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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992	)	MM Docket No. 92-266
	)	
Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment	)	

REPORT ON CABLE INDUSTRY PRICES

Adopted: December 20, 2006 **Released: December 27, 2006**

By the Commission: Chairman Martin and Commissioner McDowell issuing separate statements; Commissioners Copps and Adelstein concurring and issuing separate statements.

I. INTRODUCTION

1. Section 623(k) of the Communications Act, as amended by the Cable Television Consumer Protection and Competition Act of 1992 ("Cable Act"),[1] requires the Commission to publish annually a statistical report on average rates for the cable basic service tier, cable programming service tier, and equipment.[2] The Cable Act also requires the Commission to compare the average rates of cable operators subject to "effective competition," as identified through specific adjudications, with those of cable operators that have not been found subject to effective competition.[3] This Report is issued in compliance with those statutory obligations.

2. Overall, cable prices increased more than 5 percent last year and by 93 percent since the period immediately prior to Congress's enactment of the Telecommunications Act of 1996. Expanded basic prices rose more than 6 percent or twice the rate of inflation last year. Prices are 17 percent lower where wireline cable competition is present. DBS competition, however, does not appear to constrain cable prices – average prices are the same as or slightly higher in communities where DBS was the basis

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[1] Section 623(k) was adopted as Section 3(k) of the 1992 Cable Act, Pub. L. No. 102-385, 106 Stat. 1460, codified at 47 U.S.C. § 543(k).

[2] The term "service tier" generally refers to a category of cable service or other services provided by a cable operator and for which a separate rate is charged by the cable operator. *See* 47 U.S.C. § 522(17). Cable operators are required to offer a "basic cable service tier" that includes, at a minimum, local broadcast stations and public, educational, and governmental ("PEG") access channels that may be required pursuant to an agreement with a local government. *See* 7 U.S.C. § 543(b)(7). A "cable programming service tier" includes channels other than channels carried on the basic service tier or for which per channel ("premium") or per program ("pay-per-view") charges apply. *See* 47 U.S.C. § 543(k)(1)(2). The term "equipment" refers to a set-top converter box, remote control unit, and other equipment used to access cable television programming. *See* 47 U.S.C. § 543(b)(3).

[3] 47 U.S.C. § 543(k)(1) (cross-referencing 47 U.S.C. § 543(a)(2)).

for a finding of effective competition than in noncompetitive communities. Finally, increases in programming expenses were equivalent to more than half of the overall increase in prices for the basic and expanded basic tiers.

II. OVERVIEW OF STUDY

3. The information and analysis provided in this Report are based on the Commission's survey of cable industry prices ("Survey") as of January 1, 2005.[4] The Survey requested data from cable system operators serving a random sample of communities. The information collected enables the Commission to compare prices charged by operators serving: (1) communities where operators have not been formally found to meet the statutory test for effective competition ("noncompetitive communities"); and (2) communities where cable operators have been granted relief from rate regulation for their basic-service tier because they meet the statutory test for effective competition ("communities relieved from rate regulation"). We surveyed cable operators that served 497 out of the 31,655 noncompetitive communities and cable operators that served 228 out of the 1,128 communities relieved from rate regulation pursuant to the statute.

4. In selecting cable operators in the communities relieved from basic-tier rate regulation, we relied on the Commission's formal legal decisions regarding effective competition, based on the statutory definition of that term under the Cable Act.[5] Our list of communities relieved from rate regulation is limited to adjudicated findings of effective competition. We are unable to take into account those areas of the country where the conditions for a finding are present, but no finding has been requested or made.

5. The sample of the communities relieved from rate regulation was selected from each of four subgroups according to the primary basis for a finding that the statutory test for effective competition had been met. These subgroups are comprised of findings of effective competition where: (1) a second wireline cable operator serves a community in competition with the incumbent cable operator ("second cable operator");[6] (2) a sufficient percentage of households in a community subscribe to the multichannel video programming distribution ("MVPD") service of a direct broadcast satellite ("DBS") provider; (3) a wireless MVPD service provider, such as that of a multichannel multipoint distribution service ("MMDS") provider, overlaps the service area of a cable operator ("wireless cable operator"); and (4) the incumbent cable operator met the low penetration test at the time of the finding ("low penetration"). In

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[4] The Commission directed cable operators to respond to a survey questionnaire. *See Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Prices for Basic Service, Cable Programming Services, and Equipment*, 20 FCC Rcd 3485 (2005).

[5] Under the Cable Act, a cable operator may obtain a finding of "effective competition" for a community that meets one of four tests: (1) fewer than 30 percent of households subscribe to the cable operator's service (low penetration test); (2) at least two multichannel video programming distribution ("MVPD") providers each offer a comparable service to at least 50 percent of households and at least 15 percent of all households subscribe to service other than from the largest MVPD (50/15 test); (3) a municipality offers MVPD service to at least 50 percent of households (municipal test); or (4) a local exchange carrier (LEC) or its affiliate, or an MVPD using the facilities of such carrier or its affiliate, offers MVPD service by means other than direct broadcast satellite in an area that is also served by an unaffiliated cable operator (LEC test). *See* 47 C.F.R. § 76.905(b). The term "MVPD" refers to an entity such as, but not limited to, a cable operator that makes available for purchase multiple channels of video programming. *See* 47 C.F.R. § 76.905(d). If a community is deemed subject to effective competition, the local franchising authority may no longer regulate basic service tier rates, unless it seeks and is granted recertification. *See* 47 U.S.C. § 543(a)(2) and 47 U.S.C. § 916(a).

[6] The term "incumbent" refers to a cable operator that provided service before a competing provider entered the market.

the second cable operator subgroup, we sampled both incumbents and second cable operators. In the DBS, wireless cable operator, and low penetration subgroups, only incumbent cable operators were sampled.

6. Of the communities relieved from rate regulation, 733 communities met the statutory test for effective competition on the basis of DBS competition,[7] 147 met the test due to competition between cable operators, 137 met the test because cable operators faced competition from wireless MMDS operators, and cable operators in 111 communities met the test due to low penetration.

7. Cable operators were asked to complete a questionnaire for each of the communities they serve that were selected for the sample. The Survey focused on basic programming and expanded basic programming (or cable programming service) because these are the service packages required by the statute. Eighty-four percent of subscribers take at least basic-plus-expanded-basic service, and 16 percent take basic service only.[8] The basic service tier consists of local broadcast stations; PEG access channels; and typically a few additional channels that may be of local, regional, or national origination. Subscribers must purchase basic service in order to subscribe to the expanded basic tier. The channels on the expanded basic tier are made up mostly of national cable networks.[9] Operators were asked to report monthly prices of basic and expanded basic service as of January 1, 2005 and January 1, 2004, which permitted us to calculate the annual percentage change.

8. In addition to the monthly prices for basic and expanded basic service, the questionnaire asked for prices of the most highly subscribed digital service tier, customer-premises equipment charges, and service installation charges. Information was gathered on factors that may affect prices, including programming expenses; operating capacity; and number of subscribers to program tiers, Internet access service, and telephony. Averages for each of these elements were calculated by sample subgroup, sample group, and overall as a weighted average of the sample groups.[10]

9. Section III, below, provides a summary of the Survey's findings regarding average prices for basic and expanded basic programming. The January 1, 2005 averages are reported along with annual percentage changes. Section IV provides additional information and tables regarding those findings as well as other Survey findings. Section V presents an econometric analysis estimating the effects of market concentration on cable rates and the effects on cable rates in communities where the statutory test for effective competition has been met. Section VI presents conclusions, and Section VII covers administrative matters. Attachment 1 is an overview of the sample, and Attachments 2 through 11 provide additional statistics, including estimates of statistical sampling variances for the reported price averages. In addition, Appendix A describes the Survey design and sampling procedure and Appendix B describes in greater depth the econometric analysis presented in Section V.

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[7] We note that, because DBS service is available nationwide, there may be other areas of the country where DBS penetration exceeds the 15 percent threshold set forth in the so-called "50/15" effective competition test but the incumbent cable operator has not requested a finding of effective competition.

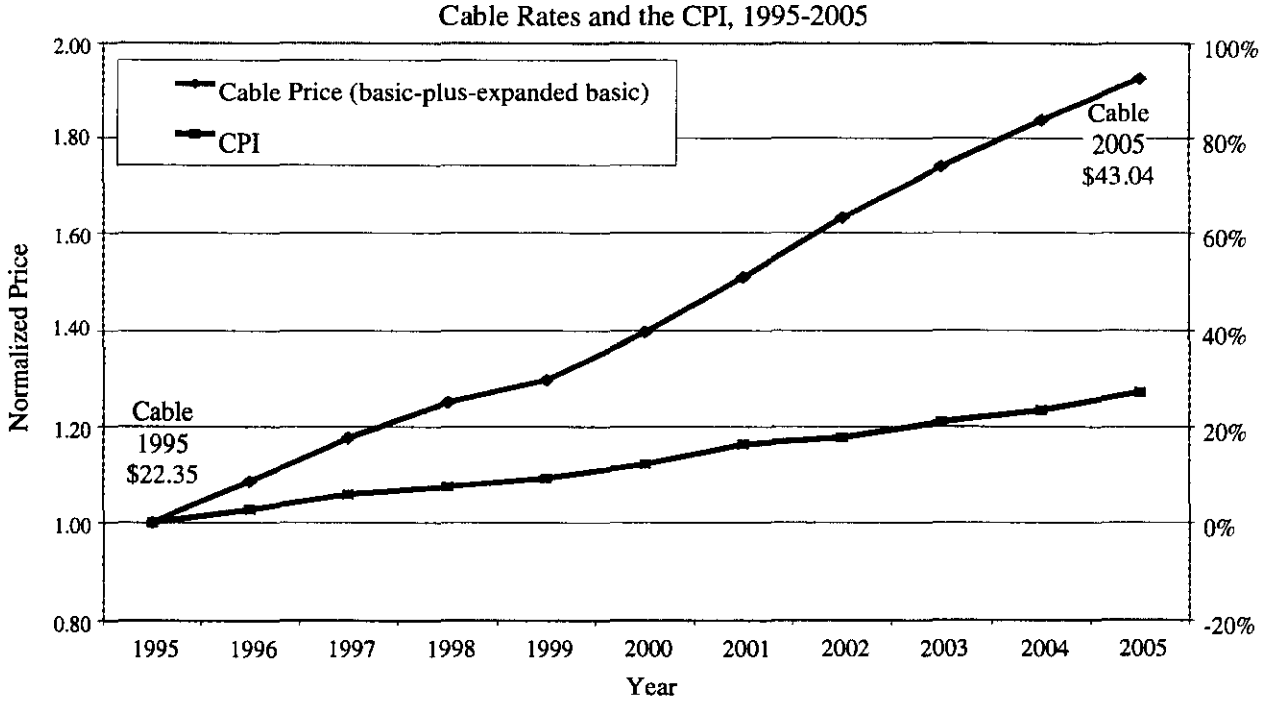
[8] *See* Table 11. This 16 percent includes the 4 percent of subscribers whose cable service providers do not offer separate rates for the basic tier and an expanded basic tier, but instead bundle all video channels except for digital service, premium, and pay-per-view channels into a basic tier.

[9] The term "expanded basic" generally refers to the cable tier with (a) the most channels and (b) the most subscribers except for basic service. Expanded basic does not include basic service channels, music and other audio channels, mini-tiers of channels, digital service, premium channels, pay-per-view, or video-on-demand channels.

[10] The weights or importance given to each subgroup and group in calculating the overall average price are based upon estimates of the share of cable subscribers in each subgroup and group.

