

**APPENDIX A****List of Commenters****Initial Comments**

American Cable Association (“ACA”)  
Ameritech New Media, Inc. (“Ameritech”)  
AT&T Corp. (“AT&T”)  
BellSouth Corporation (“BellSouth”)  
DirecTV, Inc. (“DirecTV”)  
EchoStar Satellite Corporation (“EchoStar”)  
Hiawatha Broadband Communications, Inc. (“Hiawatha”)  
MediaOne Group, Inc. (“MediaOne”)  
MICROCOM – Anchorage, Alaska (“Microcom”)  
National Cable Television Association, Inc. (“NCTA”)  
National Rural Telecommunications Cooperative (“NRTC”)  
OpTel, Inc. (“OpTel”)  
RCN Corporation (“RCN”)  
Satellite Broadcasting and Communications Association (“SBCA”)  
Wireless Communications Association International, Inc. (“WCA”)

**Reply Comments**

Cablevision Systems Corporation (“Cablevision”)  
Comcast Corporation (“Comcast”)  
Competitive Cable Coalition (“Coalition”)  
CoreComm Limited (“CoreComm”)  
DirecTV, Inc. (“DirecTV”)  
Lifetime Entertainment Services (“Lifetime”)  
Mainstreet Communications and Unitel Communications (“Mainstreet”)  
National Cable Television Association, Inc. (“NCTA”)  
National Rural Telecommunications Cooperative (“NRTC”)  
RCN Corporation (“RCN”)  
Seren Innovations, Inc. (“Seren”)  
Speedvision Network, L.L.C. and Outdoor Life Network, L.L.C. (“Speedvision”)  
Viacom Inc. (“Viacom”)  
Walt Disney Company, Inc. (“Disney”)

## APPENDIX B

TABLE B-1

**Cable Television Industry Growth: 1991 - June 1999<sup>(e)</sup>**  
(in millions)

Year	Television Households ("TH")		Homes Passed ("HP")		Basic Cable Subscribers ("Subs")		HHS Passed by Cable (HP/TH)	HHS Subscribing (Subs/TH)	U.S. Penetration (Subs/HP)
	Total	% Change	Total	% Change	Total	% Change			
1991	92.1	1.1%	88.4	2.8%	53.4	3.3%	96.0%	58.0%	60.4%
1992	93.1	1.1%	89.7	1.5%	55.2	3.4%	96.3%	59.3%	61.5%
1993	94.0	1.0%	90.6	1.0%	57.2	3.6%	96.4%	60.9%	63.1%
1994	94.9	1.0%	91.6	1.1%	59.7	4.4%	96.5%	62.9%	65.2%
1995	95.9	1.1%	92.7	1.2%	62.1	4.0%	96.7%	64.8%	67.0%
1996	97.0	1.1%	93.7	1.1%	63.5	2.3%	96.6%	65.5%	67.8%
1997	98.0	1.0%	94.6	1.0%	64.9	2.2%	96.5%	66.2%	68.6%
1998	99.0	1.0%	95.6	1.1%	66.1	1.8%	96.6%	66.8%	69.1%
Jun 99(e)	99.5	0.5%	96.1	0.5%	66.7	0.9%	96.6%	67.0%	69.4%

(e) June data based on year-end estimate by Paul Kagan Associates.

**Sources:**

**1991 to 1997:** U.S. Television Households: Paul Kagan Assoc., Inc., *Basic Cable Network Economics (1983-2007)*, Cable Program Investor, Mar. 13, 1998, at 2; Homes Passed and Basic Cable Subscribers: Paul Kagan Assoc., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, Apr. 14, 1998, at 3.

**1998 to 1999 (e):** U.S. Television Households, Homes Passed, and Basic Cable Subscribers: Paul Kagan Assoc., Inc., *Paul Kagan's 10-Year Cable TV Industry Projections (1998-2009)*, The Cable TV Financial Databook 1999, Aug. 1999, at 10.

TABLE B-2

**Premium Cable Services: 1991 - June 1999<sup>(e)</sup>**  
**(in millions)**

Year End	Premium Cable Service Subscribers <sup>1</sup>		Premium Units <sup>2</sup>	
	Year End Total	% Change	Year End Total	% Change
1991	24.0	0.4%	43.1	8.0%
1992	24.7	2.9%	46.5	7.9%
1993	26.4	6.9%	47.0	1.1%
1994	28.1	6.4%	47.4	0.9%
1995	29.8	6.0%	51.6	8.9%
1996	31.0	4.0%	54.6	5.8%
1997	31.5	1.6%	56.0	2.6%
1998	35.3	12.1%	57.9	3.4%
Jan-Jun 99(e)	35.9 (e)	1.7%	59.2 (e)	2.2%

(e) Based on year-end estimate by Paul Kagan Associates.

<sup>1</sup> Premium Cable Services Subscribers refers to the total number of homes subscribing to one or more premium services. Each home is counted once, regardless of the number of premium services to which it subscribes.

<sup>2</sup> Premium Units refers to the total number of premium subscriptions. Each subscription is counted separately, thus may exceed the number of premium subscribers.

**Sources:**

**1991 to 1997:** Paul Kagan Assoc., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, Apr. 14, 1998, at 3.

**1998 to 1999 (e):** Paul Kagan Assoc., Inc., *Paul Kagan's 10-Year Cable TV Industry Projections (1998-2009)*, The Cable TV Financial Databook 1999, Aug. 1999, at 10.

TABLE B-3

## Channel Capacity of Cable Systems: October 1997 - October 1999

Channel Capacity	1997		1998		97-98	1999		98-99
	Number of Systems	Percent of Systems	Number of Systems	Percent of Systems	Percent Change	Number of Systems	Percent of Systems	Percent Change
54 and +	1,886	19.0%	2,040	20.7%	8.2%	2,164	22.4%	6.1%
30 to 53	6,374	64.1%	6,288	63.9%	-1.3%	6,072	63.0%	-3.4%
20 to 29	971	9.8%	879	8.9%	-9.5%	833	8.6%	-5.2%
13 to 19	309	3.1%	258	2.6%	-16.5%	254	2.6%	-1.6%
6 to 12	399	4.0%	363	3.7%	-9.0%	309	3.2%	-14.9%
5 or less	10	0.1%	11	0.1%	10.0%	12	0.1%	9.1%
Not Avail.	889	-	880	-	-1.0%	822	-	-6.6%
<b>Total</b>	<b>10,838</b>	<b>-</b>	<b>10,719</b>	<b>-</b>	<b>-1.1%</b>	<b>10,466</b>	<b>-</b>	<b>-2.4%</b>
Sys. w/30+ channels	8,260	83.0%	8,328	84.6%	0.8%	8,236	85.4%	-1.1%
Sys. w/less than 30 channels	1,689	17.0%	1,511	15.4%	-10.5%	1,408	14.6%	-6.8%

**Notes:**

Figures are as of October 1, 1997, October 1, 1998, and October 1, 1999.

All "Percent of Systems" calculations exclude "not available" data, including the percentage tabulations in the categories of "Systems with 30+ channels" and "Systems with less than 30 channels."

**Sources:**

**1997:** Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 66, 1998 Edition, at I-81.

**1998:** Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 67, 1999 Edition, at J-97.

**1999:** Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 68, 2000 Edition (to be released).

TABLE B-4

**Channel Capacity for Subscribers: October 1997 - October 1999  
(in millions)**

Channel Capacity	1997		1998		97-98	1999		98-99
	Number of Subscribers	Percent of Subscribers	Number of Subscribers	Percent of Subscribers	Percent Change	Number of Subscribers	Percent of Subscribers	Percent Change
54 and +	35.73	58.4%	38.91	61.5%	8.9%	41.03	64.2%	5.4%
30 to 53	24.35	39.8%	23.57	37.3%	-3.2%	22.00	34.4%	-6.7%
20 to 29	0.85	1.4%	0.61	1.0%	-28.2%	0.74	1.2%	21.3%
13 to 19	0.09	0.1%	0.06	0.1%	-33.3%	0.07	0.1%	16.7%
6 to 12	0.19	0.3%	0.09	0.1%	-52.6%	0.08	0.1%	-11.1%
5 or less	0.00	0.0%	0.00	0.0%	0.0%	0.00	0.0%	0.0%
Not Avail.	1.22	-	1.20	-	-1.6%	2.13	-	77.5%
<b>Total</b>	<b>62.43</b>	<b>-</b>	<b>64.44</b>	<b>-</b>	<b>3.2%</b>	<b>66.05</b>	<b>-</b>	<b>2.5%</b>
Sys. w/30+ channels	60.08	98.2%	62.48	98.8%	4.0%	63.03	98.6%	0.9%
Sys. w/less than 30	1.13	1.8%	0.76	1.2%	-32.7%	0.89	1.4%	17.1%

Notes: Figures are as of October 1, 1997, October 1, 1998, and October 1, 1999.

All "Percent of Subscribers" calculations exclude "not available" data, including the percentage tabulations in the categories of "Systems with 30+ channels" and "Systems with less than 30 channels."

**Sources:**

**1997:** Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 66, 1998 Edition, at I-81.

**1998:** Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 67, 1999 Edition, at J-97.

**1999:** Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 68, 2000 Edition (to be released).

TABLE B-5

## Channel Capacity by Cable Systems and by Subscribers: October 1999

Channel Capacity	Number of Systems	Percent of Systems	Number of Subscribers (millions)	Percent of Subscribers
125+	8	0.08%	0.20	0.31%
91 to 124	71	0.74%	2.84	4.44%
54 to 90	2,085	21.62%	37.99	59.44%
30 to 53	6,072	62.96%	21.99	34.41%
20 to 29	833	8.64%	0.74	1.16%
13 to 19	254	2.63%	0.07	0.11%
6 to 12	309	3.21%	0.08	0.12%
5 or less	12	0.12%	0.004	0.01%
Not Avail.	822	-	2.13	-
<b>Total</b>	<b>10,466</b>	-	<b>66.04</b>	-
Sys. w/ 54+ channels	2,164	22.44%	41.03	64.20%
Sys. w/ 30-53 channels	6,072	62.96%	21.99	34.41%
Sys. w/ less than 30 channels	1,408	14.60%	0.894	1.39%

**Notes:**

Figures are as of October 1, 1999.

