for seeking to disadvantage broadcast stations: simply stated, cable has little interest in assisting, through carriage, a competing medium of communication."[43]

These incentives have only been strengthened since the 1992 Cable Act because of increased competition between cable operators and broadcasters for advertising. As seen in the Kraemer/Levine Report, cable operators have become increasingly strong competitors for advertising dollars.[44] While local broadcast advertising has grown from 1992 to present, local cable advertising revenues have grown at a much faster rate. And, as seen in the Kraemer/Levine Report, the Cable Television Advertising Bureau promotes cable households as more valuable for advertisers because, among other things, they are "early adopters."[45] The added functionality of digital television, such as high definition television and interactivity, likely will be most attractive to the early-adopter, upscale demographics that the cable industry regards as attractive to advertisers. Therefore, the introduction of digital television by broadcasters and cable operators will create further economic incentives on the part of cable operators to avoid carriage of competing broadcast digital channels. Development of broadcast multiplexed programming, by competing with cable's ability to sell niche audiences to advertisers, strongly adds to cable's disincentive to carry DTV signals.

While cable will argue that it has *increased* incentives to carry local broadcasters because of new carriage by satellite providers of local stations, any such incentive would extend only to analog carriage, which cable must do in any event. At bottom, the cable position – not dissimilar to the cable position on analog carriage before passage of the

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[43] *Turner II,* 520 U.S. at 201.
[44] Kraemer/Levine Report at Figure 6.

1992 Cable Act – is that it will carry attractive broadcast stations when the cable audience demands them. This position leaves unanswered the question of how an audience which does not see these stations will come to demand them.

The record following the adoption of analog must carry demonstrates the positive effects that occur when this cable argument is rejected. Once they had secure carriage rights, stations that cable systems once rejected became the basis for the extension of the Fox network, and the development of UPN, WB and Paxnet.[46] The same pattern can be expected to occur with digital broadcasters, leading to the availability of better and more diverse programming for non-cable subscribers.

As DTV, over time, becomes desirable to more viewers, a cable operator might carry the most popular commercial DTV broadcasters. But there is little incentive for cable to carry other DTV broadcasters, and every incentive *not* to help its broadcaster competitors succeed with DTV. The Supreme Court's statement that "cable has little interest in assisting, through carriage, a competing medium of communication"[47] extends logically to cable's having little interest in assisting, through carriage, the competing broadcast medium transition to digital in order to remain competitive with cable. Carriage of a few local DTV signals – the scenario predicted by cable – would precisely replicate the situation that existed with analog carriage before the Cable Act. It would allow cable operators – rather than the Commission – to decide how many local DTV stations should serve a community. Congress concluded that cable should not have such

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[45] *Id.* at 30-31.

[46] *See* Affidavit of Lucie Salhaney, *Turner Broadcasting System v. FCC*, U.S. No. 95-992; Statement of Dean Valentine (both attached as Appendix B to the Comments of NAB, CS Docket No. 98-120 (filed Oct. 13, 1998)).

authority and the Commission should implement its decision in the digital world as much as it did for analog television.

2. The Lack of Carriage Agreements To Date Indicates Cable Will Not Carry Most DTV Broadcasters.

The Commission's *Further Notice* asks for information on digital retransmission consent agreements to determine the degree to which cable operators are carrying digital signals on a voluntary basis.[48] While anecdotal information has suggested that there are very few such agreements, NAB/MSTV/ALTV conducted a survey of full-power television stations about digital carriage agreements with cable operators. The survey results suggest that what was true for the analog world will continue to be true for the DTV world: without must carry, cable will not carry the bulk of the free, over-the-air broadcasters.

a. Survey Results Show Cable Has Virtually No Interest In Carrying DTV Signals of Local Broadcasters.

The survey of broadcasters about DTV cable carriage was conducted by NAB's Research and Planning Department, which prepared a report detailing the survey and its results.[49] The principal findings of the NAB Survey as to cable carriage negotiations and agreements for commercial broadcasters are:[50]

> (1) A majority of commercial station managers who responded to the survey rate the responsiveness of cable systems to their digital television carriage requests as "Poor." Among those that are currently on-air with a digital signal, nearly 60 percent categorize cable responsiveness in their markets as "Poor."

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[47] *Turner II,* 520 U.S. at 201.
[48] *Further Notice* at ¶ 115.
[49] David Gunzerath, "Survey of DTV Cable Carriage Issues May 2001," June 11, 2001 ("NAB Survey" or "Survey") (attached hereto as Appendix B).
[50] NAB Survey at 3.

(2) The number of commercial stations that have reached agreements with cable systems for carriage of their digital signals remains very low. Only 5.8 percent of all responding commercial stations report having reached an agreement for digital signal carriage with any cable system in their markets. Eight of the 60 responding commercial stations that currently broadcast in digital have reached such an agreement, but only five of these stations report that they have obtained carriage for all non-subscription parts of their digital signal.

