

**TABLE 2:
Channel Capacity of Cable Systems, 1987-93**

Channel Capacity	1987*		1990*		1993*	
	Number of systems	Percent of systems**	Number of systems	Percent of systems**	Number of systems	Percent of systems**
54 and over	565	8.01%	808	9.60%	1,306	13.13%
30 to 53	3,272	46.40%	4,846	57.55%	6,364	63.96%
20 to 29	1,298	18.41%	1,370	16.27%	1,197	12.03%
13 to 19	312	4.42%	283	3.36%	364	3.66%
6 to 12	1,557	22.08%	1,081	12.84%	697	7.01%
5 or less	48	0.68%	32	0.38%	22	0.22%
Not available	784		1,192		1,210	
Total	7,836		9,612		11,160	
Subtotal 30 plus	3,837	54.41%	5,654	67.15%	7,670	77.09%
Subtotal 29 or less	3,215	45.59%	2,766	32.85%	2,280	22.91%

* Figures are as of April 1, 1987, April 1, 1990 and November 1, 1993.

** Percentage does not include systems for which information was not available

Sources: WARREN PUBLISHING, INC., 1987 TELEVISION AND CABLE FACTBOOK A-41;

WARREN PUBLISHING, INC., 1990 TELEVISION AND CABLE FACTBOOK C-385;

WARREN PUBLISHING, INC., 1994 TELEVISION AND CABLE FACTBOOK F-3.

**TABLE 3:
Channel Capacity for Subscribers, 1987-1993**

Channel Capacity	1987*		1990*		1993*	
	Number of subs.	Percent of subs.**	Number of subs.	Percent of subs.**	Number of subs.	Percent of subs.**
54 and over	5,752,221	15.09%	11,677,066	24.42%	20,909,256	38.37%
30 to 53	24,099,718	63.21%	31,765,994	66.44%	31,712,387	58.20%
20 to 29	5,439,395	14.27%	3,540,389	7.41%	1,482,527	2.72%
13 to 19	501,109	1.31%	180,199	0.38%	117,713	0.22%
6 to 12	2,232,808	5.86%	638,207	1.33%	262,010	0.48%
5 or less	102,394	0.27%	7,234	0.02%	3,254	0.01%
Not available	634,601		804,350		636,731	
Total	38,762,246		48,613,439		55,123,878	
Subtotal 30 plus	29,851,939	78.29%	43,443,060	90.87%	52,621,643	96.58%
Subtotal 29 or less	8,275,706	21.71%	4,366,029	9.13%	1,865,504	3.42%

* Figures are as of April 1, 1987, April 1, 1990 and November 1, 1993.

** Subs. = subscribers; percentages calculated based on totals that excluded subscribers for whom information was not available.

Sources: WARREN PUBLISHING, INC., 1987 TELEVISION AND CABLE FACTBOOK A-41;

WARREN PUBLISHING, INC., 1990 TELEVISION AND CABLE FACTBOOK C-385; WARREN

PUBLISHING, INC., 1994 TELEVISION AND CABLE FACTBOOK F-3.

**TABLE 4:
Growth By Network Type**

Network Type	1987		1990		1993		'87-'90	'90-'93
	no. of netw'ks	% of all netw'ks	no. of netw'ks	% of all netw'ks	no. of netw'ks	% of all netw'ks	% change	% change
Basic/No-Charge	59	78.67%	61	79.22%	72	72.73%	3.39%	18.03%
Premium	9	12.00%	5	6.49%	9	9.09%	-44.44%	80.00%
Pay Per View	6	8.00%	7	9.09%	13	13.13%	16.67%	85.71%
Combination	1	1.33%	4	5.19%	5	5.05%	300.00%	25.00%
<i>Total</i>	<i>75</i>		<i>77</i>		<i>99</i>		<i>2.67%</i>	<i>28.57%</i>

* A decline in the number of networks of a given type does not necessarily imply that those networks exited the market. It is equally as likely that several of the networks changed the nature of their services (and became "combination" networks, for example).

Source: *National Cable Video Networks by Type of Service*, CABLE TELEVISION DEVELOPMENTS (National Cable Television Association), Apr. 1994, at 7-A.²

**TABLE 5:
Source of Revenue**

Source of Revenue	1987		1990		1993		1987-90	1990-93
	\$ mil.	% of total	\$ mil.	% of total	\$ mil.	% of total	% chg growth	% chg growth
Basic Subscription Revenue	6,014	51.12%	10,169	56.95%	13,552	59.07%	69.09%	33.27%
Pay revenue	4,112	34.95%	5,105	28.59%	4,633	20.19%	24.15%	-9.25%
Expanded Basic Revenue	377	3.20%	495	2.77%	1,641	7.15%	31.30%	231.52%
Advertising Revenue	264	2.24%	628	3.52%	1,064	4.64%	137.88%	69.43%
Installation Revenue	241	2.05%	289	1.62%	289	1.26%	19.92%	0.00%
Pay-per-view Revenue	86	0.73%	253	1.42%	512	2.23%	194.19%	102.37%
Home Shopping Revenue	57	0.48%	72	0.40%	128	0.56%	26.32%	77.78%
Miscellaneous Revenue	613	5.21%	845	4.73%	1,123	4.89%	37.85%	32.90%
<i>Total Revenue</i>	<i>11,764</i>		<i>17,856</i>		<i>22,942</i>		<i>51.79%</i>	<i>28.48%</i>

Source: *History of Cable & Pay TV Subscribers & Revenues*, CABLE TV INVESTOR, March 31, 1994, at 9; 1993 revenue from advertising (and accordingly, total revenue) adjusted based on Kathy Healy, *Marketers Tune in to Cable's Appeal; Improvements Lead to Big Gains in Ad Spending*, ADVERTISING AGE, Feb. 28, 1994, at C-3.

² The total number of programming networks for 1990 shown in this table reflects the total at the end of 1990, and differs from the total number of networks shown in *1990 Cable Report*, App. G, Tbls. 4-5, which were derived from information obtained in 1988 and 1989.

TABLE 6:
Cable Industry Expenditure On Programming, 1987-1993

<i>Expenditure Type</i>	<i>1987</i> <i>(millions)</i>	<i>1990</i> <i>(mil.)</i>	<i>1993</i> <i>(mil.)</i>	<i>87-90</i> <i>% change</i>	<i>90-93</i> <i>% change</i>
<i>*Basic Programming</i>	\$572	\$1,410	\$2,187	146.50%	55.11%
<i>Other Programming</i>	\$1,717	\$1,785	\$1,813	3.96%	1.57%
<i>**All Programming</i>	\$2,289	\$3,195	\$4,000	39.58%	25.20%

Sources: * Paul Kagan Associates, Inc., *MARKETING NEW MEDIA*, March 15, 1993, p. 1;
 Paul Kagan Associates, Inc., *MARKETING NEW MEDIA*, June 20, 1994, p. 1; ** *Cable
 Systems' Programming Expenditures*, *CABLE TELEVISION DEVELOPMENTS 7-A* (National
 Cable Television Association Apr. 1994).

