Service Bureau
Magalie Salas, Secretary

**Election Night Coverage - 1998
Washington D.C.**

LOCAL BROADCAST STATIONS

	WRC (NBC)	WTTG (FOX)	WJLA (ABC)	WUSA (CBS)	WDCA (UPN)	WBDC (WB)	WMPT (PBS)	WETA (PBS)	WHUT (PBS)
6:30 pm	Local News (last 15 min)	The Simpsons	ABC 7pm News (last 15 min)	Local News	The Nanny	Boy Meets World	Newsday with Letter (last 15 min)	Newsday with Letter (last 15 min)	Newsday with Letter (last 15 min)
7:00 pm	NBC Nightly News	Friends	Wheel of Fortune	CBS Evening News	Frasier	Change of Heart	Business Report	Business Report	Business Report
7:30 pm	Access Hollywood	Seinfeld	Jeopardy!	Entertainment Tonight	Home Improvements	Love Connection	Business Report	Business Report	Techno at Bytes
8:00 pm	Mad About You	King of the Hill	Home Improvement	JAG	Moesha	Buffy the Vampire Slayer	Nova	Nova	GED
8:30 pm	Just Shoot Me	King of the Hill	The Hughleys		Clueless (Part 2)				Faith in the Future
9:00 pm	Just Shoot Me	Guinness World Records	Spin City	48 Hours Justice for All	America's Greatest Pets Reunited	Felicity	Frontline	Frontline	Mystery!
9:30 pm	Working		Spin City						
10:00 pm		Local News Election Returns			Star Trek: The Next Generation	Jerry Springer	Elizabeth Taylor	Great Upset of '48	Sessions at West 54 th
10:30 pm									
11:00 pm	Local News	Friends	Local News	Local News	Frasier	Change of Heart	Business Report	Charlie Rose	Off Air
11:30 pm	Tonight Show	M*A*S*H			Mad About You	Love Connection			
12:00 am		Jenny Jones	Extra	Late Show with Letterman	The Nanny	Real TV	Bloomberg TV	Newsday with Letter (last 15 min)	
12:30 am	Late Night O'Brien		Politically Incorrect		Martin	Hard Copy	NOVA	Local News	

CABLE NETWORKS

	CNN	CSPAN	MSNBC	CNBC	Fox News Channel	News Channel 8
7:00 pm						
7:30 pm						
8:00 pm						
8:30 pm						
9:00 pm						
10:00 pm						
11:00 pm						
11:30 pm						
12:00 am						
12:30 am						

KEY:

-  - Regularly scheduled programming.
-  - Regularly scheduled programming provided some coverage of local and/or national Election returns.
-  - Special Election programming coverage.

Note: WRC (NBC), WJLA (ABC) and WUSA (CBS) aired periodic election updates during their regularly-scheduled programming about every 15 minutes from 8:00 p.m. to 10:00 p.m. via cut-ins, crawls and/or reduced screen.

8,100 131 CONGRESSIONAL AND GOVERNORS' DEBATES MINUTES OF "FREE AIR TIME" FOR CANDIDATES COURTESY OF CABLE TV AND C-SPAN

This fall, with help from local television stations across the country, C-SPAN aired 131 political debates—in prime time. In some cities, C-SPAN was the only place where people could watch local candidates sound out the issues during prime time.

131 debates. 8,100 minutes of "free air time" for political candidates and their issues. That's exactly the kind of public service the cable industry had in mind when it created C-SPAN more than 20 years ago.



"Thanks to C-SPAN, we are able to watch how nominees to the Senate and for governorships handled themselves.... That is an enormous public service."

Mark Shields, *The Washington Post*, Nov. 2, 1998
by permission of Mark Shields and Creator Syndicate



TWENTY YEARS OF PUBLIC AFFAIRS PROGRAMMING. CREATED BY AMERICA'S CABLE COMPANIES.

What They're Saying About Election '98 News Coverage

Cable Scoops TV Networks

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- Adam Buckman
New York Post, 11/4/98

TV Guide: For the Latest, Turn to Cable

"With no presidential race this year, the TV networks are going light. The Big Three won't interrupt programming until 10 p.m. ET for their election reports, except to call some races in short reports. The cable news networks plan far more expansive coverage."

- Elizabeth Crowley
Wall Street Journal, 11/3/98

Publisher's Column

"Tuning in CNN's informative and ambitious coverage was reminiscent of tuning in to ABC, CBS and NBC back when the major broadcast networks really covered national elections."

- Ron Alridge
Electronic Media, 11/9/98

Networks to cut back on election coverage

"Don't look for extravagant election night coverage on CBS, NBC and ABC this year. On Nov. 3, each has winnowed its programming to a mere hour, leaving in-depth fare to cable networks like CNN."