(3) Very few commercial stations are utilizing network templates in their digital cable carriage negotiations. Just five of nearly 400 commercial station respondents report doing so (and only two of these indicate they have successfully reached a carriage agreement using a template). No stations already on-air in digital report using a network template in their cable carriage negotiations.

One-third of all responding commercial stations (including both those on-air with digital and those not yet on-air) stated that they had contacted cable systems in their markets concerning carriage of their digital signals. Of these, 51.6 percent rated the overall level of responsiveness of cable operators to these requests as "Poor," and the Mean Score fell between the "Poor" and "Fair" categories.[51] A very large percentage of the broadcasters who have tried to secure DTV carriage, 83.3%, rate cable operator responsiveness as only "Poor" or "Fair."[52]

About 60% of stations currently on-air in digital have contacted cable systems in their markets concerning carriage of their digital signal. Of these, three in five (59.4%) categorized the responsiveness of cable operators to their requests as "Poor."[53] The Mean Score (average) response here again falls between "Poor" and "Fair."[54] And even among those already on air with a digital signal and thus "available" for carriage, a very large

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[51] Survey at 8.
[52] *Id.*
[53] Survey at 9.
[54] *Id.*

percent, 78.2%, rate cable operators' responses to their requests as only "Poor" or "Fair."[55]

These survey results show what broadcasters have long been telling the FCC: cable operators generally will not respond to broadcasters about cable carriage of DTV signals.[56] And even where conversations can be had on the subject, the number of actual cable carriage agreements for DTV signals that results is very small: eight such agreements were reported to NAB. And that is some four years after the transition began, two and one-half years after the first stations starting digitally broadcasting and two years after the affiliates in the top 30 markets went on-air with digital signals.

Thus, the extent to which the Commission can rely on voluntary carriage agreements to achieve cable carriage of DTV signals during the transition (said by the Commission "likely to be essential to the successful introduction of digital broadcast television and the rapid return of the analog spectrum"[57]) is very small indeed.

Additionally, the extent to which the Commission can rely on broadcast network agreements for cable carriage of their owned stations[58] to serve as "templates" for

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[55] *Id.*

[56] Andrew Fisher, President, Cox Television, Remarks at The Media Institute Luncheon (March 14, 2001).

[57] *Notice of Proposed Rule Making*, CS Docket No. 98-120 (rel. July 10, 1998) at ¶ 14. Similarly, the Congressional Budget Office concluded that cable carriage of over-the-air digital broadcasts "is perhaps the most important factor affecting how quickly DTV reaches the largest number of households." CBO, *Completing the Transition to Digital Television* (September 1999) at *x*. Cable subscribers who are, by cable's admission, "early adopters" (*see* Kraemer/Levine Report at 31) would be particularly likely candidates to join the DTV transition early and thus help to push the transition to an early conclusion.

[58] To the extent that reported network cable carriage arrangement (mostly secured as part of a package involving carriage of network-owned cable channels) result in actual carriage (at some point) of network-owned stations' DTV signals, the Commission

carriage arrangements by affiliates also seems quite small. Very few commercial television stations that responded to the NAB Survey reported that they have been able to use a network template in their negotiations with cable systems for carriage of their digital signals. Only five stations reported using such a template, and only two of the nearly 400 commercial stations that responded to the survey indicated they have successfully used a network template in reaching a digital carriage agreement with a cable operator.

b. Broadcasters' Experiences Show Cable Will Not Negotiate for Voluntary Carriage of DTV.

Broadcasters responding to the NAB Survey were given the opportunity to include additional comments about their efforts to obtain cable carriage of their digital broadcasts that reflect their experiences to date. A sampling of these responses were included in the report of the NAB Survey and give a feeling for the adamant refusals broadcasters are receiving from cable operators as they try to talk to them about DTV cable carriage.[59]

An example is the comment by one broadcaster that "[b]oth AT&T and Time Warner refused to discuss any language for digital carriage, and AT&T referred to the issue as a 'deal breaker.'"[60] Another reported: "Made attempts with AT&T Cable. Calls have not been returned. Have attempted to set-up demonstration of DTV/HDTV programming. Invitations have not been accepted."[61] And another said: "[We have]

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should keep in mind that only 83 of the approximately 1200 commercial stations are owned by the four major networks. *See* Kraemer/Levine Report at 33.

[59] *See* NAB Survey at 11-12.

[60] *Id.* at 11.

[61] *Id.*

been broadcasting a digital signal since Sept. 26, 1998! However, systems in this area have not been and, at this time, are not prepared to discuss carriage of our digital signal."[62] And a particularly telling comment relative to the Cable Act's purpose to preserve the vibrancy of the entire free, over-the-air broadcasting system was: "Our station is a religious broadcaster. When we spoke to one cable operator, the cable operator said, 'we liken your station one level below a home shopping or foreign language broadcaster – we would never have use for a station like yours.' I think this quote best represents the feelings of most, if not all, cable gatekeepers towards underserved populations like religious and foreign language broadcasters."[63]