**TABLE 7:
Cash Flow Figures of Cable System Operators³**

<i>Cable System Operators with Publicly Available Figures*</i>	<i>1987</i>			<i>1990</i>			<i>1993</i>		
	<i>cash flow (mil.)</i>	<i>cash flow per sub.</i>	<i>cash flow margin</i>	<i>cash flow (mil.)</i>	<i>cash flow per sub.</i>	<i>cash flow margin</i>	<i>cash flow (mil.)</i>	<i>cash flow per sub.</i>	<i>cash flow margin</i>
Tele-Communications, Inc. (1)	\$773	\$117.05	43.35%	\$1,259	\$147.68	42.79%	\$1,858	\$178.55	44.74%
Time Warner Cable (2)**	\$527	\$103.23	38.16%	\$769	\$118.75	43.92%	\$1,035	\$143.45	46.88%
Comcast Cable (4)	\$117	\$107.83	40.77%	\$264	\$161.27	44.59%	\$552	\$208.46	50.41%
Cablevision Systems (5)	\$92	\$117.95	30.67%	\$241	\$154.98	42.81%	\$281	\$130.82	44.39%
Cablevision Industries (8)	-	-	-	\$135	\$130.56	45.15%	\$192	\$153.11	48.36%
Times Mirror Cable (9)	\$78	\$84.87	32.50%	\$141	\$130.68	38.01%	\$202	\$158.56	42.98%
Jones Intercable (10)	\$103	\$105.21	46.40%	\$183	\$128.78	45.41%	\$187	\$148.06	41.56%
Adelphia Communications (11)	\$55	\$94.66	55.56%	\$131	\$126.82	56.96%	\$173	\$139.07	56.72%
Viacom (12)	\$108	\$102.08	38.16%	\$143	\$135.16	43.33%	\$182	\$166.36	43.75%
Falcon Cable TV (14)***	\$10	\$111.11	50.00%	\$20	\$115.61	51.28%	\$27	\$146.74	50.00%
Century Communications (15)	\$60	\$85.11	54.55%	\$123	\$142.20	56.16%	\$177	\$187.30	49.03%
E.W. Scripps (19)****	-	-	-	\$34	\$129.77	-	\$105	\$149.57	40.38%
Post-Newsweek Cable (25)	\$40	\$103.90	40.40%	\$63	\$144.50	43.45%	\$82	\$170.12	44.09%
TCA Cable (26)	\$30	\$88.76	50.00%	\$61	\$130.06	53.51%	\$78	\$164.90	51.32%
Multimedia Cablevision (30)	\$42	\$137.70	46.15%	\$60	\$171.43	50.00%	\$85	\$203.84	51.52%
Total for Group	\$2,035	\$107.48	40.90%	\$3,627	\$137.53	44.19%	\$5,216	\$164.29	46.14%
Total for Industry*****	\$4,812			\$7,890			\$10,549		

* Displayed in descending order according to 1993 total basic subscribers, with the company's rank relative to all systems following in parenthesis.

** Includes both American Tel. & Communications Corp. (Time, Inc.) and Warner Cable Communications for 1987 and 1990, before the two were completely merged.

*** Includes only Falcon Cable Systems, a division of Falcon Cable TV.

**** The 1990 figures for E.W. Scripps are not included in the measure of change between 1987 and 1990.

***** Total estimate for industry cash flow was calculated by multiplying the estimated industry total revenue by cash flow margin for the group of companies.

Sources: 1993 Annual Reports for listed companies; PAUL KAGAN ASSOCIATES, INC., THE CABLE TV FINANCIAL DATABOOK 14-15, 37, 62 (1994); PAUL KAGAN ASSOCIATES, INC., THE CABLE TV FINANCIAL DATABOOK 17-18, 41, 66 (1991); PAUL KAGAN ASSOCIATES, INC., THE KAGAN CABLE TV FINANCIAL DATABOOK 20-21, 28-59, 86 (1991); *History of Cable & Pay TV Subscribers & Revenues*, CABLE TV INVESTOR, March 31, 1994, at 9; Tom Kerver, *Cablevision's Top 200*, CABLEVISION, May 23, 1994, at 101-123.

³ The term cash flow is used in Tables 7 and 8 to refer to the measurement of earnings before accounting for interest payments, taxes, depreciation and amortization ("EBITDA"). The group of companies that is used in both Table 7 and Table 8 includes 7 of the 10 largest cable system operators in terms of basic subscribers served in 1993, and 15 of the 30 largest such companies. Those fifteen MSOs are the fifteen largest MSOs for which information was publicly available.

**TABLE 8:
Cable MSOs' Revenues and Subscriber Totals⁴**

<i>Cable System Operators with Publicly Available Figures**</i>	1987		1990		1993	
	<i>basic subs.* (000)</i>	<i>cable revenue (mil.)</i>	<i>basic subs. (000)</i>	<i>cable revenue (mil.)</i>	<i>basic subs. (000)</i>	<i>cable revenue (mil.)</i>
Tele-Communications, Inc. (1)	6,604	\$1,783	8,525	\$2,942	10,406	\$4,153
Time Warner Cable (2)***	5,105	\$1,381	6,476	\$1,751	7,215	\$2,208
Comcast Cable (4)	1,085	\$287	1,637	\$592	2,648	\$1,095
Cablevision Systems (5)	780	\$300	1,555	\$563	2,148	\$633
Cablevision Industries (8)	-	-	1,034	\$299	1,254	\$397
Times Mirror Cable (9)	919	\$240	1,079	\$371	1,274	\$470
Jones Intercable (10)	979	\$222	1,421	\$403	1,263	\$450
Adelphia Communications (11)	581	\$99	1,033	\$230	1,244	\$305
Viacom (12)	1,058	\$283	1,058	\$330	1,094	\$416
Falcon Cable TV (14)****	90	\$20	173	\$39	184	\$54
Century Communications (15)	705	\$110	865	\$219	945	\$361
E.W. Scripps (19)	-	-	262	\$90	702	\$260
Post-Newsweek Cable (25)	385	\$99	436	\$145	482	\$186
TCA Cable (26)	338	\$60	469	\$114	473	\$152
Multimedia Cablevision (30)	305	\$91	350	\$120	417	\$165
<i>Total for Group</i>	<i>18,934</i>	<i>\$4,975</i>	<i>26,373</i>	<i>\$8,208</i>	<i>31,749</i>	<i>\$11,305</i>
<i>Industry Totals (average subscribers)</i>	<i>42,600</i>	<i>\$11,765</i>	<i>51,700</i>	<i>\$17,855</i>	<i>57,400</i>	<i>\$22,863</i>
<i>Percentage of Industry Total Accounted for by Group</i>	<i>44.45%</i>	<i>42.29%</i>	<i>51.01%</i>	<i>45.97%</i>	<i>55.31%</i>	<i>49.45%</i>

⁴ The fact that the Commission has used the figures for basic subscribers listed in Table 8, does not mean that the Commission has endorsed their use for other purposes. For example, it is likely that several of the cable system operators listed in that table are properly charged with substantially larger numbers of basic subscribers for the purpose of the Commission's attribution rules that are used for determining whether a cable system operator has exceeded the thirty-percent limit imposed by the horizontal ownership rules. See, e.g., *Implementation of Sections 11 & 13 of the 1992 Cable Act: Horizontal & Vertical Ownership Limits, Second Report & Order*, 8 FCC Rcd 8565 (1993).

- * Total at end of year. A calculation of revenue or cash flow per subscriber will be somewhat lower when the year-end total number of subscribers is used than when the average numbers of subscribers for the year is used.
- ** Displayed in descending order according to 1993 total basic subscribers, with the company's rank relative to all systems following in parenthesis.
- *** Includes both American Tel. & Communications Corp. (Time, Inc.) and Warner Cable Communications for 1987 and 1990, before the two were completely merged.
- **** Includes only Falcon Cable Systems, a division of Falcon Cable TV.

