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

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By the Chief, Media Bureau:

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I. INTRODUCTION AND EXECUTIVE SUMMARY

1. As required by law, the Media Bureau's staff conducted a survey of the rates cable operators charge for basic cable television service, expanded basic cable service, and equipment. The survey used a random sampling of cable systems. About half of the cable systems in the sample are subject to local franchise authority regulation of basic cable service rates, while the other half are exempt from such rate regulation. Media Bureau staff compared the rates of those two groups and found that the average rates for these services continue to be higher for the cable operators exempt from rate regulation of their basic service rates. This is due, at least in part, to the fact that cable operators in the survey response that are exempt from rate regulation provide a greater number of video channels, on average, than the responding cable systems subject to local rate regulation. The average monthly price of expanded basic cable service increased overall by 5.1 percent in the year ending January 1, 2013, while the average price per channel increased by 2.1 percent.

2. Section 623(k) of the Communications Act of 1934, 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 the average rates that cable operators[2] charge for "basic cable service, other cable programming," and cable equipment.[3] That section also requires the Commission to compare the rates of cable operators that have been found to be subject to effective competition, under a statutorily defined standard (hereinafter referred to as "effective competition")[4], with those of cable operators that

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

[2] All averages in this report are weighted averages where the weight given to an individual cable operator depends on the number of subscribers to the operator in that community. For the purpose of our report, a cable operator (or operator) refers to an entity that operates a wireline system and is a multichannel video programming distributor (MVPD) that makes available for purchase, by subscribers or customers, multiple channels of video programming. *See* 47 C.F.R. § 76.905(d). In our report, the term cable operator includes operators of traditional coaxial and fiber wireline cable systems, municipalities, and telephone companies, including Verizon FiOS. It includes cable operator communities that are registered with the Commission. *See* 47 C.F.R. § 76.1801.

[3] The Cable Act requires operators to offer an entry-level basic service, which must include, at a minimum, all commercial and noncommercial educational local broadcast stations entitled to carriage under the must-carry provisions of the Communications Act of 1934, 47 U.S.C. §§ 534-35. Basic service must also offer any other local broadcast station provided to any subscriber, as well as public, educational, and governmental access channels that the local franchise authority (LFA) may require the operator to carry. *See* 47 U.S.C. § 543(b)(7). The term "cable programming service" refers to a tier of video channels for which the operator charges a separate rate, other than the basic service channels and channels for which per-channel or per-program charges apply. *See* 47 U.S.C. § 543(k)(l)(2). Cable equipment refers to a converter box and other customer premises equipment used for accessing cable services. *See* 47 U.S.C. § 543(b)(3).

[4] *See* 47 U.S.C. § 543(k)(1) (cross-referencing 47 U.S.C. § 543(a)(2)). Under the Cable Act, if the Commission grants a finding of effective competition to an operator and the community it serves, that operator is not subject to regulation of its basic service price. Such a finding requires the operator to meet one of four statutory tests: (1) fewer than 30 percent of households in the franchise area subscribe to the operator's cable programming service (low penetration test); (2) the operator and at least one other MVPD, including direct broadcast satellite (DBS) operators, offer comparable service to at least 50 percent of franchise area households and at least 15 percent of such households subscribe to such service other than from the largest MVPD (50/15 test); (3) a municipality offers MVPD service to at least 50 percent of franchise area households (municipal test); or (4) a local exchange carrier (LEC) or its affiliate, or an entity using the facilities of the LEC or its affiliate, offers MVPD service by means other than DBS service directly to subscribers in an area that an unaffiliated MVPD offering comparable services also serves (LEC test). *See* 47 U.S.C. § 543(l); 47 C.F.R. § 76.905(b). The LFA may not regulate the operator's rate for basic cable service if the operator is deemed subject to effective competition, unless the LFA seeks and the Commission grants recertification. *See* 47 U.S.C. §§ 543(a)(2); and 47 C.F.R. § 76.916(a). A finding of effective competition on the basis of more generally applicable competition analysis may not necessarily reach the same (Continued….)

the Commission has found are not subject to such effective competition.[5] For purposes of this survey, we have defined all cable operators that do not have an FCC finding of effective competition as "noncompetitive". In many communities, the incumbent cable operator, for various reasons, has not petitioned the Commission for an effective competition finding, or, if a petition was filed it may be pending or may have been granted after the cut-off date for our survey. For the reasons discussed in paragraph 9, infra, there may be a significant number of these communities included in our sample of noncompetitive cable operators that remain subject to local basic rate regulation. Available data are inadequate to allow us to estimate the potential impact that these communities may have on our findings. This Report fulfills the statutory directives and presents key findings for the 12 months ending January 1, 2013.[6]

3. *Average prices for all communities.* The average monthly price of expanded basic service (the combined price of basic service and the most subscribed cable programming service tier excluding taxes, fees and equipment charges) for all communities surveyed increased by 5.1 percent over the 12 months ending January 1, 2013, to $64.41, compared to an annual increase of 1.6 percent in the Consumer Price Index (CPI). The price of expanded basic service has increased at a compound average annual growth rate of 6.1 percent during the period 1995-2013. The CPI increased at a compound average annual growth rate of 2.4 percent over the same period. The price per channel (price divided by number of channels) for subscribers purchasing expanded basic service increased by 2.1 percent over the 12 months ending January 1, 2013, to 48 cents per channel. However, over the 18 years from 1995-2013, the price per channel is lower by 0.3 percent on an average annual compound basis.[7]

4. Average prices in communities with a finding of effective competition compared with prices in communities without a finding of effective competition. Over the 12 months ending January 1, 2013, the average price of expanded basic service increased by 4.6 percent, to $63.03, for those operators serving communities for which no effective competition finding was made as of January 1, 2013. For the effective competition communities, the average price of expanded basic increased by 5.8 percent, to $66.14. Over this period, price per channel increased by 1.7 percent in communities without a finding of effective competition, to 51 cents per channel, and increased by 2.6 percent in effective competition communities, to 45 cents per channel. The price per channel is 13.5 percent lower in effective competition communities than in communities without a finding of effective competition, which reflects that operators in effective competition communities carry, on average, more channels on expanded basic service than operators in communities without this finding.

5. As noted, the price of expanded basic service averaged across effective competition communities was higher than the price of expanded basic service averaged across communities without such a finding. The difference is statistically significant. The three previous surveys also found that the price of expanded basic service in effective competition communities was higher than the price of expanded basic in communities without such a finding. Prior to that, surveys found that effective

(Continued from previous page)
conclusion as a finding of effective competition based on this statutory standard. See, generally, the Department of Justice Horizontal Merger Guidelines, http://www.justice.gov/atr/public/guidelines/hmg-2010.html.

[5] *See* 47 U.S.C. § 543(k)(2).

[6] The information in this report meets the Commission's information quality guidelines. *See Implementation of Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Pursuant to Section 515 of Public Law No. 105-554*, Information Quality Guidelines, 17 FCC Rcd 19890 (2002).

[7] To calculate 2012-2013 price changes, the survey sampled two years of data, rather than using the 2012 price from the prior (2012) survey, so as not to introduce random sampling variance. For further explanation, *See* Appendix, paragraph 9. Table 1 reports the 2013 price and annual change based on the 2013 survey. Table 3 reports the historical price series based on price data from that survey year.

competition communities in general had lower prices.[8] As discussed further in Section III, several factors contributed to this reversal of trend, including an increase in communities where there has been a finding of effective competition based on the DBS market share.

6. We next compare the price of expanded basic service in effective competition communities overall ($66.14) to subgroups of these effective competition communities, as of January 1, 2013. On average, prices were 0.8 percent lower ($65.64) for incumbent cable operators in communities with a rival operator and 4.8 percent lower ($62.96) for the rival operators. Prices were 0.8 percent higher ($66.70) for findings the Commission granted on the basis that the DBS market share met the 15 percent threshold established by the statute. Prices were 3.7 percent lower ($63.66) in the "Other" subgroup of cable operators, those competing with a wireless MVPD system or who met the low penetration test as a result of serving fewer than 30 percent of households.

II. OVERVIEW OF THE SURVEY

7. The basis for the information and analysis provided in this Report is the Commission's 2013 survey of cable industry prices (survey). The Commission directed a randomly selected sample of cable operators to respond to a survey questionnaire that requested data primarily as of January 1, 2012 and January 1, 2013.[9] On this basis, the increases/decreases in prices/channels from 2012 to 2013 reported herein reflect the data collected in the 2013 survey and are not derived from comparing the data from the 2012 and 2013 surveys.[10] The survey requested data from a random sample of 800 cable operators serving two groups of communities: (1) communities where operators have not been formally found to meet one of the statutory tests for effective competition; and (2) communities where operators have been found to meet one of the statutory tests for effective competition and, as a result, the cable operator serving that community is not subject to price regulation of its basic service by the local franchise authority (effective competition communities).

8. We surveyed operators serving 486 out of the 24,238 communities without a finding of competition and 314 out of the 9,417 communities granted an effective competition finding pursuant to the statute. In selecting cable operators for our sample from the group of effective competition communities, we relied on the Commission's formal findings of effective competition, based on the statutory definition of effective competition in the Cable Act.[11] Most of the effective competition cases that come before the Commission are based on competition between a cable operator and a DBS provider. The remaining effective competition cases are based on competition between a cable operator and a wireline or wireless competitor, or on low subscriber penetration.

9. Our list of effective competition communities is limited to those that have received a formal FCC finding of effective competition under the statutory tests. The statute does not take into account those areas of the country where the conditions may be present (*i.e.*, sufficient market-based competition may exist) to warrant a finding of effective competition, but no cable operator has petitioned the Commission for such a finding, or the Commission has not yet acted on a pending petition for such a finding as of the date our survey sample was selected.[12] We note that, due to the emergence of competing

[8] *See* Attachment 7 for citation to previous survey reports. As noted, the effective competition average price for expanded basic service exceeded the noncompetitive average price for the first time in the 2009 survey.

[9] *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*, 28 FCC Rcd 4554 (2013).

[10] The reported changes in cable prices/channels from 2012 to 2013 are not subject to random variance compared to estimates based on data from two separate survey samples.

[11] *See* 47 U.S.C. § 543(a)(2).

[12] See, 47 U.S.C. § 543(k).

wireline providers (Verizon, AT&T, and others) and DBS providers (available nationwide and serving greater than 15 percent of households on average) many areas of the country may have a competing provider who exceeds the 15 percent threshold set forth in the 50/15 test for effective competition, but the incumbent cable operator has not petitioned the Commission for a finding of effective competition.

10. DIRECTV and DISH Network DBS provide programming services similar to cable systems, which suggests that a comparison of those companies' prices and channels to cable provider offerings could be informative as part of this Report.[13] Therefore, we compare herein the national average price, number of channels, and price per channel for cable's expanded basic service package to comparable packages offered by DIRECTV (Choice) and DISH Network (America's Top 120 Plus). As of January 1, 2013, the average expanded basic cable price ($64.41) was higher than both DIRECTV ($63.99) and DISH Network ($59.99). DIRECTV offered the greatest number of channels (211 compared to cable's 160), and had a significantly lower price per channel than the cable average (30 cents compared to 48 cents). Compared to the average cable provider, DISH Network offered fewer channels (150), and had a significantly lower price per channel (40 cents). Attachment 9 provides details.