III. SUMMARY OF FINDINGS

10. *Averages for all communities.* The average monthly price for basic-plus-expanded basic service increased by 5.2 percent, from $40.91 to $43.04, over the 12 months ending January 1, 2005. The price for basic-only service increased by 3.3 percent, from $13.84 to $14.30, and the price for expanded basic service increased by 6.2 percent, from $27.07 to $28.74. As shown in the chart below, since the period immediately preceding enactment of the Telecommunications Act of 1996, prices have risen by 93 percent.[11]



11. *Differences between noncompetitive communities and communities relieved from basic-tier rate regulation.*[12] In noncompetitive communities, the average monthly price for basic-plus-expanded

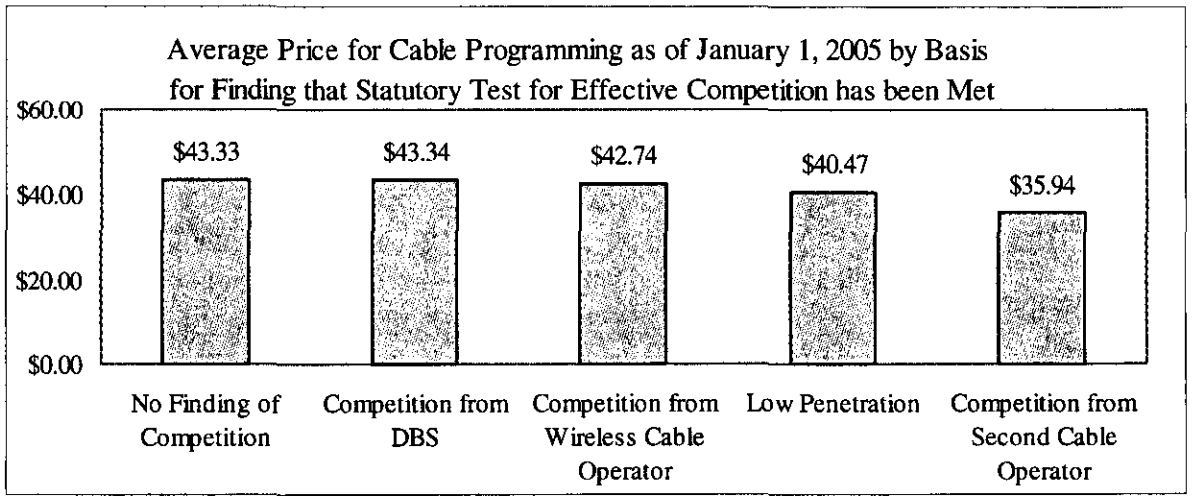
[11] We note that several major MSOs have released quarterly financial data in recent days. Comcast, Time Warner, Cablevision, and Mediacom reported double digit increases in operating cash flow and revenues, as compared with the third quarter of 2005. Comcast reported 15 and 12 percent increases in operating cash flow and revenues, respectively; Time Warner reported 28 and 44 percent increases; Cablevision reported 16 and 13 percent increases; and Mediacom reported 10 and 11 percent increases. Comcast Corp., Comcast Reports *Third Quarter 2006 Results*, (press release), October, 26, 2006; Time Warner Inc., *Time Warner Inc. Reports Third Quarter 2006 Results*, (press release), November 1, 2006; Cablevision Systems Corp., *Cablevision Systems Corporation Reports Third Quarter 2006 Results;* (press release), November 8, 2006; Insight Communications Co., Mediacom Communications Corp., *Mediacom Communications Reports Results for Third Quarter 2006,* (press release), November 2, 2006. Comcast's revenue and operating cash-flow has grown by double digits for 25 consecutive quarters. Mike Farrell, *Comcast Roars in 1Q, Top Operator Grows Across the Board, Lifting Sector Stocks*, MULTICHANNEL NEWS, May 1, 2006 at 6; Comcast Corp., *Comcast Reports Third Quarter 2006 Results*, (press release), October, 26, 2006; and *Comcast Reports Second Quarter 2006 Results*, (press release), July 27, 2006.

[12] Throughout the Report, there is only a slight difference, if any, in the overall average and the average for the noncompetitive group. This is because the group of operators that have received a Commission finding of effective competition represents a relatively small group of cable subscribers, an estimated 9 percent of the total nationwide, and thus there is only a slight effect from this group on the overall average.

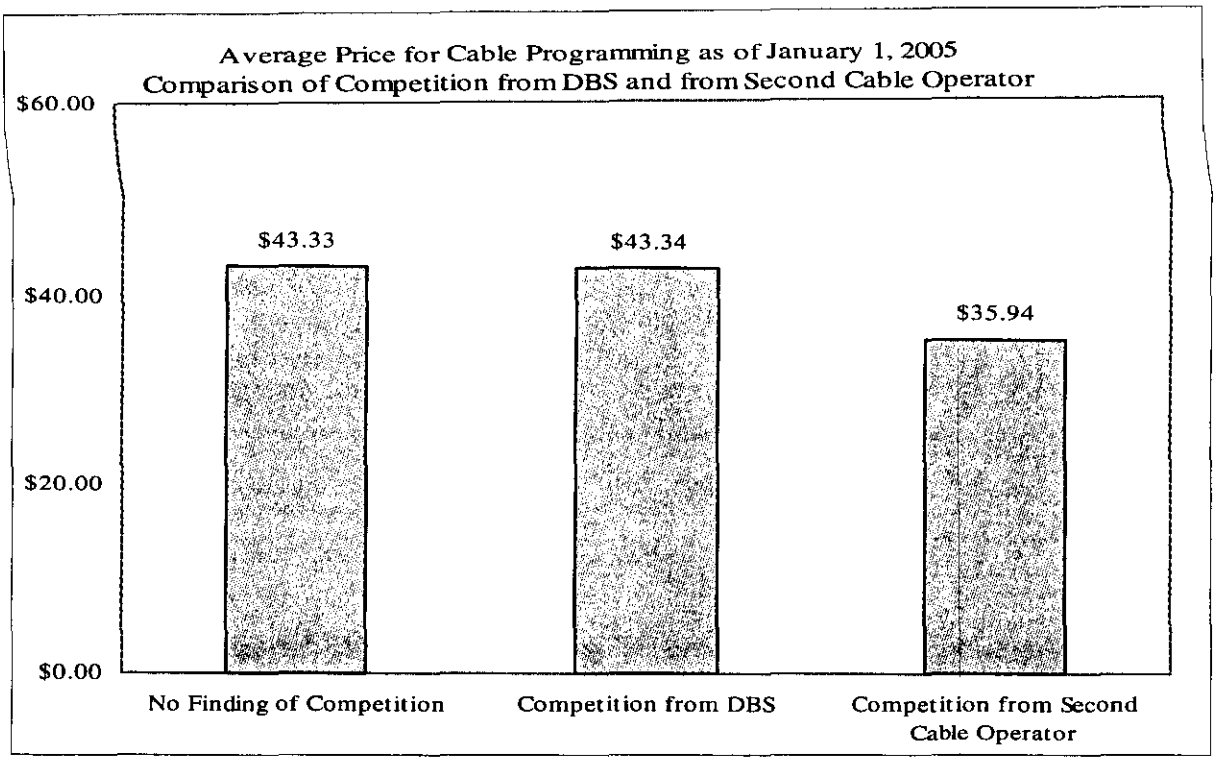
basic programming increased by 5.2 percent, from $41.18 to $43.33 over the 12 months ending January 1, 2005. In communities where the statutory test for effective competition was found to have been met, the average price for basic-plus-expanded basic programming increased by 4.9 percent, from $38.29 to $40.15 over the 12 months ending January 1, 2005. Thus, as of January 1, 2005, the prices charged for basic-plus-expanded basic programming in noncompetitive communities ($43.33) averaged 7.9 percent higher than the prices charged in communities relieved from basic-tier rate regulation ($40.15).

12. The price difference varied by the basis for the finding that the statutory test for effective competition was met. Prices were 20.6 percent higher in noncompetitive communities compared to prices in communities with second wireline cable operators, whereas cable prices were only 7.1 percent higher, 1.4 percent higher and about the same when compared to, respectively, prices in communities with low cable penetration, where a wireless cable competitor is present, or where DBS penetration is the reason for the effective competition finding.

13. The chart below shows the average prices for basic-plus-expanded basic service for noncompetitive communities and communities relieved from rate regulation.



14. Cable prices decrease substantially when a second wireline cable operator enters the market. It does not appear from these results that DBS effectively constrains cable prices. Thus, in the large number of communities in which there has been a finding that the statutory test for effective competition has been met due to the presence of DBS service, competition does not appear to be restraining price as it does in the small number of communities with a second cable operator.



15. Recent experience in Hong Kong provides further evidence that wireline competitors can constrain cable bills. Between 1995 and 2002, cable bills for subscribers of the leading cable service provider, i-Cable, grew at a rate 6.5 times faster than prices for other goods.[13] Since 2003, however, when PCCW, by far i-Cable's biggest competitor today, entered the market with an a la carte offering, i-Cable's average revenue per user has declined by approximately 9 percent.[14] While cable prices in the U.S. increased by 93 percent between 1995 and 2005, i-Cable's subscribers experienced only a 3 percent increase in their bills during this time period.[15] The modest overall increase occurred despite the fact that both Hong Kong's primary cable provider and its main competitor continue to supply many of the most popular U.S. cable networks.[16] Furthermore, i-Cable has moved to differentiate its services, by transitioning from large programming packages to "mini-packages," or theme packages, to compete with

[13] *See* i-Cable Communications Ltd., at http://www,i-cablecomm.com/ir/report/index.php. Between 1995 and 2002, i-Cable Communications Ltd. held an exclusive license to provide pay television service throughout Hong Kong via its Cable TV Hong Kong subsidiary. In July 2002, the Hong Kong government opened the pay television market to competition. Between 1995 and 2002, Cable TV Hong Kong's Average Revenue Per User (ARPU) increased 13 percent. For purposes of this analysis, we use ARPU as a proxy for the average bill paid by cable subscribers. During this same period, Hong Kong's Composite CPI increased approximately 2 percent. *See* The Government of the Hong Kong Special Administrative Region of the People's Republic of China, Census and Statistics Department, at http://www.censtatd.gov.hk.

[14] From 2002 to 2005, i-Cable's ARPU fell from HK$233 to HK$212. In its most recent Annual Report, i-Cable ascribed its declining ARPU to the advent of "aggressive pricing" and "aggressive competition" from its competitors. *See* i-Cable Communications Lt., 2005 Annual Report, at 5, 11, available at http://www.i-cablecomm.com/ir/report/index/php.

[15] *See* http://www.i-cablecomm.com/ir/report/index/php. I-Cable's ARPU increased from HK$206 in 1995 to HK$212 in 2005, an increase of 3 percent.

[16] *See* http://www.i-cablecomm.com./ir/report/index/php; www.pccw.com/eng.

the theme and a la carte programming services of its competitors.[17]

IV. SURVEY RESULTS

A. Basic and Expanded basic Service

16. Table 1 displays average monthly prices for basic and expanded basic service. Between January 1, 2004 and January 1, 2005 the price for basic-only service increased by 3.3 percent, from $13.84 to $14.30. Prices for expanded basic increased by 6.2 percent, from $27.07 to $28.74. Total price for basic-plus-expanded basic tiers increased by 5.2 percent, from $40.91 to $43.04, with a 10-year cumulative increase of 92.6% since the period immediately prior to Congress's enactment of the Telecommunications Act of 1996.

Table 1
Monthly Prices

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Basic service tier	**$14.30**	**$14.25**	**$14.80**	**$13.59**	**$17.06**	**$13.00**	**$16.54**
Previous year (2004)	$13.84	$13.79	$14.41	$13.01	$15.92	$14.29	$16.07
1-year percent change**	3.3%	3.3%	2.7%	4.5%	7.2%	-9.0%	2.9%
Expanded basic tier	**$28.74**	**$29.08**	**$25.35**	**$22.35**	**$26.28**	**$29.74**	**$23.93**
Previous year (2004)	$27.07	$27.39	$23.88	$21.12	$25.32	$26.90	$22.72
1-year percent change**	6.2%	6.2%	6.2%	5.8%	3.8%	10.6%	5.3%
Basic & expanded basic	**$43.04**	**$43.33**	**$40.15**	**$35.94**	**$43.34**	**$42.74**	**$40.47**
1 year ago (2004)	$40.91	$41.18	$38.29	$34.13	$41.24	$41.19	$38.79
10 years ago (1995)*	$22.35	$22.35	$21.64	---	---	---	---
1-year change in price	5.2%	5.2%	4.9%	5.3%	5.1%	3.8%	4.3%
10-year cumulative change	92.6%	93.9%	85.5%	---	---	---	---
Percentage that Noncompetitive Group is Higher or Lower, Comparing Prices of Basic-Plus-Expanded basic Service							
Year 2005	---	---	7.9%	20.6%	0.0%	1.4%	7.1%
Year 2004	---	---	7.5%	20.7%	-0.1%	0.0%	6.2%
Year 1995	---	---	3.3%	---	---	---	---

Sources: Attachments 2, 10, and 11. * 1995 data unavailable by type of competition. ** 10-year cumulative data unavailable because these data were not collected in 1995.

[17] *See* i-Cable Communications Lt., 2005 Annual Report, at 11, available at http://www.i-cablecomm.com/ir/report/index/php.