In further support of this general pattern of cable's turning their back on broadcasters' request for DTV carriage, is an affidavit of the general manager of Belo Broadcasting's WFAA-DT in Dallas.[64] WFAA-DT was one of the original volunteer DTV stations that rushed to be on the air in November 1998. Since then, WFAA-DT has transmitted compelling HDTV programming from its network and local productions, including movies, sporting events, parades, and other events of high public interest. Yet, almost three years after WFAA-DT began operation, it has yet to be carried on one cable system in the Dallas area, where the largest cable operator – AT&T – has upgraded all of its systems.[65]

This affidavit, which is characteristic of most digital broadcasters' experience, confirms the conclusion suggested by the NAB Survey that few cable operators have

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[62] *Id.* at 12.
[63] *Id.* at 11.
[64] Attached hereto as Appendix C.
[65] *See Broadcasting & Cable*, June 4, 2001, at 30.

little interest in voluntarily carrying DTV broadcasters, even those with compelling programming and large analog audiences.

c. Many Broadcasters Will Be Harmed Severely In An Uncertain And Slow Digital Transition With No DTV Must Carry.

As was discussed in section II.A.2.a. above, a slow DTV transition without must carry puts preservation of the free, over-the-air broadcasting system and that central purpose of the Cable Act at risk. As Kraemer/Levine commented,

> with respect to DTV, the decisions made in the 2001-2002 timeframe have a "long fuse," and a "big bang," with implications not known for three to five or even ten years, with a material impact on shareholders, employees, partners, suppliers, customers, and management. Many participants in the DTV transition are playing a game of "bet the company."[66]

Many broadcasters believe that is exactly what they are doing, but they believe they must pursue a digital broadcast future if their free, over-the-air broadcast service is to continue to survive in an increasingly digital world. They also believe they cannot reach that future without DTV must carry to carry them to the local audience, so they can begin to build a DTV business on the back of their analog service. They also know that, a prolonged transition without DTV must carry (and thus without DTV revenue) of 20 or more years will drain their resources, provide a negative return on their millions of dollars invested in expensive DTV facilities, deplete their capital budgets for DTV production and other equipment necessary to build that DTV business and, eventually, require replacement of their analog transmitters and equipment, which will further siphon off resources needed to maintain a reasonable level of service. The cost-cutting in their basic analog service eventually will diminish their service, their audience and their

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[66] Kraemer/Levine Report at 16.

advertising support, all to the end that was predicted by Congress to occur without carriage of broadcast signals.

d. Digital Must Carry Advances Substantial Governmental and Public Interests.

The Commission asked commenters to demonstrate how a dual carriage requirement would meet the constitutional test established in *Turner*.[67] As we have demonstrated, requiring carriage of digital television signals during the transition advances the precise interests identified by Congress in passing the 1992 Cable Act.

Congress identified three separate interests supporting must carry: preservation of a vibrant system of local television broadcasting; fostering the availability of information from a diverse range of sources; and preventing unfair competitive practices.[68] These interests would be directly advanced by carriage of all local digital television signals.[69]

Digital carriage will ensure access by all local stations to the audience for digital programming. Carriage of only selected stations would disadvantage those stations not carried, as Congress found and the Supreme Court concluded based on evidence submitted on remand from *Turner I*.[70] The rapid development of digital television and the new and innovative services that Congress expected when it adopted section 336 of the Act will provide the millions of Americans without cable or satellite service with a

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[67] *Further Notice* at ¶ 114.

[68] *See* 1992 Cable Act §§ 2(a)(8), (9), and (10); H. Rep. No. 628, 102d Cong., 2d Sess. at 63 (1992); S. Rep. No. 92, 102d Cong., 1st Sess. at 58 (1991).

[69] *See* Comments of NAB, CS Docket No. 98-120 (filed Oct. 13, 1998) (Statement of Jenner & Block 11-24); Reply Comments of NAB, CS Docket No. 98-120 (filed Dec. 22, 1998) at 70-81. The *Further Notice* at ¶ 144 asks parties that previously submitted legal arguments concerning the constitutionality of DTV carriage rules not to repeat those arguments. NAB, MSTV and ALTV have complied with this request and incorporate by reference those arguments in our earlier comments in this docket.

wider range of information and services. Requiring carriage of digital signals during the transition would also foreclose cable operators from using their gatekeeper position in an anticompetitive manner by delaying or frustrating the development of digital services by their broadcast competitors.

There are also interests that support carriage of digital stations during the transition that are in addition to those that supported analog must carry. As shown above, the financial burden of an extended transition will harm local broadcasters, resulting in a reduction of service to the public – exactly what Congress sought to avoid.

A more rapid transition also will advance the date when part of the spectrum now used for television service can be freed up for other uses. This would advance the public's interest in having new and innovative communications services. Further, some of the spectrum to be vacated by television broadcasters will be reallocated to public safety services, and the public's interest in more effective public safety operations would therefore be advanced by a rule requiring carriage of DTV stations during the transition. Finally, a more rapid transition with the resulting greater level of certainty about the availability of spectrum will advance the government's interest in obtaining the highest level of auction revenue for the vacated spectrum.