All "Percent of" calculations exclude "not available" data, including the percentage tabulations in the categories of "Systems with 54+ channels," "Systems with 30-53 channels," and "Systems with less than 30 channels."

**Source:**

1999: Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Services Volume No. 68, 2000 Edition (to be released).

TABLE B-6

## Growth By Network Type: 1997 - June 1999

Network Type	1997		1998		97-98	Jan-June 99		
	Number of Networks	Percent of Networks	Number of Networks	Percent of Networks	Percent Change	Number of Networks	Percent of Networks	Half-year Change
Basic/No-Chg	131	79.9%	139	80.0%	6.1%	141	77.9%	1.4%
Premium	14	8.5%	18	10.3%	28.6%	22	12.2%	22.2%
Pay Per View	6	3.7%	10	5.7%	66.7%	8	4.4%	-20.0%
Combination *	13	7.9%	7	4.0%	-46.2%	10	5.5%	42.9%
Total	164		174		6.1%	181		4.0%

**Note:**

(\*) "Combination" refers to cable networks that fall under more than one service category. For example, the Disney Channel, which is part of the basic tier in some systems, and is sold as a premium service on other systems, is considered a "combination" network.

**Source:**

1997 to June 1999: National Cable Television Association, *National Cable Video Networks By Type of Service: 1980 - 1999*, Cable Television Developments, Summer 1999, at 6.

TABLE B-7

Cable Industry Revenue and Cash Flow: 1995 – 1999<sup>(e)</sup>

	1995		1996		1997		1998		1999
	Total	Total	% Change	Total	% Change	Total	% Change	Total	Estimated Year-End Total
Avg Basic Subscribers (mil)	60.9	62.8	3.1%	64.2	2.2%	65.4	1.9%	66.7	
<b>Revenue Segments (mil.)</b>									
Regulated Tiers	\$16,860	\$18,395	9.1%	\$20,008	8.8%	\$21,830	9.1%	\$23,146	
Pay Tiers	\$4,776	\$4,955	3.7%	\$4,952	-0.1%	\$5,084	2.7%	\$5,188	
Local Advertising	\$1,433	\$1,662	16.0%	\$1,925	15.8%	\$1,850	-3.9%	\$2,092	
Pay-Per-View	\$535	\$647	20.9%	\$823	27.2%	\$627	-23.8%	\$803	
Home Shopping	\$144	\$145	0.7%	\$152	4.8%	\$187	23.0%	\$215	
Advanced Svcs (Ana./Dig.)	\$23	\$91	295.7%	\$208	128.6%	\$452	117.3%	\$1,015	
Equipment and Install	\$1,787	\$2,055	15.0%	\$2,320	12.9%	\$2,631	13.4%	\$2,825	
Total Revenue (mil.)	\$25,558	\$27,950	9.4%	\$30,388	8.7%	\$32,661	7.5%	\$35,284	
Revenue Per Subscriber	\$419.67	\$445.06	6.1%	\$473.33	6.4%	\$499.40	5.5%	\$529.00	
Operating Cash Flow (mil.)	\$10,977	\$11,972	9.1%	\$13,369	11.7%	\$14,772	10.5%	\$16,120	
Cash Flow per Subscriber	\$180.25	\$190.64	5.8%	\$208.24	9.2%	\$225.87	8.5%	\$241.68	
Cash Flow/Total Revenue	42.9%	42.8%	-0.3%	44.0%	2.7%	45.2%	2.8%	45.7%	

**Notes:**

(e) Year-end estimate by Paul Kagan Associates

(\*) While only the BST may now be regulated, the figure for 1999 includes BST and CPST.

Cash flow and its proxies (e.g. EBITDA) are often used to value the operations of a communications firm without regard to the firm's capital structure. Cash flow from operations is the net result of cash inflows from operations (revenue) and cash outflows from operations (expenses), thus ignoring non-cash charges to net income such as depreciation and amortization. Cash flow from operations indicates a firm's ability to meet its net finance and investment obligations.

**Sources:**

**1995 to 1997:** Average Number of Basic Subscribers: Paul Kagan Assoc., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, Apr. 14, 1998, at 3; Revenue Segments: Paul Kagan Assoc., Inc., *Paul Kagan's 10-Year Cable TV Industry Projections*, Cable TV Investor, May 20, 1997, at 9; Paul Kagan Assoc., Inc., *Total Cable TV Advertising Revenue (1980-2007)*, Cable TV Financial Databook, Aug. 1998, at 15; Operating Cash Flow: Paul Kagan Assoc., Inc., *Estimated Capital Flows In Cable TV*, Cable TV Finance, May 31, 1998, at 1.

**1998 to 1999 (e):** Average Number of Basic Subscribers and Revenue Segments: Paul Kagan Assoc., Inc., *Paul Kagan's 10-Year Cable TV Industry Projections (1998-2009)*, The Cable TV Financial Databook 1999, Aug., 1999, at 10-11; Operating Cash Flow: Paul Kagan Associates., Inc., *Estimated Capital Flows in Cable TV*, The Cable TV Financial Databook 1999, Aug. 1999, at 149.

TABLE B-8

**Acquisition of Capital: 1991 - June 1999**  
**(\$ in million)**

Year	Private Debt		Public Debt <sup>2</sup>		Private Equity		Public Equity		Total Capital Raised
	Sum Raised	% of Total <sup>1</sup>	Sum Raised	% of Total	Sum Raised	% of Total	Sum Raised	% of Total	
1991	\$770	29.4%	\$1,426	54.5%	\$292	11.2%	\$127	4.9%	\$2,615
1992	\$(1,842)	-77.2%	\$2,493	104.5%	\$1,711	71.7%	\$23	1.0%	\$2,385
1993	\$(3,584)	-186.4%	\$5,280	274.6%	\$62	3.2%	\$165	8.6%	\$1,923
1994	\$4,803	87.0%	\$155	2.8%	\$100	1.8%	\$461	8.4%	\$5,519
1995	\$(714)	-8.5%	\$4,495	53.6%	\$1,191	14.2%	\$3,419	40.7%	\$8,391
1996	\$537	11.3%	\$2,355	49.5%	\$49	1.0%	\$1,818	38.2%	\$4,759
1997	\$(397)	-4.9%	\$6,252	77.9%	\$1,942	24.1%	\$230	2.9%	\$8,027
1998	\$(466)	-6.0%	\$6,174	78.8%	\$200	2.6%	\$1,927	24.6%	\$7,835
Jan-June 1999	\$13,626 <sup>4</sup>	55.2%	\$8,820	35.8%	\$28	0.1%	\$2,199	8.9%	\$24,673
<b>Total: 1991-June 99</b>	<b>\$12,733</b>		<b>\$37,450</b>		<b>\$5,575</b>		<b>\$10,369</b>		<b>\$66,127</b>
<b>Avg Raised/Yr</b>	<b>\$1,498</b>		<b>\$4,406</b>		<b>\$656</b>		<b>\$1,220</b>		<b>\$7,780</b>

<sup>1</sup>Column entitled "% of total" represents the percent of total capital raised from financing sources for that given year.

<sup>2</sup>Public Debt is expressed in terms of net new public debt.

<sup>3</sup>Total Capital Raised equals private debt plus public debt plus private equity plus public equity.

<sup>4</sup>The source believes this figure is significantly higher than in the past because of several large transactions among cable firms in the first half of 1999.

**Sources:**

**1991 to 1992:** Paul Kagan Assoc., Inc., *Discussion with Elaine Blaisdell Taylor, Research Associate*, Aug. 28, 1998.

**1993:** Paul Kagan Assoc., Inc., *Estimated Capital Flows in Cable TV*, Cable TV Finance, May 31, 1998, at 1.

**1994 to 1998:** Paul Kagan Assoc., Inc. *Estimated Capital Flows in Cable TV*, The Cable TV Financial Databook 1999, Aug. 1999, at 149.

**June 1999:** Paul Kagan Assoc., Inc. *Cable Financing Snapshot - June*, Cable TV Finance, June 30, 1999, at 8.

TABLE B-9

## System Transactions: 1996 - June 1999

	1996	1997	96-97 % Change	1998	97-98 % Change	Jan - June 1999
Number of Systems Sold	98	110	12.2%	114	3.6%	60
Total Number of Subscribers	7,609,866	10,855,165	42.6%	22,458,157	106.9%	15,512,126
Average System Size	77,652	98,683	27.1%	197,001	99.6%	258,535
Number of Homes Passed	12,387,812	17,324,571	39.9%	36,387,196	110.0%	24,595,897
Avg. # of Homes Passed	126,406	157,496	24.6%	319,185	102.7%	409,932
Total Dollar Value (mil.)	\$16,092	\$22,193	37.9%	\$64,608	191.1%	\$59,708
Average Dollar Value (mil.)	\$164.2	\$201.8	22.9%	\$566.7	180.8%	\$995.1
Dollar Val. Per Subscriber	\$2,115	\$2,044	-3.4%	\$2,877	40.8%	\$3,849
Dollar Val. Per Home Passed	\$1,299	\$1,281	-1.4%	\$1,776	38.6%	\$2,428
Cash Flow Multiple	11.4x	9.2x	-19.3%	13.1x	42.4%	16.3x

**Sources:**

**1996 to 1998** - Paul Kagan Assoc., Inc., *Cable System Sale Summary (through December annually)*, Cable TV Investor, Mar. 3, 1999, at 9.

**Jan 1999 to June 1999** - Paul Kagan Assoc., Inc., *Cable System Sale Summary (through April annually)*, Cable TV Investor, Sept. 10, 1999, at 12.