Sources: 1993 Annual Reports for listed companies; PAUL KAGAN ASSOCIATES, INC., THE CABLE TV FINANCIAL DATABOOK 14-15, 37, 62 (1994); PAUL KAGAN ASSOCIATES, INC., THE CABLE TV FINANCIAL DATABOOK 17-18, 41, 66 (1991); PAUL KAGAN ASSOCIATES, INC., THE KAGAN CABLE TV FINANCIAL DATABOOK 20-21, 28-59, 86 (1991); *History of Cable & Pay TV Subscribers & Revenues*, CABLE TV INVESTOR, March 31, 1994, at 9; Tom Kerver, *Cablevision's Top 200*, CABLEVISION, May 23, 1994, at 101-123.

**TABLE 9:
Cable Systems Sales Prices**

	1987	1990	1993	Pct. Chg. 1987-90	Pct. Chg. 1990-93
Number of Systems Sold	498	105	96	-78.92%	-8.57%
Total Number of Subscribers	6,506,466	531,207	3,852,668	-91.84%	625.27%
<i>Average Size of System (subs.)</i>	<i>13,065</i>	<i>5,059</i>	<i>40,132</i>	-61.28%	693.26%
Number of Homes Passed	11,845,227	870,588	6,628,216	-92.65%	661.35%
<i>Avg. # of Homes Passed</i>	<i>23,786</i>	<i>8,291</i>	<i>69,044</i>	-65.14%	732.73%
Total Dollar Value (billions)	\$11.21	\$1.07	\$8.32	-90.41%	674.48%
<i>Average Dollar Value (million)</i>	<i>\$22.51</i>	<i>\$10.23</i>	<i>\$86.69</i>	-54.53%	747.09%
<i>Value Per Home Passed</i>	<i>\$946</i>	<i>\$1,277</i>	<i>\$1,256</i>	34.95%	-1.67%
<i>Dollar Value Per Subscriber</i>	<i>\$1,723</i>	<i>\$2,049</i>	<i>\$2,160</i>	18.92%	5.43%
<i>Cash Flow Multiple (Ratio of Price to Cash Flow)</i>	<i>11.7 x</i>	<i>11.7 x</i>	<i>11.3 x</i>	0.00%	-3.00%

Source: *The Year that Disappeared*, CABLE TV INVESTOR, February 24, 1994, at 12; *Mergermania: SW Bell, Cox Tie the Knot*, Cable TV Investor, December 20, 1993, at 6. The Commission excluded transactions that had been reported in 1993, but were not consumated.

TABLE 10:
Cable System Transactions in Principle
That Have Been Announced in 1994

#	Buyer	Seller	System(s)	Mo.	Price (mil.)	Basic Subs.	Price/ Sub.	CF Mult.
1	TCI	Intermedia Partners	Tuscon, AZ	Jan	\$250.00	105,000	\$2,381	11.9
2	Triax Comm.	Dowden Midwest	Scaumberg, IL	Jan	\$0.90	800	\$1,125	8.6
3	US Cable Corp.	Panther Valley	Allamuchy, NJ	Jan	\$2.50	1,300	\$1,923	9.1
4	Charter Comm.	McDonald Invst. Co	AL, GA, LA sys.	Feb	\$185.00	100,000	\$1,850	10.3
5	Cablevision Ind.	Comm. Sys.	Lexington/Richland, KY	Feb	\$6.10	3,000	\$2,033	10.8
6	River Valley Cable	Time Warner	Sedona & Flagstaff, AZ	Feb	\$33.00	16,300	\$2,025	9.9
7	Friendship Cable	Galaxy Cable	AR, LA, TX systems	Feb	\$42.60	34,100	\$1,249	8.2
8	Marks Cablevision	Chambers	San Bernardino, CA	Feb	\$22.50	14,000	\$1,607	10.4
9	Marks Cablevision	Simmons Comm.	Ranch. Cucamonga, CA	Feb	\$20.00	11,400	\$1,754	10.1
10	KBLCOM	Countryside Cable	Bloomington, MN	Mar	\$87.00	47,600	\$1,828	11.2
11	Falcon Cable TV	Netarts Cable	Netarts, OR	Mar	\$1.50	1,300	\$1,154	7.8
12	P. Bordes becomes	100% owner of Greater Media		Apr	\$225.00	113,400	\$1,984	9.3
13	Lenfest Comm.	TCI	Red Lion/Mt. Wolf, PA	Apr	\$17.50	10,500	\$1,667	9.7
14	Rogers Comm	Maclean Hunter	U.S. systems	Apr.	\$1,082.70	494,000	\$2,192	11
15	Bresnan	Jones	Gaston Co., NC	Apr	\$35.00	19,900	\$1,759	9.2
16	Multimedia Cblvsn.	ML Media	Williamston, NC	May	\$4.30	3,000	\$1,433	10.8
17	Galaxy Mgmt.	Galaxy Cable	IL & KY Systems	May	\$18.40	14,900	\$1,235	11.8
18	Prestige Cable	Cblvsn/Iredell	Iredell & Alex. Cty, NC	May	\$3.40	2,400	\$1,417	8
19	Adelphia Comm.	North Star Cable	Fluvanna, VA	May	\$2.50	1,400	\$1,786	9
20	Adelphia Comm.	Tele-Media Corp.	U.S. systems	May	\$345.00	165,000	\$2,091	9
21	Cox Cable Comm.	Times Mirror Cable	U.S. Systems	Jun	\$2,296.00	1,292,200	\$1,777	11
22	Comcast Cable	Rogers Comm.	Maclean Hunter sys.	Jun	\$1,270.00	547,000	\$2,322	10.5
23	TCI Cblvsn/GA	TCI/ Int. Res.	Baton Rouge, LA	Jun	\$191.00	96,500	\$1,979	10.5
24	Marcus Ptrs. (14%)	Crown Media	Alabaster, AL	Jun	\$12.00	11,000	\$1,091	6.2
25	Marcus Ptrs.	Crown Media	WI systems	Jun	\$334.00	181,300	\$1,842	10.9
26	Charter Comm.	Crown Media	100% of owned & various % of managed	Jun	\$554.00	271,000	\$2,044	9.4
27	Cblvsn. Systems	Cblvsn. Boston	Boston, MA	Jun	\$207.10	130,000	\$1,593	9.7
28	US West	Robert Bass Group, including Wometco	U.S. sys, incl. GA Cable Corp.	Jul	\$1,200.00	480,000	\$2,500	10.8
29	Cblvsn Systems	Nashoba Comm.	Boston, MA. suburbs	Jul	\$90.00	34,800	\$2,586	n/a
30	Classic Cable	Transwestern	U.S. Systems	Jul	\$24.50	20,000	\$1,225	9.1
31	TCI	TeleCable Corp.	U.S. Systems	Aug	\$1,560.00	740,900	\$2,106	10.3
32	Time Warner	Galaxy Cblvsn.	Granada Hills, TX	Aug	\$8.00	5,400	\$1,481	11.1
33	Comcast	CableSouth	U.S. Systems	Aug	\$54.80	28,700	\$1,909	9.2
34	Galaxy Telecom.	Vantage	U.S. Systems	Aug	\$38.40	30,900	\$1,243	7.5
35	Classic Cable	De-Cal Cable	Kames City, TX	Aug	\$3.70	3,500	\$1,057	8.6
36	Multimedia	TCI	Wichita, KS area	Aug	\$90.00	50,000	\$1,800	9
	TCI	Multimedia	Suburbs of Chicago, IL	Aug	\$81.00	39,400	\$2,056	9.5
37	Cblvsn Systems	Sutton Capital	Monmouth, NJ	Aug	\$413.50	177,000	\$2,336	n/a
38	Time Warner*	Summit Comm.	Winston-Salem, NC	Sep	\$300.00	160,000	\$1,875	n/a
Totals & Weighted Averages**					\$10,950.90	5,380,100	\$2,035	10.2

* The transaction between Time Warner and Newhouse, which was also announced in September, is not included on this list because it involves the creation of a joint venture, and therefore, the Commission was unable to obtain an accurate valuation of the transaction.