A digital must carry rule therefore will advance substantial government interests and fully satisfy constitutional demands.[71]

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[70] *Turner II*, 520 U.S. at 191-192.

[71] Albert N. Lung, *Must-Carry Rules in the Transition to Digital Television: A Delicate Constitutional Balance*, 22 Cardozo L. Rev. 1 at 151 (2000).

III. Cable Capacity Is Central To This Proceeding and Updated Data Must Be Obtained.

The *Further Notice* rightly asks for substantive information to determine cable system channel capacity.[72] As the *Further Notice* states, the impact of mandatory carriage on cable systems was relevant in *Turner* and "accurate capacity information is essential for a well articulated and constitutionally sustainable dual carriage decision under *O'Brien* and *Turner*."[73] The *Further Notice* thus asks for further information on current capacity and forecasts for capacity growth in the future.

The Commission sent out a survey to cable operators that asked specific questions concerning capacity and particularized system information, the results of which were to be released for public comment.[74] The requested information is yet not available and cable operators appear to be resisting either voluntarily providing relevant data or its release for public comment. In response to the 1998 *Notice of Proposed Rule Making*, cable claimed insufficient capacity to carry temporarily local analog and digital broadcast signals, despite the undeniably explosive growth in cable channel capacity, but failed to provide updated capacity data. But as we said in 1998, cable operators' claims blink reality.[75] Today's explosion in cable capacity is everywhere evident.

A. As Predicted, Cable Capacity Has Exploded.

Paul Kagan Associates, Inc., a leading cable industry research analyst, noted in 1999:

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[72] *Further Notice* at ¶¶ 115-116, 124.
[73] *Id.* at ¶ 124.
[74] *See id.* at ¶ 116.
[75] NAB Reply Comments, CS Docket No. 98-120, (filed Dec. 22, 1998) at 10-15.

> [i]f cable plant construction is a feast or famine business, suffice it to say contractors are stuffed right now – and pushing food away. We've updated our 10-year forecast on construction and capital expenditures and the results for 1999-2000 are staggering. Ops will spend $7.5 billion this year on line extensions, rebuilds and upgrades – double the 1998 level. . . . . We're looking for 2000 to bring even higher levels of construction spending, at $8.5 bil. . . . . There's good news all around for broadband ops. Bandwidth is at an all-time high – 65% of all systems will be 750 MHz by year-end. . . . There is a chance some MSOs may bump up to 860MHz plant too.[76]

Kagan Associates later projected cable bandwidth in 2001 to be 750 MHz for 85% of cable subscribers. And digital cable growth (enabling a doubling of capacity)[77] has exceeded expectations.[78] Kagan characterized the growth in digital subscriptions as "MSOs Post Blistering Digital Growth."[79] *Broadcasting & Cable* magazine last week, in a special report on cable,[80] noted that one of the "interesting patterns in this year's list [of cable MSOs] is how much progress operators are making in digital cable."[81]

While further data is awaited from cable operators themselves, a clear picture of the explosive growth in cable capacity can be seen from examination of publicly available data. NAB/MSTV/ALTV have constructed a chart from public data sources to depict the current and forecasted state of cable capacity for the top ten MSOs.[82]

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[76] Paul Kagan Associates, *Cable TV Technology Newsletter*, May 28, 1999, *available at* http://www.kagan.com/kmarket/dbdef.shtml.
[77] *See* NAB Comments, CS Docket No. 98-120, (filed October 13, 1998), at 30-31 (discussion of digital cable); s*ee also* Joseph H. Weber, Cable TV Capacity (June 7, 2001) at 7, submitted with Joint Reply to Oppositions to Petitions for Reconsideration of America's Public Television Stations, *et al.*, CS Docket No. 98-120 (filed June 4, 2001).
[78] Paul Kagan Associates, *Broadband Technology Newsletter*, May 20, 2001, *available at* http://www.kagan.com/kmarket/dbdef.shtml.
[79] *Id.*
[80] *Broadcasting & Cable*, June 4, 2001, at 30-42.
[81] *Id.* at 36.
[82] Attached hereto as Appendix D.

As can be seen in the chart, channel upgrades and digitization have indeed proceeded apace.

- AT&T reported to the SEC this year that, as of December 31, 2000, a majority of AT&T Broadband's cable television systems (serving 23% of all cable households) had been upgraded to 750 MHz and over 75% had bandwidth capacities of at least 550 MHz. *All* of its served households are reported to be "digital ready."

- Time Warner Cable (TWC), serving 18.45% of cable households, reported to the SEC this year that, by year-end 2000, it had completed its upgrade to 750 MHz of 92% of its cable plant. Reports indicate that TWC will complete 750 MHz plant for 100% of its systems by the end of 2001. As of March 1, 2001, 38 of TWC's 39 field divisions were offering digital cable and the one remaining division is expected to commence offering digital service in 2001. *Broadcasting & Cable* reports that TWC has 10.5 million digital ready homes.

