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

In the Matter of	)	
	)	
Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming	))	MB Docket No. 12-203

FIFTEENTH REPORT

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By the Commission: Acting Chairwoman Clyburn and Commissioners Rosenworcel and Pai issuing separate statements.

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I. EXECUTIVE SUMMARY

1. This is the fifteenth report ("15th Report" or "Report") of the Federal Communications Commission to the United States Congress on the status of competition in the market for the delivery of video programming as required by Section 628(g) of the Communications Act of 1934, as amended (the "Act").[1] In this Report, we focus on developments in the video marketplace in 2011 and 2012. As described below, the most significant trends since the last report include the continuing development, and consumer usage, of time and location shifted viewing of video programming, the expansion of digital and high definition programming, and the progress of the online video industry.

2. Herein, we categorize entities into one of three strategic groups – multichannel video programming distributors ("MVPDs"),[2] broadcast television stations,[3] and online video distributors

[1] 47 U.S.C. § 548(g).

[2] For purposes of this Report, MVPDs are companies that offer multiple channels of video programming to consumers for a subscription fee. The term "MVPD" is defined more fully below in Sec. III.A.1.

[3] We consider broadcast television stations separately for the 15th Report, as we have done in previous reports. Although broadcasters have transitioned to digital transmission and have the capability to offer additional linear channels, they still offer far fewer programs than are available from MVPDs and do not provide a subscription service. The Commission has previously held that broadcast television alone is not sufficiently substitutable with the services provided by MVPDs to constrain attempted MVPD price increases, and hence declined to broaden the MVPD product market. Accordingly, we treat broadcasters as part of a separate group. *See* 47 U.S.C. § 521(1); S. REP. NO. 102-92, at 8-12 (1991). *See also General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee for Authority to Transfer Control*, MB Docket No. 03-124, Memorandum Opinion and Order, 19 FCC Rcd 473, 509, ¶ 75 (2004) (citing *Competition, Rate Deregulation, and the Commission's Policies Relating to the Provision of Cable Television Services*, MM Docket No. 89-600, Report, 5 FCC Rcd 4962, 5003, ¶ 69 (1990)); *Application of EchoStar Communications Corporation, General Motors Corporation, and Hughes Electronics Corporation (Transferors) and EchoStar Communications Corporation (Transferee)*, CS Docket No. 01-348, Hearing Designation Order, 17 FCC Rcd 20559, 20607-09, ¶¶ 109-115 (2002) ("*EchoStar-DIRECTV HDO*").

("OVDs").[4] For each of these categories we examine industry structure, conduct, and performance.[5] The following is an overview of our findings.

3. *MVPDs.* Between year-end 2010 and June 2012, the number of subscribers to MVPD service grew from 100.8 million to 101.0 million households. Over that period, however, cable MVPDs lost market share, falling from 59.3 percent of all MVPD video subscribers at the end of 2010 to 57.4 percent at the end of 2011, and 55.7 percent at the end of June 2012. During this period, DBS MVPDs and telephone MVPDs gained both video subscribers and market share. DBS MVPDs had 33.4 million video subscribers, accounting for 33.1 percent of all MVPD subscribers in 2010, increasing to 33.9 million, representing 33.6 percent in 2011, and 34 million, representing an estimated 33.6 percent at the end of June 2012. Telephone MVPDs had approximately 6.9 million video subscribers, representing 6.9 percent of all MVPD subscribers in 2010, increasing to 8.5 million, representing for 8.4 percent in 2011. At the end of June 2012, AT&T's U-verse and Verizon's FiOS services combined had 8.6 million video subscribers.[6]

4. MVPDs continue to expand their "TV Everywhere" offerings, which allow subscribers of certain MVPD services to access video programming on stationary and mobile Internet-connected devices including televisions, computers, tablets and smartphones.[7] Consumer usage of TV Everywhere continues to increase. SNL Kagan estimates that 5.1 percent of MVPD subscribers qualifying for TV Everywhere access viewed programming through this service in September 2012.