17. Table 1 also shows that prices in noncompetitive communities for basic and expanded basic service also increased by 5.2 percent over the latest twelve months, from $41.18 to $43.33, with a 10-year cumulative increase of 93.9 percent. Further, Table 1 shows that in communities relieved from rate regulation, prices increased by 4.9 percent, from $38.29 to $40.15 (with a 10-year cumulative increase of 85.5 percent). Table 1 also shows the percentage differences between the prices charged for basic-plus-expanded basic service in communities relieved from rate regulation overall and the four subgroups of these communities compared with noncompetitive communities. As of January 1, 2005, the prices charged by the noncompetitive communities were on average 7.9 percent higher than the prices charged in communities relieved from rate regulation. The price difference varied by subgroup. Prices were 20.6 percent higher in noncompetitive communities compared to prices in communities with a second cable operator; this figure was notably higher than the differential presented in other competitive scenarios. Prices were 7.1 percent higher, 1.4 percent higher, and at about the same level in noncompetitive communities compared to, respectively, prices in communities deemed competitive by virtue of low penetration, wireless cable operators, or DBS providers.

18. The Bureau of Labor Statistics ("BLS") publishes a Consumer Price Index ("CPI") that measures general price inflation through changes in the prices of a selected group of goods and services.[18] By this measure, general inflation increased by 3.0 percent over the 12 months ending January 2005, significantly less than cable prices rose during that time period.[19]

19. In prior years, the Commission calculated the average rates per channel. This data is not included in the 2005 Price Survey Report because of the weaknesses associated with using it. The average rate per channel does not reflect the prices offered to consumers because cable operators do not permit consumers to purchase channels included in the expanded basic package on an individual basis, nor do they provide refunds to consumers who opt to have certain channels blocked. If cable operators offered consumers the option to purchase channels individually, it would be appropriate to consider the prices charged to consumers for those channels. Further, the use of the average rate per channel as a proxy implies that recently added channels are of equal value to previously existing channels. For example, the use of this data as a proxy would suggest that quality-adjusted prices would be unchanged if there were a 10 percent increase in monthly cable rates and a 10 percent increase in the number of channels; however, this does not take into account how consumers might value the additional channels. In particular, a consumer who placed no value on the additional channels would see a 10 percent increase in his or her monthly cable rates, but no increase in quality.

20. Table 2 displays information on programming expenses incurred by cable operators related to the provision of basic and expanded basic service. These expenses include changes in fees for existing programming as well as additional fees for new programming added during the year. Table 2 shows that programming expenses increased on an average monthly basis by $1.12 per subscriber, from year 2003 to year 2004. The change by sample group equaled $1.10 and $1.36, respectively, for the noncompetitive communities and communities relieved from rate regulation. Table 2 also shows that the change in programming expenses associated with providing basic and expanded basic service was roughly

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[18] BLS, All Urban Consumers, U.S. City Average (monthly series, extracted April 2005), Series ID CUUR0000SA0, All Items Less Food and Energy, Base Period 1982-84=100 ("CPI").

[19] The BLS also publishes an index for cable, satellite television, and satellite radio service. BLS, All Urban Consumers, U.S. City Average, (monthly series), Series ID CUUR0000SERA02, Cable and Satellite Television and Radio Service, Base Period December 1983=100. In prior Price Survey Reports we compared the data collected in our survey to those calculated by BLS for this subcategory. However, the BLS index for this subcategory reflects the prices charged not just for cable service but also for satellite television and satellite radio service. Thus, it is not appropriate to compare the numbers we collect regarding cable prices to those in this BLS subcategory.

equivalent to 53 percent of the change in the price charged for basic and expanded basic service. By sample group, this percentage was equivalent to 51 percent and 73 percent, respectively, for noncompetitive communities and communities relieved from rate regulation.

Table 2
Change in Monthly Programming Expense Per Subscriber
Basic and Expanded Basic Service

Change in Programming Expense	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Year 2003 to year 2004	$1.12	$1.10	$1.36	$1.34	$1.47	$1.19	$1.45
Percent of price change	53%	51%	73%	74%	70%	77%	86%

Source: Attachment 9.

21. Cable operators sometimes can reduce their per-unit programming costs by increasing their subscriber reach. For example, with respect to Time Warner and Comcast's acquisition of Adelphia Communications, industry analysts maintain that "Time Warner may win larger discounts from [programming] networks that were only on Adelphia's systems, since Time Warner would be under no obligation to carry them and could therefore drive a better bargain.[20] Analysts observe, however, that these cost savings are unlikely to benefit consumers directly. Time Warner, for example, "is likely to use the money [saved] to offer new services that produce revenue, like digital phones and video-on-demand. Consumers [would] get discounts for buying bundles of services, but they also [would] spend more money."[21]

B. Digital Service

22. Table 3 displays information on the prices charged for the most highly subscribed digital tier plus equipment consisting of a digital set-top converter and remote control unit. For all communities sampled, over the 12 months ending January 1, 2005, the price for this tier and equipment increased by 1.2 percent, to $12.99. The average number of digital channels received on the most highly subscribed digital tier increased by 7.7 percent, to 33.7 channels. In addition to an average of 33.7 channels offered on the most highly subscribed digital tier, cable operators offered other digital video channels, including mini-tiers, premium channels, and pay-per-view. These included an average of 11.6 high definition television ("HDTV") channels, for those cable operators who have deployed HDTV service, and 108.1 non-HDTV digital channels.

[20] *See, Adelphia Deal May Cut Time Warner's Programming Cost, but Not Consumer's Bills*, New York Times, July 31, 2006, Section C, Page 6.

[21] Id.

Table 3
Digital Tier Plus Equipment

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Monthly price *	**$12.99**	**$13.10**	**$11.85**	**$13.11**	**$11.10**	**$11.41**	**$6.65**
1-year percent change	1.2%	1.6%	-1.8%	-1.4%	-3.5%	-0.5%	9.4%
Digital tier channels *	**33.7**	**33.6**	**34.2**	**35.8**	**35.1**	**31.6**	**20.4**
1-year percent change	7.7%	7.7%	5.6%	6.9%	-0.3%	17.0%	5.2%
HDTV channels **	**11.6**	**11.5**	**11.6**	**12.1**	**11.2**	**11.6**	**9.7**
Other digital channels	**108.1**	**107.6**	**113.8**	**120.0**	**113.4**	**104.5**	**100.6**

Sources: Attachments 2, 3, and 9. * Average for the most-highly subscribed digital tier. ** HDTV includes local broadcast simulcasts and multicasts, and all other types of HDTV programming channels.

C. Distribution of Channels

23. Table 4 shows the average number of channels offered to cable subscribers, by category of programming, as of January 1, 2005. Table 4 divides analog programming into two categories: (1) basic-plus-expanded basic channels; and (2) other analog channels, consisting of premium, pay-per-view, and mini-tiers. This latter category averaged only 3.3 channels because many such channels have been moved

Table 4
Distribution of Channels

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-competitive	Relieved from Rate Regulation	Cable	DBS	Wire -less	LP Test
Analog Programming							
Local broadcast stations	12.3	12.4	11.5	11.2	11.8	11.6	11.2
Public, educational, & govt. access	2.6	2.6	2.7	3.0	2.8	2.0	3.4
Local commercial leased access	0.7	0.7	0.6	0.7	0.4	0.9	0.3
Other local, regional, & national	54.9	54.6	57.2	59.0	55.5	56.8	53.8
Basic & expanded basic tiers	**70.5**	**70.3**	**72.0**	**73.9**	**70.5**	**71.3**	**68.7**
Other analog channels	3.3	3.3	3.3	2.1	4.0	4.0	5.8
Total	**73.8**	**73.6**	**75.3**	**76.0**	**74.5**	**75.3**	**74.5**
Digital Programming							
Most highly subscribed tier	33.7	33.6	34.2	35.8	35.1	31.6	20.4
HDTV channels	11.6	11.5	11.6	12.1	11.2	11.6	9.7
Other digital channels	108.1	107.6	113.8	120.0	113.4	104.5	100.6
Total	**153.4**	**152.7**	**159.6**	**167.9**	**159.7**	**147.7**	**130.7**

Sources: Attachments 3 and 9. Number of channels does not include music or other audio channels.

to digital service. Table 4 also divides digital channels into three categories: (1) most highly subscribed digital tier; (2) HDTV channels; and (3) other digital channels including premium, pay-per-view, and mini-tiers. HDTV includes local broadcast channels as well as other programming transmitted in high definition.

D. Subscriber Equipment

24. Table 5 shows that over the 12 months ending January 1, 2005, the average monthly price charged for leased equipment (consisting of an addressable set-top converter and remote control unit) increased by 5.3 percent, to $4.39, for analog equipment; by 3.7 percent, to $4.99, for digital equipment; and by 2.3 percent, to $7.08, for HDTV equipment. As of January 1, 2005, the price of a CableCARD averaged $1.09 per month.

Table 5
Monthly Equipment Prices

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Analog equipment	**$4.39**	**$4.38**	**$4.54**	**$4.29**	**$4.43**	**$5.12**	**$5.22**
1-year percent change	5.3%	5.3%	6.1%	5.1%	9.7%	2.6%	6.7%
Digital equipment	**$4.99**	**$4.98**	**$5.07**	**$5.31**	**$4.77**	**$5.42**	**$2.87**
1-year percent change	3.7%	3.8%	4.5%	4.3%	6.2%	2.7%	4.0%
HDTV equipment	**$7.08**	**$7.08**	**$7.08**	**$6.94**	**$7.38**	**$6.82**	**$7.29**
1-year percent change	2.3%	2.3%	2.0%	0.0%	2.6%	6.6%	-5.9%
CableCARD *	**$1.09**	**$1.04**	**$1.63**	**$1.93**	**$1.61**	**$1.09**	**$1.64**

Source: Attachment 5. * Survey data was first collected as of January 1, 2005.

25. Table 6 displays the price for analog programming plus equipment, consisting of basic and expanded basic programming and the lease of an addressable analog converter and remote control. This total equaled $47.43 as of January 1, 2005, based on the price for basic-plus-expanded basic tiers of $43.04 (shown in Table 1) and equipment costs of $4.39 (Table 5). Only 76 percent of cable subscribers had an addressable analog converter made available to them as of January 1, 2005, as compared to 79 percent as of January 1, 2004.[22]

[22] *See* Table 10 and Attachment 7 regarding availabilities of various cable services.

Table 6
Average Price for Programming and Equipment

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	*Relieved* from Rate Regulation	Cable	DBS	Wire-less	LP Test
Monthly Price	**$47.43**	**$47.71**	**$44.69**	**$40.23**	**$47.77**	**$47.86**	**$45.69**
1-year percent change	5.2%	5.2%	5.0%	5.3%	5.5%	3.6%	4.6%

Sources: Tables 1 and 5.

E. Service Installation Charges

26. Table 7 displays the price of non-recurring charges that cable television subscribers may incur for service installation. As of January 1, 2005, the average charge to install cable service was $45.94 in a home not previously wired for cable and $32.22 in a pre-wired residence (excluding any promotional discounts). Subscribers were charged $28.81 on average for service reconnection. The average charge to install a CableCARD was $18.86 for an existing cable customer and $24.70 for a new cable customer.

Table 7
Service Installation Charges

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Unwired home	**$45.94**	**$45.98**	**$45.47**	**$44.55**	**$44.59**	**$49.42**	**$40.93**
1-year percent change	1.3%	1.4%	0.2%	-0.8%	-1.5%	4.7%	4.4%
Pre-wired home	**$32.22**	**$32.23**	**$32.14**	**$30.46**	**$33.17**	**$33.37**	**$33.89**
1-year percent change	1.9%	2.2%	-0.7%	-2.7%	-2.2%	4.8%	5.9%
Service reconnection	**$28.81**	**$28.80**	**$28.85**	**$24.73**	**$29.75**	**$35.53**	**$26.85**
1-year percent change	1.6%	1.9%	-1.4%	-1.0%	-2.1%	-1.6%	6.4%
CableCARD, Current subscriber	**$18.86**	**$18.87**	**$18.71**	**$18.12**	**$19.22**	**$20.63**	**$6.33**
CableCARD, New subscriber	**$24.70**	**$24.68**	**$24.82**	**$19.60**	**$26.31**	**$34.46**	**$9.18**

Source: Attachment 5.

F. System Operating Capacity

27. Table 8 shows that system operating capacity averaged 736 MHz as of January 1, 2005. This represents a 0.3 percent increase over the previous year. By sample group, noncompetitive communities averaged 734 MHz, and communities relieved from rate regulation averaged 754 MHz.