11. *Brief Overview of Survey Methodology*. The sample of cable operators granted a finding of effective competition was selected from four subgroups.[14] The first two subgroups are comprised of communities in which a second wireline operator's offerings provided the basis for the finding of effective competition. The first subgroup (Second Cable Operator: Incumbent) consists of the incumbent operator in the community and the second subgroup (Second Cable Operator: Rival) consists of the rival operator in the community. We also report the weighted average of both the incumbent and rival operators (Both). The incumbent is the operator who provided service prior to the rival operator's introduction to the market. Findings of effective competition for this incumbent subgroup are on the basis of either (a) the 50/15 test resulting from the presence of at least two MVPDs or (b) the local exchange carrier (LEC) test resulting from the presence of at least two MVPDs, one of which is a LEC or an entity affiliated with or using the LEC's facilities. The third subgroup contains operators in communities in which a sufficient percentage of households subscribed to DBS service to substantiate a finding of effective competition under the 50/15 test (DBS subgroup). The fourth subgroup consists of operators in communities that are either (a) also served by a wireless operator who offers MVPD programming comparable to the cable operator's offerings or (b) meet the low penetration test as a result of serving fewer than 30 percent of households in the service area (Other Operators). All effective competition findings involving a wireless MVPD to date have been made under the LEC test, although the Commission could also make a finding of effective competition based on the presence of a wireless MVPD under the 50/15 test, assuming the wireless MVPD's service met the requirements for that test.

12. For each community selected for the sample, the operator serving that community was asked to complete a questionnaire that included questions on the prices of basic cable service and other

[13] While these companies' programming packages are similar, DBS systems, which are available on a nationwide basis, do not provide a local-facilities-based service and can therefore add subscribers anywhere with minimal incremental infrastructure cost. *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming,* Fifteenth report, 28 FCC Rcd 10496, 10546 ¶ 112 (2013).

[14] We designed these subgroups in order to achieve a high level of statistical precision in our sample. Consequently, the subgroups vary from the division of cable communities under the four statutory tests for effective competition under Section 623(l) of the Cable Act. For example, while the statute permits a municipality to petition for effective competition status if it offers MVPD service to at least 50 percent of its households, to date, no municipality has petitioned the Commission for effective competition status. However, incumbent petitioners sometimes cite municipals as rivals. These municipals are included in the rival subgroup (described in paragraph 11, *supra,* and a number are included in our survey. The other municipal cable operators are in the groups of operators without an effective competition finding and some of these operators are also in our sample. *See* Attachment 1 and the Appendix, Section A, for a complete description of our sampling methodology.

cable programming service offerings. We used the information collected to estimate and compare average prices across the sample groups and subgroups. Basic service consists of the local broadcast stations; public, educational, and governmental access channels[15]; and typically a few additional channels that may be of local, regional, national, or international origin. Subscribers purchase basic service as a prerequisite to subscribing to expanded basic.[16] The survey focused on expanded basic service, which consists of the basic service channels plus a large number of popular national cable networks. Expanded basic service is generally the most-subscribed-to level of service after basic service. We also collected information on the price of the "next most popular" (next most subscribed) service after expanded basic. This next most popular service package generally includes all the programming channels included in the expanded basic service package and at least seven additional cable network channels. As of January 1, 2013, 86 percent of subscribers took at least expanded basic service, and 14 percent took basic service only.[17] In addition, 48 percent of subscribers on average took the next most popular programming service. Survey respondents reported prices as of January 1, 2012 and January 1, 2013, permitting us to calculate the annual percentage changes for the year ending January 1, 2013. We calculated averages for each survey question by subgroup, by the larger sample groups, and for communities overall.

13. *Accuracy and Reliability Review*. We take a number of steps to ensure the accuracy and reliability of the data upon which this report is based. Our survey is fully Internet-based, which means we provide it to respondents on the Commission's Internet site and the questionnaires are completed and submitted to us on that site. Many of the questions have built-in checks for reasonableness, which prompt the respondents to re-check their answers as they are completing the survey if those answers fall outside of a predetermined "range of reasonableness" based on our experience with prior price surveys. A second responsible party within each cable operator's company (other than the person who completed the survey) is asked to certify the completeness and accuracy of that company's responses. After receiving the submitted surveys, we examine all responses using a computer program designed specifically to identify apparent inaccuracies. When a particular response is found to lie outside of its statistically expected reasonable range or is inconsistent with the answers to other questions in the questionnaire, the computer program flags that response and we contact the cable operator and ask that operator to re-check the flagged response and make corrections if needed.[18]

III. SURVEY RESULTS

14. For the cable operators in communities where the Commission has found effective competition, most such findings have been based on DBS market share. Communities in the DBS subgroup equaled 6,681 for the 2013 survey and accounted for 68 percent of all cable subscribers in

[15] *See, e.g.,* 47 U.S.C. § 543(b)(7).

[16] *See, e.g.,* 47 U.S.C. § 543(b)(7).

[17] This 86 percent includes subscribers whose operators do not offer a separate expanded basic service tier but instead offer a basic service tier that includes many of the popular national networks typically associated with expanded basic. All operators are required to offer a basic service tier that includes, at a minimum, those channels prescribed by statute, but the statute does not require operators to offer a separate tier of cable programming service, *i.e.*, an offering that includes both the basic service tier and other cable programming. See 47 U.S.C. § 543(k). When an operator offers both a basic service tier and a separate expanded basic service tier, we refer to the basic service, for purposes of this survey, as "limited basic." Survey results indicate that less than three percent of subscribers receive basic service from operators that do not also offer a separate expanded basic service, *i.e.*, from operators that do not offer a "limited basic" service.

[18] The percentage of survey responses that requires follow-up inquiries varies over time based on such factors as the familiarity of the respondents with the survey, the complexity of the questions, and introduction of new questions to the survey instrument. For the purposes of the 2013 survey, we contacted approximately 15 percent of the survey respondents with follow-up inquiries. Each operator replied with a data correction or reasonable explanation of why a particular response was plausible.

communities with an effective competition finding. There were 731 communities where the incumbent operator was found to face effective competition as a result of the presence of a second cable operator. Incumbent operators and the rival operators in these communities now account for 25 percent of all cable subscribers in the communities with an effective competition finding, down from 26 percent in the previous survey. The remaining seven percent of cable subscribers in the effective competition communities were in the "Other" subgroup, either because they were in the range of a wireless video operator or because they satisfied the market low penetration test.

A. Cable Programming Services

15. Table 1 reports the average price of basic, expanded basic, and the next most popular service (which we defined for purposes of the survey to include at least seven additional channels) as of January 1, 2013.[19] It also shows the average price per channel for expanded basic service.[20] Further, Table 1 reports the annual percentage change in price for the year ending January 1, 2013, for the sample overall, for the group without a finding of effective competition (hereinafter referred to as the "noncompetitive group")[21] and the effective competition group and subgroups. Looking at the averages in the Overall Average column, the price was $22.63 for basic service (6.5 percent increase), $64.41 for expanded basic service (5.1 percent increase) and $77.05 for the next most popular cable programming service (4.2 percent increase). The price per channel for expanded basic service averaged 48 cents (2.1 percent increase).

[19] Except for price per channel, as explained in note 20, *infra*, data in this table does not include prices for customer premises equipment (CPE) unless the cable operator bundles the programming service and equipment into a single price. Price per channel includes CPE because our measure of channels includes channels that require CPE to view. In addition, 41 percent of cable operators bundle CPE into the price of expanded basic service as reported in Attachment 3. The same attachment reports the price of programming, including CPE, for all operators, including those who do not bundle equipment. Each operator reported its most commonly leased equipment to be a set-top converter box and remote control. Section III.C, *infra*, reports the percent of equipment that included a specific feature such as high definition.

[20] Price per channel adjusts the expanded basic programming price to reflect differences in the number of channels the subscriber receives. It equals the expanded basic programming price plus the price of the most commonly leased equipment divided by the number of expanded basic channels including channels which may require a converter box or other digital gateway equipment for reception.

[21] As discussed in paragraph 2, the "noncompetitive" group includes communities for which the Commission has not been requested to make a finding of effective competition but in which such competition may, in fact, exist.

Table 1
Monthly Price and Price per Channel
By Status of Effective Competition
January 1, 2013

Cable Programming Service	Overall Average	Non Com-petitive	Effective Competition Group and Subgroups					
			Group Average	Second Cable Operator Overbuild Subgroup			DBS	Other
				Incum-bent	Rival	Both		
Basic service	**$22.63**	**$22.63**	**$22.65**	**$19.81**	**$18.24**	**$19.63**	**$23.54**	**$24.85**
Annual change	6.5%*	4.4%*	9.2%*	7.4%*	1.1%	6.7%*	10.0%*	8.8%*
Expanded basic	**$64.41**	**$63.03**	**$66.14**	**$65.64**	**$62.96**	**$65.34**	**$66.70**	**$63.66**
Annual change	5.1%*	4.6%*	5.8%*	6.0%*	1.0%	5.5%*	6.0%*	5.0%*
Next most popular service	**$77.05**	**$76.77**	**$77.39**	**$75.83**	**$75.98**	**$75.85**	**$78.10**	**$76.11**
Annual change	4.2%*	4.0%*	4.5%*	3.9%*	0.9%	3.6%*	4.9%*	4.3%*
Expanded basic price per channel	**$0.48**	**$0.51**	**$0.45**	**$0.44**	**$0.49**	**$0.45**	**$0.44**	**$0.45**
Annual change	2.1%	1.7%	2.6%	3.7%	-8.3%	2.1%	2.5%	4.4%

Source: Attachments 2 and 4. * Change in price is statistically significant at the 95% level of confidence.

16. The price differential of each effective competition subgroup compared to the noncompetitive group. Overall, for expanded basic service, price in the effective competition group is higher by 4.9 percent compared to the noncompetitive group. (An asterisk * indicates a statistically significant differential.) One reason for this overall higher price is that the price for expanded basic charged by cable operators in the DBS subgroup is significantly higher, by 5.8 percent, than the noncompetitive average.[22] Further, in contrast to increases prior to 2009, expanded basic prices are growing fastest in the effective competition communities, at 5.8 percent over the 12 months ending January 1, 2013, compared to 4.6 percent annual growth in noncompetitive communities as shown in Table 1. The price per channel, however, for expanded basic service is significantly lower (by 13.5 percent) in effective competition areas. For the other two services, the price differentials in effective competition areas for basic service (0.1 percent higher) and next most popular service (0.8 percent higher) are not significantly different from the average in the noncompetitive group. These differentials are at the overall group level. At the subgroup level, by service, the price of basic service is significantly lower in the second cable operator subgroups and is significantly higher in the Other subgroup. For expanded basic service, the average price is significantly higher in the DBS subgroup (by 5.8 percent) and the incumbent subgroup (by 4.1 percent). For the next most popular service, none of the subgroups for the effective competition areas are significantly different in price from the noncompetitive group. On a per-channel basis for expanded basic service, the price per channel is lower, compared to the noncompetitive group in each effective competition subgroup. These differentials in price per channel range from 5.4

[22] The DBS subgroup constitutes about two-thirds of all effective competition findings and thus has considerable weight. Note that the survey does not include DBS prices but rather the prices that cable operators charge in areas where an effective competition finding is based on DBS market share. See note 2, *supra.*

percent lower on average for rivals, to 13.9 percent lower in the DBS subgroup, reflecting carriage of more channels than in the noncompetitive group.