Table B-10

## Examples of Cable Modem Deployment as of June 1999

System	Location of Offering *	Monthly Rate *	Installation Fee *	Service Provider	Type of Service
Adelphia	IL, FL, MA, NJ, NY, OH, PA, SC, VA, VT	\$34.95 subscribers \$44.95 non-subscribers	\$54.90	•Adelphia PowerLink	•Telco-return •Two-way
AT&T - BIS	CA, CO, IL, CT, TX, WA	\$39.95	\$150.00	•@Home	•Two-way
Bresnan	MI, WI	\$39.95 subscribers \$49.95 non-subscribers	\$99.95	•BresnanLink •@Home	•Two-way
Cablevision Systems	CT, NY	\$44.95 subscribers \$54.95 non-subscribers	\$150.00	•@Home	•Two-way
Century	NY	\$39.95	N/A	•@Home	•Two-way
Charter	CA, GA	\$49.95-\$79.95 subscribers \$59.95-\$89.95 non-subscribers	\$99.00-\$169.00	•High Speed Access Corp. •Earthlink	•256 kbps-1Mbps •Two-Way •Telco-return
Comcast	CA, FL, GA, MD, MI, NJ, PA, SC, VA	\$39.95 subscribers \$49.95 non-subscribers	\$95.00	•@Home	•Two-way
Cox	AZ, CA, CT, RI, NE, NV, OK, VA	\$29.95-\$44.95 subscribers \$42.95-\$54.95 non-subscribers	\$99.00-\$174.95	•@Home	•Two-way
InterMedia	GA, NC, TN, SC, KY	\$49.95 subscribers \$54.95 non-subscribers	\$149.95	•@Home •OSS	•Two-way •Telco-return
Jones Intercable	VA	\$29.95-\$39.95	\$100.00	•@Home •Jones	•Two-way •Telco-return
Marcus	TX, WI	\$14.95-\$49.95 subscribers \$69.95 non-subscribers	\$499.00	•@Home •High Speed Access Corp.	•Two-way
Media One	CA, FL, GA, IL, MA, MI, MN, NH, OH, CT	\$34.95-\$39.95 subscribers \$49.95 non-subscribers	\$99.95-\$100.00	•Road Runner	•Two-way •Telco-return
Time Warner	CA, FL, HI, ME, NC, NY, OH, TN, TX	\$39.95-\$49.95 subscribers \$39.95-\$54.95 non-sub	\$75.00-\$225.00	•Road Runner	•Two-way

**Note:**

(\* ) Monthly rate and installation fees vary based on the type of service and hardware recieved.

**Sources:**

Paul Kagan Assoc., Inc., *Cable Modem Deployments*, The Cable TV Financial Databook 1999, Aug. 1999, at 80-82.

Michael Harris, *Commercial Cable Modem Launches in North America*, Kinetic Strategies, July 7, 1999. See <http://www.cabledatcomnews.com/cm/cmic7.html>.

## APPENDIX C

TABLE C-1

Assessment of Competing Technologies<sup>(1)</sup>

Technology Used	December 95	December 96	June 97	June 98	June 99
<b>TV Households<sup>(2)</sup></b>	95,900,000	97,000,000	97,000,000	98,000,000	99,400,000
Percent Change	0.52%	1.15%	0.00%	1.03%	1.43%
<b>MVPD Households<sup>(3)</sup></b>	86,487,750	72,370,950	73,646,970	76,634,200	80,882,411
Percent Change	7.12%	5.67%	1.76%	4.06%	5.54%
Percent of Households	71.42%	74.61%	75.92%	78.20%	81.37%
<b>Cable Subscribers</b>	62,100,000	63,500,00	64,150,000	65,400,000	66,690,000
Percent Change	4.02%	2.25%	1.02%	1.95%	1.97%
Percent of MVPD Total	90.67%	87.74%	87.10%	85.34%	82.45%
<b>MMDS Subscribers</b>	851,000	1,180,000	1,100,000	1,000,000	821,000
Percent Change	41.83%	38.66%	-6.78%	-9.09%	-17.90%
Percent of MVPD Total	1.24%	1.63%	1.49%	1.30%	1.02%
<b>SMATV Subscribers</b>	962,000	1,126,000	1,162,500	940,000	1,450,000
Percent Change	13.18%	17.05%	3.24%	-19.14%	54.26%
Percent of MVPD Total	1.40%	1.56%	1.58%	1.23%	1.79%
<b>HSD Subscribers</b>	2,365,400	2,277,760	2,184,470	2,028,200	1,783,411
Percent Change	8.60%	-3.71%	-4.10%	-7.15%	-12.07%
Percent of MVPD Total	3.45%	3.15%	2.97%	2.65%	2.20%
<b>DBS Subscribers</b>	2,200,000	4,285,000	5,047,000	7,200,000	10,078,000
Percent Change	265.45%	94.77%	17.78%	42.66%	39.97%
Percent of MVPD Total	3.21%	5.92%	6.85%	9.40%	12.46%
<b>OVS Subscribers<sup>(4)</sup></b>		2,190	3,000	66,000	60,000
Percent Change	N/A	0.00%	36.99%	2100.00%	-9.09%
Percent of MVPD Total		0.00%	0.00%	0.09%	0.07%
<b>VDT Subscribers Trials<sup>(5)</sup></b>	9,350	0	0	0	0
Percent Change	41.24%	0.00%	0.00%	0.00%	0.00%
Percent of MVPD Total	0.01%	0.00%	0.00%	0.00%	0.00%

## Notes:

<sup>(1)</sup> Some numbers have been rounded.

<sup>(2)</sup> The year-end 1996 and June 1997 figures are the same because Nielsen's annual update does not take effect until September, the beginning of the new television season.

<sup>(3)</sup> The total number of MVPD households is likely to be somewhat less than the given figure due to household subscribing to the services of more than one MVPD. See e.g., *1994 Report*, 9 FCC at 7480 74 (1994). However, the number of households subscribing to more than one MVPD is expected to be low. For example, of the 60% of DBS subscribers with access to cable, 24% subscribe to cable in addition to DBS. Hence, the given total can be seen as a reasonable estimate of the number of MVPD households.

<sup>(4)</sup> The decline in OVS subscribers between 1998 and 1999 reflects the conversion of portions of some OVS systems to franchised cable systems over the last year.

<sup>(5)</sup> The 1996 Act repealed the VDT framework. For details, see *1997 Report*, 13 FCC Rcd at 1099-1104 ¶¶108-117. These trials were converted to an OVS format and cable franchises.

**Sources:**

Television households: 1995 from Nielsen Media Research as cited in *Broadcasting & Cable*, January 8, 1996; 1996 from Nielsen Media Research as cited in *TV Column*, Washington Post, August 26, 1997, at E4; 1998 from Nielsen Media Research as cited in *Broadcasting & Cable*, June 29, 1998, at 70; and 1999 from Nielsen Media Research as cited in *Broadcasting & Cable*, June 28, 1999, at 26.

Total MVPD households: The sum of the total number of subscribers listed under each of the categories of the various technologies. See note (ii) above. Because there were no permanent VDT subscribers, trial VDT subscriber figure were used in 1995.

Cable subscribers: 1995-97 from Paul Kagan Assocs, Inc., *Paul Kagan's 10-Year Cable TV Industry Projections*, Cable TV Investor, May 20, 1997, at 9; 1998 from Paul Kagan Assocs., Inc., *Paul Kagan's 10-Year Cable TV Industry Projections*, Cable TV Investor, August 10, 1998, at 4; and 1999 from Paul Kagan Assocs., Inc., *Cable Industry 10-Year Projections*, Cable TV Investor, June 25, 1999, at 6.

MMDS subscribers: 1995-96 from Paul Kagan Assocs., Inc., *Wireless Cable Futures*, Wireless Cable Investor, December 31, 1996, at 10-11; 1997 from WCA Comments for the *1997 Report* at 8. The 1998 and 1999 subscribers were estimated by the FCC.

SMATV subscribers: 1995-96 from *Private Cable Growth*, Private Cable Investor, July 1997, at 3; 1997 subscribers were estimated by the FCC based on data from Paul Kagan Assocs., Inc., *Private Cable Growth*, Private Cable Investor, July 1997, at 3; 1998 subscribers were based on NCTA Comments for the *1998 Report* at 6; and 1999 subscribers were from NCTA Comments at 5.

HSD subscribers: 1995 from *DTH Subscribers*, SkyREPORT, January 1997 at 8; 1996-1997 from *DTH Subscribers*, SkyREPORT, November 1999, at 10; 1998-99 from SkyReport.com at [http://www.skyreport.com/dth\\_us.htm](http://www.skyreport.com/dth_us.htm)

DBS subscribers: 1995 from *DTH Subscribers*, SkyREPORT, January 1997, at 8; 1996-97 from *DTH Subscribers*, SkyREPORT, November 1997, at 10; 1998 from Minal Damani and Jennifer E. Sharpe, *U.S. DBS Marketplace: 1998*, The Strategis Group, July, 1998 at 6; and 1999 from SkyReport.com at [http://www.skyreport.com/dth\\_us.htm](http://www.skyreport.com/dth_us.htm).

OVS subscribers: 1996 from Bell Atlantic Comments for *1996 Report* at 5. The 1997 and 1998 subscribers were estimated by the FCC.

VDT subscribers: 1995 from Section 214 Applications, *ex parte* letters and associated filings with the FCC.

TABLE C-2

**Number and Subscriber Size of Major Cable System Clusters  
(Cumulative Figures)**

Range of Clustered Subscribers (thousands)	1995		1996		1997		1998	
	Clusters	Subscribers (millions)						
100-199	76	10.4	76	10.3	49	6.7	33	4.6
200-299	35	8.4	34	8.3	33	8.2	25	6.3
300-399	8	2.8	11	3.7	11	3.8	20	6.7
400-499	10	4.5	8	3.6	8	3.7	7	3.2
>500	8	5.1	10	7.7	16	11.9	21	19.6
Total	137	31.2	139	33.6	117	34.3	106	40.4

**Source:**

Paul Kagan Assocs., Inc., *Major Cable TV Systems/Clusters*, The Cable TV Financial Databook, 1996, at 38-40; 1997, at 39-41; 1998, at 38-42; and 1999, at 50-55.