Table 8
System Operating Capacity

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	Relieved from Rate Regulation	Cable	DBS	Wire-Less	LP Test
Capacity, in MHz	**736**	**734**	**754**	**756**	**751**	**758**	**729**
1-year percent change	0.3%	0.0%	2.7%	n/a	n/a	n/a	n/a

Source: Attachments 6, 10, and 11. n/a: not available.

28. Table 9 shows that 19 percent of subscribers were served by a system with operating capacity of greater than 750 MHz as of January 1, 2005. About two-thirds of all subscribers (68 percent) were served by systems that operated at 750 MHz. Only 13 percent of subscribers were served by systems with an operating capacity below 750 MHz.

Table 9
Percentage of Subscribers
by Capacity of Cable System

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-Competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Above 750 MHz	19%	18%	24%	23%	35%	7%	23%
750 MHz	68%	69%	66%	68%	49%	93%	56%
331 - 749 MHz	11%	11%	9%	9%	15%	0%	21%
220 - 330 MHz	2%	2%	1%	0%	1%	0%	0%

Source: Attachment 6.

G. Service Availability and Subscription

29. Table 10 displays the percentage of cable subscribers that were offered various services as of January 1, 2005. It shows that 96 percent of subscribers could purchase programming in the form of a basic tier and an expanded basic tier. The other 4 percent of subscribers were offered a basic service tier that included many of the national cable networks typically found on the expanded basic tier, but were not offered the option of purchasing a separate expanded basic tier. Digital programming was offered to 98 percent of subscribers.

Table 10
Availability of Various Cable Services
As a Percentage of Cable TV Subscribers

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
Expanded basic tier	96%	96%	95%	96%	92%	100%	94%
Digital programming	98%	98%	98%	95%	98%	100%	100%
Cable Internet access	96%	96%	96%	95%	98%	100%	61%
HD programming	89%	90%	81%	82%	73%	96%	44%
CableCARD	88%	88%	85%	80%	87%	100%	39%
HDTV local broadcast	78%	79%	68%	73%	57%	81%	39%
Addressable analog converter	76%	78%	58%	58%	49%	78%	28%
Sports channels tier	63%	63%	63%	62%	52%	85%	39%
Cable telephony	42%	42%	41%	42%	25%	70%	17%

Source: Attachment 7.

30. Table 11 shows the number of subscribers to various types of service as a percentage of basic cable subscribers to whom each type of service was available as of January 1, 2005. It shows that 88 percent of subscribers purchased the expanded basic tier when it was available. In addition, 38 percent of subscribers purchased digital service when it was available; 31 percent purchased cable Internet access; 9 percent purchased cable telephony; and 4 percent purchased high definition programming. For reference, Table 11 also shows subscribers to particular services as a percent of all basic tier cable subscribers regardless of availability of each service.

Table 11
Subscribers to Various Cable Services

January 1, 2005	Sample Groups Overall	Sample Group		Subgroups of Communities Relieved from Rate Regulation			
		Non-competitive	Relieved from Rate Regulation	Cable	DBS	Wire-less	LP Test
As a Percentage of Cable TV Subscribers to Whom the Particular Service Is Available							
Expanded basic tier	88%	88%	88%	90%	84%	91%	90%
Digital programming	38%	38%	40%	39%	40%	39%	54%
Cable Internet access	31%	31%	35%	39%	33%	30%	32%
Cable telephony	9%	9%	14%	17%	12%	7%	52%
HDTV programming	4%	3%	4%	5%	3%	3%	2%
As a Percentage of All Cable TV Subscribers							
Expanded basic tier	84%	84%	86%	87%	82%	91%	85%
Digital programming	37%	37%	39%	36%	40%	39%	54%
Cable Internet access	30%	30%	34%	37%	32%	30%	20%
Cable telephony	4%	4%	5%	8%	3%	5%	9%
HDTV programming	3%	3%	3%	4%	3%	3%	1%

Source: Attachment 8.

V. ECONOMETRIC ANALYSIS

31. In Appendix B of this report, we use econometric analysis to provide a more sophisticated examination of the data collected. As described in Appendix B, we estimate the effect of market structure and other factors on cable prices. Our results show that cable prices tend to be higher in local MVPD markets where cable operators have a larger share of the market. This relationship may indicate an exploitation of market power by dominant firms or may reflect higher costs to serve these markets. In addition, we find that prices tend to be lower in areas served by vertically integrated cable operators than in areas served by unintegrated cable operators, suggesting that vertically integrated operators pass some of their cost savings to their subscribers. Complete results are described in Appendix B.

VI. CONCLUSIONS

32. Cable systems found to face effective competition continue to exhibit lower prices than cable systems that serve communities in which no such finding has been made. As in previous years, the competitive differential varied, with the largest differential occurring in communities with a second cable operator. Overall, for the 12 months ending January 1, 2005, cable prices rose at an average rate of 5.2 percent, compared with general inflation of 3.0 percent for the year ending January 2005.

VII. ORDERING CLAUSES

33. It is ORDERED that this Report be issued pursuant to authority contained in Section 623(k) of the Communications Act of 1934, as amended, 47 U.S.C. § 543(k).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch

Marlene H. Dortch
Secretary

ATTACHMENT 1

Survey Overview

Sample Groups And Subgroups *	Number of Observations	Estimated Percent of Cable Subscribers	Number of Sample Observations	Survey Questionnaires Completed
Communities Without a Finding of Effective Competition				
Large subgroup				
Communities served by a cable system facility:				
1) of greater than 50,000 subscribers	8,396	61.3%	278	278
2) of 25,001 - 50,000 subscribers	3,714	14.8%	68	68
3) of 10,001 - 25,000 subscribers	4,137	11.3%	52	51
Total	16,247	87.4%	398	397
Medium subgroup				
Communities served by a cable system facility of 1,001 - 10,000 subscribers	7,600	10.1%	52	48
Small subgroup				
Communities served by a cable system facility of 1,000 or fewer subscribers	7,808	2.5%	47	39
Total for noncompetitive sample group	**31,655**	**100.0%**	**497**	**484**
Communities With a Finding of Effective Competition				
Communities with second cable operator				
1) Incumbent cable operator	147	29.7%	56	56
2) Second cable operator	147	10.6%	56	55
Total	294	40.3%	112	111
DBS subgroup	733	36.1%	125	124
Wireless cable operator subgroup	137	20.8%	27	27
Low penetration test	111	2.8%	20	18
Total for effective competition sample group	**1,275**	**100.0%**	**284**	**280**
Noncompetitive Communities and Communities with a Finding of Effective Competition Combined				
Noncompetitive sample group	31,655	91.0%	497	484
Effective competition sample group	1,275	9.0%	284	280
Sample groups combined	**32,930**	**100.0%**	**781**	**764**

* The statistical averages reported in this Survey were calculated (a) at the sample subgroup level; (b) then at the group level as a subscriber-weighted average of subgroups; and (c) finally overall as a subscriber-weighted average of the noncompetitive communities and communities with a finding of effective competition. Subscriber weights were based on the percentages in the table column titled "Estimated Percent of Cable Subscribers." For the large subgroup, averages were calculated at the subcategory level (>50,000, 25,001-50,000, and 10,001-25,000) and then at the subgroup level as a subscriber-weighted average of the subcategories. For the communities with a second cable operator, averages were also calculated at the subcategory level (incumbent and second cable operators) and then at the subgroup level as a subscriber-weighted average of the subcategories.

Sources: This Survey; FCC Form 322, *Cable Community Registration*, filings pursuant to 47 C.F.R § 76.1801; FCC Form-325, *Annual Cable Operator Report*, filings pursuant to 47 C.F.R § 76.403; and FCC effective competition findings made pursuant to 47 U.S.C. § 543(a)(2) and 47 U.S.C. § 916(a).

ATTACHMENT 2

Average Monthly Price

Cable Service Tier	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
January 1, 2005									
Basic	**$14.30**	**$14.25**	**$14.80**	**$13.59**	**$12.43**	**$16.85**	**$17.06**	**$13.00**	**$16.54**
Standard error	*0.41*	*0.38*	*0.72*	*0.75*	*0.56*	*1.29*	*0.64*	*0.69*	*1.61*
Expanded basic	**$28.74**	**$29.08**	**$25.35**	**$22.35**	**$23.35**	**$19.53**	**$26.28**	**$29.74**	**$23.93**
Standard error	*0.52*	*0.49*	*0.90*	*0.97*	*0.82*	*1.39*	*0.86*	*0.74*	*1.82*
Basic + expanded basic tiers	**$43.04**	**$43.33**	**$40.15**	**$35.94**	**$35.78**	**$36.38**	**$43.34**	**$42.74**	**$40.47**
Standard error	*0.32*	*0.30*	*0.62*	*0.88*	*0.89*	*0.86*	*0.44*	*0.36*	*1.17*
Digital tier plus equipment	**$12.99**	**$13.10**	**$11.85**	**$13.11**	**$12.68**	**$14.32**	**$11.10**	**$11.41**	**$6.65**
Standard error	*0.26*	*0.23*	*0.53*	*0.60*	*0.53*	*0.81*	*0.39*	*0.54*	*1.32*
January 1, 2004									
Basic	**$13.84**	**$13.79**	**$14.41**	**$13.01**	**$11.92**	**$16.05**	**$15.92**	**$14.29**	**$16.07**
Standard error	*0.40*	*0.38*	*0.70*	*0.74*	*0.57*	*1.22*	*0.59*	*0.70*	*1.48*
Expanded basic	**$27.07**	**$27.39**	**$23.88**	**$21.12**	**$22.08**	**$18.43**	**$25.32**	**$26.90**	**$22.72**
Standard error	*0.51*	*0.47*	*0.88*	*0.95*	*0.81*	*1.33*	*0.81*	*0.74*	*1.67*
Basic + expanded basic tiers	**$40.91**	**$41.18**	**$38.29**	**$34.13**	**$34.00**	**$34.48**	**$41.24**	**$41.19**	**$38.79**
Standard error	*0.32*	*0.29*	*0.61*	*0.84*	*0.85*	*0.80*	*0.42*	*0.43*	*1.05*
Digital tier plus equipment	**$12.83**	**$12.90**	**$12.07**	**$13.30**	**$13.32**	**$13.26**	**$11.50**	**$11.47**	**$6.08**
Standard error	*0.25*	*0.22*	*0.56*	*0.58*	*0.53*	*0.73*	*0.40*	*0.67*	*1.34*

Sources: Survey.

ATTACHMENT 3

Average Number of Channels

Cable Service	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
January 1, 2005									
Basic tier	**24.9**	**24.9**	**24.5**	**23.8**	**21.2**	**30.9**	**26.0**	**23.3**	**24.6**
Standard error	*0.7*	*0.7*	*1.3*	*1.5*	*0.9*	*3.0*	*1.2*	*1.0*	*2.6*
Expanded basic tier	**45.6**	**45.4**	**47.5**	**50.1**	**52.0**	**45.0**	**44.5**	**48.0**	**44.1**
Standard error	*0.8*	*0.8*	*1.5*	*1.6*	*1.0*	*3.1*	*1.5*	*1.3*	*3.4*
Basic + expanded	**70.5**	**70.3**	**72.0**	**73.9**	**73.2**	**75.9**	**70.5**	**71.3**	**68.7**
Standard error	*0.6*	*0.5*	*0.9*	*0.9*	*0.7*	*1.5*	*0.9*	*0.9*	*2.1*
Digital tier	**33.7**	**33.6**	**34.2**	**35.8**	**35.1**	**37.8**	**35.1**	**31.6**	**20.4**
Standard error	*0.9*	*0.8*	*1.6*	*1.6*	*1.4*	*2.1*	*1.4*	*2.0*	*2.9*
January 1, 2004									
Basic tier	**24.5**	**24.5**	**24.3**	**23.7**	**21.3**	**30.3**	**25.6**	**23.6**	**23.1**
Standard error	*0.7*	*0.7*	*1.3*	*1.5*	*0.9*	*2.9*	*1.1*	*1.1*	*2.7*
Expanded basic tier	**44.3**	**44.0**	**46.6**	**48.9**	**50.6**	**44.3**	**43.6**	**47.6**	**44.1**
Standard error	*0.8*	*0.8*	*1.5*	*1.6*	*1.0*	*3.0*	*1.4*	*1.2*	*3.3*
Basic & expanded	**68.8**	**68.5**	**70.9**	**72.6**	**71.9**	**74.6**	**69.2**	**71.2**	**67.2**
Standard error	*0.6*	*0.5*	*0.9*	*0.8*	*0.6*	*1.4*	*0.9*	*1.0*	*2.2*
Digital tier	**31.3**	**31.2**	**32.4**	**33.5**	**33.2**	**34.2**	**35.2**	**27.0**	**19.4**
Standard error	*1.3*	*1.2*	*1.9*	*1.9*	*1.9*	*2.1*	*1.7*	*2.0*	*2.9*

Source: Survey.