** The totals and weighted average sales prices include both transactions involving the Maclean Hunter systems, but only include the differences between the systems involved in the transactions between TCI and Multimedia.

Note: Table 10 includes all transactions that have been identified by the Commission at this time.

It is not, however, purported to be a complete list of all transactions that have been announced in 1994.

Sources: *1993 Cable Sales Stats: Telco Buys Bring Them Back to the Future*, CABLE TV INVESTOR, Jan. 28, 1994, at 11; *System Sales: Caught in Credit Crunch III*, CABLE TV INVESTOR, Feb. 28, 1994, at 12; *The Year that Disappeared*, CABLE TV INVESTOR, Feb. 28, 1994, at 12; *Systems for Sale, But Where Are the Buyers?*, CABLE TV INVESTOR, Mar. 31, 1994, at 12; *Deal Tally -- Few & Far Between*, CABLE TV INVESTOR, Apr. 30, 1994, at 8; *Adelphia Taps Into Tele-Media*, CABLE TV INVESTOR, Jun. 7, 1994, at 3; *System Sales Spring to Life*, CABLE TV INVESTOR, Jul. 25, 1994, at 8; *MSOs on the Way Out*, CABLE TV INVESTOR, Aug. 31, 1994, at 6; Mark Robichaux, *Adelphia to Buy 75% Control of Tele-Media*, WALL ST. J., Jun. 8, 1994, at A5; *In Brief*, BROADCASTING & CABLE, Jul. 4, 1994, at 56; Joe Estrella & John M. Higgins, *TCI Swallows TeleCable Corp. in \$1.5M [sic.] Deal*, MULTICHANNEL NEWS, Aug. 15, 1994, at 42; John M. Higgins, *Newhouse Deal Sets Stage for New Sales*, MULTICHANNEL NEWS, Sep. 19, 1994, at 1; *A Deal is Completed*, N.Y. TIMES, Aug. 9, 1994, at D-17.

APPENDIX D

<i>Date Filed</i>	<i>Telephone Company</i>	<i>Location</i>	<i>Homes</i>	<i>Type of Proposal</i>
10/21/92	Bell Atlantic-VA	Arlington, VA	2,000	technical/ market
10/30/92	NYNEX	New York, NY	2,500	technical
11/16/92	New Jersey Bell	Florham Park, NJ	11,700	permanent
12/15/92	New Jersey Bell	Dover Township, NJ	38,000	permanent
04/27/93	Southern New England Telephone	West Hartford, CT	1,600	technical/ market
06/18/93	Rochester Telephone	Rochester, NY	350	technical/ market
06/22/93	US West	Omaha, NE	2,500 or 60,000	technical/ market
12/15/93	Southern New England Telephone (amendment)	Hartford & Stamford, CN	150,000	technical/ market expansion
12/16/93	Bell Atlantic	MD & VA	300,000	permanent
12/20/93	Pacific Bell	Orange Co., CA	210,000	permanent
12/20/93	Pacific Bell	So. San Francisco Bay, CA	490,000	permanent
12/20/93	Pacific Bell	Los Angeles, CA	360,000	permanent
12/20/93	Pacific Bell	San Diego, CA	250,000	permanent
01/10/94	US West	Denver, CO	330,000	permanent
01/24/94	US West	Portland, OR	132,000	permanent
01/24/94	US West	Minneapolis/ St. Paul, MN	292,000	permanent
01/31/94	Ameritech	Detroit, MI	232,000	permanent
01/31/94	Ameritech	Columbus & Cleveland, OH	262,000	permanent
01/31/94	Ameritech	Indianapolis, IN	115,000	permanent
01/31/94	Ameritech	Chicago, IL	501,000	permanent

01/31/94	Ameritech	Milwaukee, WI	146,000	permanent
<i>Date Filed</i>	<i>Telephone Company</i>	<i>Location</i>	<i>Homes</i>	<i>Type of Proposal</i>
03/16/94	US West	Boise, ID	90,000	permanent
03/16/94	US West	Salt Lake City, UT	160,000	permanent
04/13/94	Puerto Rico Tel. Co.	Puerto Rico	250	technical
05/23/94	GTE - Contel of Va.	Manassas, VA	90,000	permanent
05/23/94	GTE Florida Inc.	Pinella and Pasco Co., FL	476,000	permanent
05/23/94	GTE California Inc.	Ventura Co., CA	122,000	permanent
05/23/94	GTE Hawaiian Tel. Co.	Honolulu, HA	296,000	permanent
06/16/94	Bell Atlantic (amendment)	Wash. DC LATA	1,200,000	permanent
06/16/94	Bell Atlantic	Baltimore, MD; Northern NJ; DE; Philadelphia, PA; Pittsburgh, PA; and Southeastern VA	2,000,000	permanent
06/27/94	BellSouth	Chamblee & DeKalb Counties, GA	12,000	technical/ market
07/08/94	NYNEX	RI	63,000	permanent
07/08/94	NYNEX	MA	334,000	permanent
09/09/94	Carolina Tel. & Tel. Co.	Wake Forest, NC	1,000	technical/ market

APPENDIX E

MARKET AND TECHNICAL TRIALS, GRANTS AND PENDING APPLICATIONS FOR VIDEO DIALTONE

1. Since the adoption in 1992 of the video dialtone regulatory framework, the Commission has granted five applications for technical and market trials of video dialtone services, and one application for a permanent commercial video dialtone platform. Five additional applications for expanded, new market or technical trials are pending before the Commission, as well as twenty-three applications for permanent commercial authorizations. In this appendix the Commission briefly reviews the status of the trials, grants and pending applications.

A. Technical and Market Trials

2. Bell Atlantic -- Arlington Technical Trial. The first technical trial was granted on March 25, 1993, to Chesapeake and Potomac Telephone of Virginia (now, Bell Atlantic - Virginia) for a one-year technical trial with up to 400 (employee) subscribers in Arlington, Virginia, to test ADSL technology. *See Chesapeake and Potomac Telephone Company of Virginia*, 8 FCC Rcd 2313 (1993). Subsequent to the grant, requests to extend the technical trial into a market trial and to expand the market trial to 2000 subscribers were filed with the Commission. *See Application of Bell Atl. Co. for Section 214 Auth. to Provide VDT Servs. in No. VA.* ("Bell Atl. No. Va. VDT Application"), File No. WPC 6834 (filed Nov. 9, 1993). Special temporary authority ("STA") was granted to allow Bell Atlantic to continue the trial until its application to expand and extend the service is granted, or for six months, whichever occurs first. The STA is due to expire September 25, 1994. The technical feasibility of the service in various network environments is being assessed in the second phase of the trial. Therefore, information on those aspects was not available for review prior to submission of this Report. Program supplier-customers on the Bell Atlantic trial platform in northern Virginia include: HBO, Medstar Communications, Inc., 20th Century Fox, Atrium Group, Inc., Metro-Goldwyn-Mayer Inc., Black Entertainment Television, MTM Entertainment, Inc., Miramar Productions, USA Networks, National Geographic Society Television Division, Multimedia Entertainment, Inc., Worldvision Enterprises, American Medical Television, and Walt Disney Pictures & TV. In its report on the status of its trial, Bell Atlantic reported that no access problems were reported by program supplier-customers. *Six Month Compliance Report of Bell Atl. Co., Bell Atl. No. Va. VDT Application*, File No. WPC-6834 (filed Sep. 23, 1993).