- Jennifer Harper
The Washington Times, 10/21/98

Viewers elect for cable news

"While the broadcast networks blew off election night coverage for the most part, cable news networks more than picked up the slack."

- Lee Hall
Electronic Media, 11/9/98

The TV Column

"The cable news networks are, not surprisingly, taking the lead on today's election coverage."

- Lisa de Moraes
The Washington Post, 11/3/98

Cable scoops TV networks

CHUCK SCHUMER'S defeat of Al D'Amato wasn't the only close race on TV last night.

The other one was the race to call the winner in the senatorial campaign.

News organizations had privately projected the outcome long before the polls closed in New York at 9 p.m., based on exit polling. But they didn't want to jump the gun and risk being criticized later for reporting the results before everyone had had a chance to vote.

So as soon as 9 o'clock rolled around, local stations wasted no time leaping onto the air to declare Schumer the winner.

Just moments after 9 p.m., four stations projected the winner with special live reports. Here's the dramatic order in which the Schumer projections appeared, separated in some cases by mere seconds:

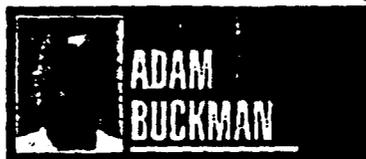
New York 1 News was first, fol-

lowed closely by: Bill Beutel and Diana Williams on WABC/Channel 7; then WNBC/Channel 4, where Chuck Scarborough first declared George Pataki the winner in his race against Peter Valone and then projected Schumer as the winner against D'Amato; and then about a half-minute later, Stephen Clark and Dana Tyler came on WCBS/Channel 2 to deliver their own Schumer projection.

The drama at 9 o'clock was shortlived, as all the stations (except NY1) went back to regular series programming a few min-

utes later. It is the November ratings sweeps, after all.

Channel 2 returned with a special report at 9:50 p.m. as Gov. Pataki gave his acceptance speech. Channel 7 — which suffered major technical difficulties during the evening due to the strike of technical workers — also came on for Pataki's speech.



Channel 4 sat that one out.

The all-news cable channels were also anxious to call the New York Senate race, and they all weighed in with their Schumer projections a few minutes after 9 p.m. also.

There was one exception, however: NBC's Tim Russert, who called the race a few minutes after 8 p.m. on MSNBC during a report on how the Democrats appeared to be winning a number of key races.

Russert's zealotness may have been due to Election Night adrenaline. By 8 p.m. on NBC's other cable network, CNBC, Chris Matthews was also working himself

into a frenzy, spitting out senatorial and gubernatorial results from around the country.

Fox News Channel and CNN were also up and running. In fact, if you were watching cable in the hours leading up to the close of the New York polls, you already knew the results of key races from all over. You knew the ones that were too close to call and the landslides, and how both fit into

the national story of Democrats vs. Republicans.

There were graphics, percentages, maps and photos of candidates. There were correspondents reporting live from various campaign headquarters around the nation (including big-time network news stars like Matt Lauer and Maria Shriver on MSNBC), and in-studio analysts to put it all in perspective.

When it came to last night's election news, cable delivered.

When the old-fashioned broad-

The fact that the networks waited until 10 o'clock to air their reports is a clear sign that competitive network news is a thing of the past.

cast networks — ABC, CBS and NBC — came on at 10 p.m., they, too, had graphics and photos, live satellite pictures and interviews. And, of course, they had their star anchors — Peter Jennings, Dan Rather and Tom Brokaw.

The problem is: Peter, Dan and Tom got beat — badly. If the goal of any self-respecting news organization is to report a story first, then the network news business was clobbered by cable TV last night.

The fact that the networks waited until 10 o'clock to air their reports is a clear sign that competitive network news is a thing of the past. They're sitting back and letting cable TV run away with news. And the situation is only going to get worse for the networks. Cable is available in 67 percent of TV homes. Network news is important only to the other 33 percent (about 32 million homes out of 98 million).

Moreover, last night's network reports were punctured throughout by local news reports here in New York and, presumably, in other major cities.

It's a shame about network news. Pound for pound, the old networks produce the best news programming on TV. But because their corporate owners have no respect for what they do, they're rarely allowed to strut their stuff.

And now they're losing to cable on Election Night.

NY 1

SCHUMER VICTORY SPEECH

U.S. Senate		PRECINCTS
✓ Charles Schumer (D)		64%
Al D'Amato (R)		45%

SCREEN STAR: NY1 was the first to declare Charles Schumer the winner last night.

NEW YORK GOVERNOR

73% PRECINCTS

* GEORGE PATAKI (R)		
1,747,980	54%	
PETER VALLONE (D)		
1,071,190	33%	

FIRST THINGS FIRST: WNBC/Channel 4 reports Gov. Pataki last night's winner.