ATTACHMENT 4

Number of Channels,
Comparison of Sample Groups

January 1, 2005	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
Basic service Tier	**24.9**	**24.9**	**24.5**	**23.8**	**21.2**	**30.9**	**26.0**	**23.3**	**24.6**
Previous year (2004)	24.5	24.5	24.3	23.7	21.3	30.3	25.6	23.6	23.1
Percentage change	1.6%	1.6%	0.8%	0.4%	-0.5%	2.0%	1.6%	-1.3%	6.5%
Expanded basic tier	**45.6**	**45.4**	**47.5**	**50.1**	**52.0**	**45.0**	**44.5**	**48.0**	**44.1**
Previous year (2004)	44.3	44.0	46.6	48.9	50.6	44.3	43.6	47.6	44.1
Percentage change	2.9%	3.2%	1.9%	2.5%	2.8%	1.6%	2.1%	0.8%	0.0%
Basic & expanded basic	**70.5**	**70.3**	**72.0**	**73.9**	**73.2**	**75.9**	**70.5**	**71.3**	**68.7**
Previous year (2004)	68.8	68.5	70.9	72.6	71.8	74.6	69.2	71.2	67.2
10-years ago (1995)*	44.0	44.0	38.0	---	---	---	---	---	---
1-year percentage change	2.5%	2.6%	1.6%	1.8%	1.9%	1.7%	1.9%	0.1%	2.2%
10-year cumulative change	60.2%	59.8%	89.5%	---	---	---	---	---	---
Percentage that Noncompetitive Group is Higher or Lower Comparing Number of Basic-Plus-Expanded basic Channels									
2005	---	---	-2.4%	5.1%	4.1%	8.0%	-0.3%	-1.4%	2.3%
1995*	---	---	13.6	---	---	---	---	---	---

Source: Surveys. * 1995 data unavailable by type of competition.

ATTACHMENT 5

Average Equipment and Installation Charges

January 1, 2005	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
Monthly Equipment Charges									
Analog converter & remote control	**$4.39**	**$4.38**	**$4.54**	**$4.29**	**$4.86**	**$2.69**	**$4.43**	**$5.12**	**$5.22**
Standard error	*0.15*	*0.13*	*0.32*	*0.37*	*0.39*	*0.31*	*0.24*	*0.24*	*1.00*
Prior year (1/1/04)	$4.17	$4.16	$4.28	$4.08	$4.62	$2.55	$4.04	$4.99	$4.89
Digital converter & remote control	**$4.99**	**$4.98**	**$5.07**	**$5.31**	**$5.66**	**$4.32**	**$4.77**	**$5.42**	**$2.87**
Standard error	*0.13*	*0.12*	*0.26*	*0.33*	*0.28*	*0.47*	*0.14*	*0.26*	*0.64*
Prior year (1/1/04)	$4.81	$4.80	$4.85	$5.09	$5.48	$4.01	$4.49	$5.28	$2.76
HD converter & remote control	**$7.08**	**$7.08**	**$7.08**	**$6.94**	**$7.13**	**$6.41**	**$7.38**	**$6.82**	**$7.29**
Standard error	*0.19*	*0.17*	*0.38*	*0.38*	*0.25*	*0.72*	*0.25*	*0.56*	*0.66*
Prior year (1/1/04)	$6.92	$6.92	$6.94	$6.94	$7.29	$5.97	$7.19	$6.40	$7.75
CableCARD	**$1.09**	**$1.04**	**$1.63**	**$1.93**	**$1.45**	**$3.25**	**$1.61**	**$1.09**	**$1.64**
Standard error	*0.07*	*0.07*	*0.13*	*0.18*	*0.09*	*0.41*	*0.04*	*0.20*	*0.08*
Non-Recurring Cable TV Installation Charges									
Unwired home	**$45.94**	**$45.98**	**$45.47**	**$44.55**	**$44.05**	**$45.94**	**$44.59**	**$49.42**	**$40.93**
Standard error	*0.76*	*0.64*	*1.95*	*2.62*	*1.58*	*5.53*	*1.15*	*1.76*	*3.96*
Prior year (1/1/04)	$45.34	$45.34	$45.36	$44.92	$44.78	$45.30	$45.27	$47.19	$39.21
Pre-wired home	**$32.22**	**$32.23**	**$32.14**	**$30.46**	**$30.07**	**$31.58**	**$33.17**	**$33.37**	**$33.89**
Standard error	*0.67*	*0.57*	*1.64*	*1.90*	*1.20*	*3.87*	*1.02*	*1.93*	*3.78*
Prior year (1/1/04)	$31.61	$31.53	$32.38	$31.30	$31.40	$31.04	$33.93	$31.83	$32.00
Service reconnection	**$28.81**	**$28.80**	**$28.85**	**$24.73**	**$24.41**	**$25.60**	**$29.75**	**$35.53**	**$26.85**
Standard error	*0.62*	*0.54*	*1.44*	*1.57*	*1.32*	*2.27*	*0.97*	*1.82*	*2.83*
Prior year (1/1/04)	$28.36	$28.27	$29.25	$24.98	$25.09	$24.67	$30.39	$36.10	$25.23
CableCARD, current subscriber	**$18.86**	**$18.87**	**$18.71**	**$18.12**	**$22.45**	**$5.98**	**$19.22**	**$20.63**	**$6.33**
Standard error	*0.84*	*0.74*	*1.85*	*1.66*	*1.63*	*1.77*	*1.27*	*3.14*	*2.58*
CableCARD, new subscriber	**$24.70**	**$24.68**	**$24.82**	**$19.60**	**$24.50**	**$5.89**	**$26.31**	**$34.46**	**$9.18**
Standard error	*1.07*	*0.96*	*2.22*	*1.90*	*1.95*	*1.76*	*1.61*	*3.64*	*4.03*

Source: Survey.

ATTACHMENT 6

Average Operating Capacity

January 1, 2005	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
Cable System Operating Capacity									
Average MHz	**736**	**734**	**754**	**756**	**757**	**756**	**751**	**758**	**729**
Standard error	*7.0*	*6.6*	*11.1*	*12.3*	*13.0*	*10.4*	*11.1*	*5.7*	*32.2*
Percentage of Subscribers by Capacity of Cable System Serving Their Community									
System above 750 MHz	**19%**	**18%**	**24%**	**23%**	**24%**	**18%**	**35%**	**7%**	**23%**
Standard error	*0.03*	*0.02*	*0.05*	*0.06*	*0.06*	*0.06*	*0.04*	*0.05*	*0.10*
System at 750 MHz	**68%**	**69%**	**66%**	**68%**	**67%**	**73%**	**49%**	**93%**	**56%**
Standard error	*0.03*	*0.03*	*0.06*	*0.06*	*0.06*	*0.06*	*0.04*	*0.05*	*0.12*
System from 331 - 749 MHz	**11%**	**11%**	**9%**	**9%**	**9%**	**8%**	**15%**	**0%**	**21%**
Standard error	*0.02*	*0.02*	*0.03*	*0.04*	*0.04*	*0.04*	*0.03*	---	*0.10*
Systems below 331 MHz	**2%**	**2%**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**0%**
Standard error	*0.01*	*0.01*	*0.01*	---	---	---	*0.01*	---	---

Source: Survey.

ATTACHMENT 7

Availability of Various Cable Services

January 1, 2005	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
Availability of Service as a Percent of All Basic Cable Subscribers									
Cable basic tier	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Standard error	---	---	---	---	---	---	---	---	---
Expanded basic tier	**96%**	**96%**	**95%**	**96%**	**100%**	**84%**	**92%**	**100%**	**94%**
Standard error	*0.01*	*0.01*	*0.01*	*0.01*	*0.0*	*0.05*	*0.03*	*0.0*	*0.0*
Addressable analog converter	**76%**	**78%**	**58%**	**58%**	**58%**	**61%**	**49%**	**78%**	**28%**
Standard error	*0.03*	*0.03*	*0.06*	*0.07*	*0.07*	*0.07*	*0.05*	*0.08*	*0.11*
Prior yr. (Jan. 1, 2004)	79%	81%	59%	59%	56%	61%	51%	78%	28%
Digital programming	**98%**	**98%**	**98%**	**95%**	**100%**	**82%**	**98%**	**100%**	**100%**
Standard error	*0.01*	*0.01*	*0.01*	*0.01*	*0.00*	*0.05*	*0.01*	*0.00*	*0.00*
Digital tier	**97%**	**98%**	**96%**	**92%**	**100%**	**68%**	**98%**	**100%**	**100%**
Standard error	*0.01*	*0.01*	*0.01*	*0.02*	*0.00*	*0.06*	*0.01*	*0.00*	*0.00*
HDTV programming	**89%**	**90%**	**81%**	**82%**	**91%**	**59%**	**73%**	**96%**	**44%**
Standard error	*0.02*	*0.02*	*0.04*	*0.05*	*0.04*	*0.07*	*0.04*	*0.04*	*0.12*
HDTV broadcast	**78%**	**79%**	**68%**	**73%**	**78%**	**57%**	**57%**	**81%**	**39%**
Standard error	*0.02*	*0.02*	*0.06*	*0.06*	*0.06*	*0.07*	*0.04*	*0.08*	*0.12*
Sports tier	**63%**	**63%**	**63%**	**62%**	**75%**	**27%**	**52%**	**85%**	**39%**
Standard error	*0.03*	*0.03*	*0.06*	*0.06*	*0.06*	*0.06*	*0.05*	*0.07*	*0.12*
CableCARD	**88%**	**88%**	**85%**	**80%**	**96%**	**32%**	**87%**	**100%**	**39%**
Standard error	*0.02*	*0.02*	*0.03*	*0.04*	*0.03*	*0.06*	*0.03*	*0.00*	*0.12*
Cable Internet	**96%**	**96%**	**96%**	**95%**	**98%**	**88%**	**98%**	**100%**	**61%**
Standard error	*0.01*	*0.01*	*0.02*	*0.03*	*0.02*	*0.04*	*0.01*	*0.00*	*0.12*
Cable telephony	**42%**	**42%**	**41%**	**42%**	**40%**	**48%**	**25%**	**70%**	**17%**
Standard error	*0.03*	*0.02*	*0.06*	*0.07*	*0.07*	*0.07*	*0.04*	*0.09*	*0.09*

Source: Survey and *Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment,* 20 FCC Rcd 2718 (2005); 18 FCC Rcd 13284 (2003); 17 FCC Rcd 6301 (2002); 16 FCC Rcd 4346 (2001);.

ATTACHMENT 8

Subscribers to Various Cable Services

January 1, 2005	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
Subscribers as a Percent of All Basic Cable TV Subscribers Who Have Availability to the Particular Service									
Cable basic tier	100%	100%	100%	100%	100%	100%	100%	100%	100%
Standard error	---	---	---	---	---	---	---	---	---
Expanded basic tier	88%	88%	88%	90%	89%	93%	84%	91%	90%
Standard error	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.00*	*0.02*
Digital programming	38%	38%	40%	39%	41%	34%	40%	39%	54%
Standard error	*0.01*	*0.01*	*0.02*	*0.03*	*0.02*	*0.04*	*0.01*	*0.02*	*0.06*
HDTV programming	4%	3%	4%	5%	5%	3%	3%	3%	2%
Standard error	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Cable Internet	31%	31%	35%	39%	35%	52%	33%	30%	32%
Standard error	*0.01*	*0.01*	*0.02*	*0.02*	*0.02*	*0.03*	*0.01*	*0.02*	*0.07*
Cable telephony	9%	9%	14%	17%	6%	46%	12%	7%	52%
Standard error	*0.01*	*0.01*	*0.04*	*0.03*	*0.02*	*0.08*	*0.04*	*0.01*	*0.30*
Subscribers as a Percent of All Cable TV Subscribers									
Cable basic tier	100%	100%	100%	100%	100%	100%	100%	100%	100%
Standard error	---	---	---	---	---	---	---	---	---
Expanded basic	84%	84%	86%	87%	89%	81%	82%	91%	85%
Standard error	*0.01*	*0.01*	*0.01*	*0.02*	*0.01*	*0.01*	*0.06*	*0.01*	*0.01*
Digital programming	37%	37%	39%	36%	41%	24%	40%	39%	54%
Standard error	*0.01*	*0.01*	*0.02*	*0.03*	*0.01*	*0.02*	*0.06*	*0.01*	*0.01*
HDTV programming	3%	3%	3%	4%	5%	2%	3%	3%	1%
Standard error	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Cable Internet	30%	30%	34%	37%	34%	45%	32%	30%	20%
Standard error	*0.01*	*0.01*	*0.02*	*0.02*	*0.01*	*0.02*	*0.06*	*0.01*	*0.01*
Cable telephony	4%	4%	5%	8%	3%	22%	3%	5%	9%
Standard error	*0.01*	*0.01*	*0.02*	*0.02*	*0.01*	*0.01*	*0.06*	*0.01*	*0.01*

Source: Survey.