3. NYNEX -- Manhattan Technical Trial. The second technical trial was granted to New York Telephone (NYNEX) on June 29, 1993, for a one-year trial to test an HFC network, video switching technologies and methods for storing and delivering video programming in three multiple-dwelling unit ("MDU") buildings serving 2,500 subscribers in New York City. NYNEX proposed to employ switched and non-switched analog technology initially, and to incorporate digital technology such as asynchronous transfer mode (ATM) switch, compact disk-read only memory (CD-ROM) and digital storage as they became

available. The network configuration involves fiber to a demarcation point within the MDU and coaxial cable drops to connect end-users within the MDU, with initial capacity estimates at 160 channels (the analog switch has 90 output ports and 160 input ports; access to switched video services initially is limited to 50 end-users). *Application of New York Telephone Co. for Section 214 Auth. to Provide VDT Servs. in New York City ("NYNEX New York VDT Application")*, 8 FCC Rcd 4325 (1993). NYNEX submitted the required report to the FCC on the status of the trial on July 15, 1994. *Six Month Compliance Report of NYNEX, NYNEX New York VDT Application*, File No. WPC 6836 (filed July 15, 1994). NYNEX reports spirited competition between its customer-programmers, particularly between Liberty Cable and Time Warner Cable. NYNEX is providing end-users a choice between two cable or direct-access programmer customers, Liberty Cable and Time Warner Cable, with a select number of end-users having access to on-demand programming from several information providers, including Liberty Cable, Time Warner, and Urban Communications Transport Corp. The programmer-customers participating in the stored access aspect of the trial include Capital Cities/ABC Video Entertainment, Educational Broadcasting Station WNET, Lincoln Center, Reuters, Archive Holdings, Advanced Research and Technology, Liberty Cable and Television, and Urban Transport. The NYNEX trial is being conducted in two phases. The first phase utilizes an analog system. The second phase of the trial, originally scheduled to begin in the fourth quarter of 1994, proposes to test a digital interactive system, while continuing to provide basic analog transport services. NYNEX reports a postponement in deployment of the digital phase of the trial due to delays in the availability of equipment. *Id.*

4. SNET -- West Hartford Technical and Market Trial. Southern New England Telephone Company (SNET) was granted a one-year authorization on November 12, 1993, for a technical and market trial to serve between 200 and 1600 customers in West Hartford, Connecticut and to test FTTN architecture with coaxial facilities from the node to individual subscribers. *Application of Southern New England Telephone Co. for Section 214 Auth. to Provide CDT Servs. in West Hartford, Conn. ("SNET West Hartford VDT Application")*, 9 FCC Rcd 1019 (1993). The system proposes to provide 110 channels of video initially, with possible expansion to approximately 500 channels using digital compression. In addition to delivering multichannel and single channel video, the network is intended to be capable of delivering to subscribers on-demand movies and other advanced interactive services, such as home shopping, educational and health care services. SNET is authorized to test enhanced and non-common carrier services such as digitizing, compressing, sorting video programming, operating a video switch and the provision of video customer premises equipment, in addition to testing customer interest in menu access and video-on-demand services. SNET also proposes to charge subscribers for the service to test interest and willingness to pay for services available from the video dialtone platform. *Id.* Shortly after grant of the technical and market trial, SNET requested an authorization to expand the trial to pass 150,000 homes. *Request for Expansion of Serv., SNET West Hartford VDT Application*, File No. WPC 6858 (filed Dec. 15, 1993).

5. U.S. West -- Omaha Technical and Market Trial. On December 22, 1993, U.S. West was granted an authorization for technical and market trials in Omaha, Nebraska. The technical trial will be for six months and may pass either 2,500 or 10,000 homes, depending on whether or not U.S. West files a tariff for the service. The market trial will be for the twelve months following the technical trial and may pass up to 60,000 homes. U.S. West will construct an advanced fiber-to-the-curb/coaxial cable network capable of providing 77 channels of analog video and between 800 and 1000 channels of digital capacity. See *Application of US West Communications, Inc. for Section 214 Auth. to Provide VDT Servs. in Omaha, Neb.*, 9 FCC Rcd 184 (1993). U.S. West predicted that approximately fifteen percent of the homes passed would elect to participate in the trial. The grant was also conditioned on US West charging tariffed rates if the service passed more than 2500 homes. The architecture consists of a hybrid fiber-to-the-curb/coaxial cable network for video dialtone, voice and data service, with the components including a gateway that combines and distributes signals from video providers, fiber optic cables, video nodes that convert optical signals to electrical signals, coaxial cable distribution system and interdiction devices that provide network control and end user access to individual analog channels. *Id.*

6. Rochester Telephone Co. -- Rochester Technical Trial. The fifth authorized trial was granted on March 25, 1994 to Rochester Telephone Co., for six months to conduct a tariffed field test to serve up to 120 subscribers using two architectures: a fiber-coax system within multi-unit and single-unit dwellings, and an ADSL system utilizing Discrete Multi-Tone technology within a defined two mile area. See *Application of Rochester Tel. Corp. for Section 214 Auth. to Provide VDT Servs. in Rochester N.Y.*, 9 FCC Rcd 2285 (1994). Rochester Telephone filed a tariff prior to commencement of its trial because it intends to charge both programmer-customers (the video information providers) and subscribers (end-users) for its video dialtone service. Rochester Telephone Corporation, Tariff FCC No. 3, Transmittal No. 224, filed May 17, 1994. Rochester states that it will construct, operate, own and maintain the facilities necessary to transport the video dialtone service, and the programmer-customer will supply, operate, and own the setup box and be responsible for providing all content and programming and service to the subscriber. Rochester's tariff indicates that the HFC network will provide programmer-customers 6-MHz channels and an interactive (4-MHz downstream and 40-KHz upstream) channel per specific customer location. The ADSL system will provide programmer-customers 6-MHz channels and an interactive (6-Mbps downstream and 16-Kbps upstream) channel per specific customer location. Rochester Telephone is testing the capabilities of the ADSL system to transmit a compressed digital video signal over embedded cooper loop plant in order to offer video dialtone service to customers located in areas where fiber optic and coaxial cable facilities have not been deployed. Rochester Telephone Corporation, Tariff FCC No. 3, Transmittal No. 224, filed May 17, 1994.

7. Additional Applications for Initial Trial. Three additional applications for initial trials are pending before the Commission. Puerto Rico Telephone Company has requested a one-year technical trial authorization to serve 250 homes using FTTC and 18 schools and 12 business offices using ADSL network architecture. See *Application of Puerto Rico Telephone Co.*, File No. WPC-6949 (filed April 13, 1994). The trial proposes initial

deployment of 64 analog video channels over the FTTC system, with future enhancement through digital compression to 384 channels.

8. BellSouth proposes an eighteen-month trial to pass 12,000 homes in DeKalb County and Chamblee, Georgia for the purpose of testing an HFC network offering both traditional channel service with 60 analog channels and a digital video dialtone platform with approximately 300 channels utilizing both digital multi-cast and digital point-cast. See *BellSouth Application*, File No. WPC-6977 (filed June 27, 1994). Digital multi-cast entails distribution of a digital video signal to everyone who subscribes, while digital point-cast is switched digital distribution.

9. Carolina Telephone and Telegraph Company has requested authorization for a two-year technical and market trial to 1000 homes in Wake Forest, North Carolina. See *Application of Carolina Telephone and Telegraph Co.*, File No. WPC-6999 (filed Sep. 9, 1994)

10. Trial Cost Estimates. The cost estimates for the various trials are as follows: C&P of Virginia, 400 end-user subscribers at a cost of less than \$5 million; NYNEX, 2500 potential end user-subscribers at a cost of less than \$3 million; SNET, 1600 potential end user-subscribers at a cost of less than \$3 million; US West, 2500 potential end user subscribers at a cost of less than \$8.4 million. *US West Communications, Inc.*, 9 FCC Rcd at 188 n. 59. The trial proposed by Bell Atlantic for 2000 households in Virginia is estimated to cost over \$11 million. *Id.* The Puerto Rico trial is estimated to cost approximately \$2.5 million.