TV Guide: For the Latest, Turn to Cable

By ELIZABETH CROWLEY
Staff Reporter of THE WALL STREET JOURNAL

With no presidential race this year, the TV networks are going light. The Big Three won't interrupt programming until 10 p.m. EST for their election specials, except to call some races in short reports.

But that doesn't mean they won't make every effort to make election night fun. CBS news plans "graphics that are faster than a speeding bullet," says Lane Venardos, executive producer. At NBC,



Executive Producer Beth O'Connell says she is "excited" about "having Tom Brokaw and Tim Russert sitting with the Capitol right behind them." At Fox News, Executive Producer Marty Ryan promises new hi-tech graphics "with pictures of candidates and up-to-the-minute results." "A lot more people will be interested in this than we believe," he says.

The cable news networks plan far more expansive coverage. MSNBC's Brian Williams will anchor continuous returns until 2 a.m. CNBC will go on just as long with help from Geraldo Rivera. Marathon winner: CNN, with coverage from 5 p.m. to 6 a.m. EST. CNN will feature that king of one-liners - former White House spokesman Mike McCurry.

Networks to cut back on election coverage

By Jennifer Harper
THE WASHINGTON TIMES

Don't look for extravagant election night coverage on CBS, NBC and ABC this year. On Nov. 3, each has winnowed its programming to a mere hour, leaving in-depth fare to cable networks like CNN.

Viewer interest in the off-year election, said CBS spokesman Lane Venardos, has been lagging for months.

ON MEDIA

The networks are also thinking twice about preempting lucrative prime-time programming after their experiences with President Clinton's televised testimony in the Lewinsky scandal last month.

Each of the networks lost an estimated \$1 million when it replaced daytime soap operas and game shows with the entire testimony, which rolled — and rolled and rolled — for four hours without commercial break.

The networks also had a costly learning experience during the 1996 presidential election, when anchormen reported from dramatic sets, surrounded by a kaleidoscope of fancy graphics and special effects.

Expenses ran high. Viewers, however, tuned out by the millions, annoyed with blabby analysts who got six times as much airtime as the actual candidates, according to a study by the Center for Media and Public Affairs.

Ratings fell at the big three broadcast networks by 11 percent. Over at independent UPN, though, ratings shot up 133 percent as viewers opted to watch "Xena: Warrior Princess" and "Baywatch."

This year, the networks have adopted a no-frills approach for their election programming.

CBS, which offered more than

two hours of midterm election night coverage in 1994, features one hour this year. ABC, which featured three hours of coverage and extended "Nightline" in '94, will also offer just an hour this year.

NBC, which had over two hours of election night programming two years ago, is offering four 15-minute segments that can be plugged into local programming around the country as affiliates see fit.

Over at cable giant CNN, it's a different story. The bigger, the better.

Things get under way in the afternoon on Nov. 3, featuring a "team of more than 20 seasoned political correspondents, anchors and analysts, in addition to hundreds of producers behind the scenes," according to CNN.

Viewers can follow the political horse race across the country down to the last detail at CNN's Web site, which will feature more than 1,000 text pages of information, ranging from candidate profiles to minute-by-minute results.

The differences between cable news and regular network programming go back to the voting public, said former network news producer Robert Frye, now an analyst with the Media Studies Center.

"The marketplace is still being driven by the consumer," he said.

Mr. Clinton may be turning to radio rather than TV to counter voter indifference to the '98 elections. CNN reported yesterday that Mr. Clinton has taped 67 carefully targeted radio spots, urging Democrats to get out and vote.

"It also keeps the president," said CNN's Larry King, "out of any national TV ads that might motivate Democrats — but might also motivate Republicans to come out and vote against the president's candidates."

Politicians, news media underestimated voters

There's much to be learned from last week's national elections, our final such event of the 20th century.

I, for one, am reminded that the American people are a heck of a lot smarter than their leaders, not to mention their news media.

Thomas Jefferson was right; the strength and wisdom of the system lies at the grass-roots level. H.L. Mencken was wrong; you can go wrong by underestimating the American people.

What the voters of this nation did last week was truly uplifting.

They refused to be stampeded into an emotional casting of their ballots. They refused to allow themselves to be manipulated. They refused to fall prey to those who would exploit their worst fears and instincts.

Instead, the voters went to the polls and rather calmly cast their ballots, not on the basis of Monica mania or religious zealotry but with important issues firmly in mind.

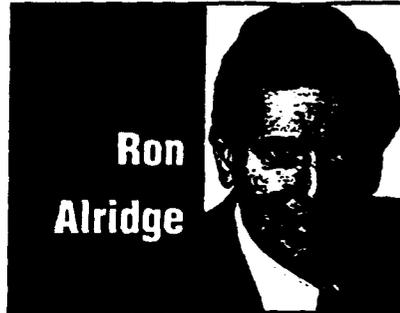
Chief among those issues, or so the exit polls tell us, were education, Social Security and health care. Oral sex in the oval office was barely a blip on the Election Day radar screen.