5. In addition, to free up bandwidth for additional services (*e.g.*, more digital channels, more HD channels, more video-on-demand ("VOD") programming, and faster Internet speeds), some cable MVPDs are transitioning analog channels to all digital. At the end of 2012, the all-digital transition had reached slightly more than half of the collective footprints of the top eight cable MVPDs. Cable operators are also deploying switched digital video ("SDV"), freeing up bandwidth by transmitting only the digital

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[4] An "OVD" is any entity that offers video content by means of the Internet or other Internet Protocol (IP)-based transmission path provided by a person or entity other than the OVD. An OVD does not include an MVPD inside its MVPD footprint or an MVPD to the extent it is offering online video content as a component of an MVPD subscription to customers whose homes are inside its MVPD footprint. *See Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licensees*, MB Docket No. 10-56, Memorandum Opinion and Order, 26 FCC Rcd 4238, 4357, App. A (2011) ("*Comcast-NBCU Order*"). Consumers need a broadband connection to receive video content from OVDs. The issue of whether a certain type of OVD also qualifies as an MVPD under the Act and our regulations has been raised in pending program access complaint proceedings. *See, e.g., VDC Corp. v. Turner Network Sales, Inc., et al.*, Program Access Complaint (Jan. 18, 2007); and *Sky Angel U.S., LLC v. Discovery Communications LLC, et al.*, Program Access Complaint, MB Docket No. 12-80, CSR-8605-P (Mar. 24, 2010). Nothing in this Report should be read to state or imply our determination on that issue. The Media Bureau though is currently seeking comment on the interpretation of the terms "MVPD" and "channel." *See Media Bureau Seeks Comment On Interpretation of the Terms "Multichannel Video Programming Distributor" and "Channel" as Raised in Pending Program Access Complaint Proceeding*, MB Docket No. 12-83, Public Notice, 27 FCC Rcd 3079 (MB 2012).

[5] We present information and data using the same analytical framework that was used for the Fourteenth Report ("*14th Report*"). *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 07-269, Fourteenth Report, 27 FCC Rcd 8610 (2012).

[6] We do not have reliable June 2012 data for the number of video subscribers for the remaining telephone MVPDs. However, NCTA estimated that telephone MVPDs accounted for 9.1 percent of MVPD subscribers at the end of June 2012.

[7] "TV Everywhere" refers to an MVPD initiative, which allows subscribers of certain services to access video programming on a variety of fixed and mobile Internet-connected devices. MVPDs market their TV Everywhere initiatives under various brand names (*e.g.*, Verizon's FlexView). *See infra*, n. 22 & ¶ 102.

channels that are actually being watched within a given group of homes at any given time, rather than all digital channels to all subscribers all the time. At the end of 2012, SDV served approximately 43 percent of digital cable subscribers of the top eight cable MVPDs.

6. *Broadcast Television Stations.* Since the last report, full-power television stations have continued to take advantage of digital broadcasting technology to offer improved service to the public. In addition to high definition ("HD") content, broadcasters are using multicasting to bring more programming to consumers by expanding the availability of established networks and adding new startup digital networks (including networks targeting minorities and programming targeting niche audiences) and Spanish language offerings. As of the end of 2011, 1,501 (82.2 percent) of full-power stations were broadcasting in HD, up from 1,036 stations in 2010.

7. Patterns of consumer behavior noted in the last report, including increases in the number of households with HD television sets, penetration of digital video recorders (DVRs), and increased availability of broadband and mobile devices, have continued. As of 2012, 85.3 million U.S. television households, or 74.4 percent of such households, have sets capable of displaying and/or receiving digital signals, including HD television signals, up from 75.5 million, or 65.1 percent of television households, in 2011. In 2012, 50.3 million television households had DVRs, representing 43.8 percent of all such households, an increase from the 46.3 million households, or 40.4 percent of all television households, reported in 2011. In addition, broadcasters are using a variety of mechanisms to respond to consumers' desire to watch video on a time-shifted basis either on television sets or on other screens, including mobile DTV, VOD, and online video distribution.