- Comcast, serving 11.14% of cable homes, reported to the SEC this year that 70% of its cable subscribers were served by a system with a capacity of at least 750 MHz, with 84% at at least 550 MHz. It is projected to have 90-95% of its systems at 750 MHz in 2001. Comcast serves 7.2 million homes with digital cable today.

- Charter Communications, serving 9.15% of cable households, announced that as of February 2001, 70% of subscribers were served by plant upgraded to at least 550 MHz. It reported to the SEC in 2001 that, by year-end 2002, 88% of subscribers will be served by systems with at least 750 MHz and 93% of subscribers will be served by systems with at least 550 MHz. That report also stated that Charter will add even more channels and services when their bandwidth is used for digital signal transmission. *Broadcasting & Cable* reports that Charter has 8.8 million digital ready homes.

- Cox, serving 8.94% of all cable homes, reported to the SEC in 2001 that, at the end of 2000, Cox had upgraded 70% of its networks to a bandwidth capacity of 750 MHz or greater and anticipates that 83% of its networks will have bandwidth capacity of 750 MHz or greater by the end of 2001. It also told the SEC that digital compression enables Cox to increase the channel capacity of its cable systems to approximately 250 channels. Cox currently has 8.1 million digital ready households.

- Adelphia Communications, serving 8.25% of cable homes, reported to the SEC in 2001 that 82% of its systems will be upgraded to greater than 750 MHz and that 18% of the plant will remain at 550 MHz and that digital services are available to Adelphia subscribers. Cablefax reported in May 2001 that Adelphia's upgrades

will be completed by the end of 2002. Adelphia currently has 5.4 million digital ready homes.

- Cablevision, serving 4.28% of cable households, reported in 2001 to the SEC that currently 71% of the total plant is 750 MHz capable two-way interactive and 95% of its homes are served by at least 77 channels. It also told the SEC that 97% of its subscribers will be served by systems having a capacity of at least 77 channels and 84% of the total plant will be 750 MHz capable two-way interactive.

- Insight, serving 2.03% of cable households, reported in 2001 to the SEC that it is in the process of upgrading over 99% of its subscribers to at least 750 MHz plant by the end of 2002. Insight was reported to be deploying 870 MHz systems. It has 1.10 million digital ready homes.

- Mediacom, serving 1.12% of cable homes, told the SEC in 2001 that, as of yearend 2000, 74% of its cable network was upgraded with 550 MHz to 750 MHz bandwidth capacity and that it is rapidly upgrading its cable network. It reported that, by December 2002, 95% of its basic subscribers will be served by cable systems with 550 MHz to 870 MHz bandwidth capacity. Mediacom is reported to have 470,000 digital ready homes.

Thus, data submitted to the SEC by these MSOs shows that, by the end of this year, over 50% of cable subscribers will by served by cable systems with 750 MHz bandwidth,[83] which allows approximately 115-6 MHz channels. That data also shows that, by end of 2002 (when all commercial DTV signals are scheduled to be on air), another 16.82% of cable subscribers will be served by cable systems with 750 MHz bandwidth.[84] Thus, under the conservative estimates submitted to the SEC, by end of 2002 at least 67.78% of cable subscribers will be served by 750 MHz cable systems.[85]

While NAB/MSTV/ALTV did not have access to information on smaller cable systems, these systems appear to also be rapidly upgrading their capacity and going digital. For example, an executive of Millennium Cable said in a company press release

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[83] Combined totals for AT&T, TWC, Comcast, Cox and Cablevision.
[84] Combined totals for Charter, Adelphia and Insight.

that Millennium is converting its customers to digital, because "analog cable simply cannot continue to deliver the amount of choices and the picture quality for the money that digital programming can."[86]

Thus, an observation voiced by AT&T's General Counsel at an FCC Cable Services Bureau hearing fairly represents the overall cable industry, "[cable] channel capacity is not only increasing exponentially, but is about to go even beyond that as [cable] goes digital." He went on to say that AT&T's belief "is that we are going to be crying for content." When asked if that included digital must carry signals, he had no answer.[87] As said by a senior executive at MediaOne, "[t]his digital capability . . . effectively obliterat[es] the must-carry threat."[88]

B. Cable Holds All the Actual Data On Capacity.

As noted above, the FCC has requested precise data on capacity from cable operators, but to date that information is not available. NAB/MSTV/ALTV here urge the FCC to make its request for this information mandatory and, once received, release it to the public for examination and comment. Further, we note that the FCC has asked for this information as a percentage of cable *systems*. We urge the FCC to ask for the requested data as a percent of cable *subscribers*, which would be a far more useful figure by which to evaluate capacity, given that cable systems vary tremendously in size and

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[85] By the end of 2002 an additional 1.064% of cable subscribers will be served by Mediacom's 550-870 MHz systems.

[86] Press Release, Millennium Digital Cable, Millennium Digital Media Converts Cable to Digital: Launching New Channels and Packaging in Seattle and East King County (Feb. 6, 2001).