B. Applications for Permanent Commercial Service

11. Twenty-four applications for permanent commercial video dialtone services have been filed with the Commission, including applications by six of the seven RBOCs, as well as GTE. Pacific Bell has filed applications for permanent authority to serve 210,000 homes in Orange County, 490,000 homes in San Francisco, 360,000 homes in Los Angeles and 250,000 homes in San Diego, CA. See File Nos. WPC-6913 to WPC-6916, filed December 20, 1993. U.S. West has requested permanent authorizations to serve 330,000 homes in Denver, CO, 132,000 homes in Portland, OR, 292,000 homes in Minneapolis-St. Paul, MN, 90,000 homes in Boise, ID, and 160,000 homes in Salt Lake City, UT. See File No. WPC-6919 filed January 10, 1994, File Nos. WPC-6921 and WPC-6922, filed January 24, 1994, and File Nos. WPC-6944 and WPC-6945, filed March 16, 1994. Ameritech has requested permanent authorizations to serve 232,000 homes in Detroit, MI, 262,000 homes in Columbus and Cleveland, OH, 115,000 homes in Indianapolis, IN, 501,000 homes in Chicago, IL, and 146,000 homes in Milwaukee, WI. See File Nos. WPC-6926 to WPC-6930 filed January 31, 1994. GTE has requested permanent authorizations to serve 90,000 homes in Virginia, 476,000 homes in Florida, 122,000 homes in California and 296,000 homes in Hawaii. See File Nos. WPC-6955 to WPC-6958 filed May 23, 1994. Bell Atlantic has requested permanent authorizations to serve 1.2 million homes in the Washington DC metropolitan area and 2 million in the Baltimore-New Jersey-Philadelphia-Pittsburgh

area. See File No. WPC-6912 as amended June 16, 1994, and File No. WPC-6966 filed June 16, 1994. NYNEX has requested permanent authorizations to serve 63,000 homes in portions of Rhode Island and 334,000 homes in portions of Massachusetts. See File Nos. WPC-6982 and WPC-6983 filed July 8, 1994 and supplemented on July 29, 1994.

12. The first permanent commercial video dialtone authorization was recently granted to New Jersey Bell for Dover Township. *New Jersey Bell Telephone Co.*, 9 FCC Rcd 3677 (1994), *pets. for recon. and mots. for stay pending*, File No. WRC-6840, and *appeals pending*, *Apelphia Communications, Inc. v. FCC*, No. 94-1616 (D.C. Cir., Sept. 7, 1994). Pursuant to that grant, New Jersey Bell is authorized to construct and operate a video dialtone system to provide video dialtone service to approximately 38,000 homes using a FTTC architecture, with coaxial cable and copper wire for the final link to the home and providing initial digital capacity of 64 channels, conditioned upon expanding capacity to 384 digital channels in January of 1995. *Id.*, 9 FCC Rcd at 3678. New Jersey Bell predicts that 35% of the homes passed will become end-user subscribers. *Id.*

APPENDIX F

Description of Program Access Cases Resolved (as of September 19, 1994)

1. *Petition of Time Warner Cable for Exclusivity*, 9 FCC Rcd 3221 (1994). Time Warner Cable filed a petition for exclusivity requesting authority to enforce, for a period of fifteen years, an exclusive distribution agreement with Courtroom Television (Court TV), a cable programming network. Liberty Cable, a SMATV operator, opposed the petition. On June 1, 1994, the Commission denied Time Warner's request. The Commission ruled that: (1) denial of access to Court TV to competitors will adversely affect competition in the local distribution market, because of its impact on Liberty's ability to compete in Manhattan and New York City, and could similarly limit the development of competition in other local distribution markets and in the national market; (2) Time Warner failed to show that exclusivity is necessary to either (a) attract capital investments for production, promotion, distribution, or carriage of Court TV, which is an established cable network with a growing subscriber base, or (b) promote diversity in programming; and (3) Time Warner would not be able to demonstrate that fifteen years is necessary, in any event, to justify exclusivity.

2. *Petition of New England Cable News for Exclusivity*, 9 FCC Rcd 3231 (1994). New England Cable News, a new regional cable news network, requested a public interest determination that would allow it to enter into exclusive program distribution agreements with cable system affiliates. The petition was unopposed. On June 1, the Commission granted the petition on the following grounds: (1) the ability to offer exclusivity to cable affiliates is necessary to attract investment and secure distribution essential to the financial viability of NECN; (2) NECN's ability to offer exclusive distribution rights to cable affiliates will foster diversity in the programming market; and (3) the public interest benefits of reasonably tailored exclusivity offset any detrimental effect exclusivity has on competition in the New England market. The Commission limited the exclusivity that NECN may offer to exclusive distribution for eighteen months to cable affiliates in the six New England states identified.

3. *Consumer Satellite Systems, Inc. v. Lifetime Television*, 9 FCC Rcd 3212 (1994). Consumer Satellite Systems ("CSS") filed a complaint against Lifetime Television, alleging excessive and discriminatory pricing for Lifetime's programming service. Subsequently, CSS requested dismissal of its complaint, because Lifetime had restructured its ownership so that it was no longer a vertically-integrated vendor. The parties also settled issues relating to pricing practices during the time that Lifetime was still subject to the rules. On June 24, the Cable Services Bureau dismissed the complaint, as not falling under the Commission's rules.

4. *Mid-Atlantic Cable Service Co. v. Home Team Sports and Columbia Cable of Virginia*, 9 FCC Rcd 3991 (1994). In June, 1994, the parties settled this complaint, which involved allegations of exclusivity, unfair practices and discrimination, including predatory pricing and undue influence. Both Mid-Atlantic and Columbia Cable serve Prince William County. Mid-Atlantic alleged it could not buy the Home Team Sports channel, but that

Columbia could, because of Columbia's TCI affiliation. Although there was no exclusive HTS/Columbia contract, Mid-Atlantic alleged *de facto* exclusivity growing from and related to the other alleged unfair and discriminatory practices. Pursuant to the settlement agreement, the Cable Services Bureau dismissed Mid-Atlantic's complaint with prejudice.

5. *Liberty Cable Company, Inc. v. Courtroom Television Network*, 9 FCC Rcd 4035 (1994). Liberty Cable Company, a SMATV operator in New York City, alleged that Court TV had violated the program access rules by refusing to provide its programming to Liberty, based on an exclusive agreement with Time Warner Cable. Prior to the filing of this complaint, Time Warner had filed a petition for exclusivity with respect to its contracts with Court TV and Prime Ticket Network. On March 25, 1994, the Bureau held Liberty Cable's complaint against Court TV in abeyance pending the outcome of Time Warner's petition for exclusivity. See *Complaint of Liberty Cable Co., Inc. v. Courtroom Television Network*, 9 FCC Rcd 2324 (1994). On June 1, 1994, the Commission denied Time Warner's exclusivity petition. *Time Warner Cable*, 9 FCC Rcd 3221 (1994). The Bureau determined that under the terms of the Commission's Order, Court TV could not refuse to distribute its programming to Liberty or any other MVPD, on the basis of its exclusive distribution agreement with Time Warner. Accordingly, the Bureau dismissed Liberty's complaint as moot, but without prejudice to refile if subsequent negotiations gave rise to a new program access complaint.