8. Since the last report, the number of households relying exclusively on over-the-air broadcast service has remained steady at approximately 11.1 million households, although the percentage of all households they represent increased slightly from 9.6 percent in 2011 to 9.7 percent in 2012. Broadcast station revenues appear to have rebounded somewhat in 2012, in part due to increased political advertising, following a decline in 2011, with broadcasters relying chiefly on advertising sales, and, increasingly, retransmission consent fees from MVPDs. Industry revenues fell to $21.31 billion in 2011 from the $22.22 billion in 2010, but were projected to rise to $24.70 billion in 2012.

9. *OVDs.* While the OVD industry is still evolving, a few trends emerged during the period covered by this Report. OVDs continue to expand the amount of video content available to consumers through original programming and new licensing agreements with traditional content creators. A few MVPDs now offer OVD services to non-subscribers. Some OVDs have invested in their own servers, content delivery networks, and other infrastructure to facilitate the delivery of video programming. Several technology companies, notably Amazon, Apple, Google, and Microsoft, are delivering end-to-end solutions of Internet infrastructure, software, devices, and video programming.

10. Viewing of OVDs' video programming on television sets is becoming increasingly prevalent. SNL Kagan estimated that there were 26.6 million Internet-connected television households (*i.e.*, accessed via an Internet-enabled game console, OVD set-top box, television set, or Blu-ray player), representing 22.8 percent of all television households, at the end of 2011, and estimated that by the end of 2012, the number would grow to 41.6 million, or 35.4 percent of television households.

11. OVDs account for an increasing portion of Internet traffic during peak hours. During the first half of 2012, most major cable multiple system operators ("MSOs") formalized bandwidth caps or usage-based/metered pricing. Several telephone company MVPDs also are implementing bandwidth caps and usage fees.

II. INTRODUCTION

A. Scope of the Report

12. Section 19 of the Cable Television Consumer Protection and Competition Act of 1992 ("1992 Cable Act")[8] amended the Communications Act and established regulations for the purpose of increasing competition and diversity in multichannel video programming distribution, increasing the availability of satellite delivered programming, and spurring the development of communications technologies.[9] To measure progress toward these goals, Congress required the Commission to report annually on "the status of competition in the market for the delivery of video programming."[10]

13. The framework of this Report allows the Commission to present information concerning competition in the video programming market in a uniform manner and consistent with the structure of recent wireless and satellite competition reports.[11]

B. Analytic Framework

14. We first categorize entities that deliver video programming into one of three strategic groups:[12] MVPDs, broadcast television stations, and OVDs. Second, we examine industry structure, conduct, and performance, considering factors such as:

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[8] 1992 Cable Act, Pub. L. No. 102-385, § 19, 106 Stat 1460, 1494 (1992) ("The purpose of this section is to promote the public interest, convenience, and necessity by increasing competition and diversity in the multichannel video programming market, to increase the availability of satellite cable programming and satellite broadcast programming to persons in rural and other areas not currently able to receive such programming, and to spur the development of communications technologies.").

[9] Video programming is defined as: "Programming provided by, or generally considered comparable to programming provided by, a television broadcast station that is distributed and is exhibited for residential use." 47 U.S.C. § 522(20); 47 C.F.R. § 79.1(a)(1).

[10] *See* Section 628(g) of the Communications Act of 1934, as amended, 47 U.S.C. § 548(g). The Commission's previous reports appear at: *Implementation of Section 19 of the 1992 Cable Act and Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming,* 9 FCC Rcd 7442 (1994) ("*First Report*"); 11 FCC Rcd 2060 (1995) ("*Second Report*"); 12 FCC Rcd 4358 (1997) ("*Third Report*"); 13 FCC Rcd 1034 (1998) ("*Fourth Report*"); 13 FCC Rcd 24284 (1998) ("*Fifth Report*"); 15 FCC Rcd 978 (2000) ("*Sixth Report*"); 16 FCC Rcd 6005 (2001) ("*Seventh Report*"); 17 FCC Rcd 1244 (2002) ("*Eighth Report*"); 17 FCC Rcd 26901 (2002) ("*Ninth Report*"); 19 FCC Rcd 1606 (2004) ("*Tenth Report*"); 20 FCC Rcd 2755 (2005) ("*11th Report*"); 21 FCC Rcd 2503 (2006) ("*12th Report*"); 24 FCC Rcd 542 (2009) ("*13th Report*"); 27 FCC Rcd 8610 (2012) ("*14th Report*").