Table 2
Differential in Average Price
Effective Competition Group and Subgroups
Compared to Noncompetitive Average Price
January 1, 2013

Cable Programming Service	Effective Competition Group	Effective Competition Subgroups				
		Second Cable Operator Overbuild			DBS	Other
		Incumbent	Rival	Both		
Basic service	**0.1%**	**-12.5%***	**-19.4%***	**-13.2%***	**4.1%**	**9.8%***
Expanded basic	**4.9%***	**4.1%***	**-0.1%**	**3.7%***	**5.8%***	**1.0%**
Next most popular	**0.8%**	**-1.2%**	**-1.0%**	**-1.2%**	**1.7%**	**-0.9%**
Expanded basic price per channel	**-13.4%***	**-13.5%***	**-5.4%**	**-12.6%***	**-13.9%***	**-11.9%***

Source: Attachments 2 and 4. * Price difference is statistically significant at 95% confidence level.

17. Table 3 shows that the average price of expanded basic service grew at a compound annual rate of 6.1 percent over the 18-year period from 1995-2013, higher than the annual 2013 increase of 5.1 percent shown in Table 1.[23] Over the 18 years, channels offered with expanded basic service grew annually at 5.9 percent, and price per channel declined by 0.3 percent on an annual basis.[24] For comparison, the CPI for All Items, published by the Bureau of Labor Statistics (BLS) as a measure of general price inflation, grew annually at 2.4 percent over the 18 years. BLS also publishes a CPI for Cable, Satellite, and Radio Services, which grew annually at 4.1 percent over the 18 years.[25]

[23] The prices in Table 3 in each year are taken from the survey for that year. Because of the random variance of survey samples from year to year, the "starting rate" will not necessarily match the "ending rate" from the prior year's survey. For example, the 2012 prices in Table 3 were obtained from the sample communities included in the 2012 survey and do not exactly match the 2012 prices reflected in the 2013 survey shown in Attachment 2 because the sample communities included in the 2013 survey may be different than those in the 2012 survey and may have had different 2012 rates. For this same reason, the 2011 prices in Table 3 do not exactly match 2011 prices reflected in the 2012 survey, and so on for each year reported in Table 3.

[24] In Table 3, 2010 is the start of a new data series for channels and price per channel, reflecting the change to the survey questionnaire, and the difference between the 2009 and 2010 number of channels results in part from the difference in the set of channels surveyed. The channel and price per channel indices in Table 3 adjusts for this difference in order to accurately measure the percentage change in the number of channels between 2009 and 2010. *See* Attachment 7 and the Appendix, Section C, for a more complete explanation.

[25] Because it covers a different mix of services and is adjusted for change in the number of programming channels, the Cable, Satellite, and Radio CPI cannot be compared directly with the change in cable prices in our survey.

Table 3
Historical Averages
1995-2013

Year	Basic Svc. Price	Expanded Basic Service					Next Most Popular Service and Equipment	CPI	
		Price	Channels		Price per Channel			All Items	Cable
			No.	Index	Dollars	Index			
1995	---	$22.35	44.0	100.0	0.600	100.0	---	100.0	100.0
1996	---	$24.28	47.0	106.8	0.610	101.7	---	103.0	106.9
1997	---	$26.31	49.4	112.3	0.630	105.0	---	105.2	114.9
1998	$12.06	$27.88	50.1	113.9	0.650	108.3	$38.58	107.0	122.6
1999	$12.58	$28.94	51.1	116.1	0.650	108.3	$38.43	109.3	127.0
2000	$12.84	$31.22	54.8	124.5	0.660	110.0	$39.64	113.3	132.9
2001	$12.84	$33.75	59.4	135.0	0.600	100.0	$45.33	116.4	139.1
2002	$14.45	$36.47	62.7	142.5	0.660	110.0	$46.59	118.1	147.8
2003	$13.45	$38.95	67.5	153.4	0.650	108.3	$49.03	121.2	157.1
2004	$13.80	$41.04	70.3	159.8	0.660	110.0	$51.76	123.5	163.1
2005	$14.30	$43.04	70.5	160.2	0.620	103.3	$56.03	127.2	169.6
2006	$14.59	$45.26	71.0	161.4	0.650	108.3	$59.09	132.2	174.4
2007	$15.33	$47.27	72.6	165.0	0.670	111.7	$60.27	135.0	179.0
2008	$16.11	$49.65	72.8	165.5	0.680	113.3	$63.66	140.8	183.9
2009	$17.65	$52.37	78.2	177.7	0.710	118.3	$67.92	140.8	186.5
2010	$17.93	$54.44	117.0	204.7	0.560	110.3	$71.39	144.5	191.9
2011	$19.33	$57.46	124.2	217.3	0.569	112.0	$75.37	146.9	192.0
2012	$20.55	$61.63	149.9	262.2	0.505	99.4	$78.91	151.2	199.8
2013	$22.63	$64.41	159.6	279.2	0.484	95.3	$81.64	153.6	206.5
1995-2013 Total and Compound Average Annual Rate of Change									
Total	---	188%	---	179%	---	-5%	---	54%	107%
Average	4.3%	6.1%	---	5.9%	---	-0.3%	5.1%	2.4%	4.1%

Source: Attachment 7.

18. The survey collects data on a "family-friendly" package of channels specifically marketed as a substitute for expanded basic. A number of operators offer such a programming service as an alternative targeted toward subscribers who may object to some of the programming on expanded basic. Survey responses show that the typical family package offers fewer channels than expanded basic and requires a converter or other digital gateway. Some operators bundle the digital equipment with the family-friendly package, while in other cases it is leased separately. Typically, the family-friendly package includes basic service and some, but not all, of the channels included in expanded basic service. It also includes some channels included in the next most popular service or other programming service package. Operators offered an average of 76 channels in a family-friendly package, compared to 54 channels for basic service and 160 channels for expanded basic service. While 51 percent of subscribers had the option to elect a family-friendly package, fewer than one percent subscribed, the others electing basic or expanded basic service. While this low percentage likely reflects a number of factors, the data indicate that family-friendly packages generally lack sports programming (*e.g.* ESPN) and thus many

families may not consider them to be a viable alternative to expanded basic service. On average, expanded basic services offered 2.4 channels devoted to regional sports networks,[26] compared to the family-friendly packages average of 0.3 regional sports networks. As of January 1, 2013, the price for a family-friendly package, including the additional price of equipment if not included with the package, averaged $39.66, which fell between the averages for basic service ($22.63) and expanded basic service ($64.41).

B. Cable Programming Channels

19. Table 4 shows the average number of video channels offered, the annual percentage change in the number of video channels offered over the previous 12 months, and whether the percent change is statistically significant (indicated with an asterisk *). Channels shown under expanded basic include all basic service channels. The next most popular service package generally includes expanded basic channels plus at least seven additional channels.[27] Overall, the number of channels averaged 54, 160, and 245 for basic service, expanded basic service, and the next most popular service, respectively. The number of video channels for all services averaged 420, consisting of the channels shown with basic, expanded basic, the next most popular service, other non-premium and premium packages, pay, and per-per-view programming. The number of channels in each category grew, in most cases by a statistically significant percentage. Looking at the effective competition subgroups, the number of channels in almost all subgroups and services are higher than in the noncompetitive group counterparts.

Table 4
Number of Video Channels
January 1, 2013

Cable Programming Service	Overall Average	Non com-petitive	Effective Competition Group and Subgroups					
			Group Average	Second Cable Operator Overbuild Subgroup			DBS	Other
				Incumbent	Rival	Both		
Basic service	**53.8**	**49.7**	**59.1**	**64.1**	**47.6**	**62.3**	**58.1**	**57.7**
Annual Change	3.9%*	3.3%*	4.7%*	5.6%*	8.6%*	5.8%*	4.4%*	3.3%*
Expanded basic	**159.6**	**151.4**	**169.9**	**167.1**	**168.8**	**167.3**	**171.5**	**163.9**
Annual Change	2.4%*	2.9%*	2.0%*	1.2%	11.0%*	2.2%*	2.0%*	1.5%
Next most popular	**245.4**	**234.8**	**258.2**	**258.0**	**280.1**	**260.4**	**258.2**	**249.2**
Annual Change	2.6%*	3.2%*	2.2%*	0.5%	12.6%*	1.8%*	2.4%*	2.2%*
All Channels	**419.9**	**383.7**	**465.7**	**499.2**	**463.8**	**495.3**	**457.5**	**438.2**
Annual change	3.7%*	3.8%*	3.8%*	2.8%*	4.3%*	2.9%*	4.4%*	1.6%*

Source: Attachment 6. * The change is statistically significant at the 95% level of confidence.

[26] Regional sports networks are defined in paragraph 20, below.

[27] The survey asks respondents to provide the maximum number of video channels carried, including those that require customer premises equipment to view. These channels consist of the primary video stream of local broadcasters (primary channels in all viewing formats) and multicast channels the cable system carries; public, educational, and governmental; commercial leased access; other non-premium cable networks; video on demand offering free content; and other channels if offered at no extra programming charge. The numbers do not include audio only channels.

20. Table 5 displays basic service broken into its component channel categories, which vary by only a few channels between effective competition and noncompetitive communities. The categories are local broadcast; public, educational, and governmental (PEG) access; commercial leased access; non-premium regional sports networks; and other non-premium channels.

Table 5
Basic Service Channels
January 1, 2013

Video Channel Category	Overall Average	Non com-petitive	Effective Competition Group and Subgroups					
			Group Average	Second Cable Operator Overbuild Subgroup			DBS	Other
				Incumbent	Rival	Both		
Analog & standard definition broadcast	14.3	12.9	16.0	17.0	13.9	16.6	15.8	15.9
Digital high definition	3.8	3.4	4.1	5.0	4.3	4.9	3.9	3.8
Local broadcast multicast	11.9	10.8	13.5	12.1	13.4	12.3	13.9	13.5
Local broadcast channels	**30.0**	**27.1**	**33.6**	**34.1**	**31.6**	**33.8**	**33.6**	**33.2**
Public, Educational and governmental access	3.6	3.6	3.6	3.8	7.1	4.2	3.4	3.3
Commercial leased access	1.0	0.7	1.3	1.2	0.5	1.1	1.3	2.0
Regional sports networks	0.1	0.1	0.1	0.0	0.3	0.1	0.1	0.1
Other channels	19.1	18.2	20.6	25.0	8.0	23.1	19.7	19.1
Basic service channels	**53.8**	**49.7**	**59.1**	**64.1**	**47.6**	**62.3**	**58.1**	**57.7**

Source: 2013 survey.

21. Table 6 reports the number of regional sports networks (RSNs) included in service offerings. Overall, the average is 0.1 RSN channels on basic service, 2.4 channels on expanded basic service, and 2.5 on the next most popular service package. A regional sports network in this report is defined as a channel that carries a substantial number of live games from at least one nearby professional sports team that is a member of the National Football League, Major League Baseball, the National Basketball Association, or the National Hockey League. It does not include pay-per-view events.

Table 6
Regional Sports Networks
January 1, 2013

Cable Programming Service	Overall Average	Non competitive	Effective Competition Group and Subgroups					
			Group Average	Second Cable Operator Overbuild Subgroup			DBS	Other
				Incumbent	Rival	Both		
Basic service	0.1	0.1	0.1	0.0	0.3	0.1	0.1	0.1
Expanded basic	2.4	2.3	2.5	2.6	5.4	2.9	2.3	2.8
Next most popular	2.5	2.5	2.5	2.4	5.2	2.8	2.3	2.4

Source: 2013 survey.