6. *Petition for Exclusivity of Time Warner Cable*, 9 FCC Rcd 4029 (1994). Time Warner Cable filed a petition for exclusivity requesting the authority to enforce an exclusive distribution agreement with Prime Ticket Network in ten communities in southern California. Vanguard Communications, Inc., a SMATV and MMDS operator, and the California Attorney General opposed the petition. Time Warner Cable withdrew its petition and stated that it will not enforce the exclusive provisions of the distribution agreement. Vanguard requested that the Commission condition withdrawal and dismissal of the petition on Time Warner's amendment of the distribution agreement with Prime Ticket. The Bureau determined that such conditions were unnecessary because without a public interest determination from the Commission such exclusive distribution agreements are unenforceable. On August 1, 1994, the Cable Services Bureau dismissed the petition.

7. *Petition of Walt Disney Company for Waiver of Program Access Rules*, 9 FCC Rcd 4007 (1994). Disney requested a waiver of the program access rules so its subsidiary, The Disney Channel, would not be considered a vertically integrated programming vendor by virtue of Disney's operation (through a subsidiary, Madeira Land Company) of a cable system serving almost exclusively the Disney World hotels. The hotels receive the channel from the Madeira system and then distribute it to guest rooms using internal wiring. Disney claimed that Madeira's few subscribers -- the hotels -- constituted less than 1/1000th of one percent of The Disney Channel's subscribers, and that Madeira's monthly license fee for the channel accounted for less than 1/40th of one percent of the channel's revenues. Disney argued that its interests as a cable operator were so *de minimis* that it lacked any incentive to refuse to sell programming to a competing distribution system or discriminate against competing systems by charging higher rates for the programming or imposing other

discriminatory conditions. The Bureau granted a conditional waiver, based on the fact that Madeira, although technically a cable system, is not the kind of distribution system the program access rules were designed to reach, and because the Disney Channel is widely available. The Bureau conditioned the waiver on Disney's reappearance before the Commission to have the waiver continue in force if Madeira either begins residential distribution or adds other non-Disney hotels to its distribution system.

8. *Electric Plant Board, City of Glasgow, KY v. Turner Network Cable Sales, Inc.*, DA 94-974, (CSR-4188-P, released September 6, 1994). Glasgow's municipal utility and electricity board, an overbuilder, alleged that its competitor, Telescripps Cable Company, was illegally enforcing an exclusive programming distribution contract with Turner to distribute TNT. Because this is an "area served by a cable operator," this type of contract is not prohibited *per se*, but Glasgow alleged that the parties cannot enforce it without first obtaining a favorable public interest determination from the Commission. Turner claimed the contract was grandfathered, as it was entered into before June 1, 1990. Glasgow claimed that a new contract was made when the contract was modified and extended in August, 1990. The Bureau dismissed Glasgow's complaint because it determined that the contract was grandfathered under the 1992 Cable Act. The Bureau noted in its dismissal that the exclusive contract was scheduled to expire October 31, 1994 and at that time Turner would be obligated to negotiate with Glasgow or to petition the Commission for a public interest determination.

9. *Hutchens Communications Inc. v. TCI Southeast and TCI of Georgia*, DA 94-975 (CSR-4230-P, released September 6, 1994). Hutchens, the owner and operator of a video production company, created and produced The Welcome Channel (TWC), that was carried by TCI initially without a lease fee. In 1993, TCI took the position that TWC was a leased access channel under the Commission's new rules and that a monthly lease was now warranted. Hutchens and TCI could not agree on the amount of the fee and TCI terminated carriage. Hutchens claimed that the fee was not justified under the leased access rules and was an unfair practice under the program access rules. Hutchens also claimed that TCI engaged in other unfair practices, including calling Falcon Cable (another cable system in the area that carries TWC) to encourage it to terminate TWC. TCI contended the fee was justified under the leased access rules, and that Hutchens' program access theory was misplaced, as Hutchens is not an MVPD. TCI also disputed Hutchens' other claims of unfair practices and claimed that the complaint was not properly verified and was untimely under the leased access rules. The Bureau dismissed the complaint on the grounds that the leased access claim was untimely filed and that Hutchens lacked standing to bring a program access complaint because it did not fall within the statutory definition of a multichannel video programming distributor.

10. *CableAmerica v. Times Mirror*, DA 94-985 (CSR-4024-P, released Sep. 9, 1994). CableAmerica, a 9,000 subscriber MVPD in Mesa, Arizona, competes directly with Dimension Cable Services, a subsidiary of Times Mirror Cable Television, Inc., with approximately 40-50,000 subscribers. According to CableAmerica, Times Mirror owns the Arizona Sports Programming Network, which carries professional and other live sporting

events featuring teams based in Arizona or otherwise of interest to Arizona residents. CableAmerica filed a complaint in January 1993. In February 1993, the Cable Television Branch sent CableAmerica a letter stating that the complaint was premature and that it would not be accepted for filing at this time because the Commission had not yet adopted its program access rules. CableAmerica filed a petition for reconsideration of this decision, which remained pending. CableAmerica refiled its complaint on August 10, 1993 alleging that ASPN refused to sell its programming to CableAmerica's Mesa system. Pursuant to a negotiated settlement agreed to by the parties, the Bureau dismissed the complaint.

11. *Private Network Cable Systems Company v. SportsChannel New York*, File No. CSR-4233-P. Private Network Cable Systems Company ("PNC") is a multichannel video programming distributor operating satellite master antenna television systems in two multi-unit housing complexes in Queens, New York. SportsChannel is a vertically integrated programmer who offers its programming to Time Warner, a direct competitor of PNC. PNC alleged that SportsChannel was discriminating against PNC vis-a-vis Time Warner in the pricing of programming. PNC recently filed a request to withdraw its complaint, with prejudice, because the parties have reached an amicable settlement. An order dismissing the case will be released shortly.

APPENDIX G

TABLE 1
1994 HORIZONTAL CONCENTRATION
IN THE CABLE TELEVISION INDUSTRY¹

<u>Rank</u>	<u>Company</u>	<u>Total Industry²</u>
1	TCI	24.75%
2	Time Warner	12.53
3	Continental Cablevision	5.08
<u>4</u>	<u>Comcast</u>	<u>4.82</u>
<i>Top 4</i>		<i>47.18</i>
5	Cablevision Systems	3.78
6	Cox Cable	3.12
7	Newhouse	2.41
<u>8</u>	<u>Cablevision Industries</u>	<u>2.33</u>
<i>Top 8</i>		<i>58.81</i>
9	Jones Spacelink	2.24
<u>10</u>	<u>Times Mirror</u>	<u>2.23</u>
<i>Top 10</i>		<i>63.29</i>
<i>Top 25</i>		<i>83.41</i>
<i>Top 50</i>		<i>92.42</i>
HHI		898.00³

¹ Data as of March 31, 1994. *Top 100 Cable System Operators as of March 31, 1994*, CABLE TV INVESTOR, June 7, 1994, at 17.

² Percentage based on share of total industry subscribers for 1994, which was calculated to be 57,900,000 by estimating from year-end 1993 total, and assuming continuation of the 1990-93 industry trend for total subscriber growth. PAUL KAGAN ASSOCIATES, INC., CABLE TV FINANCIAL DATABOOK 7 (1994).

³ The HHI is calculated on the basis of the top 50 companies' shares of the total subscribers in the industry. If data were available for all other companies in the industry, the number could increase no more than 2.1 points to a total of 900.