TABLE C-3

1999 Concentration in the National Market for the Purchase of Video Programming<sup>(1)</sup>

Rank	Company	Percent of Subscribers <sup>(2)</sup>
1	AT&T	20.50
2	Time Warner	15.95
3	DirecTV	9.23
4	Comcast	8.26
Top 4		53.94
5	MediaOne	5.84
6	Cox	4.67
7	Charter	3.60
8	EchoStar	3.23
Top 8		71.28
9	Adelphia	2.01
10	Century	1.66
Top 10		74.95
Top 25		84.92
Top 50		89.58
	HHI	923 <sup>(3)</sup>

## Notes:

<sup>(1)</sup> MSO subscriber totals as of June 1999, and as reported in Paul Kagan Assocs., Inc., *Top Cable System Operators as of June 1999*, Cable TV Investor, August 20, 1999, at 10-12. There is no double counting of subscribers. If a cable operator is partially owned by more than one MSO, its subscribers are assigned to the largest MSO. Subscribers for DirecTV and EchoStar are based on SkyReport.com at [http://www.skyreport.com/dth\\_us.htm](http://www.skyreport.com/dth_us.htm).

<sup>(2)</sup> The total number of MVPD subscribers used to calculate the HHI is 80,882,411 from Table C-1.

<sup>(3)</sup> The HHI is calculated on the basis of market shares for the top 75 companies. Because all of the remaining MVPDs have very small shares of the market, an HHI calculation that included all cable system operators could only be slightly higher (no more than 2-3 points) than the given HHI.

TABLE C-4

## Concentration in the National Market for the Purchase of Video Programming

1996-1999

Market Share	Percent of MVPD Subscribers			
	1996	1997	1998	1999
<b>Top Share</b>	24.25	25.54	26.48	20.50
<b>Top 2</b>	40.69	41.51	42.62	36.45
<b>Top 3</b>	47.37	48.46	48.94	45.68
<b>Top 4</b>	53.30	54.30	54.63	53.94
<b>Top 10</b>	71.40	72.26	71.04	74.95
<b>Top 25</b>	83.96	84.96	80.99	84.92
<b>Top 50</b>	89.68	89.92	86.08	89.58
<b>HHI</b>	1013	1166	1096	923

**Sources:**

Data for 1996 through 1998 were taken from the *1996-98 Competition Reports*.

Data for 1999 are from Table C-3.

TABLE C-5

## Announced Cable Transactions

July 1998 – June 1999

YEAR	BUYER	SELLER	SYSTEMS	PRICE ** (Millions)	SUBS (Actual)	PRICE/SUB.***	CASH FLOW MULT.
Jul-98	Blackstone	Bayside	Baldwin City, AL	\$2.0	1,600	1,250	7.2
Jul-98	Blackstone Creek Comm.	Cable One	TX, OK, MO, KS	\$45.8	30,000	1,527	10.3
Jul-98	Cox Comm.	TCI	Tucson/Sierra Vista AZ	\$250.0	115,000	2,174	11.3
Jul-98	Friendship Cable	TCI	Eastland, TX	\$31.2	24,000	1,300	8.4
Jul-98	FrontierVision *	Susquehanna*	ME, NH	\$10.7	6,700	1,597	8.7
Jul-98	Jones Intercable	Cableamerica	Placitas, NM	\$1.1	800	1,375	7.2
Jul-98	Pegasus Cable TV	USA Partners	Aguadilla, PR	\$42.0	21,500	1,953	7.6
Jul-98	Story Comm.	Bayside	Tulsa, OK	\$2.2	1,700	1,294	6.3
Jul-98	Susquehanna*	FrontierVision *	Harpwell/Freepor t, ME	\$7.5	4,500	1,667	8.7
Jul-98	Vulcan Venture	Charter	MO-based MSO	\$4,500.0	1,250,000	3,600	13.9
Aug-98	Blackstone	Milestone Comm.	Santee, Vance, SC	\$3.3	2,600	1,269	8
Aug-98	Comcast	Bell Canada	CO-based MSO	\$1,177.0	364,000	3,234	12.7
Aug-98	Df Cablevision	Cable Prop.	Mayville, MI	\$2.5	1,900	1,316	8
Aug-98	Eagle West	Mark Twain	Eager, St. Johns, AZ	\$5.2	5,000	1,040	6.7
Aug-98	FrontierVision	TCI	Bryan, Celina, OH	\$38.0	19,700	1,929	9.4
Aug-98	Northland Cable	MediaOne	Mt. Shasta, McCloud CA	\$7.7	5,000	1,540	8.8
Aug-98	US Cable	Fanch	MN, CO, NM, MO	\$138.0	70,000	1,971	10.7
Aug-98	WNW Comm.	NCP Inc.	New Waverly, TX	\$0.1	200	500	6.0
Aug-98	WNW Comm.	Northland Cable	Waterford, TX	\$0.4	400	1,000	7.0
Sep-98	NPG Cable	Mark Twain	Payson, AZ	\$19.2	12,400	1,548	8.6
Sep-98	Paxton Comm.	Bob's TV	Birch River, Glennville WV	\$1.4	1,000	1,400	8.1
Sep-98	TCA	TCI	Sallisaw, OK	\$4.0	3,000	1,333	8.5
Sep-98	TCI	IDS/Jones JV	Aurora, Plano, IL	\$108.5	55,000	1,973	10.7

YEAR	BUYER	SELLER	SYSTEMS	PRICE ** (Millions)	SUBS (Actual)	PRICE/SUB.***	CASH FLOW MULT.
Sep-98	Telepartners	Vision	IA, NE,	\$2.9	4,000	725	7.5
Oct-98	American Cable	Marks Cablevision	Rancho Cucamonga/ San Bernardino, CA	\$93.0	36,000	2,583	10.2
Oct-98	Bresnan	Jones Cable, Inc.	Owatonna, MN	\$11.8	8,700	1,356	9.3
Oct-98	Charter Comm.	Annox, Inc.	Montgomery, Robertson, TN	\$5.8	3,000	1,933	9
Oct-98	KnoLogy Holdings	Cable Alabama	Huntsville/Madison AL	\$61.0	31,700	1,924	9.9
Oct-98	MediaOne *	TCI *	FL, CA	\$1,375.0	500,000	2,750	14.1
Oct-98	Pine Tree Cable	Brookridge Cable	Richland, Lexington, SC	\$2.5	3,000	833	8.5
Oct-98	TCI *	MediaOne *	IL, MI	\$1,375.0	500,000	2,750	12.5
Nov-98	Benchmark Comm.	Genesis Cable	FL, GA, MS, NC, OK, SC	\$92.0	52,000	1,769	10.2
Nov-98	Memphrecom	Adelphia	Newport, Orleans, VT	\$8.1	3,400	2,382	11.3
Nov-98	Schurz Comm.	Gulf & Pacific	Weston, FL	\$30.0	9,700	3,093	11.3
Dec-98	Central Valley Cable	McVay Comm.	Coalinga, CA	\$5.0	3,000	1,667	8.8
Dec-98	Central Valley Cable	Somerset Cable	Williams, CA	\$2.0	2,000	1,000	6.2
Dec-98	Classic*	TCA *	Sallisaw, OK	\$4.0	3,000	1,333	8.5
Dec-98	James Cable	Fannon Cable TV	Tazewell, TN	\$8.0	7,000	1,143	7.4
Dec-98	TCA*	Classic *	Hudson, TX	\$1.0	1,000	1,000	5.7
Jan-99	Adelphia	Telesat Cablev.	St. Lucie, FL	\$348.0	182,000	1,912	9.5
Jan-99	Avalon	Cross Country	Montague/Whitehall, MI	\$2.5	2,000	1,250	7.5
Jan-99	Charter	American Cable	Rancho Cucamonga/Victorville, CA	\$215.0	68,000	3,162	13
Jan-99	Charter	Intermedia	SC, GA, NC, TN	\$1,300.0	395,000	3,291	12.9
Jan-99	Intermedia	Charer Comm.	IN, KY, UT, MT	\$461.0	140,000	3,293	13
Jan-99	Ohio Cablevision	Bethel Cable TV	Armstrong County, PA	\$8.0	5,000	1,600	8.4
Jan-99	STC Cable Partners.	Galaxy Mgmt.	Sequoinville, TN	\$2.0	1,000	2,000	7.8
Jan-99	Suburban Cable	Raystay	Carlisle/Chambersburg, PA	\$92.0	33,000	2,788	12.7