Sure, an ex-wrestler was elected governor of Minnesota, but who's to say that was a bad decision? Not me. Not yet, anyway.

In the final analysis, about the only folks who seem to have been particularly obsessed with or outraged by the White House sex scandal were politicians and the news media. The American people simply had more important things to worry and vote about.

I point all this out because it runs encouragingly against the cynicism of our times.

Too many people who ought to know better persist in believing that John and Jane Public are hopeless dupes ripe



for the picking.

We're told that average people will vote for anyone with a pretty face, will accept nothing more complicated than a 10-second sound bite, will be governed by emotion rather than reason.

That's why so many people, especially politicians and news professionals, were expecting a truly disgusting Election Day performance.

Pre-election coverage and commentary led us to believe that voter turnout would be of unprecedented paucity; that ballots would reflect widespread moral outrage; that the GOP, armed with followers from the Religious Right, would gain in both the House and Senate.

We were, in short, misled.

Overall, voter turnout was, at worst, more or less typical, although it was unusually high in California and among African Americans in general.

And, as previously noted, voters were focused on issues, not the sex scandal that had so consumed Washington and the media.

At day's end, the GOP, extreme elements of which had hoped and tried to exploit all the sex and scandal for political gain, actually lost seats in the House and only maintained the status quo in the Senate. It was a nearly unprecedented midterm election setback.

The question that lingers for those of us in the news media is, why didn't we see this coming? Why didn't we size up the voters better? They are, after

all, our readers, viewers and listeners.

Was it because the polls were wrong? Did things change dramatically at the very last minute? Or might it be that our vision was obscured by smoke blown our way by spin doctors and the like?

I suspect it was probably a combination of things, including my pet concern: a growing disconnect between the national news media and the general public.

The elections of 1998 suggest that news organizations should spend more time studying and explaining the people to government leaders rather than vice versa.

That, of course, will require the media to be closer to the people and farther from the powers that be.

A good step in the right direction would be to limit the time any reporter can be assigned to Washington. Call it term limits to prevent Potomac Fever.

Another good step would be a flat ban on reporter hobnobbing with known spin doctors. The very idea of a journalist allowing himself or herself to be "spun" by professional propagandists is repulsive.

With all that said, let me close on a pleasant postscript partially related to the subject at hand: CNN did a fine job on election night.

Tuning in CNN's informative and ambitious coverage was reminiscent of tuning in to ABC, CBS and NBC back when the major broadcast networks really covered national elections.

With continuous election coverage all but gone from the Big 3 of yesteryear, we're indeed lucky that today we have a cable service such as CNN. #

Ron Alridge is publisher and editorial director of ELECTRONIC MEDIA. His e-mail address is ralridge@craim.com.

Viewers elect for cable news

BY LEE HALL
STAFF REPORTER

ATLANTA—Looks like the American public got just about what it wanted on election night, at least as far as television coverage was concerned.

Hours after the polls closed on Nov. 3, the National Association of Broadcasters issued results of a national survey showing that nearly half of voters polled thought broadcast TV and radio stations gave "just the right amount" of time to election coverage. Only 15 percent of voters said broadcasters offered "too little time."

While the broadcast networks blew off election night coverage for the most part, cable news networks more than picked up the slack.

CNN doubled its typical prime-time audience on election night, drawing a 2.6 Nielsen Media Research rating in its cable universe (1.9 million households). Nielsen numbers show that Fox News Channel edged rival MSNBC in ratings, 1 to 0.9 in their respective universes, although MSNBC, available in more households, drew more viewers (423,000 to 364,000).

CNN opened its coverage at 5 p.m. (ET); Fox News and MSNBC followed at 6 p.m. Ratings on the three cable news networks fell dramatically at 10 p.m., however, when the broadcast networks kicked in their full-bore coverage. CNN, for example, lost half its audience.

Former PBS anchor Robert MacNeil found the political paucity on the Big 3 disturbing.

"I watched CNN last night, skipping around to the other networks, and I had the feeling I was watching an old-fashioned political evening on television because you guys were covering it the way the networks used to," Mr. MacNeil said in a Wednesday appearance on the network's "Talkback Live."

An exhilarated Jeff Greenfield, CNN

senior analyst, called the evening an "old-fashioned, kick out the jams effort."

ABC, CBS and NBC have slowly scaled back their coverage of political conventions and elections in recent years.

"Anybody who does a TV show and says they don't care about ratings won't last long in this business," said Marty Ryan, executive producer at Fox News Channel. Cable has an advantage in November elections, he said, because the broadcasters are concentrating on the sweeps.

Perhaps.