**TABLE 1A
HORIZONTAL CONCENTRATION AFTER
1994 MERGERS IN THE CABLE TELEVISION INDUSTRY¹**

<u>Rank</u>	<u>Company</u>	<u>Share of Total Industry²</u>
1	TCI	26.01%
2	Time Warner	15.21
3	Comcast	5.57
4	<u>Cox Cable</u>	<u>5.35</u>
<i>Top 4</i>		<i>52.14</i>
5	Continental Cablevision	5.08
6	Cablevision Systems	3.78
7	Cablevision Industries	2.33
8	<u>Jones Spacelink</u>	<u>2.24</u>
<i>Top 8</i>		<i>65.57</i>
9	Adelphia	2.17
10	<u>Viacom</u>	<u>1.90</u>
<i>Top 10</i>		<i>69.64</i>
<i>Top 25</i>		<i>87.35</i>
<i>Top 50</i>		<i>95.16</i>
<i>HHI</i>		<i>1051.00³</i>

This table takes account of the effects of the following proposed transactions: (1) TCI's acquisition of Telecable; (2) Comcast's acquisition of Maclean Hunter systems in the United States; (3) Cox's acquisition of Times Mirror; and (4) Time Warner's joint venture with Newhouse.

¹ Data as of March 31, 1994. *Top 100 Cable System Operators as of March 31, 1994*, CABLE TV INVESTOR, June 7, 1994, at 17.

² Percentage based on share of total industry subscribers for 1994, which was calculated to be 57,900,000 by estimating from year-end 1993 total, and assuming continuation of the 1990-93 industry trend for total subscriber growth. PAUL KAGAN ASSOCIATES, INC., CABLE TV FINANCIAL DATABOOK 7 (1994).

³ The HHI is calculated on the basis of the top 50 companies' shares of the total subscribers in the industry. If data were available for all other companies in the industry, the number could increase no more than 2.1 points to a total of 1053.

TABLE 2
CHANGES IN CONCENTRATION OF CONTROL OF THE
CABLE INDUSTRY BASED ON TOTAL SUBSCRIBERS

	1989	1990	1991	1992	1993	1994	POST 1994 MERGERS
Top Co. Share	24.4	24.0	24.5	25.2	24.3	24.8	26.0
Top 4 Share	45.8	46.9	46.0	48.1	47.2	47.2	52.1
Top 8 Share	57.3	58.7	57.2	60.0	58.7	58.8	65.6
Top 10 Share	61.7	62.9	61.4	64.4	63.2	63.3	69.6
Top 25 Share	80.7	82.1	80.2	84.3	83.1	83.4	87.4
Top 50 Share	91.6	93.5	90.9	95.0	93.1	94.4	95.2
HHI	867.00	866.00	872.00	928.00	880.00	898.00	1051.00

Sources: Data for 1994 and Post-Merger taken from Appendix G, Table I & Table IA. Data for 1989 through 1994 was calculated from information appearing in PAUL KAGAN ASSOCS., INC., CABLE TV FINANCIAL DATABOOK 16 (1990); PAUL KAGAN ASSOCS., INC., CABLE TV FINANCIAL DATABOOK 14 (1991); PAUL KAGAN ASSOCS., INC., CABLE TV FINANCIAL DATABOOK 12 (1992); PAUL KAGAN ASSOCS., INC., CABLE TV INVESTOR 12 (1993); PAUL KAGAN ASSOCS., INC., CABLE TV FINANCIAL DATABOOK 12 (1994). Data for 1994 was calculated from information appearing in CABLE TV INVESTOR, June 7, 1994, at 17. Total subscriber information was calculated from CABLE TV INVESTOR, March 31, 1994 at 9. The figure for total industry subscribers for 1994 is estimated by beginning with year-end 1993 total and assuming continuation of the industry trend for total subscribers 1990-93. Data for 1991-94 have been recalculated after discussions with Paul Kagan Associates personnel about consolidated, non-consolidated and international subscribers. International subscribers for TCI are deducted from its total subscribers for 1991-93; estimates for 1994 assume continuation of historical trends. TCI data for 1990 was calculated from its last year-end filing with the Securities and Exchange Commission. Tele-Communications, Inc., Form 10K I-2, I-4 (Dec. 31, 1993).

Table 3

**National Programming Services With
Ownership Interests Held by Cable Operators**

<i>Programming Services</i>	<i>Launch Date</i>
Action Pay Per View	Sep-90
All News Channel	Nov-89
American Movie Classics	Oct-84
Black Entertainment Television	Jan-80
Bravo	Feb-80
C-Span I	Mar-79
C-Span II	Jun-86
Cable Health Club	Oct-93
Cable News Network	Jun-80
Cartoon Network	Oct-92
Cinemax	Aug-80
Comedy Central	Apr-91
Country Music Television	Mar-83
Court TV	Jul-91
Discovery	Jun-85
E! (formerly Movietime)	Jul-87
Encore	Apr-91
Family	Apr-77
Flix!	Apr-91
GEMS Television	Apr-93
HBO	Dec-75
Headline News	Jan-82
Home Shopping Network I	Jul-85
Home Shopping Network II	Sep-86
International Channel	Jul-90
KTVT Dallas	Jul-84
Mind Extension Univeristy	Nov-87
The Movie Channel	Dec-79
MTV Latino	Oct-93
MTV: Music Television	Aug-81
NewSport	Feb-94
NICK at Nite	Jul-85
Nickelodeon	Apr-79
Prime SportsChannel Network	Jan-89
QVC	Nov-86
QVC Fashion Channel	Dec-91

Table 3

Request 3-5	Sep-93
Request Television	Nov-85
Request Television 2	Jul-88
Sci-Fi Channel	Sep-92
Showtime	Jul-76
TBS Atlanta	Dec-76
Television Food Network	Nov-93
The Box	Dec-85
The Learning Channel	Nov-80
The Nashville Network	Mar-83
Turner Classic Movies	Apr-94
Turner Network Television	Oct-88
USA Network	Sep-80
VH-1	Jan-85
Viewers Choice 1	Nov-85
Viewers Choice 2: Hot Choice	Jun-86
Viewers Choice Continuous Hits 1	Feb-93
Viewers Choice Continuous Hits 2,3	Aug-93
Viva Television Network	Jan-93
Z Music	Mar-93

This table was derived from a study prepared by Economists, Inc., submitted with NCTA Comments and was updated to reflect recent launches and information. See NCTA Comments, Attachment C, Table 1; Liberty Media Comments at 9; *Cable Network Ownership*, Cable TV Programming, Aug. 29, 1994.

Table 4

**National Programming Services Without A
Cable Operator Holding An Ownership Interest**

<i>Programming Service</i>	<i>Launch Date</i>
Adam & Eve Channel	Feb-94
Alternate View Network	Oct-85
Network	Feb-84
America's Talking	Jul-94
Americana Television	Apr-94
Arts & Entertainment	Feb-84
Cable Video Store	Jan-85
Caribbean Satellite Network	Dec-92
CNBC	Apr-89
The Crime Channel	Jul-93
Deep Dish TV Network	Jan-86
Disney Channel	Apr-83
Employment Channel	Feb-92
ESPN	Sep-79
ESPN2	Oct-93
EWTN	Aug-81
Faith and Value Network (formerly VISN/ACTS)	May-84
Foxnet	Jul-91
fX	Jun-94
Galavision/ ECO	Oct-79
Hit Video USA	Dec-85
The Inspirational Network	Apr-78
Jewish Television Network	Jan-81
KTLA	Mar-88
Lifetime	Feb-84
Mor Music TV	Aug-92
NASA Television	Jul-91
National Empowerment Television	Dec-93
National Jewish Television	May-81
The 90s Channel	Nov-89
Nostalgia Channel	Feb-85
Playboy Channel	Nov-82
Prevue Channel	Jan-88
SCOLA	Aug-87