ATTACHMENT 9

Other Report Averages

January 1, 2005	Sample Groups Overall	Non-Comp. Sample	Communities With a Finding of Effective Competition by Primary Basis for Finding						
			Sample Group Overall	Communities with a Second Cable Operator			DBS	Wire-less	LP Test
				Sub-group Overall	First Cable System	Rival Cable System			
Monthly programming expense per subscriber *	**$1.12**	**$1.10**	**$1.36**	**$1.34**	**$1.14**	**$1.88**	**$1.47**	**$1.19**	**$1.45**
Standard error	0.09	0.08	0.18	0.16	0.13	0.24	0.12	0.31	0.16
Local broadcast stations	**12.3**	**12.4**	**11.5**	**11.2**	**11.4**	**10.7**	**11.8**	**11.6**	**11.2**
Standard error	*0.3*	*0.3*	*0.5*	*0.6*	*0.6*	*0.6*	*0.4*	*0.5*	*0.5*
Public, educational, and governmental	**2.6**	**2.6**	**2.7**	**3.0**	**3.1**	**2.7**	**2.8**	**2.0**	**3.4**
Standard error	*0.1*	*0.1*	*0.3*	*0.3*	*0.4*	*0.2*	*0.2*	*0.3*	*0.5*
Local commercial leased access	**0.7**	**0.7**	**0.6**	**0.7**	**0.7**	**0.5**	**0.4**	**0.9**	**0.3**
Standard error	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Other analog channels **	**3.3**	**3.3**	**3.3**	**2.1**	**2.2**	**1.8**	**4.0**	**4.0**	**5.8**
Standard error	*0.4*	*0.4*	*0.8*	*0.7*	*0.7*	*0.6*	*0.6*	*1.1*	*1.7*
High definition **	**11.6**	**11.5**	**11.6**	**12.1**	**12.2**	**11.9**	**11.2**	**11.6**	**9.7**
Standard error	*0.3*	*0.3*	*0.5*	*0.5*	*0.4*	*0.7*	*0.4*	*0.7*	*0.9*
Other digital channels **	**108.1**	**107.6**	**113.8**	**120.0**	**126.1**	**102.9**	**113.4**	**104.5**	**100.6**
Standard error	*4.4*	*4.1*	*7.1*	*7.5*	*7.3*	*8.1*	*4.8*	*9.7*	*12.4*

* Equals the difference in the monthly programming expense per subscriber for the basic-plus-expanded basic tiers, comparing year 2003 to year 2004. Monthly programming expense per subscriber for each year was approximated by dividing programming cost by end-of-year basic tier subscribers, dividing by 12 months.

** Includes premium, pay-per-view, mini-tiers, and other video channels. High definition channels also include local broadcast simulcasts and multicasts. Does not include channels counted in Attachment 3 that are part of the basic tier, expanded basic tier, or most-highly subscribed digital tier.

Source: Survey. Note: Results in this table are 5-pecent trended means calculated by removing the lowest and highest 5 percent of sample observation values.

ATTACHMENT 10

Averages for 1995-2005

Date	Basic and Expanded Basic Programming Service				System Operating Capacity (MHz)
	Price of Basic Tier	Price of Expanded Basic Tier	Total Price	Channels	
July 1995	---	---	$22.35	44.0	---
July 1996	---	---	$24.28	47.0	---
July 1997	---	---	$26.31	49.4	---
July 1998	$12.06	$15.82	$27.88	50.1	---
July 1999	$12.58	$16.36	$28.94	51.1	534
July 2000	$12.84	$18.38	$31.22	54.8	623
July 2001	$12.84	$20.91	$33.75	59.4	652
July 2002	$14.45	$22.02	$36.47	62.7	694
January 2003	$13.45	$25.50	$38.95	67.5	---
January 2004	$13.80	$27.24	$41.04	70.3	734
January 2005	$14.30	$28.74	$43.04	70.5	736
10-year-percent change, 1995-2005	---	---	92.6%	60.2%	---

Sources and notes: Years 1995-2004 are from previous Survey Reports including *Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment,* 12 FCC Rcd 3239 (1997) *("1997 Survey")*; 14 FCC Rcd 8331 (1999) *("1998 Survey")*; 15 FCC Rcd 10927 (2000) *("1999 Survey")*; 16 FCC Rcd 4346 (2001) *("2000 Survey")*; 17 FCC Rcd 6301 (2002) *("2001 Survey")*; 18 FCC Rcd 13284 (2003) *("2002 Survey")*; and 20 FCC Rcd 2718 (2005) *("2004 Survey")*. Year 2005 is from this Survey. Some data points have been revised from the historical series reported in the *2004 Survey* to reflect the first survey in which data for that year were published.

Missing data in this table indicates we did not survey those metrics in that year. Ten-year-percent change is unavailable for the basic tier, expanded basic tier, and MHz capacity because we did not survey those metrics in 1995. Prices and channels from 1995-2000 and capacity from 2000-2001 are represented by the averages for noncompetitive communities in Attachment 11, because composite subscriber-weighted averages of noncompetitive communities and effective competition communities were not included in those survey reports. All other numbers in this table are composite subscriber-weighted averages. There is only a slight difference in the average of all communities and the average for the noncompetitive group. This is because the group of cable operators that have received a specific Commission "effective competition" finding represents a relatively small group of cable subscribers, and thus there is only a slight effect from this group on the overall average.

1995-1997: *1997 Survey.* For 1995, only a combined programming plus equipment price was reported. The 1995 price in this table was calculated by subtracting an estimate of equipment price.
1998: *1998 Survey.*
1999: Prices were reported in *1999 Survey*, and capacity was reported in *2004 Survey* based on data collected for *1999 Survey.*
2000: *2000 Survey.*
2001: *2001 Survey.*
2002: *2002 Survey.* For 2002, price in the column labeled "Basic Tier" is out of trend. As another estimate, the *2004 Survey* reports that, in January 2002, the basic tier price is $13.11 and the expanded basic tier price is $23.01 (for a total of $36.12). These January 2002 estimates are the composite subscriber-weighted averages for noncompetitive communities (basic tier price is $13.06 and expanded basic tier price is $23.15 for a total of $36.21), and effective competition communities (basic tier price is $13.70 and the expanded basic tier price is $21.36 for a total of $35.06).
2003-2004: *2004 Survey.* Capacity was not surveyed for 2003. Averages for 2004 in this Attachment are based on the *2004 Survey*, and therefore, do not match the 2004 averages in Table 1 of this Survey, since those averages are based on the *2005 Survey.* In the *2005 Survey*, prices were collected for 2004 and 2005 in order to measure percentage changes across a consistent set of communities. Data collected for the same year for two different surveys are likely to vary slightly because each sample includes a different set of communities. The variability inherent in samples is discussed in Appendix A.
2005: This Survey.

ATTACHMENT 11

Averages for 1995-2005, By Sample Group

Date	Basic and Expanded Basic Programming Service				System Operating Capacity (MHz)
	Price of Basic Tier	Price of Expanded Basic Tier	Total Price	Channels	
Noncompetitive Communities					
July 1995	---	---	$22.35	44.0	---
July 1996	---	---	$24.28	47.0	---
July 1997	---	---	$26.31	49.4	---
July 1998	$12.06	$15.82	$27.88	50.1	---
July 1999	$12.58	$16.36	$28.94	51.1	532
July 2000	$12.84	$18.38	$31.22	54.8	623
July 2001	$12.87	$21.02	$33.89	59.3	652
July 2002	$14.47	$22.14	$36.61	62.7	696
January 2003	$13.38	$25.73	$39.11	67.3	---
January 2004	$13.73	$27.56	$41.29	70.1	734
January 2005	$14.25	$29.08	$43.33	70.3	734
10-year-percent change, 1995-2005	---	---	93.9%	59.8%	---
Communities with a Finding of Effective Competition					
July 1995	---	---	$21.64	38.0	---
July 1996	---	---	$23.32	39.6	---
July 1997	---	---	$25.29	46.5	---
July 1998	$11.12	$15.00	$26.12	54.0	---
July 1999	$12.03	$15.27	$27.30	52.3	619
July 2000	$12.03	$17.41	$29.44	59.9	630
July 2001	$12.43	$19.23	$31.66	60.9	666
July 2002	$14.09	$20.25	$34.34	62.9	677
January 2003	$14.25	$22.61	$36.86	69.7	---
January 2004	$14.58	$23.59	$38.17	72.5	734
January 2005	$14.80	$25.35	$40.15	72.0	754
10-year-percent change, 1995-2005	---	---	85.5%	89.5%	---

Sources and notes: *See* Attachment 10.

APPENDIX A

Survey Methodology

A. Sampling Procedure

1. Our sample was drawn from the list of community-unit identifiers the Commission assigns to each cable operator for each community that a cable operator serves.[1] Prior to drawing our sample, we divided this list into noncompetitive communities and communities relieved from rate regulation, depending on whether the Commission had made a finding of effective competition in that community as of January 1, 2005. Moreover, we assigned each noncompetitive community to one of three subgroups -- large, medium, or small -- depending on the number of subscribers served by the cable system. Each community relieved from rate regulation was also assigned to a subgroup – communities with a second cable operator, DBS, wireless overbuild, or low penetration -- depending on the primary basis for the finding of effective competition. Communities with a second cable operator were further divided into incumbent cable operators and the rival second cable operator. Attachment 1 of this Report provides additional information on these sample groups and subgroups.

2. To determine the number of communities needed in our sample in order to achieve statistical precision, we applied a statistical formula.[2] Based on this formula, the sample size equaled 497 of the 31,655 communities in the noncompetitive group and 284 of the 1,275 communities relieved from rate regulation.[3] We divided the number of observations to be selected from each group into subgroups,[4] based on our estimate of each subgroup's percentage share of cable subscribers. Adjustments were made, however, to ensure that a sufficient number of sample observations were allocated to each subgroup, considering expected price variances within the subgroups. Sample selections were drawn at random from each subgroup, with each community having a known probability of selection. The probability of selection for any one community depended upon our estimate of its number of cable subscribers relative to the total number of cable subscribers in the subgroup. This method of selection was chosen so that the sample would be more representative of a typical subscriber on a nationwide basis. For each subgroup of communities with a finding of effective competition, we selected no more than one community per county from any particular cable operator.

3. After drawing the sample, we asked cable operators to complete a questionnaire for each of their communities selected for the sample. The questionnaire requested data as of January 1, 2005, and more limited amounts of data as of January 1, 2004. Cable operators in the noncompetitive sample group completed 484 of 497 questionnaires, representing a 97% response rate. The "large" subgroup (comprised of communities receiving service from a cable headend facility serving more than 10,000 subscribers) completed 397 of 398 questionnaires; the "medium" subgroup (1,001-10,000 subscribers) completed 48 of 52 questionnaires; and the "small" subgroup (1,000 or less subscribers) completed 39 of 47 questionnaires. Cable operators in the communities relieved from rate regulation completed 280 of 284 questionnaires, representing a 99% response rate. Operators in communities with a second cable

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[1] *See* 47 C.F.R. § 76.1801.

[2] *See* B. J. Mandel, *Statistics for Management* (1984) at 258. Formula parameters were set to determine a sample size large enough to estimate monthly cable prices within 50 cents of actual price with 95 percent probability.

[3] A relatively higher percentage of competitive communities were selected because this group is relatively small and the sampling formula requires a minimum number for statistical precision.

[4] For an explanation of stratified sampling methods, *see, e.g.*, G. W. Snedecor and W. G. Cochran, *Statistical Methods*, 7th ed. (1980) at 435-59.

operator completed 111 of 112 questionnaires; the DBS subgroup completed 124 of 125 questionnaires; the wireless overbuild subgroup completed 27 of 27 questionnaires; and the low penetration subgroup completed 18 of 20 questionnaires.