Although the cable channels attracted proportionally larger ratings than usual, their numbers still paled in comparison to the millions of TV viewers who by-

Key lawmakers re-elected, Page 2
ABC locks out union workers, Page 3
Ron Alridge on election coverage, Page 22

passed election coverage in favor of sitcoms, dramas and movies.

At 10 p.m., the single hour that the Big 3 fully devoted to election coverage, national viewership was lame. CBS won the hour with a 4.8 rating (percentage of TV homes) and 8 share (percentage of sets in use). NBC, which simulcast the hour with MSNBC, finished second with a 4.5/8. ABC, struggling through the effects of a walkout by technicians, was third with a 4.4/8.

"The broadcast networks are so ratings-driven now, so entertainment oriented, and they know elections don't draw viewers in," said David Hazinski, a professor of telecommunications at the University of Georgia and a former NBC News correspondent.

"They pay a lot of lip service to responsibility and ethics, but when it comes down to the choice between attracting viewers and doing what should be right, they're not going to commit resources to it."#

Highlights of Cable's Coverage of Election '98

C-SPAN

- Six hours of election night coverage of all congressional and state races, beginning live at 8:30 pm ET to 2:30 am ET
- Local feeds from network affiliates from 17 cities around the country
- C-SPAN.org will provide Internet coverage of up-to-the-minute election results as they come in
- C.SPAN.org also offers "Campaign '98 Archive," a library of all 110 debates carried by C-SPAN or C-SPAN 2 in Real Audio or Video, the candidates' campaign commercials and a state-by-state election guide
- *Washington Journal*, the network's daily viewer call-in show, begins one hour earlier at 6:00 am ET for a special four-hour program with election results and analysis
- C-SPAN affiliates participating in the election night simulcast include:

NYW- New York City	WBBM-Chicago	KCNC-Denver
WKYT-Lexington, KY	WFAA-Dallas	KOAT-Albuquerque
WIS-Columbia, SC	WITI-Milwaukee	KCRA-Sacramento
WRAL-Raleigh	WPLG-Miami	KING-Seattle
WUSA-Washington	WSB-Atlanta	KHON-Honolulu
WHDH-Boston	KTNV-Las Vegas	

CNN

- Election night coverage beginning at 5:00 pm ET with analysis from former White House spokesman Mike McCurry joining studio anchors Bernard Shaw, Judy Woodruff and Jeff Greenfield – extensive coverage into the evening of national and state races, more than seven hours in all

MSNBC

- Brian Williams hosting election night coverage beginning at 7:00 pm ET, with continuous coverage until 10:00 pm when MSNBC will simulcast special election coverage from NBC with Tom Brokaw and Tim Russert, allowing Williams to move over to host one-hour special on sister-network CNBC

CNBC

- Brian Williams hosts live one-hour specials at 10:00 pm and 1:00 am ET.
- Also featuring special election-devoted discussions on *Hard Ball* at 8:00 pm and 11:00 pm ET – with Ed Koch, Geraldine Ferraro, Mario Cuomo, Ed Rollins and Adriana Huffington
- Geraldo Rivera's regularly scheduled programming also focuses on election coverage

- more -

FOX News Channel

- Brit Hume and Catherine Crier kickoff election night coverage at 7:00 pm ET, with live continuous coverage slated until 2:00 am ET
- Michael Barone, author of *The Almanac of American Politics*, analyzes results for FOX, while Tony Snow provides exit poll data

New York 1 News

- Serving more than 1 million New York area cable subscribers, NY1 produces "Inside City Hall," an hour-long political program, which airs every weeknight — barring major holidays. The show features reports from NY1 video-journalists, in-studio and remote interviews with politicians, political observers, "pundits" and others involved in New York politics
- In addition to "Inside City Hall," which covers politics exclusively, NY1 carries regular political reports throughout the day
- NY1 devotes five reporters to full-time political coverage for New York
- Leading up the election night, NY1 focused extensively on the key races affecting its viewers, including gubernatorial, senatorial, congressional and statewide races
- NY1 carried special (Saturday and Sunday) weekend editions of "Inside City Hall" as the New York Primary and General Election drew near
- During the last week of the 1998 campaign, NY1 and "The New York Daily News" conducted a statewide poll to measure voter support for various candidates (senator, governor, state attorney general and comptroller). Results received extensive on the station and were featured at the NY1 web site.
- During primary season, NY1 carried at least eight debates featuring the democratic candidates for Senate, Congress, attorney general and State Assembly
- During general election season, the network carried a live senatorial debate originating from Albany-based WRGB-TV and a News 12 Long Island debate between leading party candidates for attorney general.