[87] AT&T/Media One Cable Services Bureau Hearing, Feb. 4, 2000, excerpt transcribed from FCC RealAudio, attached hereto as Appendix E.

number of subscribers served. We also note in this regard that the burden cannot and should not be placed on broadcasters to demonstrate conclusively that DTV must carry would place only a minimum burden on cable. Cable holds all the relevant information for such a showing. The public and broadcasters must be allowed to evaluate and comment on specific system capacity information submitted to the Commission.

C. The Actual Burden On Cable Of Carrying DTV Broadcast Signals Would Be Less Than That of Original Analog Mandatory Carriage.

NAB/MSTV/ALTV have constructed a bar chart, entitled "Relative Burden Chart: Local Commercial Broadcast Stations as a Percentage of Cable System Capacity"[89] showing, for the years from 1993 when must carry came into effect through 2008, local commercial broadcast stations as a percentage of average cable carrying capacity.[90]

Two points are clearly evident from this chart. One, the burden of carrying local broadcast stations has diminished over time as cable capacity has expanded.[91] And two, the relative burden of carrying both DTV *and* NTSC signals will be *less* than the initial burden of carrying only analog signals.[92]

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[88] Jim Barthold, *Bandwidth Debate: Just How Much Will be Enough*, attached as Appendix E.

[89] Attached hereto as Appendix F.

[90] The court in *Turner II* relied on national averages as an appropriate way to evaluate cable claims of undue burden, despite cable arguments that these average figures were "useless." 520 U.S. at 215; *see* Brief of Turner Broadcasting System at 51.

[91] *See Turner II*, 520 U.S. at 215.

[92] *See also* Joseph H. Weber, Cable TV Capacity (June 7, 2001) at 11, submitted with Joint Reply to Oppositions to Petitions for Reconsideration of America's Public Television Stations, *et al.*, CS Docket No. 98-120 (filed June 4, 2001) ("[E]ven if another dozen channels were devoted to digital signals from the broadcasters, it would still barely impact cable's available capacity.")

As cable capacity increased, the relative percentage occupied by local stations dropped substantially by 1998. There is a "blip" upward in the percentage burden in 2002 when all commercial stations are scheduled to have constructed digital facilities. However, even at the height of the transition, the "burden" of carrying local stations will be far less than the burden on cable from carrying analog stations when must carry went into effect. And the total average burden never comes close to the one-third cap established by the Act and upheld in *Turner II*. To the extent that there are some cable systems that have not upgraded and for which carriage of DTV signals would pose a significant burden, the Commission can fashion its rules to accommodate those situations. *See* notes 18-19, *supra* and accompanying text.

The cable capacity devoted to local broadcasters has diminished over time, and will continue to diminish in the future with further upgrades and deployment of digital cable, notwithstanding the temporary addition of DTV signals. Once the transition has been completed, cable carriage will revert to carriage of only one signal per broadcaster, which will be a truly *de minimis* burden on cable systems.

D. The Expanding Capacity of Cable Systems Obviates Any First Amendment Concerns.

In considering channel capacity issues, the Commission cannot proceed under the assumption that *any* displacement of cable programming by digital television signals would violate the First Amendment. Indeed, if it were certain that all digital signals could be carried without displacing any cable channels, there would be no First

Amendment question presented here at all, given the complete rejection of cable's "forced speech" argument in *Turner I*.[93]

In *Turner II*, the Court did not suggest that must carry had not affected *any* cable programming; instead it found that "[b]ecause the burden imposed by must-carry is congruent to the benefit it affords, we conclude that must carry is narrowly tailored."[94] Further, it recognized the argument that the already-increasing capacity of cable systems would diminish any burdens caused by carriage rules.[95]

Since the burden of carrying all analog stations was deemed constitutionally acceptable in *Turner II*, the Commission must conclude that a DTV carriage rule that created no higher burden than must carry had in 1993 would also pass constitutional muster. We have shown that for the overwhelming majority of cable systems, not only would the burden of carrying both analog and digital signals during the transition be no higher than the burden created by analog must carry in 1993, the growth of cable capacity means the real burden would be *far less*. And cable systems have the ability to reduce the burden further by employing digital compression technology.

Under the record before the Commission, therefore, no substantial First Amendment question could be raised due to any claimed burden of digital carriage on cable systems or programmers. The burden should be squarely placed on them to demonstrate specific facts that would support any contrary conclusion.[96]

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[93] *Turner I*, 512 U.S. at 655-56.
[94] *Turner II*, 520 U.S. at 215-16.
[95] *Id.* at 215.
[96] In evaluating any burden claims, moreover, the Commission should recall that cable programmers' claims concerning the impact of analog must carry proved baseless. *See,*

IV. The Commission's Use of the *WGN* Test For Carriage of Program Related Material Under the Act Does Not Work in the DTV World and Must Be Replaced for Purposes of DTV Carriage Rules.

In the *Further Notice*, the Commission asks how it should apply the statutory term "program-related" from Section 614(b)(3)(A) of the Act to the content of digital signals.[97] The Commission also determined that it would, in making these decisions, continue to apply the factors enumerated in *WGN Continental Broadcasting v. United Video*.[98] NAB/MSTV/ALTV urge the Commission to move beyond the *WGN* factors because they are inappropriate and unworkable in a digital environment.