C. Customer Premises Equipment

22. The survey asked cable operators if subscribers would need equipment to view all or some channels when purchasing each programming service. The vast majority of cable operators reported that equipment is required for at least some channels. Such equipment can include, for example, a converter set-top box to enable consumers to view digital signals on analog TVs, or a high definition (HD) converter that allows consumers to view HD channels in HD format, and a remote control. If respondents answered in the affirmative, the survey asked operators to report the extra monthly fee required to lease the most commonly-leased equipment for this purpose. Operators were asked to identify the equipment features, such as an interactive programming guide, a digital video recorder, etc. Table 7 shows that, as of January 1, 2013, the average equipment price was $7.55 with basic service, $7.70 with expanded basic service, and $8.40 with the next most popular service package.[28] Most equipment prices increased on an annual basis. Increases in the overall price for the most commonly leased equipment ranged from 4.4 percent for basic service, to 4.2 percent for expanded basic, to 3.9 percent for the next most popular service. These percentage increases were lower than the programming price increases for those services (6.5 percent, 5.1 percent, and 4.2 percent respectively). Finally, we note that equipment may change from year to year and thus the comparison of equipment prices to some extent may reflect quality or feature changes.

Table 7
Price for Most Commonly Leased
Customer Premises Equipment
January 1, 2013

Cable Programming Service	Overall Average	Non competitive	Effective Competition Group and Subgroups					
			Group Average	Second Cable Operator Overbuild Subgroup			DBS	Other
				Incumbent	Rival	Both		
Basic service	**$7.55**	**$7.16**	**$7.94**	**$7.62**	**$7.79**	**$7.64**	**$8.26**	**$6.39**
Annual change	4.4%	2.7%	6.2%	5.0%	8.7%	5.4%	6.6%	7.6%
Expanded basic	**$7.70**	**$7.37**	**$8.04**	**$7.56**	**$7.83**	**$7.59**	**$8.40**	**$6.76**
Annual change	4.2%	2.8%	5.7%	4.9%	7.5%	5.3%	5.8%	8.8%
Next most popular	**$8.40**	**$8.07**	**$8.77**	**$8.15**	**$7.86**	**$8.11**	**$9.17**	**$8.15**
Annual change	3.9%	3.2%	4.7%	3.6%	7.6%	4.1%	4.8%	7.7%

Source: Attachment 5.

23. Table 8 identifies equipment features and the percent of cable systems in which the most commonly leased customer premises equipment includes one or more of the following features: a remote control unit (RCU), interactive programming guide (IPG), HD video capability, or a digital video recorder (DVR). For basic service customers, 98 percent of systems offer a RCU. The most commonly leased basic service equipment for 55 percent of systems includes an IPG, compared to over 90 percent for the other two services. Percentages are similar across all three services for the other two features in the table. Regarding basic service, for 34 percent of systems, the most commonly leased equipment includes HD video capability; and for 17 percent of systems, the most commonly leased equipment includes a DVR.

[28] An equipment price is not included in the average price of equipment if the respondent stated that the price of programming already includes equipment or that equipment is unnecessary to view all or some of the channels.

Table 8
Features Offered With Most Commonly Leased Customer Premises Equipment
January 1, 2013

Cable Programming Service	Feature	Overall Average	Non Com-petitive	Effective Competition Group and Subgroups					
				Group Average	Second Cable Operator Overbuild Subgroup			DBS	Other
					Incumbent	Rival	Both		
Basic service	DVR	17%	10%	26%	47%	7%	43%	21%	14%
	HD	34%	27%	42%	60%	96%	63%	35%	33%
	IPG	55%	54%	57%	64%	98%	67%	53%	53%
	RCU	98%	97%	100%	100%	98%	100%	100%	98%
Expanded basic service	DVR	19%	12%	26%	46%	6%	42%	21%	14%
	HD	34%	28%	40%	55%	88%	58%	34%	35%
	IPG	92%	90%	94%	91%	98%	92%	95%	87%
	RCU	98%	96%	100%	100%	96%	100%	100%	98%
Next most popular	DVR	22%	16%	29%	50%	9%	45%	25%	16%
	HD	42%	36%	49%	65%	82%	67%	42%	51%
	IPG	97%	95%	100%	100%	98%	100%	100%	100%
	RCU	96%	95%	99%	100%	95%	99%	98%	100%

Source: 2013 survey.

D. DTV Viewability

24. The survey asked respondents to identify the scenario that best describes how signals sent from local broadcast stations are processed at the cable system headend and transmitted from there to subscriber premises as of January 1, 2013.[29] All cable operators in our survey responded that system headend equipment was in place to receive analog and digital broadcast signals. There are several scenarios that operators use to format and transmit the signals to customer premises for viewing in analog, digital standard definition (SD) or digital HD formats. The tables below report the percentage of subscribers on average whose cable system operates under each scenario. Table 9 provides this information by sample group and Table 10 by subscriber size of the cable system.

25. Figures shown in the Overall Average column for all sample groups in Table 9 show that

[29] Under the Communications Act, cable operators are required to ensure that subscribers with analog television sets can continue to view all must-carry stations after the end of the digital television transition. *See* 47 U.S.C. § 534(b)(7) (must-carry signals "shall be viewable via cable on all television receivers of a subscriber which are connected to a cable system by a cable operator or for which a cable operator provides a connection"). The 2013 survey included questions that addressed viewing capability. We note that, under our Viewability Order, cable operators of a hybrid system (*i.e.,* a system that offers both analog and digital cable service to its subscribers) may comply with the statutory viewability requirement by choosing to down-convert digital must-carry stations to analog format in addition to carrying those stations in digital format. Alternatively, after December 12, 2012, a hybrid cable operator may make must-carry signals available to analog subscribers by offering for sale or lease the equipment necessary to down-convert digital must-carry stations to analog format, either for free or at an affordable cost that does not substantially deter the use of the equipment. *See Agape Church, Inc. v. FCC*, No. 12-1334 (D.C. Cir. Dec. 27, 2013); *Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission's Rules*, CS Docket 98-120, Fifth Report and Order, 27 FCC Rcd 6529 (2012).

83 percent of households (or other subscriber premises) received analog, SD, and HD signals over three separate transmission paths for viewing by analog, SD, and HD customers, respectively. Fourteen percent received signals over all-digital systems with either one or two transmission paths. Such digital systems are either SD digital only or have both SD and HD capability. In the latter case and if there is a single transmission path, a signal transmitted in HD format is converted to SD format, and then from SD to analog format, using customer premises equipment, for viewing by SD digital and analog television customers, respectively. In the SD digital-only scenario, customer premises equipment converts the SD signals to analog format for viewing by analog television customers. Two percent of subscribers received signals over two separate analog and digital transmission paths and two percent of subscribers received signals over an analog-only system.

Table 9
Path of Local Broadcast Signal
Percent of Subscribers by Scenario
January 1, 2013

Signal Path From the Cable System Headend to Customer Premises	Overall Average	Non-com-petitive	Effective Competition Group & Subgroups					
			Group	Second Cable Operator			DBS	Other
				Incumbent	Rival	Both		
3 separate analog/SD/HD paths	83%	77%	91%	88%	40%	83%	93%	96%
2 separate analog/digital paths	2%	3%	0%	0%	12%	1%	0%	0%
Digital only path(s)	14%	18%	8%	12%	48%	15%	6%	4%
Analog path & viewing only	2%	2%	0%	0%	0%	0%	1%	0%

Source: 2013 survey. Scenarios may not add to 100% due to rounding.

26. Table 10 displays the signal transmission path percentages arranged by cable system size. Looking at the scenario for three separate analog/SD/HD paths, the percent of subscribers whose system had this architecture ranged from 80 percent of large systems to 52 percent of very small systems. A range from 20 percent of large and medium systems to zero in very small systems of the systems surveyed were HD/SD digital systems with no analog path. Systems transmitting over two separate analog and digital paths ranged from one percent of very large systems to 13 percent of very small systems. Analog-only architectures ranged from zero percent in large systems to 35 percent of very small systems.

Table 10
Path of Local Broadcast Signal
Cable Systems by Subscriber Size
January 1, 2013

Signal Path From Cable System Headend to Customer Premises	Very Large Over 75,000 Subscribers	Large 25,001 - 75,000	Medium 10,001 - 25,000	Small 1,001- 10,000	Very Small Up to 1,000 Subscribers
3 separate analog/SD/HD paths	80%	78%	75%	69%	52%
2 separate analog/digital paths	1%	3%	4%	10%	13%
Digital only path(s)	19%	20%	20%	11%	0%
Analog path & viewing only	0%	0%	3%	11%	35%

Source: 2013 survey. Scenarios may not add to 100% due to rounding.

27. Table 11 reports the average number of local broadcast channels by carriage election (either retransmission consent or must carry) and by channel viewing format (analog, SD, or HD). The

channels counted consist of main signals and simulcasts of the main signal on separate analog, SD, or HD channels. The counts do not include multicast signals. Table 11 shows the difference in the overall average of the number of channels carried via retransmission consent (6.8) compared to must carry (11.2). More analog and SD channels were must-carry channels (9.2) than retransmission consent (5.1), and the average number of HD channels carried via retransmission consent and must carry was almost the same (1.7 and 2.0, respectively).

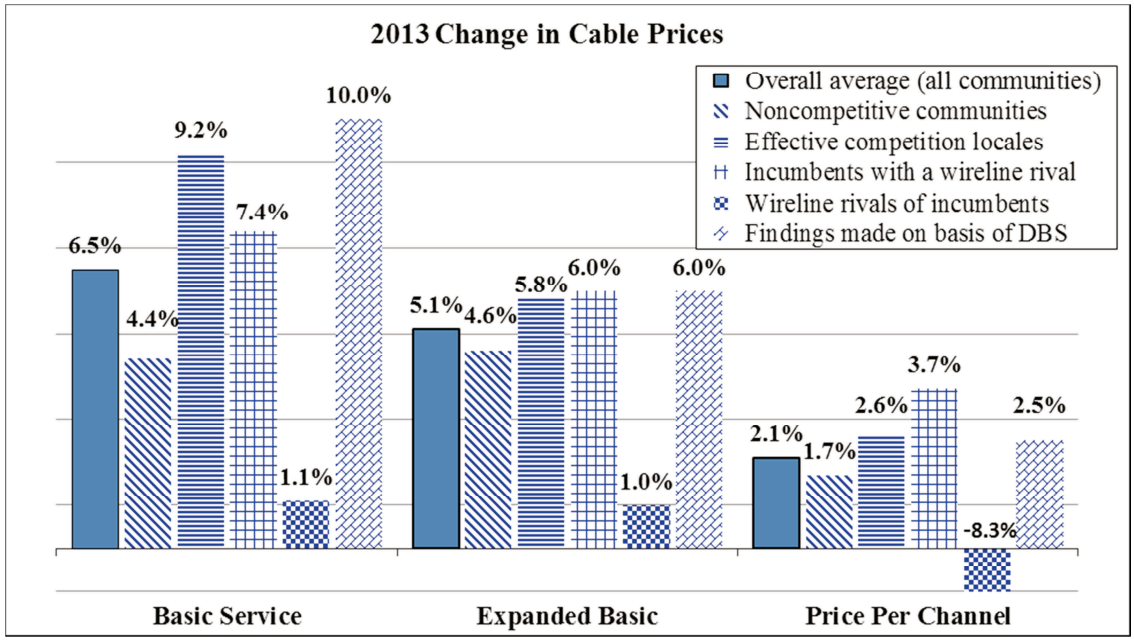
Table 11
Number of Local Broadcast Channels
by Carriage Election and Viewing Format
January 1, 2013

Carriage Election and Viewing Format	Overall Average	Non com-petitive	Effective Competition Group & Subgroups					
			Group	Second Cable Operator			DBS	Other
				Incumbent	Rival	Both		
Retransmission Consent								
Analog or SD digital	5.1	4.6	5.7	5.6	4.1	5.4	5.7	6.4
HD digital channels	1.7	1.6	1.9	2.2	2.8	2.2	1.8	2.1
Total number of channels	**6.8**	**6.2**	**7.6**	**7.8**	**6.9**	**7.6**	**7.5**	**8.5**
Must Carry Election								
Analog or SD digital	9.2	8.4	10.3	11.4	9.8	11.2	10.1	9.5
HD digital channels	2.0	1.9	2.2	2.8	1.5	2.7	2.1	1.7
Total number of channels	**11.2**	**10.3**	**12.5**	**14.2**	**11.3**	**13.9**	**12.2**	**11.2**

Source: 2013 survey. Individual categories may not add up to totals due to rounding.