PCN – Pennsylvania Cable Network

- Serving more than 2 million subscribers on 88 cable systems, PCN has provided viewers with an unprecedented 220 hours of election-related programming since September 1, including 80 hours original
- Coverage included candidate debates, interviews, rallies, speeches, radio appearances, visits to newspaper editorial boards and even rides on candidate bus caravans
- PCN produced 15 live viewer call-in programs, giving Pennsylvanians the opportunity to question the candidates, the media and political analysts

- more -

NEWS 12 Regional Cable News Networks

News 12 consists of five separate operations: News 12 Long Island, News 12 Westchester, News 12 the Bronx, News 12 New Jersey and News 12 Connecticut. Each unit has its own staff and serves its own section of the N.Y. Metropolitan area. The idea is to provide exclusive coverage of local communities at a level that's unavailable through any of the big N.Y. City-based TV news operations. In terms of election coverage, this means News 12 pays attention to the many smaller races that are ignored by broadcast TV newsrooms, but are very important to local people directly affected.

Pre-election coverage

The News 12 Networks collectively produced literally dozens of debates and special reports featuring candidates for statewide and local office. On Long Island alone, there were approximately 50 debates including ALL Congressional, State Senate and State Assembly races. The three News 12 operations in New York State also co-produced one of the only two debates between the candidates for State Attorney General. That program was made available to Time Warner's NY1 service, as well.

All five News 12 operations participated in a network-wide multi-part series on campaign finance reform. The series, called "Take the Money and Run," was customized to feature candidates and experts from each region. News 12 Long Island produced a 2-hour electronic "Town Meeting" on the same subject, with live call-ins and a satellite link to Washington, D.C.

Election Night Coverage

The News 12 Networks is mobilizing an army of remote crews and live trucks to cover local and state races in each region. Continuous live coverage begins when the polls close in each region and runs at least until midnight, longer if necessary. The three New York State operations will share live remotes via fiber runs from the Manhattan hotels where the candidates for Senate, Governor and Attorney General will be based. On top of that the News 12 networks will deploy numerous ENG and SNG vehicles for live shots on crucial races in each area. Altogether the network will dispatch more than 30 field crews. Expert political observers at each News 12 will provide perspective as the results roll in.

News 12 Long Island

Pre-election coverage

- 50 plus televised debates featuring all Congressional, State Senate and State Assembly districts
- Produced one of the only two debates in N.Y. on State Attorney General race
- "Island Vote '98", a 20-part series explaining the issues and highlighting key races
- Two-hour live electronic "Town Meeting" on campaign finance reform (Followed 4-part investigative report on the same subject)

- more -

Election Night

- Continuous coverage beginning 9pm
- 10 crews, including 7 live remotes
- Local political analysts live on-set
- Complete results posted on News 12 website

News 12 Connecticut

Pre-Election coverage

- * Produced first of four gubernatorial debates in the state.
- * Produced only televised debate in the Fourth Congressional District.
- * 5 debates featuring regional and statewide races.
- * "Campaign '98"; daily reports on key issues and races throughout southwestern Connecticut and on a statewide and national level.
- * Five-part series on campaign finance reform followed by a half-hour panel-discussion on the issues.

Election Night

- Continuous coverage beginning at 8 pm.
- 12 crews, including 9 live remotes
- 2 fiber feeds
- 3 satellite trucks
- 3 microwave trucks
- 1 cable feed
- Two local political analysts live on-set.

News 12 New Jersey

Pre Election Coverage

- 6 Congressional debates
- 4-part series on campaign finance reform
- Numerous stories on issues and key local races

Election Night

- Live remotes at six locations throughout Northern New Jersey coverage area
- Twelve remote crews
- Political analysis from former Senator and N.J. Secretary of state
- Continuous coverage beginning 8pm

- more -

News 12 The Bronx

Pre-Election

- Live reports every hour from 11am-2pm of Vice President Gore's visit to Bronx Democratic Party, plus coverage of his address to the Bronx at 2:30
- Candidate profiles in Governor, State Senate and State Attorney General races
- Co-produced one hour debate in State Attorney General race
- Numerous stories on Bronx candidates and issues

Election Night

- 6 crews, including 2 live remotes from Manhattan and the Bronx Democratic HQ and the Bronx Republican HQ.
- Local political analysts live from the newsroom
- Continuous coverage beginning 9pm

News 12 Westchester

Pre-Election

- Three special editions of "Newsmakers" to discuss issues and dynamics of races for state legislature in Westchester
- Co-produced one-hour debate in State Attorney General race
- Numerous stories on Westchester issues and races

Election Night

- 8 crews, including live remotes from local campaign HQ and statewide candidates in Manhattan
- Use of Yorktown bureau for remote interviews
- Live commentary from Westchester political experts
- Continuous coverage beginning when polls close at 9pm

NewsChannel 8

- The regional cable news network serving more than 1 million homes has provided the greater Washington, D.C. area with the most extensive local coverage, including six local, state and Congressional candidate debates;
- Since early August, NewsChannel 8 has aired the weekly *Vote '98*, a series of half-hour forums for local, state and Congressional candidates;
- Election night coverage includes a unique simulcast with radio partner WAMU-FM, emanating from NewsChannel 8's headquarters