4. We reviewed the questionnaires for completeness and accuracy. When a response to a question was incomplete or appeared to be incorrect, we asked the responding cable operator to check its answer and revise the response if necessary. After this review process, we calculated the statistical averages for responses to each question. These averages were calculated at the subgroup level, then at the group level as a subscriber-weighted average of subgroups, and finally overall as a subscriber-weighted average of the noncompetitive communities and communities relieved from rate regulation combined. In this manner, the effect from a subgroup's average on its group average, as well as on the overall average, increased in direct proportion to its weight. The weights, which are equal to our estimate of each subgroup's percentage share of cable subscribers nationwide, are shown in Attachment 1.[5]

B. Sampling Accuracy

5. Because our Survey is based on a sample of communities rather than a 100% census, the price averages in this Report are subject to sampling variance. Sample results are likely to be different from results that would be obtained if we were able to collect prices from all communities nationwide. If it were possible to survey all cable communities we might increase the accuracy of this Report, but we would also increase the cost of the Survey. The number of cable communities we selected for our sample strikes a reasonable balance between accuracy and cost. The Attachments report estimates of potential sampling variance or "standard error" for each price average calculated as of January 1, 2005. Standard errors can be used to express a degree of confidence that the true average falls within a range around our sample average. This degree of confidence is usually expressed as assurance that in 95 out of 100 similar samples, the true average will fall within the stated range (the "95 percent confidence interval").[6] Standard errors can also be used to identify whether differences in prices, either over time or between noncompetitive communities and communities relieved from rate regulation, are statistically significant at a 95 percent confidence level.

6. In addition to variance inherent in the process of sampling, variances between sample results and true price averages may occur for reasons involving errors in (a) survey design; (b) survey responses; and (c) data collection and processing. One limit on our survey design involved the community count of subscribers used to develop subscriber-weights to compute weighted averages. As in previous surveys, we estimated the number of subscribers in each community by using the data reported on FCC Form 325 as of 1994, supplemented by current subscriber information whenever possible. These 1994 data are the most recent census of cable subscribers at the community level, and for this reason our weights did not reflect post-1994 growth in cable subscribers. Nevertheless, because it is likely that percentage growth across communities has tended to be evenly distributed, our weights serve as a reasonable, although imperfect, approximation of current weights. To limit survey error, we continued to apply quality control measures to enhance the accuracy of survey responses. When a response to a question was incomplete or out-of-trend, we asked that cable operator to check its answer and revise the response if necessary.

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[5] For a discussion of weighted averages, see W. E. Deming, *Some Theory of Sampling* (1950) at 135-211.

[6] This "95 percent confidence interval" is the range surrounding the sample average plus or minus 1.955 multiplied by the standard error. For example, the price for basic-plus-expanded basic service as of January 1, 2005 averaged $43.04, and the standard error was 32 cents, as shown in Attachment 2. We estimate at a 95 percent confidence level that the true average lies between $42.41 and $43.67. We arrive at the lower end of the range by subtracting 1.955 x $0.32 from our average of $43.10. We arrive at the upper end by adding 1.955 x $0.32 to $43.10.

APPENDIX B

Econometric Analysis

1. In this report, we return to econometric analysis in order to provide a more sophisticated examination of the data collected.[1] The model we describe below was designed to examine the effects of market structure as well as demand and cost factors on cable prices. The estimation of the relationship between market concentration and measures of firm performance was pioneered by Collins and Peterson in their 1969 study of the effects of concentration on profits in 417 industries.[2] Later, Weiss used a slightly different model specification to estimate the effects of concentration on profitability.[3] Since the publication of these two seminal articles, regressions of profit/price on concentration have become a frequently used empirical tool in industrial organization literature.[4]

2. The model is based on the textbook paradigm of "structure-conduct-performance," i.e., performance is affected by conduct (of buyers and sellers), which in turn is affected by structure (of the relevant market).[5] A majority of the studies have used market concentration as a measure of structure, and price or profit as a measure of performance. In this study, we use the same regression techniques that have been used previously and apply them to the MVPD industry to estimate the effects of a cable operator's share of the local market (a measure of market structure) on the price of cable service (a measure of performance).

A. Model Specification

3. Following the approach taken in previous empirical studies, we specify the following log linear relationship between cable prices and market concentration along with other explanatory variables:

$$\text{Log Price}_i = b_0 + b_1 \text{Log Market Share}_i + b_2 \text{ Log Income}_i + b_3 \text{Log National Subscribers}_i + b_4 \text{ Log Capacity}_i + b_5 \text{ Log Density}_i + b_6 \text{Vertical Dummy}_i + b_7 \text{ Effective Competition}_i + b_8 \text{Local-into-Local}_i + e_i,$$

Where

Log Price_i = log of cable price at i^{th} cable community,

Log Market Size_i = log of cable's share of the MVPD market in system area,

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[1] For previous econometric studies, *see Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment,* 17 FCC Rcd 6301 (2002); 16 FCC Rcd 4346 (2001); 15 FCC Rcd 10927 (2000); and 14 FCC Rcd 8331 (1999).

[2] N. Collins and L. Peterson, *Price-Cost Margins and Industry Structure,* Review of Economics and Statistics, 51 (Aug. 1969) at 27-286. For discussion of empirical studies, *see* D. Waldman and E. Jensen, *Industrial Organization* (2001) at Ch. 16.

[3] L. Weiss, *The Concentration-Profits Relationship and Antitrust,* in H. Goldschmidt et al, *Industrial Concentration: The New Learning* (1974), updated in F.M. Scherer and D. Ross, *Industrial Market Structure and Economic Performance,* 3rd Ed. (1990) (Scherer and Ross).

[4] *See, e.g.,* T.F. Bresnahan, *Empirical Studies of Industries with Market Power,* R. Schmalnsee and R. Willig, *Handbook of Industrial Organization Vol. II* (1989) at Ch. 17; Scherer and Ross at 4-5; M.D. Whinston, *Lectures on Antitrust Economics: Chapter 3* at 27, www.csio.econ.northwestern.edu (Whinston); and W.N Evans, L. Froeb, and G. Werden, *Endogeneity in the Concentration-Price Relationship: Causes, Consequences, and Cures,* Journal of Industrial Economics (Dec. 1993) at 431-38 (Evans, Froeb, and Werden).

[5] L. Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust,* 127 U. Pa. L. Rev. 1104 (1978-79).

Log $Income_i$ = log of median family income,

Log National $Subscriber_i$ = log of number of parent company subscribers of cable operator,

Log $Capacity_i$ = log of cable plant's capacity in MHz,

Log $Density_i$ = log of population density in the community served,

Vertical $Dummy_i$ = vertical dummy (0,1 indicating presence or absence of vertical affiliation with one or more programming networks),

Effective Competition $Dummy_i$ = effective competition dummy (0,1 indicating whether a petition requesting a finding of effective competition in the community has been granted),

Local-into-$Local_i$ = local-into-local dummy (0,1 indicating availability or non-availability of local programming in DBS operators' program offerings in the community served), and

e_i = error term.

4. The above equation includes variables representing market structure as well as demand and cost factors. Certain variables can influence both demand and cost. For example, median family income can be considered both a demand and a cost factor. High income is generally associated with increased ability to pay for cable services (thus influencing demand), but may also mean that higher labor cost prevails in the area, thus contributing to higher cable prices.

5. Cable plant capacity measured in megahertz is another variable that represents a combination of cost and demand factors. Higher megahertz may enable a cable operator to provide more channels and a variety of services including Internet access and telephony, which may lead to higher demand, which in turn may lead to higher cable prices. But upgrading the cable plant to provide increased capacity in megahertz also requires investment capital and so represents a cost factor. In the past, cable operators have upgraded their plant to meet competition from other MVPD operators, particularly DBS, as well as to be able to provide advanced services.

6. Similarly, population density can represent both a cost and a demand factor. A more densely populated area may suggest higher demand for cable services and therefore higher cable prices. It is possible, however, that a densely populated area may be part of a large city, which may have competing forms of entertainment available to consumers, which in turn may lead to lower demand for cable. Higher density, however, can also mean lower construction costs per home passed, which may lower the cost of providing cable services. The "local-into-local" dummy variable indicates the presence of more intense local competition from DBS in the MVPD market and thus may be associated with lower cable prices in the area. The effective competition dummy variable indicates that the cable operator has been freed from basic rate regulation and may face competition from additional MVPDs.

7. The "vertical affiliation" dummy variable, the "market share" variable, and the "number of nationwide subscribers" variable are three variables that represent market structure in the equation. If a vertically integrated cable operator enjoys cost savings or increased efficiencies due to the ownership of or affiliation with one or more programming networks, then the prices charged by the affiliated cable operator may be lower if some of the benefits are passed on to consumers. Vertically integrated operators

may wield market power in the sale of programming, and may be able to deny carriage of "must-have" affiliated programming to competing MVPD operators. This may lead to higher cable prices.[6]

8. A positive relationship between market share and prices is expected where a dominant firm is able to exploit its dominant position and charge higher prices than its competitors. Higher prices as a result of unilateral action by the dominant firm may in many instances lead to a loss of consumer welfare. However, a positive relationship between market share and prices can also result if the markets in which firms have larger market shares tend to be markets with higher costs. In these circumstances, market share may not be a good indicator of market power and higher prices may not represent a loss of consumer welfare.[7]

9. The variable indicating the number of nationwide subscribers indicates the overall size of the parent company of the cable operator. If large cable operators have a cost advantage over smaller operators, then prices should be lower in areas served by a cable operator that has a large number of subscribers nationwide.

10. Although the above equation provides a useful analysis of the effects of market structure and other demand and cost variables on prices, it may suffer from endogeneity due to omitted relevant variables.[8] Failure to include variables relevant to determining the price of cable service can bias the estimated impact of any included variables, such as market share, that are correlated with the omitted variables. As previously discussed, the failure to properly observe the quality of the product can lead to erroneous conclusions regarding the market share variable. In addition, over time, markets that exhibit higher prices may attract increased investment, increased research and development, and the entry of new competitors, thus affecting market shares. One consequence of the endogeneity of market shares is that the use of the ordinary least squares (OLS) technique to estimate the equation will lead to biased conclusions because of the correlation between the market share variable and the error term, which would violate one of the basic assumptions of OLS.[9]

11. To correct for the endogeneity of market share, we use the instrumental variable (IV) technique to estimate the equation. The instrumental variable method purges the link between explanatory variables and the error term by using appropriate exogenous variables as instruments. The selected instruments must be strongly correlated with the endogenous variable and must not be correlated with the omitted variables, whose effects are incorporated into the error term. We use nine variables related to market size and the cost of entry into the market as instruments for market share since these factors may affect market share but are not necessarily related to the omitted factors. Specifically, we use the following variables as instruments: number of households, location of franchise area in terms of latitude, age of the cable system, percent of Spanish speaking people in the population, percent of multiple dwelling units in the franchise area, percent of households without telephone service, percent of households with children under 18 years of age, presence or absence of a second cable operator in the franchise area, and whether or not the cable operator is regulated.

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[6] T. Chipty, *Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry,* American Economic Review (Jun. 2001) at 428-53.

[7] *See* C.M. Newmark, *Price-Concentration Studies: There You Go Again,* DOJ/FTC Joint Workshop on Merger Enforcement, Concentration and Market Shares panel (Feb. 2004) (Newmark).

[8] *See* Whinston at 28-29 and Evans, Froeb, and Werden.

[9] For a discussion of ordinary least squares and endogeneity, see J. Wooldridge, *Econometric Analysis of Cross Section and Panel Data,* Cambridge: The MIT Press (2002) at Ch. 4: The Single-Equation Linear Model and OLS Estimation at 49-81.

12. We use the natural log of the variables to estimate the equation. Although other functional forms may be equally suited for the estimation of this equation, we choose the log linear form so that the estimated coefficients can be interpreted as elasticities. Cable's market share, national subscriber size, capacity in megahertz, number of households, regulation, the presence of a second cable operator, and local-into-local variables are from the Survey. The vertical integration dummy is based on information provided in the 2004 Competition Report and the age of the cable system is derived from cable system registration information reported by cable operators.[10] All other variables are from the Census Bureau.[11]

B. Results

13. The Table shown below reports the estimated regression coefficients obtained by using the IV technique.[12]

IV Regression Estimation		
Dependent Variable (Log Price)	**Estimate of Coefficient**	**t-Statistic**
Log Income	0.030	1.07
Log National Subscribers	0.025*	5.96
Log Capacity	0.099*	2.69
Log Density	0.026*	4.65
Effective Competition Dummy	-0.042*	4.65
Local-into-Local	0.031	0.70
Log Market Share	0.112*	2.88
Vertical Dummy	-0.104*	6.25
Constant	1.749*	4.69
Observations	659	---
R-Squared	0.28	---
Root Mean Squared Error	0.418	---
* Significant at 99-percent confidence level.		