YEAR	BUYER	SELLER	SYSTEMS	PRICE ** (Millions)	SUBS (Actual)	PRICE/SUB.***	CASH FLOW MULT.
Jan-99	Susquehanna	Hanover Cable	Hanover, PA	\$33.4	16,700	2,000	11.9
Jan-99	TCI	Intermedia	Nashville, TN	\$1,100.0	300,000	3,667	14.4
Jan-99	US Cable	Cablevision	Hillsdale, Paramus, NJ	\$4.0	5,000	800	4.8
Feb-99	Adelphia	FrontierVision	VA, OH, KY, ME, NH, VT	\$2,100.0	702,000	2,991	14.3
Feb-99	Charter	Greater Media	Worcester, MA	\$565.0	173,000	3,266	13
Feb-99	Charter	Interlink	FL, VA, WV, TX, IN, NM, CO, ND, NE, AR, LA	\$880.0	275,000	3,200	13
Feb-99	Charter	Renaissance	LA, MS, TN	\$390.0	130,000	3,000	13.2
Feb-99	Charter	Rifkin	TN, IL, GA	\$608.0	190,000	3,200	13
Feb-99	Comcast	Greater Media	Philadelphia, PA	\$282.0	79,000	3,570	14.8
Feb-99	Comm. Services	Com-Star Cablevision	South Lake Tahoe, NV	\$0.9	600	1,500	6.8
Feb-99	Comm. Services	El Dorado Cable TV	Santa Fe, NM	\$2.3	1,600	1,438	8.7
Feb-99	Comm. Services	SD Cable TV	Belle, Fourche, SD	\$26.0	16,400	1,585	9.1
Feb-99	Interlink	Scott Cable	CA, NM, CO, ND, TX, LA, AR, VA, OH	\$165.0	77,000	2,143	9.2
Feb-99	MediaOne	Galaxy Cablevision	Spring Greek, GA	\$2.0	1,000	2,000	6.5
Feb-99	MediaOne *	Time Warner *	MA, NH, GA	\$900.0	310,000	2,903	12.5
Feb-99	Ohio Cablevision	Michiana	MI, IN	\$11.0	6,000	1,833	11.3
Feb-99	Pine Tree Cable	Carolina Cable	St.Stephen, Cross SC	\$3.1	2,400	1,292	9.6
Feb-99	Star Cable	Illini Cablevison	LA, TX	\$18.0	12,000	1,500	10.9
Feb-99	Time Warner *	Mediaone *	OH, CA, ME	\$900.0	350,000	2,571	12.5
Mar-99	Adelphia	Century	NY-based MSO	\$4,853.0	1,291,000	3,759	13.9
Mar-99	Avalon	Nova Cblvsn.	Grand Haven MI	\$7.8	6,200	1,258	7.5
Mar-99	Charter	Helicon	NJ-based MSO	\$550.0	171,000	3,216	12.8
Mar-99	Comcast	MediaOne	CO-based MSO	\$23,562.0	4,965,000	4,746	14.9
Mar-99	Falcon/Bend JV	Bend	Bend/Sisters OR	\$35.0	20,000	1,750	8.8

YEAR	BUYER	SELLER	SYSTEMS	PRICE ** (Millions)	SUBS (Actual)	PRICE/SUB ***	CASH FLOW MULT.
Mar-99	Falcon/Bend JV	Falcon	Redmond, OR	\$5.0	4,000	1,250	6.8
Mar-99	Insight	Americable	Portland, IN Fort Recovery, OH	\$10.9	6,100	1,787	12.3
Mar-99	TW Fanch-Two	Multi-Cblvis'n	Livingston MI	\$37.0	16,000	2,313	11
Mar-99	USA Media	WestStar Comm.	CA-based MSO	\$84.0	45,000	1,867	8
Apr-99	Adelphia	Harron	PA, MI, New England	\$1,170.0	300,000	3,900	14.6
Apr-99	AT&T	MediaOne	CO-based MSO	\$23,000.0	4,965,000	4,632	19.5
Apr-99	Cox	Media General	Fairfax County, Fredericksburg, VA	\$1,400.0	260,000	5,385	17.7
Apr-99	Etan Ind.	Cencom Ptnrs.	Angleton, TX	\$20.8	11,700	1,778	10.2
Apr-99	Etan Ind.	Cencom Ptnrs.	La Grange, TX	\$11.2	6,500	1,723	9.9
Apr-99	Insight	Intermedia	Louisville, Lexington, KY	\$725.0	215,000	3,372	13.4
Apr-99	Mill. Dig. Med.	Summit	ID, OR, WA	\$68.5	42,000	1,631	9.4
Apr-99	Millennium	Horizon I LP	MI-based MSO	\$110.0	43,000	2,558	13
Apr-99	NPG Cable	King Videocable.	Mammoth Lakes, June Lake, CA	\$11.8	7,000	1,686	8.8
Apr-99	Rapid Comm.	James Cable	Morgan, Scott, Fentures, TN	\$15.0	10,000	1,500	5.8
May-99	AT&T	Lenfest	PA-based MSO	\$2,195.7	602,200	3,646	18.9
May-99	Buford	TCI	Albany, Breckenridge TX	\$37.0	23,200	1,595	10.1
May-99	Charter	Avalon	NY-based MSO	\$845.0	260,000	3,250	14.8
May-99	Charter	Falcon	CA-based MSO	\$3,600.0	1,005,000	3,582	16.3
May-99	Charter	Fanch	CO-based MSO	\$2,379.0	547,000	4,349	16
May-99	Charter	Vista Brdbnd.	Smyrna, GA	\$130.0	26,000	5,000	17.0
May-99	Classic Comm.	Buford	TX-Based MSO	\$320.0	178,500	1,793	9.1
May-99	Cox	TCA Cable	TX-Based MSO	\$3,635.0	882,900	4,117	16.1

YEAR	BUYER	SELLER	SYSTEMS	PRICE ** (Millions)	SUBS (Actual)	PRICE/SUB ***	CASH FLOW MULT.
May-99	Mallard Cable	Willow Park	Ft. Worth suburbs, TX	\$7.0	5,000	1,400	8.5
May-99	Mediacom	Triax	AZ, IL, IN, IA, MI, MN, WI	\$740.0	342,000	2,164	11.6
May-99	MediaComm.	Zylstra Comm.	IA, MN, SD	\$21.5	14,300	1,503	10.9
May-99	Peak Cablevision*	TCA Cable	Dalhart, TX; Guyman, OK	\$16.4	8,200	2,000	10.5
May-99	TCA Cable*	Peak Cablevision	Fayetteville AR	\$18.5	9,300	1,989	12.7
Jun-99	Charter	Bresnan	MI-Based MSO	\$3,100.0	690,200	4,491	21.0
Grand Total				\$92,616.2	23,615,500		

**Notes:**

\* System swaps.

\*\* Transaction prices are from Paul Kagan Assocs. The transaction price is dependent upon the terms of each transaction and may or may not include debt.

\*\*\* Calculation of the "price/basic subscriber" data is from Paul Kagan Assocs. These calculations are subject to rounding and reporting inconsistencies.

**Sources:**

Paul Kagan Assocs., Inc., *Announced/Proposed Cable System Sales*, Cable TV Investor, Aug. 10, 1998, at 10; Sept. 11, 1998, at 5; Oct. 23, 1998, at 6; Nov. 11, 1998, at 9; Dec. 19, 1998, at 7; Mar. 3, 1999, at 8; Apr. 27, 1999, at 10; Jun. 25, 1999, at 10; Jul. 26, 1999, at 9; Sept. 10, 1999, at 6.

## APPENDIX D

TABLE D-1

## MSO Ownership in National Video Programming Services

Programming Service	Launch Date	MSO Ownership (%)
American Movie Classics (AMC)	Oct-84	Cablevision (75)
Animal Planet	Oct-96	AT&T (49),* Cox (24.6)
BBC America	Mar-98	AT&T (24.6), Cox (12.3)
BET (Black Entertainment Television)	Jan-80	AT&T (35)
BET Action Pay-Per-View	Sept-90	AT&T (35)
BET Gospel	Nov-98	AT&T (35)
BET Movies	Feb-97	AT&T (81)
BET on Jazz	Jan-96	AT&T (35)
BET Soundz R&B	Jul-98	AT&T (35)
Bravo	Feb-80	Cablevision (75)
Canales ñ (6 digital channels)**	Oct-98	AT&T (100)
Cartoon Network	Oct-92	Time Warner (100)
Cinemax	Aug-80	Time Warner (100)
CNN	Jun-80	Time Warner (100)
CNN Headline News	Jan-82	Time Warner (100)
CNN International	Jan-95	Time Warner (100)
CNN/SI	Dec-96	Time Warner (100)
CNNfn (The Financial Network)	Dec-95	Time Warner (100)
Comedy Central	Apr-91	Time Warner (50)
Court TV	Jul-91	AT&T (50), Time Warner (50)
Discovery Channel	Jun-85	AT&T (49), Cox (24.6)
Discovery Civilization	Oct-96	AT&T (49), Cox (24.6)
Discovery En Espanol	Aug-98	AT&T (49), Cox (24.6)
Discovery Health	Jul-98	AT&T (49), Cox (24.6)
Discovery Home & Leisure	Oct-96	AT&T (49), Cox (24.6)
Discovery Kids	Oct-96	AT&T (49), Cox (24.6)
Discovery People	Dec-98	AT&T (49), Cox (24.6)

Programming Service	Launch Date	MISO Ownership (%)
Discovery Science	Oct-96	AT&T (49), Cox (24.6)
Discovery Wings	Jul-98	AT&T (49), Cox (24.6)
E! Entertainment	Jun-90	Comcast (40), MediaOne (10), AT&T (10)
Encore	Apr-91	AT&T (100)
Encore Action	Sept-94	AT&T (100)
Encore Love Stories	Jul-94	AT&T (100)
Encore Mysteries	Jul-94	AT&T (100)
Encore True Stories and Drama	Sept-94	AT&T (100)
Encore WAM! America's Youth Network	Sept-94	AT&T (100)
Encore Westerns	Jul-94	AT&T (100)
Food Network	Nov-93	MediaOne(5.5),*** Cox (1),TimeWarner(1)
FOX Sports Net (5 channels)	various	Cablevision (50)
GEMS International Television	Apr-93	Cox (50)
Golf Channel	Jan-95	MediaOne (14.4), Comcast (43.3)
Great American Country	Dec-95	Jones (100)
HBO (Home Box Office)	Nov-72	Time Warner (100)
HBO Plus	Dec-75	Time Warner (100)
HBO Signature	Oct-93	Time Warner (100)
HBO Comedy	May-99	Time Warner (100)
HBO Family	Dec-96	Time Warner (100)
HBO Zone	May-99	Time Warner (100)
Home Shopping (Spree!)	Sep-86	AT&T (18.6), MediaOne (<1)
Home Shopping Network	Jul-85	AT&T (18.6), MediaOne (<1)
Independent Film Channel	Sep-94	Cablevision (75)
International Channel	Jul-90	AT&T (90)
Kaleidoscope	Sep-90	AT&T (12)
Knowledge TV	Nov-87	Jones (97)
MoreMAX	Aug-91	Time Warner (100)
MuchMusic USA	Jul-94	Cablevision (75)