[11] *See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 and Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 09-66, Fourteenth Report, 25 FCC Rcd 11407 (2010) ("*14th Mobile Wireless Report*"); *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 and Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 10-133, Fifteenth Report, 26 FCC Rcd 9664 (2011) ("*15th Mobile Wireless Report*"); *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 and Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 11-186, Sixteen Report, 28 FCC Rcd 3700 (2013) ("*16th Mobile Wireless Report*"); *Third Report and Analysis of Competitive Market Conditions with Respect to Domestic and International Satellite Communications Services, Report and Analysis of Competitive Market Conditions with Respect to Domestic and International Satellite Communications Services*, IB Docket Nos. 09-16 and 10-99, 26 FCC Rcd 17284 (2011) ("*Third Satellite Competition Report*").

[12] We assign entities that deliver video content to one of three groups based on the "strategic group" concept used in strategic management that groups companies within an industry that have similar business models or similar combinations of strategies. *See* Michael E. Porter, COMPETITIVE STRATEGY: TECHNIQUES FOR ANALYZING (continued….)

- *Structure*: The number and size of firms in each group, horizontal and vertical integration, merger and acquisition activity, and conditions affecting entry and the ability to compete.
- *Conduct*: The business models and competitive strategies used by firms that directly compete as video programming distributors, including product differentiation, advertising and marketing, and pricing.
- *Performance*: The improvements in the quantity, quality, and delivery methods of programming to subscribers, subscriber and penetration rates, financial indicators (*e.g.*, revenue and profitability), and investment and innovation activities.

Third, we look upstream and downstream to examine the influence of industry inputs and consumer behavior on the delivery of video programming. In particular, we discuss two key industry inputs: video content creators and aggregators and consumer premises equipment.[13] We also compare video programming competition in rural and urban areas for each of the three strategic groups.

C. Data Sources

15. The information and data presented in this Report are based, in part, on comments we received from interested parties in response to the notice of inquiry in this proceeding.[14] In addition, we also rely on a variety of publicly available sources of industry information and data including: Securities and Exchange Commission filings; data from trade association and government entities; data from securities analysts and other research companies and consultants; company news releases and websites; newspaper and periodical articles; scholarly publications; vendor product releases; white papers; and various public Commission filings, decisions, reports, and data.

16. As we have done for previous video competition reports, we requested data as of June 30 in order to monitor trends on an annual basis.[15] Therefore, to the extent possible, we report information and data as of June 30, 2011, and June 30, 2012. Because a significant amount of data is reported on a calendar year basis though, we provide year-end data when June 30 information is not readily available. In addition, to the extent we find more recent Commission decisions and industry developments relevant, we include this information.

(Continued from previous page)
INDUSTRIES AND COMPETITORS 129-155 (Free Press) (1980) ("Porter"). The three groups also may be said to represent the historical development of delivered video where consumers initially had access to over-the-air broadcast television, then a growing number of MVPDs, and most recently the Internet. Our placement of delivered video providers into one of three groups is an organizational convenience to facilitate discussion. In addition, we recognize that the structure-conduct-performance paradigm implies a one-way chain of causation when in reality there may be interrelationships among these factors (*e.g.*, conduct sometimes influences structure).

[13] As described more fully below in Section V.A., content creators are firms that produce video programming and content aggregators are entities that assemble packages of video programming for distribution.

[14] *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 12-203, Notice of Inquiry, 27 FCC Rcd 8581 (2012) ("*Notice*"). Appendix A contains a list of commenters.

[15] *See Notice*, 27 FCC Rcd at 8585-86, ¶ 10.