IV. CONCLUSIONS

28. Basic cable service prices increased by 6.5 percent for the 12 months ending January 1, 2013. Expanded basic cable prices increased by 5.1 percent for those 12 months, and at a compound average annual rate of 6.1 percent over the 18-year period from 1995-2013. Equipment prices for basic and expanded basic services increased by 4.4 percent and 4.2 percent, respectively, for the 12 months ending January 1, 2013. These price increases compare to a 1.6 percent increase in general inflation as measured by the CPI (All Items) for the same one-year period. The CPI's compound average annual rate of growth over the 18-year period was 2.4 percent. The CPI for Cable, Satellite, and Radio Services grew by 3.4 percent in 2013 and by a compound average annual rate of growth of 4.1 percent over the 18-year period. Compared to the average basic price that cable system operators charged in noncompetitive communities, prices on January 1, 2013, were 19.4 percent lower for rival operators, and were 12.5 percent lower for the incumbent operators in communities with at least two cable operators. Compared to the average expanded basic price that cable system operators charged in noncompetitive communities, prices were less than one percent lower for rival operators, and were 4.1 percent higher for the incumbent operators in communities with at least two cable operators. However, the rivals and incumbents had a lower price per channel for expanded basic service, by 5.4 percent and 13.5 percent, respectively. In addition, rivals and incumbents offered a lower price for the next most popular service, by 1.0 percent and 1.2 percent, respectively. Expanded basic prices were 5.8 percent higher in the areas where effective competition findings have been granted based on a finding that the DBS market share exceeded the 15 percent threshold as established by the statute. On a per channel basis, the average price per channel (programming price divided by number of channels) of expanded basic service is lower by 0.3 percent on a compound average annual basis over the last 18 years. The price per channel averages 13.4 percent lower in effective competition communities overall compared to price per channel in noncompetitive communities (*i.e.,* those without a finding of effective competition), reflecting that cable operators in the effective competition communities carry more channels, on average, on expanded basic than operators in noncompetitive communities.



V. ORDERING CLAUSE

29. 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

William T. Lake

Chief, Media Bureau

Attachment 1
Cable Survey
January 1, 2013

Sample Groups and Subgroups *	Cable Communities	Percent of National Subscribers	Survey Sample Size	Survey Responses
Noncompetitive group	24,238	56.2%	486	471
Effective competition group	9,417	43.8%	314	314
Overall sample	33,655	100%	800	785
Noncompetitive Subgroups (by Cable System Subscriber Size)				
Very large : more than 75,000	6,602	25.3%	150	150
Large : 25,001 - 75,000	4,276	14.0%	118	118
Medium : 10,001 - 25,000	4,377	8.0%	80	80
Small : 1,001 - 10,000	6,150	7.5%	98	93
Very small : 1,000 or below	2,833	1.4%	40	30
Effective Competition Subgroups (by Type of Effective Competition Finding)				
Incumbent in *Second Cable Operator* subgroup (Area with at least 2 wireline cable operators)	731	9.8%	55	55
Rival in the *Second Cable Operator* subgroup (The wireline overbuild "second" operator)	545	1.2%	56	56
DBS (Cable operator with a finding made on basis of DBS market share under 50\15 test)	6,681	29.7%	163	163
Other findings (In range of wireless MVPD or on basis of market share in low penetration test)	1,460	3.1%	40	40

Sources: FCC Form 322, Cable Community Registration, 47 C.F.R § 76.1801; FCC Form 325, Annual Cable Operator Report, 47 C.F.R § 76.403.

* The Commission assigns a cable community unit identifier (CUID) to each cable operator for each community that the operator serves. The noncompetitive group consists of communities for which the Commission had not made a finding of effective competition as of January 1, 2013. The effective competition communities are those for which the Commission had made such a finding. Note 4 and the Appendix further discuss the survey groups.

There are fewer rivals (545) than there are incumbents (731) in the second cable operator subgroup mainly because the 545 rivals do not include AT&T U-verse since these systems are not associated with a CUID. The Commission however considers AT&T U-Verse to be a rival cable operator for purposes of findings of effective competition for incumbent operators. Similarly, the DBS subgroup consists of cable operators with a finding based on DBS market share, however, the DBS subgroup does not include the DBS operators.

The statute permits a municipality to petition for effective competition status if it offers MVPD service to at least 50 percent of its households. *See* note 4, *supra*. To date, no municipality has petitioned the Commission, however, incumbent petitioners sometimes cite municipals as rivals. These municipals are included in the rival subgroup and a number are included in our survey. The other municipal cable operators are included in the groups of operators without an effective competition finding and some of these operators are also in our sample.

Attachment 2
Cable Programming
Average Prices
January 1, 2013

Cable Programming Service	Overall Average	Non com-petitive	Effective Com-petition	Effective Competition Subgroups				
				Second Cable Operator Overbuild Subgroup			DBS	Other
				Incum-bent	Rival	Both		
Basic service	**$22.63**	**$22.63**	**$22.65**	**$19.81**	**$18.24**	**$19.63**	**$23.54**	**$24.85**
Standard error	0.253	0.378	0.317	0.552	0.829	0.500	0.425	0.601
Observations	785	471	314	55	56	111	163	40
Prior year	**$21.25**	**$21.68**	**$20.74**	**$18.45**	**$18.04**	**$18.40**	**$21.40**	**$22.83**
Standard error	0.260	0.406	0.296	0.491	0.803	0.445	0.398	0.620
Observations	768	455	313	55	56	111	163	39
Annual change	**6.5%**	**4.4%**	**9.2%**	**7.4%**	**1.1%**	**6.7%**	**10.0%**	**8.8%**
Expanded basic service	**$64.41**	**$63.03**	**$66.14**	**$65.64**	**$62.96**	**$65.34**	**$66.70**	**$63.66**
Standard error	0.238	0.349	0.309	0.707	0.636	0.633	0.370	1.200
Observations	785	471	314	55	56	111	163	40
Prior year	**$61.27**	**$60.26**	**$62.52**	**$61.92**	**$62.33**	**$61.96**	**$62.91**	**$60.64**
Standard error	0.247	0.358	0.331	0.742	0.655	0.663	0.403	1.191
Observations	768	455	313	55	56	111	163	39
Annual change	**5.1%**	**4.6%**	**5.8%**	**6.0%**	**1.0%**	**5.5%**	**6.0%**	**5.0%**
Next most popular service	**$77.05**	**$76.77**	**$77.39**	**$75.83**	**$75.98**	**$75.85**	**$78.10**	**$76.11**
Standard error	0.333	0.440	0.509	1.100	0.804	0.984	0.642	1.307
Observations	748	435	313	55	55	110	163	40
Prior year	**$73.92**	**$73.80**	**$74.06**	**$72.95**	**$75.28**	**$73.21**	**$74.48**	**$73.00**
Standard error	0.326	0.423	0.506	1.089	0.807	0.974	0.639	1.265
Observations	731	419	312	55	55	110	163	39
Annual change	**4.2%**	**4.0%**	**4.5%**	**3.9%**	**0.9%**	**3.6%**	**4.9%**	**4.3%**

Source: 2013 survey. Averages are subscriber weighted means of the survey responses. The averages in this table do not account for the price for customer premises equipment, unless the cable operator bundles the programming service and equipment into a single price. Attachment 3 reports the price of programming plus equipment for all operators, and the percent of operators that bundle programming and equipment.

Attachment 3
Programming and Equipment
Average Prices
January 1, 2013

Cable Programming Service	Overall Average	Non Com-petitive	Effective Com-petition	Effective Competition Subgroups				
				Second Cable Operator Overbuild Subgroup			DBS	Other
				Incum-bent	Rival	Both		
Basic service	**$26.66**	**$26.05**	**$27.44**	**$25.29**	**$24.09**	**$25.16**	**$28.15**	**$28.81**
Standard error	0.308	0.434	0.431	0.805	0.706	0.720	0.571	0.776
Observations	785	471	314	55	56	111	163	40
Prior year	**$25.06**	**$24.89**	**$25.27**	**$23.67**	**$23.41**	**$23.64**	**$25.76**	**$26.46**
Standard error	0.314	0.460	0.412	0.742	0.715	0.665	0.549	0.747
Observations	768	455	313	55	56	111	163	39
Annual change	**6.4%**	**4.7%**	**8.6%**	**6.9%**	**2.9%**	**6.4%**	**9.3%**	**8.9%**
Expanded basic	**$68.54**	**$66.59**	**$71.00**	**$71.21**	**$69.42**	**$71.01**	**$71.33**	**$67.70**
Standard error	0.307	0.431	0.432	0.739	0.884	0.665	0.570	1.388
Observations	785	471	314	55	56	111	163	40
Prior year	**$65.19**	**$63.63**	**$67.10**	**$67.23**	**$68.33**	**$67.35**	**$67.29**	**$64.30**
Standard error	0.315	0.444	0.442	0.759	0.861	0.681	0.583	1.378
Observations	768	455	313	55	56	111	163	39
Annual change	**5.1%**	**4.7%**	**5.8%**	**5.9%**	**1.6%**	**5.4%**	**6.0%**	**5.3%**
Next most popular	**$81.64**	**$81.06**	**$82.34**	**$81.42**	**$82.71**	**$81.56**	**$82.87**	**$79.98**
Standard error	0.305	0.430	0.429	0.909	0.858	0.815	0.539	1.309
Observations	747	434	313	55	55	110	163	40
Prior year	**$78.27**	**$77.84**	**$78.78**	**$78.34**	**$81.54**	**$78.69**	**$79.04**	**$76.50**
Standard error	0.302	0.418	0.437	0.910	0.886	0.816	0.552	1.280
Observations	731	419	312	55	55	110	163	39
Annual change	**4.3%**	**4.1%**	**4.5%**	**3.9%**	**1.4%**	**3.6%**	**4.9%**	**4.5%**
Percent of All Cable Operators that bundle Programming and Equipment into a Single Price								
Basic service	38.5%	40.1%	36.4%	26.3%	3.4%	23.8%	41.2%	35.7%
Prior Year	39.1%	41.5%	36.1%	26.3%	3.4%	23.8%	40.6%	36.6%
Expanded	40.5%	42.9%	37.5%	26.3%	5.1%	24.0%	42.5%	38.0%
Prior year	40.9%	43.6%	37.5%	26.3%	5.1%	24.0%	42.5%	38.8%
Next most	45.5%	47.0%	43.6%	31.5%	14.4%	29.6%	47.9%	52.6%
Prior year	46.0%	48.0%	43.7%	31.5%	14.4%	29.6%	47.9%	53.8%

Source: 2013 survey. Averages are subscriber weighted means of survey responses. For the operators in our survey who did not bundle programming and customer premises equipment, for the purpose of this table, we added together the price of programming and the price of the most commonly leased equipment.