WGN dealt with whether the copyright on a television program extended to the material in a teletext transmission in the Vertical Blanking Interval (VBI). As the court emphasized in denying rehearing, "more than 'relatedness' is required" to satisfy its test.[99] Thus, the court's own characterization of its test reveals that it is not congruent with the statutory language.[100]

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e.g., Letter from Edward O. Fritts to Brian P. Lamb, May 29, 1998 (Appendix F to NAB Comments, CS Docket No. 98-120 (filed Oct. 13, 1998)).

[97] *Further Notice* at ¶ 122.

[98] 693 F.2d 622, 626 (7th Cir. 1982).

[99] *Id.* at 629.

[100] It is also worth noting that the court on rehearing rejected an argument by United Video that carriage of the teletext material would unduly burden cable systems, which had suggested that carriage of teletext would displace cable programming. The court recognized that teletext "is part of the channel on which the station's regular programming is carried. No displacement of any other programming is threatened by our decision." *Id.* The same, of course, is true with respect to carriage of material contained in DTV signals.

Indeed, NAB argued that the Commission should not utilize the *WGN* factors in determining what material is "program-related" for purposes of analog must carry.[101] The Commission ultimately recognized that since "[c]arriage of information on a station's VBI is rapidly evolving . . . we believe no hard and fast definition can now be developed."[102] On reconsideration, it clarified that "the factors set forth in *WGN* do not necessarily form the exclusive basis for determining program-relatedness."[103]

As the Commission anticipated, technology for carrying additional material in broadcast signals has rapidly developed. The Commission recently noted, for example, that interactive television (ITV) "services can be supported by transmissions using the vertical blanking interval of analog video channels."[104]

Regardless of whether these enhancements to *analog* transmissions would justify a new definition of program-related, the transition to *digital* transmission requires the Commission to move away from the narrow *WGN* factors. In a digital signal, of course, there is no VBI. In order for interactive digital services to be delivered to a consumer, the corresponding elements must somehow be "associated" or "linked." And whoever controls the process of "associating" will therefore be able to control both how new services will be made available to consumers and how these additional viewing choices are presented to consumers for selection.[105]

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[101] NAB Comments, MM Docket No. 92-259 (filed Jan. 4, 1993) at n. 26; NAB Petition for Partial Reconsideration and Clarification, MM Docket No. 92-259 (filed May 3, 1993) at 2, 4-5.
[102] *Cable Act Implementation (Must Carry)*, 8 FCC Rcd 2965, 2986 (1993).
[103] *Cable Act Implementation (Must Carry)(Reconsideration Order)*, 9 FCC Rcd 6723, 6734 (1994).
[104] *Notice of Inquiry*, CS Docket No. 01-7 (rel. Jan. 18, 2001) at ¶ 10.
[105] *See* NAB Comments, CS Docket No. 01-7 (filed March 19, 2001) at 22-24.

In the pending proceeding on carriage of interactive services, the Commission broadly defined the term *related* to encompass video signals such as:

> transmission of a different camera angle on a sporting event. Alternatively, it could be to access a chat room or email service to be used in conjunction with a video stream. Another possibility could be to access a graphic interface, *e.g.*, a screen or screens that wraps around the video signal(s) being displayed, which provides supplementary information related to the video display or the opportunity for 't-commerce' (the purchase of merchandise related to the displayed video signal).[106]

The Commission thus has already acknowledged that the myriad uses of new technology require a broader definition of relatedness than was suitable for an analog environment.

A narrow interpretation of what constitutes program-relatedness raises serious concerns in a digital environment. For example, a broadcaster's time-shifting of programming on a second or third channel would not be considered program-related because it fails the second prong of the *WGN* test: it would not be made available during the same interval of time as the initial video signal. Thus, consumers who prefer to view their news, sports, and/or entertainment programming on a time-shifted schedule may be denied access to their broadcast multicast channel because time-shifting does not fit squarely within the copyright definition of what is related – a definition that was based on an analog premise.

Further, zone-specific, or community-specific newscasting, would fall outside the boundaries of the *WGN* definition of program-related because the broadcaster would not intend for the *all* viewers to watch the same video signal. Yet news targeted to specific communities or geographic regions is *clearly related* in terms of content to the main program.

Another shortcoming of the *WGN* test would be revealed in the dissemination of emergency information or breaking news. For example, if during an entertainment program, severe weather conditions were occurring in a broadcaster's community, digital technology would allow the station to alert the viewing audience on the first channel, and invite them obtain detailed coverage on a second channel or a data transmission with minimal disruption to audiences that were not affected by the emergency. The breaking news or weather emergency information is not likely to meet the third-prong of *WGN* test, *i.e.,* whether the information is an integral part of the video program. While emergency information may not directly relate to the entertainment program, it would *directly relate* to the safety and well being of the viewing audience.

A copyright test inherently requires consideration of the content of a particular program or service. Given the broad flexibility that digital technology provides, a determination of program-relatedness based on individualized determinations about specific programs or services would be unworkable, since the volume of decisions would overwhelm the resources of broadcasters, cable systems and the Commission.