14. All of the estimated regression coefficients have the sign that was expected, and, except for median income and local-into-local, are statistically significant at a 99% confidence level. The three structural variables, the vertically integrated dummy, nationwide subscribers, and local market share, are all significant at the 99% confidence level. The positive relationship between cable prices and market share may suggest a structure-conduct nexus in which cable operators with high market shares wield

[10] *See* 2004 Competition Report at Table C-1 and www.fcc.gov/mb/engineering/liststate.html.

[11] For some communities, we used state level penetration data to estimate the number of DBS subscribers. This number was then used to estimate cable's share of MVPD subscribers.

[12] The effective competition dummy variable takes on a value of one if a petition for a finding of effective competition has been granted. The statutory definition of effective competition includes "low penetration" cable operators, i.e., those where fewer than 30 percent of households in a franchise area subscribe to the cable operator's service. Since low penetration operators may behave very differently from operators with a more substantial presence, they have been excluded. We tested a regression equation using the low penetration operators as part of the effective competition dummy and, possibly due to the few numbers in the sample, found that the results were almost identical to the results reported here.

unilateral market power to charge higher prices or it may reflect higher costs in markets in which cable operators have large market shares. The estimated coefficient for cable operators with a parent company having a large number of nationwide subscribers is positive and significant indicating no cost advantage for cable operators affiliated with large multiple service operators.

15. Prices are lower in franchise areas where cable operators are vertically integrated than in areas where they are not. The negative coefficient for the vertically integrated variable suggests that vertically integrated operators pass some of their cost savings to their subscribers. The vertically integrated variable, however, is also strongly correlated with the number of nationwide subscribers. This may affect its significance. We tested an alternative specification without the national size variable and found that the coefficient for the vertically integrated variable was slightly smaller but more significant.

STATEMENT OF
CHAIRMAN KEVIN J. MARTIN

Re: Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, MM Docket No. 92-266

Congress requires us to issue an annual report on the price of basic cable services. This year's report reveals what we already know from our monthly bills: cable rates are rising. In fact, for the past decade, cable rates have risen faster than the rate of inflation.

In 1996, Congress passed a comprehensive statute that embraced the idea that competition was preferable to regulation. Since then, the price for every service the Commission regulates has decreased—except for cable. For instance, the average rate for wireless service has plummeted 80% and average interstate telephony rates have decreased almost 40%. This is, in part, because those other services have been subjected to competition from providers who have competed on price, as well as on service options and quality. In contrast, cable prices alone have increased, and they have risen more than 90%. (See attached chart.)

Cable does face some competition from DBS, but our report reveals that DBS and cable do not seem to compete on price. In other words, the presence of a DBS operator does not have an impact on the price the cable operator charges its subscribers. Significantly, however, where a second cable operator is present, cable prices are significantly lower ($43.33 without competition vs. $35.94 where there is competition).

And we are not alone in this conclusion. The Government Accounting Office also concluded that the average monthly cable rate was significantly lower only in areas with another wire-based competitor.[1]

In light of these findings, I believe it is critical then that the Commission act to remove regulatory barriers to the ability of a second cable operator to enter the market. When consumers have the ability to choose among more than one cable operator, they receive one of the most important benefits of competition that the 1996 Act envisioned: lower prices. I look forward to continuing to work to foster additional cable competition and choice that can lead to greater consumer benefits.

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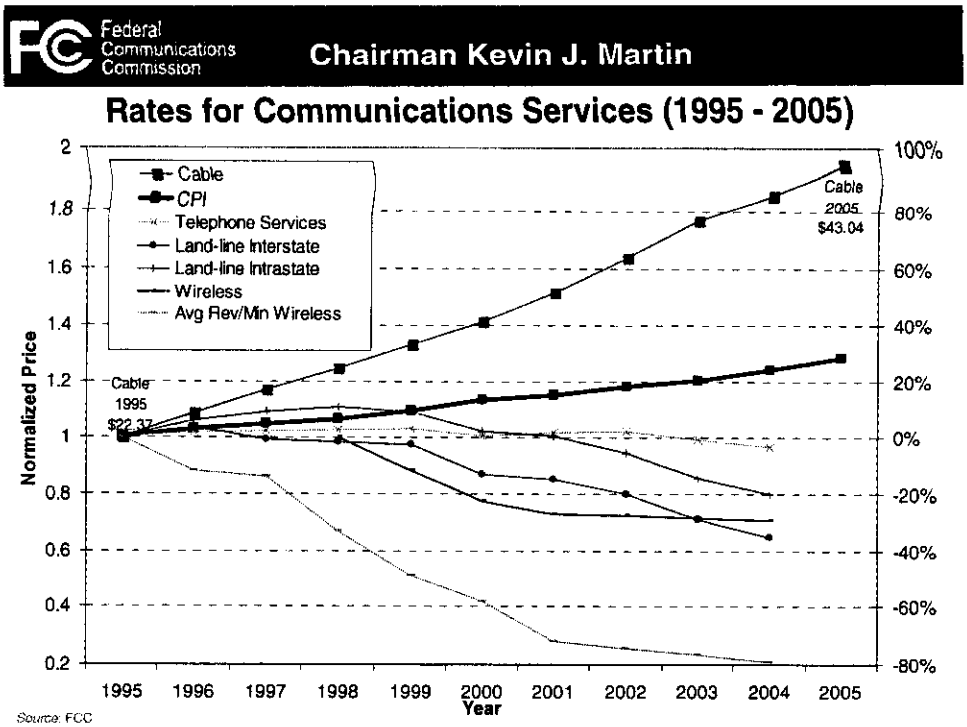
[1] *See* U.S. General Accountability Office, *Issues Related to Competition and Subscriber Rates in the Cable Television Industry*, GAO-04-8 (Oct. 2003)


Federal Communications Commission
Chairman Kevin J. Martin
Rates for Communications Services (1995 - 2005)
Cable
CPI
Telephone Services
Land-line Interstate
Land-line Intrastate
Wireless
Avg Rev/Min Wireless
Cable 1995 $22.37
Cable 2005 $43.04
Normalized Price
Year
Source: FCC

CONCURRING STATEMENT OF COMMISSIONER MICHAEL J. COPPS

Re: Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992; Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, MM Docket No. 92-266

As I did last year, I will vote to concur in today's report on ever-rising cable rates. I think the document we release today does represent an improvement over years past, but it still has not achieved the level of comprehensiveness in data-gathering and analysis that I have called for over the years I have been here. Nevertheless, I do thank the Chairman for his willingness to amend the Bureau's methodology in response to some of the criticisms that Commissioner Adelstein and I have made about earlier reports. That helps.

Of particular importance, I note that this year's report contains an econometric analysis of the survey results. This allows us better to gauge the relative importance of the various factors influencing the price of cable service. For instance, it discloses that there is a positive relationship between local market share and cable prices, as well as between a provider's number of nationwide subscribers and prices. In other words, customers of a large national cable company that controls a large share of a local market generally pay more than customers of a company with either a smaller national or local market share. Correlation does not necessarily imply causation, of course, but this result certainly raises troubling questions about market power that I hope will receive the Commission's further attention in future reports.

Despite the welcome addition of econometric analysis, today's report still suffers from some of the same flaws that have been identified by critics of earlier reports. For example, the Government Accountability Office pointed out more than two years ago that the FCC relies on an unreliable definition of competition. Yet today's report continues along the same lines that the GAO criticized. Another example: we continue to rely on the operators' own reports of their rate and cost structures, without any auditing of our own to assure the accuracy of their data.

Given the importance of the cable industry to the nation's economy and the staggering sums that consumers now pay for video service each month – not to mention our statutory mandate under section 623(k) of our Act – I believe the FCC has a plain responsibility to provide more in-depth research. I hope that next year we can build on the improvements in this year's report in order to provide industry, scholars, and the American public with a report that reflects more comprehensively what is actually happening in the cable market and that gives a more robust accounting of the factors that affect cable prices.

CONCURRING STATEMENT OF COMMISSIONER JONATHAN S. ADELSTEIN

Re: *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992; Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, MM Docket No. 92-266*

Once again we are presented with an annual *Report on Cable Industry Prices* showing the price Americans pay for cable service spiraling ever upward as cable companies continually report double digit increases in revenues and cash flow.[1] And once again this regular report provides insufficient data and analysis to explain how cable companies' prices are growing at such tremendous rates, leaving both us and Congress without the information we need to know how best to combat rising prices.

The price to consumers for cable service increased an average of 5.2% this year to bring the ten year total price increase on cable television rates to a whopping 93%. Few other goods and services in America cost nearly twice today what they did in 1995. And as anyone would expect from looking at these ever rising prices, the cable companies behind them have swelling revenues year in and year out regardless of the overall American economy. Questions about both ascending prices to consumers and market dominance in the cable industry will be raised many times in other proceedings over the next year. Other than the most basic information that prices are continuing to rise and cable companies are consolidating and growing richer, this report does not give either us or the American people much information to work with in considering future related proceedings.

Over the years, I have consistently pointed out areas where these annual reports need more effort and also have offered many constructive suggestions to improve them. While I am happy to see the econometric analysis finally return in this report, I find its conclusion that cable companies are using unilateral market power to extort unreasonable prices sobering. Unfortunately, however, this appears to be the only positive improvement in the work done on these reports. While an international market comparison is made, it is made to a single foreign city – Hong Kong – clearly hand-picked to support a particular viewpoint. Whether one agrees with that viewpoint or not, a factual analysis such as this is no place to hand pick particular comparisons. Rather, as an expert agency, our analysis should include a broad comparison to many similarly situated foreign markets in order to give an accurate picture of cable competition at home and abroad.

Finally, the econometric analysis that addresses the impact of consolidation, mergers and vertical integration in the cable industry on consumer price is short on a meaningful and thoughtful discussion, beyond the model specification narrative.

The underlying facts analyzed in this annual report are generated solely from a survey of the cable companies and their responses are simply assumed to be accurate. The suggestion to perform an audit of some of these responses to see if we are really being told the truth has been on the table for years. For example, the cable companies attempt to explain their soaring prices through increases in the cost of programming content. How do we know this is the case when the only data we have is nothing more than what the cable companies decide to tell us? Also, there are some curious results shown in the raw data that are not addressed in the analysis. For example, there are some unexplained differences between the price increases in analog cable and the decreases or averaged miniscule increases in high quality digital

[1] ¶ 10, FN 11, *infra*.

service and equipment. However, we do not know what the experts think is the cause of this huge discrepancy, since no analysis was provided.

The lack of meaningful analysis in some areas and wealth of it in others lend this report to criticism. The huge inconsistency in what types of data and analysis will be included in any given year reinforce this weakness since it makes meaningful comparison of the reports nearly impossible. And the lack of auditing makes all the data in these reports suspect at best, especially on the data the cable companies use to justify their prices.

All of these deficiencies and inconsistencies make this report of limited use in examining a cable industry except to tell us what we already know: that consumers keep paying higher prices for cable year after year and that, regardless of economic climate, the cable companies keep posting huge annual profits. One conclusion that is easy to reach is that this market is in desperate need of competition. I am hopeful that the entrance of the telephone companies into this market will provide badly needed competition that can help keep a lid on prices and provide the incentive for innovation and new services for consumers.

STATEMENT OF COMMISSIONER ROBERT M. MCDOWELL

Re: *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992; Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, MM Docket No. 92-266

This Cable Price Survey presents statistical information about the average rates for cable basic and expanded basic tiers of service in markets with varying levels of competition. Compiling this information, while potentially helpful, is only a first step. While the McDowell family's cable bill has gone up a lot in recent years, I would like for us to study the status of video competition in terms of not only prices, but also value provided to consumers, programming costs, barriers to entry and so forth. What the Cable Price Survey does not provide is an analysis of all of the potential factors that could cause overall rate increases. For instance, are higher rates reflective of many factors including: consumers buying more bundled service offerings; greater value being offered today compared with several years ago (such as the benefits of digital cable over analog, or more channel offerings); cost recovery due to regulatory burdens; or other causes? Such analyses will better inform our actions with respect to furthering competition in the video marketplace. In the meantime, I look forward to continuing to use this report as a resource. Many thanks to the Media Bureau for their work on this report.