Attachment 4
Average Price per Channel
Price Divided by No. of Channels
January 1, 2013

Cable Programming Service	Overall Average	Non com-petitive	Effective Com-petition	Effective Competition Subgroups				
				Second Cable Operator Overbuild Subgroup			DBS	Other
				Incum-bent	Rival	Both		
Basic service	**$0.624**	**$0.688**	**$0.545**	**$0.452**	**$0.762**	**$0.486**	**$0.565**	**$0.559**
Standard error	0.013	0.018	0.019	0.028	0.062	0.026	0.026	0.040
Observations	785	471	314	55	56	111	163	40
Prior year	**$0.596**	**$0.654**	**$0.526**	**$0.437**	**$0.793**	**$0.476**	**$0.545**	**$0.524**
Standard error	0.012	0.016	0.019	0.026	0.067	0.024	0.026	0.040
Observations	768	455	313	55	56	111	163	39
Annual change	**4.7%**	**5.2%**	**3.6%**	**3.4%**	**-3.9%**	**2.1%**	**3.8%**	**6.5%**
Expanded basic service	**$0.484**	**$0.515**	**$0.445**	**$0.445**	**$0.487**	**$0.449**	**$0.443**	**$0.453**
Standard error	0.006	0.009	0.008	0.011	0.025	0.011	0.010	0.025
Observations	785	471	314	55	56	111	163	40
Prior year	**$0.474**	**$0.506**	**$0.434**	**$0.429**	**$0.531**	**$0.440**	**$0.432**	**$0.434**
Standard error	0.006	0.009	0.008	0.012	0.027	0.011	0.011	0.021
Observations	768	455	313	55	56	111	163	39
Annual change	**2.1%**	**1.7%**	**2.6%**	**3.7%**	**-8.3%**	**2.1%**	**2.5%**	**4.4%**
Next most popular service	**$0.371**	**$0.391**	**$0.346**	**$0.331**	**$0.311**	**$0.329**	**$0.351**	**$0.357**
Standard error	0.005	0.007	0.008	0.009	0.010	0.008	0.011	0.021
Observations	747	434	313	55	55	110	163	40
Prior year	**$0.366**	**$0.388**	**$0.341**	**$0.321**	**$0.359**	**$0.325**	**$0.346**	**$0.344**
Standard error	0.005	0.006	0.008	0.009	0.016	0.008	0.011	0.018
Observations	731	419	312	55	55	110	163	39
Annual change	**1.1%**	**0.7%**	**1.6%**	**3.2%**	**-13.3%**	**1.2%**	**1.5%**	**3.7%**

Source: 2013 survey. Averages are subscriber weighted means of the survey responses. Price per channel adjusts the programming price to incorporate differences in the number of video channels the subscriber receives. It equals the programming price plus the price of the most commonly leased customer premises equipment divided by the number of video channels including channels which may require CPE.

Attachment 5
Customer Premises Equipment
Average Prices
January 1, 2013

Cable Programming Service	Overall Average	Non com-petitive	Effective Com-petition	Effective Competition Subgroups				
				Second Cable Operator Overbuild Subgroup			DBS	Other
				Incum-bent	Rival	Both		
Basic service	**$7.55**	**$7.16**	**$7.94**	**$7.62**	**$7.79**	**$7.64**	**$8.26**	**$6.39**
Standard error	0.140	0.212	0.183	0.255	0.287	0.228	0.261	0.580
Observations	417	219	198	38	44	82	91	25
Prior year	**$7.23**	**$6.97**	**$7.47**	**$7.25**	**$7.16**	**$7.24**	**$7.75**	**$5.94**
Standard error	0.135	0.207	0.175	0.251	0.242	0.223	0.249	0.523
Observations	402	204	198	38	44	82	92	24
Annual change	**4.4%**	**2.7%**	**6.2%**	**5.0%**	**8.7%**	**5.4%**	**6.6%**	**7.6%**
Expanded basic service	**$7.70**	**$7.37**	**$8.04**	**$7.56**	**$7.83**	**$7.59**	**$8.40**	**$6.76**
Standard error	0.139	0.212	0.176	0.254	0.285	0.226	0.250	0.597
Observations	422	221	201	39	48	87	90	24
Prior year	**$7.39**	**$7.18**	**$7.60**	**$7.20**	**$7.29**	**$7.21**	**$7.94**	**$6.21**
Standard error	0.137	0.215	0.171	0.249	0.253	0.220	0.243	0.570
Observations	408	208	200	39	48	87	90	23
Annual change	**4.2%**	**2.8%**	**5.7%**	**4.9%**	**7.5%**	**5.3%**	**5.8%**	**8.8%**
Next most popular service	**$8.40**	**$8.07**	**$8.77**	**$8.15**	**$7.86**	**$8.11**	**$9.17**	**$8.15**
Standard error	0.128	0.193	0.162	0.170	0.291	0.152	0.239	0.447
Observations	431	244	187	36	47	83	85	19
Prior year	**$8.09**	**$7.82**	**$8.38**	**$7.87**	**$7.30**	**$7.79**	**$8.75**	**$7.57**
Standard error	0.126	0.193	0.159	0.156	0.268	0.140	0.237	0.415
Observations	416	230	186	36	47	83	85	18
Annual change	**3.9%**	**3.2%**	**4.7%**	**3.6%**	**7.6%**	**4.1%**	**4.8%**	**7.7%**

Source: 2013 survey. Averages are subscriber weighted means of the survey responses. Customer premises equipment (CPE) refers to a set top converter box or other digital gateway. The survey asks whether or not subscribers who purchase programming require CPE to view all or some channels and whether or not the service includes (bundles) such CPE at no additional charge. If not, the survey asks the respondent to report the unbundled price for the most commonly leased CPE. CPE features may differ yearly between services and thus comparisons of CPE prices to some extent reflect quality differences.

Attachment 6
Cable Programming
Number of Video Channels
January 1, 2013

Cable Programming Service	Overall Average	Non com-petitive	Effective Com-petition	Effective Competition Subgroups				
				Second Cable Operator Overbuild Subgroup			DBS	Other
				Incumbent	Rival	Both		
Basic service	**53.8**	**49.7**	**59.1**	**64.1**	**47.6**	**62.3**	**58.1**	**57.7**
Standard error	0.713	0.914	1.126	2.177	3.103	1.966	1.474	2.195
Observations	785	471	314	55	56	111	163	40
Prior year	**51.8**	**48.1**	**56.5**	**60.7**	**43.8**	**58.9**	**55.6**	**55.9**
Standard error	0.673	0.874	1.045	1.712	2.837	1.555	1.412	2.080
Observations	768	455	313	55	56	111	163	39
Annual change	**3.9%**	**3.3%**	**4.7%**	**5.6%**	**8.6%**	**5.8%**	**4.4%**	**3.3%**
Expanded basic	**159.6**	**151.4**	**169.9**	**167.1**	**168.8**	**167.3**	**171.5**	**163.9**
Standard error	1.433	1.880	2.204	3.840	6.861	3.498	2.917	5.917
Observations	785	471	314	55	56	111	163	40
Prior year	**155.9**	**147.1**	**166.6**	**165.2**	**152.1**	**163.7**	**168.1**	**161.5**
Standard error	1.585	2.033	2.494	4.310	6.765	3.905	3.308	6.590
Observations	768	455	313	55	56	111	163	39
Annual change	**2.4%**	**2.9%**	**2.0%**	**1.2%**	**11.0%**	**2.2%**	**2.0%**	**1.5%**
Next most popular	**245.4**	**234.8**	**258.2**	**258.0**	**280.1**	**260.4**	**258.2**	**249.2**
Standard error	2.241	2.760	3.640	6.185	7.174	5.565	4.854	9.633
Observations	748	435	313	55	55	110	163	40
Prior year	**239.1**	**227.6**	**252.5**	**256.7**	**248.8**	**255.8**	**252.1**	**243.9**
Standard error	2.349	2.881	3.806	6.328	8.458	5.712	5.096	9.628
Observations	731	419	312	55	55	110	163	39
Annual change	**2.6%**	**3.2%**	**2.2%**	**0.5%**	**12.6%**	**1.8%**	**2.4%**	**2.2%**
All channels	**419.9**	**383.7**	**465.7**	**499.2**	**463.8**	**495.3**	**457.5**	**438.2**
Standard error	3.854	5.033	5.946	10.161	20.242	9.310	7.822	18.899
Observations	785	471	314	55	56	111	163	40
Prior year	**405.0**	**369.4**	**448.6**	**485.7**	**444.6**	**481.2**	**438.1**	**431.3**
Standard error	4.045	5.196	6.344	10.027	19.080	9.163	8.512	17.985
Observations	768	455	313	55	56	111	163	39
Annual change	**3.7%**	**3.8%**	**3.8%**	**2.8%**	**4.3%**	**2.9%**	**4.4%**	**1.6%**

Source: 2013 survey. Averages are subscriber weighted means of the survey responses. In reference to the maximum number of channels that are viewable with a service subscription, including channels requiring customer premises equipment: local broadcast TV (main, simulcast and multicast), public, educational and governmental, commercial leased access and other non-premium. A video-on-demand channel offering free content counts one channel. The number does not include premium, pay and pay-per-view unless viewable with the service at no additional charge. Nor does it include audio-only channels. All video services include premium, pay and pay-per-view.