The Commission recognized that the flexibility granted digital broadcasters to provide ancillary and supplementary services directly relates to the way in which "program-related" should be defined for DTV.[107] The Commission has already established a bright line test to define ancillary and supplementary services – services are ancillary to the broadcaster's main signal when they are offered on a subscription

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[106] *Notice of Inquiry*, CS Docket No. 01-7 (rel. Jan. 18, 2001) at ¶ 6.
[107] *Further Notice* at ¶ 122.

basis.[108] That decision should also control the Commission's definition of program-related.

The Commission should, therefore, abandon the *WGN* test for DTV. While information that is wholly unrelated to a broadcaster's program service would not be subject to carriage, the Commission should define "program-related" for carriage of a digital signal to include all non-subscription material that adds to, supplements, or relates to the program service of the broadcasting station.[109]

V. Carriage of Digital Signals by Satellite Carriers

As the NAB explained in its prior comments, the Satellite Home Viewer Improvement Act of 1999 ("SHVIA") requires the Commission to ensure that the carriage obligations imposed on the satellite industry are comparable to those imposed on cable systems.[110] In particular, the SHVIA requires the satellite rules to be comparable to the requirements imposed on cable systems with regard to carriage of digital signals.[111]

As to cable systems, as NAB has previously documented, the Communications Act expressly directs the Commission to issue regulations requiring cable systems to carry the signals of all local television stations, whether analog or digital. Moreover, the SHVIA itself (in § 338(a)(1)) applies to "all" television broadcast stations in the local market -- not just analog stations. Both to honor its obligation to create carriage rules "comparable" to those applicable to cable, and in light of the clear mandate of the SHVIA itself, the Commission should rule that section 338 requires (for those carriers that invoke

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[108] *Fifth Report and Order* at ¶ 29.
[109] *See* NAB Comments, MM Docket No. 98-120 (filed Oct. 13, 1998) at 39.
[110] See NAB Comments, CS Docket No. 00-96 (filed July 14, 2000).
[111] 47 U.S.C. § 338(g).

the voluntary compulsory license established by section 122 of the Copyright Act) carriage of both analog and digital television stations. That is, a satellite carrier that relies on the section 122 compulsory license to retransmit at least one station in a particular local market should carry both the analog and digital signals of each local station requesting carriage for as long as the station continues broadcasting in both formats. To the extent that local stations broadcast their digital signals in a HDTV format, satellite carriers should be required to carry a station's digital signal in that format.

As discussed in detail above, the channel capacity of *cable systems* -- which is now exceedingly abundant -- is relevant in evaluating the alleged "burdens" on cable from the must carry regime mandated by Congress for that industry. There is no need for the Commission to undertake any similar capacity inquiry with regard to satellite systems, however, because the SHVIA does not mandate any speech whatsoever by satellite carriers. Rather, as the Commission itself has explained in a recent court filing, "[t]he SHVIA imposes no burden on [the satellite carriers'] speech and, accordingly, does not even implicate the First Amendment. . . . SHVIA imposes no restriction (beyond those imposed by the generally applicable law of copyright) on plaintiffs' right to carry any television program. Instead, SHVIA creates a statutory benefit for satellite carriers -- a license which permits [satellite carriers] to carry television programs that would otherwise be subject to copyright restrictions."[112]

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[112] Federal Defendants' Motion to Dismiss, *Satellite Broadcasting & Communications Ass'n v. Federal Communications Commission*, Civ. No. 00-1571-A (E.D. Va. filed Dec. 22, 2000) (emphasis in original).

Although the requirement under SHVIA to carry all stations is clear, and creates no constitutional issues whatsoever, Congress was aware that, because of factors such as the lead time necessary to create additional satellite capacity, the Commission might conclude that certain modest differences were appropriate between the rules applicable to cable and those applicable to satellite firms. In particular, the Commission might reasonably conclude that, just as Congress created a brief transition period to permit DBS firms to further develop their satellite capacity before the effective date of section 338, a short transition period is appropriate before the effective date of a requirement to carry both digital and analog signals under section 338. Such a short transition period would enable DBS firms to launch additional satellites (or take other steps, such as use of improved compression techniques) to exploit the vast amount of satellite capacity available to them, including Ku-band capacity at the DBS firms' core orbital slots (101°, 110°, and 119° West Longitude), Ku-band capacity at "wing slots" (such as 6.15° W.L. and 148° W.L.) and Ka-band capacity at numerous orbital slots. Whether or not the Commission elects to adopt a delayed effective date for carriage of digital stations, however, one core principle should always apply: satellite carriers cannot be permitted to use the section 122 compulsory license to discriminate among stations in a market with respect to carriage of digital signals. If a DBS firm offers to carry the digital signal of one station in a market using the section 122 compulsory license, all stations in that market must be offered the same opportunity.

The Commission also seeks comment on the application of network nonduplication, syndicated exclusivity, and sports blackout rules to carriage of digital