Programming Service	Launch Date	MSO Ownership (%)
Multimax: ActionMax	June-98	Time Warner (100)
Multimax: ThrillerMax	June-98	Time Warner (100)
Odyssey Channel	Oct-93	AT&T (32.5)
Outdoor Life Network	Jul-95	Cox (33.3), Comcast (17), MediaOne (15.4)
Ovation: The Arts Network	Apr-96	Time Warner (4.2)
PIN (Product Information Network)	Apr-94	Cox (45)
Prevue Channel	Jan-88	AT&T (44), MediaOne (7)
QVC	Nov-86	Comcast (57), AT&T (43)
Romance Classics	Jan-97	Cablevision (75)
Sci-Fi Channel	Sept-92	AT&T (18.6), MediaOne (<1)
Sneak Prevue	May-91	AT&T (12)
Speedvision	Dec-95	Cox (33.3), Comcast (15), MediaOne (13.3)
Starz!	Feb-94	AT&T (100)
Starz! Cinema	May-99	AT&T (100)
Starz! Family	May-99	AT&T (100)
Starz!2	Mar-96	AT&T (100)
Style	May-99	Comcast (40), MediaOne (10), AT&T (10)
TBS	Dec-76	Time Warner (100)
Telemundo	Jan-87	AT&T (50)
The Box Worldwide	Dec-85	AT&T (78)
TLC (The Learning Channel)	Nov-80	AT&T (49), Cox (24.6)
TNT (Turner Network Television)	Oct-88	Time Warner (100)
Travel Channel	Feb-87	AT&T (49), Cox (24.6)
Turner Classic Movies	Apr-94	Time Warner (100)
USA Network	Apr-80	AT&T (18.6), MediaOne (<1)
Viewers Choice 1-10 and Hot Choice (11 multiplexed channels)	Nov-85	Cox (20), Time Warner (17), MediaOne (11.7), Comcast (11)

**Notes:**

AT&T has a 33% equity interest (6.9% voting) in Cablevision Systems and a 9% ownership interest in TWE.

Canales ñ, AT&T Liberty's digital package of Spanish-language channels, consists of, Fox Sports Americas, CBS Telenoticias, CineLatino, BoxTejano, BoxExitos, and Canal 9.

MediaOne has a 25% ownership interest in Time Warner Entertainment, L.P., ("TWE") including Time Warner Cable.

**Sources:**

National Cable Television Association, *Directory of Cable Networks*, Cable Television Developments, Summer 1999 at 29 - 114.

Rainbow Media Holdings Web Page, <http://www.cablevision.com/cvhome/cvrainb/rainbow.htm>.

Liberty Media Investor Relations Web Page,  
[http://www.libertymedia.com/investor\\_relations/affiliate\\_list.htm](http://www.libertymedia.com/investor_relations/affiliate_list.htm).

Cox Communications Investor Relations Web Page, <http://www.cox.com/investor>.

Turner Entertainment 1998 Annual Report at 2-7 (*Cable Networks*), 14-15 (*Cable Systems*), and 17-19 (*Selected Brands and Products*).

The Industry Standard, Company Profiles, <http://www.thestandard.com/companies>.

Sallie Hofmeister, *Interacting with the Future*, Los Angeles Times, April 7, 1999, at C1.

John Higgins, *Getting Out of the Sports Biz*, Broadcasting and Cable, April 12, 1999 at 35.

TABLE D-2

**National Video Programming Services  
Not Affiliated With a Cable Operator**

Programming Service	Launch Date
A&E (Arts & Entertainment)	Feb-84
Adam & Eve Channel	Feb-94
Adultvision	Jul-95
All News Channel	Nov-89
America's Voice	Dec-93
ANA Television Network	Dec-91
Asian American Satellite TV	Jan-92
Biography Channel	Dec-98
Bloomberg Information Television	Jan-95
B-Movie Channel	May-98
boyzChannel	Oct-99
Cable Video Store	Apr-86
Canal de Noticias NBC	Mar-93
Canal Sur	Aug-91
CBS TeleNoticias	1997
CelticVision	Mar-95
Channel America Television Network	Jun-88
Channel Earth	Mar-97
Children's Cable Network	May-95
Cine Latino	Dec-94
Classic Arts Showcase	May-94
Classic Movie Channel	Nov-99
CMT (Country Music Television)	Mar-83
CNBC	Apr-89
CNET: The Computer Network	Jan-95
Consumer Resource Network	Dec-94
Crime Channel	Jul-93

Programming Service	Launch Date
C-SPAN <sup>(1)</sup>	Mar-79
C-SPAN2 <sup>(1)</sup>	Jun-86
Deep Dish TV	Jan-86
Disney Channel	Apr-83
Do-It-Yourself Channel	Sep-99
Dream TV Network	Nov-96
Ecology Channel	Nov-94
Employment Channel	Feb-92
ESPN	Sep-79
ESPN Classic Sports (formerly Classic Sports Network)	May-95
ESPN2	Oct-93
ESPNEWS	Nov-96
Ethnic-American Broadcasting Co.	1992
EWTN: Global Catholic Network	Aug-81
Fashion Network	Jul-96
Filipino Channel	Apr-91
Flix	Aug-92
Fox Family Worldwide	Apr-77
Fox News Channel	Oct-96
Fox Sports Americas	Dec-93
Fox Sports Direct	1989
Fox Sports World	1997
FX	Oct-94
FXM: Movies from Fox	Oct-94
Galavision	Oct-79
Game Show Network	Dec-94
Games and Sports	Mar-99
Gay Entertainment Television	Nov 95
girlzChannel	Oct-99
Goodlife Television Network (formerly Nostalgia Channel)	Jun-98

Programming Service	Launch Date
History Channel	Jan-95
History Channel International	Dec-98
Home & Garden Television	Dec-94
HTV	Aug-95
Inspirational Network	Apr-78
International Channel Network (7 channels)	various
Jewish Television Network	1981
Ladbroke Racing Channel	Nov-84
Las Vegas Television Network	Nov-91
Lifetime Movie Network	Jun-98
Lifetime Television	Feb-84
Lottery Channel	Nov-95
M2: Music Television	Aug-96
MBC Gospel Network	Nov-98
Military Channel	Jul-98
Mor Music TV	Aug-92
MSNBC	Jul-96
MTV "S"	Aug-98
MTV "X"	Aug-98
MTV Networks Latin America (formerly MTV Latino)	Oct-93
MTV: Music Television	Aug-81
Music Zone	Apr-95
My Pet TV	Sep-96
NASA Television	Jul-91
National & International Singles Television Network	Apr-95
NBA.comTV	Jan-99
NET - Political NewsTalk Network	Dec-93
Network One	Dec-93
Newsworld International	Sep-94
Nick at Nite's TV Land	Apr-96

Programming Service	Launch Date
Nick Too	Jan-99
Nickelodeon/Nick at Nite	Apr-79
Noggin	Feb-99
Oasis TV	Sept-97
Outdoor Channel	Apr-93
Planet Central Television	May-95
Playboy TV	Nov-82
Praise Television	Dec-96
Recovery Network	Feb-97
SCOLA	Aug-87
Shop at Home	Jun-86
Showtime	Jul-76
Showtime Beyond	Sep-99
Showtime Extreme	1998
SingleVision	Jun-94
Soap Channel	Jul-98
Spice	May-89
Spice Hot	1998
Student Film Network	Nov-94
Sun TV	Aug-96
Sundance Channel	Feb-96
Telemundo	Jan-87
The Erotic Network (TEN)	Aug-98
The Health Network	May-99
TMC (The Movie Channel)	Dec-79
TNN: The Nashville Network	Mar-83
Toon Disney	Apr-98
Total Communications Network	Nov-95
Trinity Broadcasting Network	Apr-78
TRIO	Sep-94

Programming Service	Launch Date
Tropical Television Network	Aug-96
TV 5 - La Television Internationale	Jan-98
TV Asia	Apr-93
TV Japan	Jul-91
TVN Digital Cable (32 digital pay-per-view channels)	Feb-98
U Network	Oct-89
Univision	Sep-76
ValueVision	Oct-91
VH-1	Jan-85
VH1 Smooth	Aug-98
VH1 Soul	Aug-98
VH1 Country	Aug-98
Via TV Network	Aug-93
Video Catalog Channel	Oct-91
Weather Channel	May-82
Weatherscan	April-98
Weatherscan Local	May-99
Weatherscan Plus	Sep-99
Weatherscan Radar	Jun-99
WorldJazz	Jul-95
Worship Network	Sep-92
Z Music	Mar-93
ZDTV: Your Computer Channel	May-98

**Notes:**

<sup>(1)</sup> Cable affiliates provide 95% of funding for C-SPAN and C-SPAN2, but have no ownership or program control interests. DBS licensees provide the other 5% of funding and also have no ownership or program control interests.

**Sources:**

National Cable Television Association, *Directory of Cable Networks*, Cable Television Developments, Summer 1999 at 29 - 114.

NCTA, *Cable Networks New Digital Channel Roll Outs*, [http://www.ncta.com/yearend98\\_8.html](http://www.ncta.com/yearend98_8.html).