Attachment 7
Historical Averages
1995-2013

Year	Basic Svc. Price	Expanded Basic Service					Next Most Popular Service and	CPI	
		Price	Channels		Price per Channel			All Items	Cable
			No.	Index	Dollars	Index			
Jul. 1995	---	$22.35	44.0	100.0	0.600	100.0	---	100.0	100.0
Jul. 1996	---	$24.28	47.0	106.8	0.610	101.7	---	103.0	106.9
Jul. 1997	---	$26.31	49.4	112.3	0.630	105.0	---	105.2	114.9
Jul. 1998	$12.06	$27.88	50.1	113.9	0.650	108.3	$38.58	107.0	122.6
Jul. 1999	$12.58	$28.94	51.1	116.1	0.650	108.3	$38.43	109.3	127.0
Jul. 2000	$12.84	$31.22	54.8	124.5	0.660	110.0	$39.64	113.3	132.9
Jul. 2001	$12.84	$33.75	59.4	135.0	0.600	100.0	$45.33	116.4	139.1
Jul. 2002	$14.45	$36.47	62.7	142.5	0.660	110.0	$46.59	118.1	147.8
Jan. 2003	$13.45	$38.95	67.5	153.4	0.650	108.3	$49.03	121.2	157.1
Jan. 2004	$13.80	$41.04	70.3	159.8	0.660	110.0	$51.76	123.5	163.1
Jan. 2005	$14.30	$43.04	70.5	160.2	0.620	103.3	$56.03	127.2	169.6
Jan. 2006	$14.59	$45.26	71.0	161.4	0.650	108.3	$59.09	132.2	174.4
Jan. 2007	$15.33	$47.27	72.6	165.0	0.670	111.7	$60.27	135.0	179.0
Jan. 2008	$16.11	$49.65	72.8	165.5	0.680	113.3	$63.66	140.8	183.9
Jan. 2009	$17.65	$52.37	78.2	177.7	0.710	118.3	$67.92	140.8	186.5
Jan. 2010	$17.93	$54.44	117.0	204.7	0.560	110.3	$71.39	144.5	191.9
Jan. 2011	$19.33	$57.46	124.2	217.3	0.569	112.0	$75.37	146.9	192.0
Jan. 2012	$20.55	$61.63	149.9	262.2	0.505	99.4	$78.91	151.2	199.8
Jan. 2013	22.63	$64.41	159.6	279.2	0.484	95.3	$81.64	153.6	206.5
1995-2013 Total and Compound Average Annual Rate of Change									
Total	---	188%	---	179%	---	-5%	---	54%	107%
Average	4.3%	6.1%	---	5.9%	---	-0.3%	5.1%	2.4%	4.1%

Sources: *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*, 612 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); 20 FCC Rcd 2718 (2005) (2003-04 survey); 21 FCC Rcd 15087 (2006) (2005 survey); 24 FCC Rcd 259 (2009) (2006-08 survey); 25 FCC Rcd 13350 (2010) (2009 survey); 27 FCC Rcd 2427 (2012) (2011 survey); 28 FCC Rcd **9857** (2012 survey); and 2013 survey. *Bureau of Labor Statistics, Department of Labor, Consumer Price Index, All Urban Consumers, U.S. City Average, Not Seasonally Adjusted,* Series CUUR0000SA0, All Items (1982 -84=100); Series CUUR0000SERA02, Cable and Satellite Television and Radio Service (Dec. 1983=100). http://data.bls.gov/cgi-bin/srgate. Accessed Sept.18, 2013. Rebased to Jul. 1995=100.

Notes: Table values are weighted averages of the sample groups, except for 1995-2000 prices and 2000-01 channels, which are noncompetitive group averages. (Composites were unreported). The 2012 averages are from the 2012 survey and may not match 2012 averages from the 2013 survey due to random sampling variance. A missing value indicates we did not survey the metric that year. The 1995 expanded basic price is programming and equipment less an estimate of the equipment portion. Before 2010, price of the next most popular service is the sum of expanded basic, a digital tier, and equipment. We began surveying a more expansive set of channels in 2010 and the indices combine the two series. The 2010 index change reflects 2009-2010 data from the 2010 survey for which the 2009 values (not displayed) are 101.6 channels and $0.601 per channel. *See* the Appendix, Section C.

Attachment 8
Historical Averages
by Sample Group
1995-2013

Year	Noncompetitive Group				Effective Competitive Group			
	Basic Service Price	Expanded Basic Service			Basic Service Price	Expanded Basic Service		
		Price	Channels	Channel Index		Price	Channels	Channel Index
1995	---	$22.35	44.0	100.0	---	$21.64	38.0	100.0
1996	---	$24.28	47.0	106.8	---	$23.32	39.6	104.2
1997	---	$26.31	49.4	112.3	---	$25.29	46.5	122.4
1998	$12.06	$27.88	50.1	113.9	$11.12	$26.12	54.0	142.1
1999	$12.58	$28.94	51.1	116.1	$12.03	$27.30	52.3	137.6
2000	$12.84	$31.22	54.8	124.5	$12.03	$29.44	59.9	157.6
2001	$12.87	$33.89	59.3	134.8	$12.43	$31.66	60.9	160.3
2002	$14.47	$36.61	62.7	142.5	$14.09	$34.34	62.9	165.5
2003	$13.38	$39.11	67.3	153.0	$14.25	$36.86	69.7	183.4
2004	$13.73	$41.29	70.1	159.3	$14.58	$38.17	72.5	190.8
2005	$14.25	$43.33	70.3	159.8	$14.80	$40.15	72.0	189.5
2006	$14.52	$45.48	70.6	160.5	$15.09	$43.70	74.0	194.7
2007	$15.10	$47.49	72.5	164.8	$16.37	$46.28	73.0	192.1
2008	$15.83	$49.97	72.8	165.5	$17.37	$48.19	73.0	192.1
2009	$17.88	$52.10	77.7	176.6	$17.16	$52.96	79.3	208.7
2010	$17.97	$54.27	111.6	200.5	$17.84	$54.77	127.8	246.5
2011	$19.46	$56.82	120.4	216.4	$19.13	$58.47	130.2	251.0
2012	$20.83	$60.99	146.1	262.6	$20.19	$62.49	154.8	298.4
2013	$22.63	$63.03	151.4	272.0	$22.65	$66.14	169.9	327.7
1995-2013 Total and Compound Average Annual Rate of Change								
Total	---	182%	---	172%	---	206%	---	228%
Annual	4.3%	5.9%	---	5.7%	4.9%	6.4%	---	6.8%

Sources and notes: *See* Attachment 7. We began surveying a more expansive set of channels beginning with the 2010 survey and the channel indices combine the two series. The 2010 index change reflects 2009-2010 data from the 2010 survey for which the 2009 values (not displayed in this table) are 98.3 and 108.2 channels respectively for the noncompetitive and effective competition groups.

Attachment 9
2013 Programming Service Comparisons
Between Cable and DBS Providers

Price, Channels and Price per Channel	Cable Average	DBS Provider Average	
	Expanded Basic Service	DIRECTV Choice	DISH America's Top 120 Plus
Programming price	$64.41	$63.99	$59.99 *
Observations	785	40	40
Standard error	0.238	0.000	0.000
t-value		-1.76	-18.55
p-value		0.079	>0.001
Number of channels	159.6	210.6 *	150.1 *
Observations	785	40	40
Standard error	28.018	1.355	1.375
t-value		25.83	-4.78
p-value		>0.001	>0.001
Price per channel	$0.484	$0.304 *	$0.401 *
Observations	785	40	40
Standard error	0.006	0.002	0.004
t-value		-27.31	-11.48
p-value		>0.001	>0.001

* The difference is statistically significant at the 95 percent confidence level between cable and the DBS average.

Source: 2013 survey. Cable prices and channel information from 2013 survey at Attachments 2, 4 and 6; DIRECTV prices from http://web.archive.org/web/20130117162439/http://www.directv.com/DTVAPP/new_customer/base_packages.jsp?footernavtype=-1 (Jan 17, 2013); Dish prices from *SNL Kagan, Multichannel Video Pricing Report,* End of 2012 (April 11, 2013); DIRECTV national channels from http://www.directv.com/DTVAPP/compare/ printable PackageChannels.jsp? packageId=960008&skuId=sku930008 (Jan. 16, 2013); DISH national channels from http://web.archive.org/liveweb/http://www.mydish.com/downloads/ChannelLineup/StandardHDChannelGuide.pdf?WT.svl=guide-area-img and http://web.archive.org/web/20130125103943/http:// www.dish.com/ entertainment/packages/americas-top-120-plus/ (Jan. 2013); Local broadcast channels and Regional Sport Networks for DIRECTV from http://www.directv.com/DTVAPP/compare/ printable PackageChannels.jsp?packageId=960008&skuId=sku930008 (May 2013) and for DISH from http://www.dish.com /entertainment/channels/local/?WT.svl=why (May 2013).

Methodology: In Attachment 9, cable price and channel data for expanded basic service are from the Survey. DBS sells service packages nationally at a uniform price for each package. We determined that DIRECTV Choice and DISH America's Top 120 Plus were the DBS packages most comparable to cable expanded basic service. The number of DBS channels delivered varies by Designated Market Area (DMA) depending on the number of local broadcast signals and regional sports networks (RSNs) provided. The DBS channels represent 40 communities chosen in a systematic random sample of the 800 cable communities in the survey. Using reports from DISH Network and DIRECTV, we determined each DMA's local broadcast channel count, including both standard and high definition channels. The RSN count is the average number of RSNs across the 40 communities, which is equal to 3.45 channels for DIRECTV and 1.98 channels for DISH. We added local broadcast channels and RSNs to each DBS national programming package to represent the total number of DBS channels offered in each community sampled. We did not include satellite radio networks in any of the channel tallies.

APPENDIX

Survey Methodology

A. Sampling Procedure

1. The 2013 survey was conducted pursuant to the requirements of the Cable Act.[1] Communities were selected nationwide at random to be part of the sample and were chosen from the Commission's list of cable operators and communities the operators serve.[2] For the purpose of choosing our sample, we divided the communities into two groups. Noncompetitive communities were those where the Commission had not made a finding of effective competition as of January 1, 2013. Effective competition communities were those where the Commission had made such a finding. Further, we subdivided the two groups into strata, and selected a sample of communities from each stratum. For each community selected, we asked the operator in that community to complete a survey questionnaire that included questions on the prices charged for video programming service offerings as well as other questions related to the operator's system. We used the information collected to estimate and compare mean prices, and other statistics, across the different strata of operators and communities. Attachment 1 provides additional information on the sample.

2. We divided the groups into strata to compare subgroups as well as to achieve desirable levels of statistical precision. Creating strata in which prices are less disparate than in the group overall tends to increase the efficiency of sampling by reducing sample price variance.[3] Because there is a correlation between price and the operator's system size, we stratified noncompetitive communities into five strata by system size – very large, large, medium, small, and very small systems – depending on the number of subscribers the system serves. We stratified the effective competition cable operators and communities into four strata on the basis for which the Commission had made a finding of effective competition. The first stratum consisted of incumbent cable operators in communities with a second rival operator. The second stratum consisted of the rival operators. Cable operators in the incumbent stratum have sometimes cited municipals as rivals. Municipals that are cited as such are included in the rival subgroup and a number are included in our survey. The other municipal cable operators are included in the groups of operators without an effective competition finding and some of these operators are also included in our sample. The third stratum consisted of communities where the finding of effective competition was based on the level of DBS subscribers in that community. The fourth stratum consisted of communities within range of a wireless MVPD or who met the cable low penetration test as a result of serving fewer than 30 percent of households in that community.[4] The survey collected prices charged by wireline operators. The survey did not collect prices charged by DBS and wireless MVPD operators.[5]

3. We determined the number of observations to select for statistical precision to be 800

[1] *See* note 1, Section I, *supra*.

[2] The Commission assigns a community unit identifier (CUID) code to each registered cable operator for each community that operator serves. *See* 47 C.F.R. § 76.1801. If two cable operators serve the same community, the Commission assigns two CUIDs. A current list is downloadable from the Commission's website. *See* FCC Media Bureau, *All Cable Communities registered with the FCC,* <www.fcc.gov/mb>.

[3] *See e.g.,* W. G. Cochran, *Sampling Techniques,* 2nd ed. (1977) at 87-107.

[4] Low market penetration may have resulted from the presence of a second operator in the community. However, we did not include the second operators in this low penetration stratum, because the finding of effective competition was not made on that basis.