III. PROVIDERS OF DELIVERED VIDEO PROGRAMMING

A. Multichannel Video Programming Distributors

1. Introduction

17. As discussed above, for purposes of this Report we have categorized entities that deliver video programming into one of three groups.[16] We focus in this section on the MVPD group. As defined by statute, an MVPD is an entity that makes available for purchase multiple channels of video programming.[17] Thus, the MVPD group includes cable operators,[18] DBS operators, and telephone companies that offer multiple channels of video programming. For purposes of this Report, we also include in the MVPD group other entities that sell multiple channels of video programming to consumers, including home satellite dish service providers ("HSD"), open video systems ("OVS"), electric and gas utilities, wireless cable systems,[19] private cable operators ("PCO"),[20] commercial mobile radio services ("CMRS"), and other wireless providers. Inclusion of an entity in the MVPD group is based on the similarity of the video service provided to the consumer, not on the technology used (*e.g.*, coaxial cable, fiber, spectrum) or the identity of the parent company (*e.g.*, cable operator, telephone company), or any regulatory classification (*e.g.*, cable service, open video system). In most cases, the entities we include in the MVPD group represent themselves publicly, in reports to their shareholders and press releases to the news media, as retailers of video packages that include a large number of channels. At the end of June 2012, the MVPD group was primarily comprised of 38 cable MVPDs with over 20,000 basic video subscribers each and over 1,000 cable MVPDs with less than 20,000 basic video subscribers each, two DBS MVPDs (DIRECTV and DISH Network), two large telephone company MVPDs (AT&T and Verizon) and numerous smaller telephone company MVPDs.[21]

18. In this Report, we discuss a broad range of video programming services offered by MVPDs. Today, the major MVPDs offer hundreds of linear television channels, which are streams of programming that offer video programs on a specific channel at a specific time of day. Many MVPDs also offer thousands of non-linear VOD programs, including pay-per-view ("PPV") programs, which allow consumers to select and watch video programs whenever they request them. Although MVPDs have traditionally delivered video programming to television sets, some MVPDs are moving beyond the television and delivering video programming to computer screens, tablets, and smartphones. The expansion of MVPD's delivered video programming from television to other stationary and mobile

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[16] *See supra*, ¶ 2 & n. 4.

[17] Specifically, Section 602(13) of the Act defines MVPD as "a person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming." 47 U.S.C § 522(13). This Report does not address the extent to which wireless providers of video programming other than direct broadcast satellite service ("DBS"), wireless cable system operators, home satellite dishes, and private cable operators should be classified as MVPDs under the Act. As previously noted, the Media Bureau is currently seeking comment on the interpretation of the terms "MVPD" and "channel." *See supra*, n. 4.

[18] Large and medium-size cable companies that serve many homes in multiple geographic areas by operating multiple cable systems are often referred to as multiple system operators ("MSOs").

[19] Wireless cable systems use the Broadband Radio Service ("BRS") and Educational Broadband Service ("EBS") to transmit video programming to subscribers.

[20] Private cable operators were formerly known as satellite master antenna ("SMATV") systems. PCOs use a satellite master antenna to distribute video programming throughout a property (*e.g.*, an apartment building, hotel, hospital, or commercial property with multiple tenants) from a single satellite feed.

[21] SNL Kagan, http://www.snl.com/interactivex/TopCableMSOs.aspx (visited Sept. 19, 2012).

devices – generally known as TV Everywhere[22] – represents a new opportunity for MVPDs that may affect their business models and competitive strategies.[23]

19. MVPDs typically offer services other than delivered video services using the same network infrastructure or through cooperative arrangements with other companies, such as high-speed Internet access service and telephone service. Although the focus of this Report is delivered video services, these non-video services are important to the business strategies of some MVPDs and may shift the focus of competition from standalone delivered video services to bundles of video, Internet access, and telephone services.

20. When available, this Report uses information and data provided directly by the cable, DBS, and telephone MVPDs as reported to the Commission and/or a company's shareholders. For privately held companies we primarily rely on data from SNL Kagan.[24] On the other hand, with respect to some other types of MVPDs, including HSD, OVS, and PCO, there is little or no publicly or commercially available data. Comments filed for this Report provide limited data on those entities. Considering that the combined market share of these other types of MVPDs represents less than one percent of MVPD subscribers, their relevance to competition in the market for the delivery of video programming is limited.[25] Thus, we do not believe that a lack of data regarding these types of MVPDs will significantly hinder our analysis of competition in the market for delivered video services.