Cablevision Online: *Database, Network Subscriber Counts*, [http://www.cablevisionmag.com/database/db\\_basic.htm](http://www.cablevisionmag.com/database/db_basic.htm)

TABLE D-3

## Regional Video Programming Services

Programming Services	Launch Date	MSO Ownership (%)
Arabic Channel	Apr-91	
Arizona News Channel	Nov-96	
Automotive Television Network (ATN)	Sep-95	
Bay News 9	Jul-94	AT&T (49)
BAYTV	Jul-94	AT&T (49)
Cable TV Network of New Jersey	Jul-93	
California Channel	Feb-91	
Casa Club TV	Jul-97	
Central Florida News 13	Oct-97	
ChicagoLand Television News (CLTV)	Jan-93	
CN8 - The Comcast Network	1996	Comcast (100)
Comcast SportsNet	Oct-97	Comcast (46)
County Television Network San Diego	Jul-96	
Ecumenical Television Channel	1983	
Empire Sports Network	Dec-90	
Florida's News Channel	Sep-98	
Fox Sports Arizona	Sep-96	
Fox Sports Bay Area	Apr-90	
Fox Sports Chicago	Jan-84	Cablevision (45)
Fox Sports Cincinnati	1989	Cablevision (45)
Fox Sports Detroit	Sep-97	
Fox Sports Intermountain West	1990	
Fox Sports Midwest	1989	
Fox Sports New England	Nov-81	Cablevision (22.5), MediaOne (50)
Fox Sports New York	1982	Cablevision (41.5)
Fox Sports Northwest	Nov-88	
Fox Sports Ohio	Feb-89	Cablevision (45)
Fox Sports Pacific	Unknown	Cablevision (45)

Programming Services	Launch Date	MSO Ownership (%)
Fox Sports Pittsburgh	Apr-86	
Fox Sports Rocky Mountain	Nov-88	
Fox Sports South	Aug-90	
Fox Sports Southwest	Jan-83	
Fox Sports West	Oct-85	
Fox Sports West 2	Jan-97	
Hip Hop Network	Jan-97	
Home Team Sports (HTS)	Apr-84	AT&T (17)
International Television Broadcasting (ITV)	Apr-86	
Las Vegas One News	Apr-98	
Local News on Cable	Feb-97	
Madison Square Garden Network (MSG)	Oct-69	AT&T (18), Cablevision (41.5)
MediaOne News	Dec-95	MediaOne (100)
Midwest Sports Channel	Mar-89	
MSG Metro Guide	Aug-98	Cablevision (100)
MSG Metro Learning Channel	Aug-98	Cablevision (100)
MSG Traffic and Weather	Aug-98	Cablevision (100)
Neighborhood News L.I.	Unknown	Cablevision (75)
New England Cable News	Mar-92	MediaOne (50)
New England Sports Network (NESN)	Mar-84	
New York 1 News	Sep-92	
News 12 Connecticut	Jun-95	Cablevision (75)
News 12 Long Island	Dec-86	Cablevision (75)
News 12 New Jersey	Mar-96	Cablevision (75)
News 12 The Bronx	Jun-98	Cablevision
News 12 Westchester	Nov-95	Cablevision (75)
News 8 Austin	Sep-99	
News Channel 5+	Sept-96	
News Now 53	Jun-97	
News on One	Oct-97	

Programming Services	Launch Date	MSO Ownership (%)
News Watch 15	Oct-99	
Newschannel 8	Oct-91	
Nippon Golden Network	Jan-82	
NorthWest Cable News	Dec-95	
Ohio News Network	May-97	
Orange County NewsChannel	Sep-90	
PASS Sports (Pro-Am Sports System)	Apr-84	
Pennsylvania Cable Network (PCN)	Sep-79	
Pittsburgh Cable News Channel (PCNC)	Jan-94	
PRISM	Sep-76	
San Diego's News Channel 15	Jan-97	
Six News Now	Jul-95	
South Florida News Channel	1998	
SportsChannel Florida	Dec-87	AT&T (6), Cablevision (13.5)
SportsChannel New York	1976	
Sunshine Network	Mar-88	AT&T (27), MediaOne (7.5), Comcast (16), Cox (5.3)
Texas Cable News	Jan-99	

**Sources:**

National Cable Television Association, *Regional Video Services*, Cable Television Developments, Summer 1999, at 115 – 138.

Deborah D. McAdams, *Regional Cable News Networks*, Broadcasting and Cable, Sep 27, 1999 at 44-50.

Cablevision Online: *Database, Network Subscriber Counts*, [http://www.cablevisionmag.com/database/db\\_regbas.htm](http://www.cablevisionmag.com/database/db_regbas.htm).

Rainbow Media Holdings Web Page, <http://www.cablevision.com/cvhome/cvrainb/rainbow.htm>.

Leonard Shapiro, *Clash of the Titans; Sports Giants Battle for Air Traffic Control*, The Washington Post, August 15, 1999 at D1.

John Higgins, *Getting Out of the Sports Biz*, Broadcasting and Cable, April 12, 1999 at 35.

TABLE D-4

## Planned Programming Services

Programming Service	Planned Launch Date, If Announced
American Legal Network	TBA
American Pop	2000
American West Network	TBA
Anthropology Programming and Entertainment	TBA
Anti-Aging Network	TBA
Applause	TBA
Arts & Antiques Network	TBA
Auto Channel	1999
Baby TV	TBA
Beauty Channel	TBA
BET Rap/Hip Hop	TBA
BET World Music Beat	TBA
Black Women's Television	1999
Boating Channel	TBA
Booknet	1999
Bravo World Cinema	TBA
Children's Fashion Network	1999
Chop TV	TBA
Collectors Channel	TBA
ComedyNet	TBA
Crime Beat	2000
Documentary Channel	4th Qtr. 1999
Eurocinema	TBA
Fad TV (Fashion & Design Television)	1999
Fanfare (The Classical Music Channel)	4 <sup>th</sup> Qtr. 1999
GETv Network	TBA
Global Village Network	TBA
Hobby Craft Interactive	TBA

Programming Service	Planned Launch Date, If Announced
Inspirational Network Digital Digiplex (6 channels)	2000
Investment TV	1999
Local News Network	TBA
Love Network	TBA
Martial Arts Action Network	1999
MBC Movie Network	TBA
Museum Channel	TBA
Museum World	4 <sup>th</sup> Qtr. 1999
National Geographic Channel	2 <sup>nd</sup> Qtr. 1999
Native American Nations Program Network	TBA
Noah's World International	1999
Orb TV	TBA
Oxygen Media	2000
Parents Television	TBA
Performance Showcase	TBA
Planet Central Television	TBA
Pleasure	1999
Premiere Horse Network	TBA
Puppy Channel	TBA
RadioTV Network	1999
Real Estate Network (TREN)	TBA
RomanceLand	1999
Senior Citizens Television Network	2000
Si TV	2000
Skywatcher Channel	1999
Spanish Shopping Channel	TBA
TBD (Gen - Y emphasis)	2000
The Catalogue Channel	4 <sup>th</sup> Qtr. 1999
The CEO Channel	TBA

Programming Service	Planned Launch Date, If Announced
The Enrichment Channel	TBA
The Fifth Avenue Channel	1999
The Football Channel (TFN)	1999
The Gospel Network	TBA
The Recovery Network	TBA
Theater Channel	2000
TV Games Network	1999
Weatherscan + Traffic	TBA
Weatherscan Espanol	TBA
Youth Sports Broadcasting Channel	TBA

**Sources:**

National Cable Television Association, *Planned Services*, Cable Television Developments, Summer 1999 at 149 - 168.

Linda Moss, *Fox Family Unveils One Dozen New Offerings*, Multichannel News, Feb 15, 1999 at 17.

Sam Walker, *NBA Set to Launch 24-Hour Television Network*, The Wall Street Journal, Sep 24, 1999 at B7.

Price Colman, *The Digital Jungle*, Broadcasting and Cable, Aug 23, 1999 at 22.

NCTA, *Cable Networks New Digital Channel Roll Outs*, [http://www.ncta.com/yearend98\\_8.html](http://www.ncta.com/yearend98_8.html).

Cablevision Online: *Database – Announced Services*, [http://www.cablevisionmag.com/database/db\\_annon.htm](http://www.cablevisionmag.com/database/db_annon.htm).

Rick Churchill, *New Cable Networks*, Broadcasting and Cable, Feb 22, 1999 at 28 – 36.

TABLE D-5

## MSO Ownership in National Programming

Services	Subs <sup>(1)</sup>	AT&T	Time Warner	Media One	Comcast	Cox	Cablevision Systems	Jones <sup>(2)</sup>
AMC	71.9						75%	
Animal Planet	50.9	49%				24.6%		
BBC America	9.0		24.6			12.3		
BET	57	35%						
BET Action PPV	10	35%						
BET Gospel	*	35%						
BET Movies	5.0	81%						
BET on Jazz	4.0	35%						
BET Soundz R&B	*	35%						
Bravo	42.1						75%	
Canales ñ	*	100%						
Cartoon Network	60		100%					
Cinemax <sup>(2)</sup>	34.6		100%					
CNN	77.4		100%					
CNN Headline News	72.4		100%					
CNN Int'l	10 <sup>(3)</sup>		100%					
CNN/SI	15.8		100%					
CNNfn	11.7		100%					
Comedy Central	59.3		50%					
Court TV	36	50%	50%					
Discovery	77.7	49%				24.6%		
Discovery Civilization	*	49%				24.6%		
Discovery En Espanol	*	49%				24.6%		
Discovery Health	*	49%				24.6%		

Services	Subs (Mil)	AT&T	Time Warner	Media One	Comcast	Cox	Cablevision Systems	Jones <sup>(1)</sup>
Discovery Home&Leisure	*	49%				24.6%		
Discovery Kids	*	49%				24.6%		
Discovery People	11	49%				24.6%		
Discovery Science	*	49%				24.6%		
Discovery Wings	*	49%				24.6%		
E!	60	10%		10%	40%			
Encore	13.1	100%						
Encore Action	(2)	100%						
Encore Love Stories	(2)	100%						
Encore Mysteries	(2)	100%						
Encore True Stories/Drama	(2)	100%						
Encore WAM!	(2)	100%						
Encore Westerns	(2)	100%						
Food Network	39.6		1%	5.5%		1%		
Fox Sports Net							50%	
GEMS Intn'l TV	5.5					50%		
Golf Channel	24.9			14.4%	43.3%			
Great American Country	11.1							100%
HBO (The Works) <sup>(4)</sup>	34.6		100%					
Spree!	12.4	18.6%		<1%				
Home Shopping Network	52.5	18.6%		<1%				
Independent Film Channel	14						75%	