- more -

CLTV – ChicagoLand TV

- Nearly 2 million Chicago area cable subscribers have been provided with daily election coverage over the past three months
- Feature coverage has included four-minute long-form interviews with candidates from 10 races, with interviews airing unedited during the two weeks leading to election day; pre-election coverage culminates with hour-long preview show on Election eve
- Six hours of live continuous election night coverage begins at 7:00 pm CT through 1:00 am CT, and will include remote reports from at least eight candidate headquarters plus the Washington, DC bureau and live analysis from *Chicago Tribune* reporters from the Tribune Tower

PCNC – Pittsburgh Cable News Channel

- Live election night coverage from 8:00–10:00 pm ET
- *Decision '98: The Pennsylvania Election* will include live interviews from area polling places with political analyst Bill Green and Allegheny County Controller Frank Lucchino joining anchor David Johnson
- PCNC's *10 O'Clock News* will be expanded to a full-hour to include the latest election results and analysis

New England Cable News

- Live election coverage beginning at 7:30 pm ET -- until all races in New England are decided
- Network will feature live coverage of all key races from the six New England states, including key gubernatorial, Congressional and statewide races
- Throughout the evening, analysts at the network and in the field will offer political analysis
- Report will feature constant updates of election results

OCN -- Orange County NewsChannel:

- Election coverage (percentages) from OCN's studios as numbers trickle in, featuring Orange County districts and major races
- Network will feature discussions with various candidates every 5 to 10 minutes (to assess how they did in the race as results are rolling in)
- Reporters will cover major races from the field; two reporters stationed with Republican party (at Sutton Hotel, Newport Beach) and -- possibly -- at the Disneyland Hotel to cover the Democrats (who will be in LA).
- From the studio, network will rely on two anchors as hosts and three co-hosts rotated throughout the night

APPENDIX C

NCTA RESPONSE TO CEMA AND NAB ON TECHNICAL ISSUES

William A. Check, Ph.D., Vice President, Science and Technology

Andy Scott, Director of Engineering

The Consumer Electronics Manufacturer's Association ("CEMA") and the National Association of Broadcasters ("NAB") propose various approaches to the carriage of digital broadcast signals that would be onerous for cable systems to implement and would limit a cable operator's ability to use its bandwidth and capabilities in a manner that is optimal for the distribution of cable services. They also fail to take into account the unique attributes of cable television's transmission scheme and the need to protect copyrighted material.

This document addresses some of the significant and complex technical issues involved in the carriage of digital broadcast signals over cable systems. It also addresses the status of the digital standards-setting process as it applies to cable television.

8-VSB Pass through and 8-VSB Conversion in the Set Top

CEMA urges the Commission to require cable operators to deliver an "ATSC-compliant" signal to DTV receivers until the cable industry and the consumer electronics industry agree on technical standards for cable-ready DTV receivers.¹ It believes that this can be readily accomplished on both analog and digital cable systems. CEMA asserts that cable set top equipment and cable systems do not need computing power in order to deliver any ATSC digital-format signals to the consumer. It argues that "if a cable

¹ Comments of CEMA at i-ii.

operator delivers an ATSC-compliant signal [8-VSB] to the consumer's digital television set within the standard broadcast frequencies, the computing power of the digital receiver will decode the signal to its fullest capability."² The following sets forth the difficult and complex technical aspects involved in the carriage of digital broadcast signals by cable systems.

In 1994, the cable industry chose Quadrature Amplitude Modulation (QAM) after CableLabs, the industry's research and development arm, tested all of the advanced systems. QAM with a 64 point signal constellation (64-QAM) or 256 point signal constellation (256-QAM) is capable of supporting approximately 27 Mbps or 38 Mbps respectively in each 6 MHz cable channel. By contrast the broadcasters' will use an 8 Level -Vestigial Sideband modulation (8-VSB) capable of approximately 19 Mbps.

While some cable operators may carry 8-VSB modulated signals in the early, experimental phase of DTV, there are several reasons why 8-VSB modulation is not an effective solution for cable systems. Most importantly, 8-VSB makes inefficient use of channel capacity. Using 8-VSB, the cable operator would be required to use one analog channel to get one full-resolution HDTV channel. With 64-QAM, the cable operator can put one HDTV channel and several SDTV channels into the equivalent bandwidth of one analog channel. With 256-QAM, the cable operator could put two HDTV channels in one analog channel.³

Simply passing the broadcasters' 8-VSB signal through the cable system presents other complications. This approach will not allow the cable customer to receive cable's

² Id. at 12-13.

³ This assumes 1920 x 1080i format.

On-Screen Display (OSD) while tuned to 8-VSB, nor will the use of 8-VSB allow the cable operator to provide its customer with premium HDTV services.