[5] This is because there are no CUID codes associated with DBS or wireless operators. For the same reason, AT&T U-verse service was not surveyed.

communities. These 800 selections were divided between the two sampling groups. To determine the number to allocate in each group, we used a sampling size formula calibrated to yield sample price means within one percent of actual price means at a 95 percent confidence level.[6] We then allocated the number of selections in each group among the group's strata. Allocation methods generally emphasize two criteria; selections allocated to a stratum increase relative to other strata in proportion to population size and price variance. Thus, for each stratum, we multiplied its share of the group's cable subscribers by the standard deviation of price.[7] A higher measure relative to the other strata resulted in a relatively higher allocation. Further, we adjusted each allocation by a non-response factor.[8] After completing this process, 42 of the 800 overall selections remained to be allocated. We assigned these 42 observations among the incumbent and rival subgroups since these strata were of particular interest to the survey, yet had been allocated relatively few selections. Attachment 1 reports the sample sizes for all strata.

4. After determining the number of sample selections using the process described above, we drew independent samples of communities from the strata,[9] using probability proportional to size (PPS) sampling without replacement.[10] A PPS design is efficient for our survey because the relative size of a community in terms of the number of subscribers is correlated with our primary survey study variable (price).[11] Using the PPS method of sampling, we assigned a selection probability to each community in direct proportion to the relative number of subscribers. In a group and stratum, the higher the level of subscribers relative to other communities in the strata, the higher the likelihood was of selection. PPS sampling requires sampling selection probability not to exceed one (or 100 percent). Therefore, we sub-stratified communities whose probability exceeded one into one-unit strata with probability equal to one.[12]

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[6] *See* B. J. Mandel, S*tatistics for Management* (1984) at 258. *See also, e.g.,* C. A. Boneau, *Effects of Violations of Assumptions Underlying the t test,* Psychological Bulletin, 57 (1960) at 49-54.

[7] *See* G. W. Snedecor and W. G. Cochran*, Statistical Methods,* 7th ed. (1980) at 458-59. The allocation formula equals $N_hS_h / \Sigma N_hS_h$, where in stratum *h*, N is the number of cable subscribers on January 1, 2010 and S is the finite population adjusted standard deviation of price in the 2009 survey. (Snedecor and Cochran).

[8] Because previous surveys suggest not all selections will respond to the survey questionnaire for various reasons -- *e.g.,* the system no longer operates -- the non-response factor adjusts selections by the expected number of non-responses. Our non-response factor equals $[1+ [NR_h / (NR_h + R_h)]]$, where in stratum *h*, NR equals the number of non-responses and R equals responses to our 2009 survey.

[9] To prevent sampling bias, the samples are drawn independently, including incumbents and rivals in locations with a second cable operator; *i.e.,* selection of an incumbent did not necessarily require that the rival would be selected and *vice versa*.

[10] This sample was generated using the SurveySelect Procedure, PPS Method without Replacement, SAS software, Version SAS/STAT 9.2, SAS Institute Inc., Cary, NC (2010).

[11] *See, e.g.,* F. Yates and P. M. Grundy*, "*Selection without Replacement from Within Strata with Probability Proportional to Size," *Journal of the Royal Statistical Society,* 15 (1953) at 253-261; and B. K. Som, Practical Sampling Techniques, 2nd ed. (1996).

[12] We applied the following algorithm to identify, remove, and sub-stratify community units whose selection probability exceeded one in a stratum, where Z = number of subscribers in the stratum, $z_{,i}$ = subscribers in community unit i, n = sample size, $\pi_i = n (z_i /Z)$ = selection probability of unit i, k = number of units for which P_i is greater than one: (a) Sub-stratify the unit with the highest $P_{h,i}$ which exceeds one; (b) reduce sample size to n_h minus one; (c) reduce, k_h by one; (d) recalculate $P_{h,i}$ for the remaining units; and (e) repeat steps a-d until k_h=0. An alternative would be to set maximum $P_{h,i}$=1 and not sub-stratify; however, to a degree, $P_{h,i}$ would no longer be proportionate to subscribers. We note that one of these substrata in the Incumbent subgroup was later reassigned to the Large subgroup, after the Commission granted a petition from the local franchise authority to re-regulate the basic service rates of the incumbent cable operator. *See Petition of the City of Boston, Massachusetts, For Recertification to Regulate the Basic Cable Service Rates of Comcast Cable Communications, LLC (CUID MA0182)*, 27 FCC Rcd 3763 (2012).

The PPS sample design requires an estimate of the relative number of subscribers in each community. We estimated the relative sizes using the FCC's 1994 census of communities, the most recent census of subscribers at the community level. If the service areas of two communities merged subsequent to the census, we merged the subscriber counts accordingly. For the newly registered communities, not part of the census, we estimated the subscriber counts to be equal to the mean number of subscribers for the municipality types*, i.e.,* an incorporated city, private settlement, *etc*.

B. Data Quality Control

5. To improve the quality of the survey data and reduce the burden on operators, the survey questionnaire is web-based.[13] After the samples were drawn, operators serving the communities selected were notified and instructed on how to complete the survey questionnaire on the Commission's website. Steps were taken to ensure the reliability and accuracy of the data collection. Computer programming checks notified respondents in real time of inconsistent answers. In addition, we asked a responsible party within each company (other than the person who completed the survey) to certify the completeness and accuracy of the company's responses. The survey response rate (the ratio of completed to requested questionnaires) equaled 98 percent (or 785 of 800 communities in the sample). The 15 non-responses were comprised of nine small and very small systems below 1,000 subscribers that were no longer in business and did not file and six other systems that filed however had either ceased or had yet to begin operations at the time of the survey and did not provide usable data.

6. We systematically examined all questionnaires submitted using a computer program designed to identify answers which appeared to be inaccurate. When a particular response fell outside of its expected reasonable range or was inconsistent with the answers to other questions in the survey, the computer program automatically flagged that response and we contacted the operator and asked that operator to re-check and verify the flagged answer, or make a correction if needed. In all cases, the operators we contacted cooperated with these requests and, where necessary, submitted revised data. About 15 percent the operators in the sample were asked to review at least one answer. Each of these operators replied with either a data correction or reasonable explanation as to why a particular response was plausible. In the case of missing data, some operators provided these data and others explained that the operating company did not collect the particular information.

C. Estimation of Means

7. After the responses were collected and checked, estimates of the population means and variances were calculated from the samples based on the response to each survey question. We estimated the means and variances on a basic subscriber basis rather than a cable community basis. We choose this level of analysis because we are interested in understanding the price paid by the average subscriber rather than the price charged in the average community. These two methods of analysis yield different results when the number of subscribers in a community is correlated with the response. To estimate the per-subscriber means and variances of those means, we use the Horvitz-Thompson ratio estimator.[14] This estimator is a well-known, unbiased method of estimation applicable to probability sampling designs. The Horvitz-Thompson estimator estimates the ratio of two totals.[15] By appropriately selecting those

[13] Our web-based questionnaire includes several features which ease the respondent's filing burden. For example, the questionnaire pre-fills some survey questions based on information already on file with the Commission, and asks the respondent to verify the information.

[14] We began using the Horvitz-Thompson ratio estimator with the 2009 report. Prior to the 2009 report, we applied the unweighted mean in each stratum.

[15] *See, e.g.,* D. G. Horvitz and D. J. Thompson, "A Generalization of Sampling without Replacement from a Finite Universe," *Journal of the American Statistical Association,* 47 (1952) at 663-685; W. S. Overton and S. V. Stehman, (Continued….)

totals we are able to weight the response from each cable community by the number of subscribers and estimate the per-subscriber mean of the responses. The numerator of our ratio estimator is the estimate of the industry total of the value of the response of the cable community multiplied by the number of basic subscribers in the community. The denominator is the estimate of the industry total of basic subscribers. For example, in estimating the mean basic price the numerator is the estimate of the industry total of the basic price in the community multiplied by the number of basic subscribers in the community. This resulting total is an estimate of total revenues from the purchase of basic service. The denominator is simply the estimate of the total basic subscribers. The resulting product is an estimate of basic service revenue per subscriber. Formally, the estimator of the per basic subscriber mean of variable X is

$$\frac{\sum_{i=1}^{N} \frac{1}{\pi_i} X_i \cdot Sub_i}{\sum_{1=1}^{N} \frac{1}{\pi_i} Sub_i}$$

where X_i is the response from cable community i, Sub_i is the number of basic subscribers in community i, and π_i is the probability of community i being selected into the sample.[16]

8. For expanded basic service, we report the overall mean as reported in previous survey reports, and we also report time-series indices of the cumulative percent change in price, number of channels, and price per channel. There are two data series each for channels and price per channel. The 2010 price survey collected data on a more expansive set of cable channels for 2009 and 2010. As shown in Attachments 4 and 5, both the 2009 and 2010 value for Series 2 are from the 2010 survey and the 2010 index value reflects the 2009 to 2010 change in Series 2. The data in series 1 is from prior surveys and forms the basis of the 1995-2009 index values. The index, in effect, links the percent changes of the two series by re-basing the newer series (Series 2) which began in 2010 to index base year 1995. For variable X, the index value (I) of mean ($\bar{x}$) in time series (s) in year (t) is

$$I_t = I_{t-1}(\bar{x}_{s,t} / \bar{x}_{s,t-1})$$

where I_t =100 in base year 1995 and the time series (s) is 1 (s=1) if t<2010, and s=2 if t>=2010. The mean price per channel of expanded basic service in a community (i) is

$$x_t = ((P_{i,t} + E_{i,t}) / C_{i,t})$$

where $P_{i,t}$ is programming price, $E_{i,t}$ is equipment price, and $C_{i,t}$ is the number of channels. Equipment refers to the most commonly leased set-top converter or other digital gateway leased with expanded basic service. The equipment price is zero if equipment is pre-bundled into the programming price or if it is unnecessary to view any of the expanded basic channels.

D. Survey Accuracy

9. Because our survey is based on a sample of communities rather than a 100 percent census, the price averages in this report are subject to sampling variance. Expanding the survey to include all communities might increase accuracy, but would also increase the burden of collecting the information. Our sample results are likely to be different from results that would be obtained if we were

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"The Horvitz-Thompson Theorem as a Unifying Perspective for Probability Sampling: With Examples from Natural Resource Sampling," *The American Statistician,* 49(3) (1995); and Cochran (1977) at 259.

[16] We conducted the data analysis using SAS Software, Version 9.3, SAS Institute Inc.; and SAS Macro SMSUB, Version 3.1. HTTP://support.sas.com/kb/25/addl/fusion_25033_1_. smsub.sas.txt (Accessed Oct. 31, 2012).

able to collect prices from all communities nationwide. The attachments report estimates of sampling variance or statistical "standard error" for each price mean. Standard errors can be used to express the degree of confidence that the true mean falls within a range around a sample mean. This is usually expressed as assurance that in 95 out of 100 similar samples, the true mean will fall within the stated range (the "95 percent confidence interval").[17] Standard errors can also identify whether or not price differences are statistically significant at a 95-percent confidence level. The discussion above refers to within-sample variance. To prevent random variance which may occur across samples when measuring annual percentage change, the survey collected two years of data rather than comparing estimates over two different surveys. The exception is the historical time series table, which reports means from each survey year.

10. In addition to the sampling variance discussed above, changes in the composition of sample subgroups affect means.[18] The composition of communities making up the subgroups changes from year to year as a result of operators starting, ceasing, merging, or transferring operations. Further, the composition changes as a result of findings of effective competition and, therefore, migration of operators in the communities from the noncompetitive group to one of the effective competition subgroups.

[17] This "95 percent confidence interval" is a range surrounding the sample average plus or minus 1.96 multiplied by the standard error.

[18] *See, e.g.,* D. Holt and C. J. Skinner, *Components of Change in Repeated Surveys,* International Statistical Review, 57 (1989) at 1-18.