Services	Subs (Mill)	A&E	Time Warner	Media One	Comcast	Cox	Cablevision Systems	Jones <sup>1)</sup>
Int'l Channel	8.7	90%						
Kaleidoscope		12%						
Knowledge TV	20							100%
MuchMusic USA	18.5						75%	
Odyssey	28	32.5%						
Outdoor Life	13.5	16.7%		8.3%	8.3%	33.3%		
Ovation	7		4.2%					
Prevue Channel	50.8	44%						
PIN	22.2					45%		
QVC	65.3	43%			57%			
Romance Classics	24.7						75%	
Sci-Fi	46.9	18.6%		<1%				
Sneak Preview	36.0	12%						
Speedvision	22	16.7%		8.3%	8.3%	33.3%		
Starz!	9.1	100%						
Starz! Cinema	*	100%						
Starz! Family	*	100%						
Starz!2	*	100%						
Style	6	10.4%		10.4%	39.6%			
TBS	78.6		100%					
Telemundo	17.6	50%						
The Box	24.5	78%						
TLC	72	49%				24.6%		
TNT	77.1		100%					
Travel Channel	31.5	49%				24.6%		
TCM	34.1		100%					
USA	77.1	18.6%		<1%				
Viewers Choice 1-10	20	10%	17%	10%	10%	20%		

Notes:

In addition to cable, other services such as MMDS (wireless cable), SMATV (satellite master antenna television), satellite, including HSD (home satellite dish) and DBS (direct broadcast satellite), broadcast television and LPTV (low power television) may distribute these signals. Subscriber figures may include these non-cable services.

\*Indicates that subscribership count is unknown or not available.

<sup>(1)</sup> In April 1999, Glenn Jones, founder of Jones International, sold controlling interest in cable MSO, Jones Intercable, to Comcast Cable Communications. *See Comcast Announces Filing of Registration Statement Relating to Partial Exchange Offer for Jones Intercable, Inc.* (press release) August 23, 1999. *See also* Frank Witsil, *Augusta, Ga.-Based Cable Firm to Adopt Comcast Name*, *The Augusta Chronicle*, September 29, 1999.

<sup>(2)</sup> Cinemax subscriber numbers include MoreMax, ActionMax and ThrillerMax

<sup>(3)</sup> CNN International subscribership of 10 million includes domestic US subscribers only. CNN international has 129 million subscribers outside the U.S.

<sup>(4)</sup> HBO "The Works" includes HBO Plus, HBO Signature, HBO Comedy, HBO Family, and HBO Zone.

**Sources:**

National Cable Television Association, *Directory of Cable Networks*, Cable Television Developments, Summer 1999 at 29 - 114.

Cablevision Online: *Database, Network Subscriber Counts*, <http://www.cablevisionmag.com/database>.

TABLE D-6

## Top 20 Programming Services by Subscribership

Rank	Programming Network (Top 20)	Number of Subscribers (Millions)	MSO Ownership Interest in Network (%)
1	TBS	77.0	Time Warner (100)
2	Discovery Channel	76.4	AT&T (49), Cox (24.6)
3	ESPN	76.2	
4	USA Network	75.8	AT&T (18.6)
5	C-SPAN <sup>(1)</sup>	75.7	
6	TNT	75.6	Time Warner (100)
7	Fox Family Channel	74	
8	TNN (The Nashville Network)	73.9	
9	Lifetime Television	73.4	
10	A&E	73	
11	CNN	73	Time Warner (100)
12	Weather Channel	72	
13	QVC	70.1	Comcast (57), AT&T (43)
14	TLC (The Learning Channel)	70	AT&T (49), Cox (24.6)
15	MTV	69.4	
16	AMC	69	Cablevision (75)
17	CNBC	68	
18	Nickelodeon/Nick at Nite	67	
19	VH1	65.6	
20	ESPN2	64.5	

**Notes:**

In addition to cable, other services such as MMDS (wireless cable), SMATV (satellite master antenna television), satellite, including HSD (home satellite dish) and DBS (direct broadcast satellite), broadcast television and LPTV (low power television) may distribute these signals. Subscriber figures may include these noncable services.

<sup>(1)</sup>Cable affiliates provide 95% of funding for C-SPAN and C-SPAN2, but have no ownership or program control interests. DBS licensees provide the other 5% of funding and also have no ownership or program control interests.

**Source:**

National Cable Television Association, Top 20 Cable Networks, Cable Television Developments, Summer 1999 at 16-17.

TABLE D-7

## Top 15 Programming Services by Prime Time Rating

	Programming Service	MSO with Ownership Interest (%)
1	USA Network	AT&T (18.6)
2	TBS	Time Warner (100)
3	TNT	Time Warner (100)
4	Nick at Night	
5	Cartoon Network	Time Warner (100)
6	ESPN	
7	Lifetime Television	
8	A&E	
9	MTV	
10	Discovery Channel	AT&T (49), Cox (24.6)
11	TLC (The Learning Channel)	AT&T (49), Cox (24.6)
12	TV Land	
13	Sci Fi Channel	AT&T (18.6)
14	CNN	Time Warner (100)
15	History Channel	

**Source:**

Paul Kagan Assocs., Inc., *Day Part Ratings Averages, Prime Time (3<sup>rd</sup> Quarter)*, Cable Program Investor, Nov. 17, 1999, at 4.

**Dissenting Statement of Commissioner Harold Furchtgott-Roth  
Annual Assessment of the Status of Competition in Markets for the  
Delivery of Video Programming, CS Docket No. 99-230**

I must respectfully dissent from the 1999 "Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming."

As I said last year, I do not believe that the Competition Report, in its traditional form, fulfills our duties under the Communications Act. See Dissenting Statement of Commissioner Harold Furchtgott-Roth, *Annual Assessment of Competition in Markets for the Delivery of Video Programming*, 13 FCC Rcd 24284 (1998).

Again, instead of examining the state of competition "in the market for the delivery of video programming," 47 USC section 628(g), as the statute prescribes, the Report artificially limits its analysis to the delivery of "*multichannel* video programming." There are, of course, many forms of video programming that do not come bundled in channels but that are still part of the general video distribution market. Unfortunately, the Report does not take full account of these very real forces in its investigation of competition. In focusing primarily on what is a *submarket* of video programming -- the "multichannel" distribution market -- rather than the entire market, the report does not fully meet the requirements of the statute.

The language of the statute also makes clear that Congress considered the delivery of video programming to constitute a single "market," *see id.* section 628(g) (referring to "the market" for video programming delivery), not a conglomeration of "markets," as the very title of this Report suggests in speaking of "[m]arkets" for the delivery of video programming.

We should, as a plain statutory matter, have considered the delivery of video programming a single market in this Report. Because I believe the definition of the relevant market to be in error, I cannot sign on the ensuing analysis of that market.

In closing, I comment on the significance of cable market share, a number that traditionally receives top billing in these reports. *See supra* at para. 5. The fact that a large number of MVPD subscribers opt for cable service is not in itself a reflection of a lack of competition in the market for video programming. Assuming that subscribers have choices for their source of video programming, as I think they clearly do, their selection of cable is not indicative of anything harmful. The objective here should not be to drive down cable's market share, but rather to analyze the options available to consumers.

**STATEMENT OF COMMISSIONER GLORIA TRISTANI***In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 99-230*

Cable is in the midst of a major transformation, from a platform for the delivery of one-way video programming to a platform for the delivery of a bundle of products, including advanced and two-way services. For many of these services, the cable industry has been driving residential deployment and has begun offering consumers the kind of competitive choice envisioned by the Telecommunications Act of 1996. Cable deserves a great deal of credit for its efforts.

But this Report is not about cable's entry into new markets like Internet access or telephony. Under the Communications Act, this Report is about competition in the market for the delivery of *video services*. Millions of Americans still rely on plain old one-way video service for their news, information and entertainment. These consumers should not be forgotten in our rush to continue sharpening the cutting edge.

Two things stand out in this year's Report:

First, it appears that widespread video competition, if it comes, will come via satellite and not from terrestrial competition. In particular, incumbent local exchange carriers, which once clamored for the right to offer video (and, indeed, took the issue all the way to the Supreme Court), continue to show limited interest in large-scale entry. Indeed, it appears that Ameritech (now SBC) -- always the "poster child" for LEC video entry -- may be dropping out of the cable business altogether. DBS, by contrast, continues to add subscribers, and, with local broadcast signals now available in many communities, may be on the verge of finally becoming a true alternative to cable for many consumers. We must continue to do whatever we can, within the confines of the law, to strengthen DBS's ability to compete.

Second, the number of distinct programming voices that the public receives is distressingly small. The Report finds that 46 of the top 50 cable networks are owned by twelve large media conglomerates -- ABC/Disney, General Electric, CBS, News Corp, Time Warner, Viacom, Discovery, Rainbow Media, Liberty Media, USA Networks, E.W. Scripps and Comcast.<sup>1</sup> And two of the remaining four services are C-Span and C-Span2, which are funded almost exclusively by the cable industry. More disturbing, these same entities also control the top commercial television broadcast networks, dozens of television stations and lesser cable networks, many of the major movie, TV and video production studios, and even the country's largest video rental distributor. Thus, to a significant extent, the video programming that the American public receives is being funneled through a handful of media gatekeepers (not to mention the vast magazine, newspaper, publishing and Internet properties owned by these entities).

These potential bottlenecks should be a concern of all those who care about true competition and the clashing of opinion that is so vital to our democracy. How information is presented and what stories are covered on television -- and, often more important, what stories are *not* covered -- has a significant

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<sup>1</sup> Two of these twelve entities, CBS and Viacom, have proposed to merge, which would leave only eleven.

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impact on public perceptions and the discussion of public issues. More channels do not necessarily mean that additional views are being expressed. More channels often just mean that the same voices can express their views over and over again.