CEMA posits another approach involving the conversion of the digital set top output signal into 8-VSB modulation. But remodulation from QAM to VSB poses significant problems. As noted above, cable operators plan to use QAM modulation to carry digital signals. Converting QAM into 8-VSB in the digital set-top output in first generation VSB-only digital receivers adds unnecessary cost. Further, this approach fails to address how digital signals transmitted “in the clear” across the interface between the set top and the TV set will be protected from being copied. Digital copy protection is critical to the cable industry and copyright holders because unauthorized reception of cable programming is a widespread, serious problem that is detrimental to the growth and economic health of cable programming. Digital technology enables the creation and transmission of high-quality digital copies of movies and other content. Effective resolution of this issue is of major concern to both NCTA and the Motion Picture Association of America (“MPAA”).

Another significant compatibility problem has arisen with some first generation DTV receivers. These sets tune only the standard broadcast frequency plan, that is, channels 2 through 6 (low-band VHF), channels 7 through 13 (high band VHF) and channels 14 through 69 (UHF). Even if cable systems were to use 8-VSB modulation to deliver broadcast digital signals, the fact that DTV receivers can tune only the standard broadcast frequency plan will imply that cable operators will not have the flexibility to carry these signals in a different part of the cable spectrum. This forces severe constraints on cable system capacity (especially in systems with limited bandwidth)

above and beyond channel space that would have to be devoted to carry a broadcast station's second channel.

For example, in a 750 MHz cable system carrying 8-VSB broadcast signals, the UHF broadcast frequencies allocated to DTV would be required to be positioned on spectrum between cable channels 2 through 13 and/or 65 through 116. In a 550 MHz cable system carrying 8-VSB broadcast signals, the UHF broadcast frequencies allocated to DTV would need to be positioned on spectrum between cable channels 2 through 13 and/or 65 through 78. In a 450 MHz system or below 8-VSB broadcast signals would need to fit within cable channels 2 through 13, since this type of system is limited to about 60 channels.

Moreover, the UHF broadcast frequencies allocated to the DTV UHF band are 2 MHz higher in frequency than an equivalent channel in a cable system. Because some current DTV receivers do not support cable's frequency plan, this requires allocating two channels for one high definition broadcast digital feed. In other words, twice the bandwidth, or 12 MHz, would have to be devoted to every 6 MHz broadcast signal carried in 8-VSB.⁴ This is a highly inefficient use of cable spectrum.

The IEEE-1394 Interface

The cable industry has worked with the consumer electronics industry to reach an inter-industry consensus on compatibility in the next generation of DTV receivers. As NCTA and CEMA recently reported to Chairman Kennard, the industries have completed the specifications for an interface, the IEEE-1394, which will promote compatibility

⁴ See e.g. "MSG goes hi-def", *Broadcasting & Cable*, November 2, 1998 (quoting Wilt Hildebrand, Cablevision Senior Vice President of Engineering and Technology.)

between DTV receivers and digital set top boxes.⁵ This specification is now reflected in CEMA document EIA-775 and OpenCable document OCI-C1. This interface will enable cable systems to use QAM modulation without requiring additional expensive computing power in the set top box while at the same time supports the use of digital copy protection technology.

In sum, the complex compatibility issues in the transition to digital television could be better served if the consumer electronics manufacturing industry would commit to building cable-ready digital television receivers that facilitate the use of both QAM and VSB modulation formats. The recent inter-industry agreement between CEMA and NCTA on the 1394 interface is a step in the right direction.

Cable-Ready Digital Receivers

CEMA urges the Commission to promote industry-wide adoption of standards for cable-ready digital receivers. We agree. NCTA has worked diligently with CEMA on developing digital cable-ready standards under the auspices of the Digital Standards Subcommittee of the NCTA/CEMA Joint Engineering Committee (JEC), a voluntary inter-industry standards-setting organization.

CEMA and NAB suggest that NCTA is delaying the adoption of cable-ready digital receiver standards and refer to NCTA's failure to respond to a standards proposal submitted by the TV/VCR Caucus of the Cable Consumer Electronics Advisory Group ("C3AG"). NCTA believes that the work of the subcommittee is still ongoing, that the proposal is at best incomplete by failing to address matters that are essential to whether a

⁵ See Letter to William E. Kennard, Chairman, Federal Communications Commission from Decker Anstrom, President and CEO, National Cable Television Association and Gary Shapiro, President, Consumer Electronics Manufacturers Association, October 30, 1998.

DTV set can be deemed “cable-ready”. This includes support for specifications and standards relating to, among other things, a replaceable security module interface, the IEEE-1394 interface, and out-of-band signaling.

The cable industry is committed to continuing to work within the JEC’s Digital Standards Subcommittee process to resolve these outstanding issues.