2. MVPD Structure

21. We begin our analysis of video competition with an examination of the MVPD industry structure. In this section of the Report, we describe the structure of companies offering video service via cable, DBS, telephone, and other means that comprise the MVPD group. We then examine horizontal concentration and vertical integration in the market. Next, we describe conditions affecting market entry during the relevant period, including an overview of existing regulations and market conditions that might influence entry decisions. Finally, we describe recent entry and exit in the market.

a. Cable, DBS, Telephone, and Other Providers

22. The major MVPDs now offer hundreds of television channels as well as thousands of video programs through VOD services. Many of these channels and programs are offered in HD. The major MVPDs offer delivered video programming as a standalone service or in combination with Internet access and telephone services. Cable MVPDs typically offer video, Internet access, and telephone

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[22] *See supra*, n. 7. TV Everywhere is an authentication system whereby certain movies and television shows are accessible online via a variety of display devices including personal computer, mobile, and television – but only if you can prove (or "authenticate") that you have a subscription to an MVPD. *See* definition of TV Everywhere, The Interactive TV Institute, http://www.itvdictionary.com/definitions/tv_everywhere_initiative_definition.html (visited Jan. 31, 2013).

[23] Different MVPDs use different terms to market video services to other stationary and mobile devices. In this Report, we use the term "TV Everywhere" as a generic term for these video services.

[24] The following companies were privately held cable MVPDs at the end of June 2012: Cox Communications Inc., Bright House Networks, LLC, Cequel Communications Holdings I, LLC d/b/a Suddenlink Communications ("Suddenlink"), Mediacom Communications Corp., and Wide Open West Networks, LLC d/b/a WOW!. At the end of June 2012, these companies represented five of the ten largest cable MVPDs. SNL Kagan, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2011Q2&sortcol=subscribersbasic&sortorder=desc (visited Sept. 19, 2012). Mediacom Communications became a privately held company on March 4, 2011. Media Communications Corp., *Mediacom Communications and Rocco B. Commisso Complete Going-Private Transaction* (press release), March 4, 2011.

[25] *See* SNL Kagan, *Cable TV Investor: Deals & Finance*, Sept. 30, 2011, at 2-3.

services using their own facilities. DBS MVPDs offer video services using their own facilities and typically enter into cooperative arrangements with other entities to offer Internet access and telephone services.[26] Telephone MVPDs offer video, Internet access, and telephone services using their own facilities where they have upgraded systems. Where they have not upgraded systems, telephone MVPDs usually offer video through cooperative arrangements with DBS MVPDs.

23. *Cable MVPDs.* Historically, cable companies rarely competed with one another in the same geographic area. In some locations, cable operators built cable systems where cable MVPDs had already provided video service, but this was the exception, not the rule.[27] The introduction of DBS MVPDs with national footprints in the 1990s changed the competitive landscape and increased competition in the market for the delivery of video programming. In geographic areas that did not have access to cable MVPDs, the DBS companies competed with one another. In geographic areas with access to cable MVPDs, the DBS companies competed with one another and with the incumbent cable MVPDs. The level of competition increased again with the entry of Verizon in 2005 and AT&T in 2006, two large facilities-based telephone MVPDs that began offering video service in geographic areas already served by incumbent cable MVPDs.[28] Today, a small number of geographic areas have as many as five MVPDs (*i.e.*, two cable MVPDs, two DBS MVPDs, and a telephone MVPD) directly competing with one another in the delivery of video programming. At the other end of the spectrum, some geographic areas (*e.g.*, rural areas) have only two MVPDs (*i.e.*, the two DBS MVPDs) directly competing with one another.

24. According to the NCTA, there were 1,141 cable companies at the end of June 2012.[29] Depending upon the number of homes and the size of the geographic area served, cable operators use one or more cable systems to provide video service. A cable system is a physical system integrated to a principal headend. Currently there are 5,127 cable systems.[30] Large cable MVPDs that serve millions of

[26] For example, DIRECTV has cooperative arrangements with Verizon, AT&T, CenturyLink, Cincinnati Bell, and Windstream to offer a combination of video, Internet access, and telephone services. DIRECTV, http://www.directv.com/DTVAPP/content/packages/internet (visited Sept. 19, 2012). In 2012, DISH Network announced that it was expanding the availability of Internet access via satellite through cooperative arrangements with Hughes and ViaSat. Although DISH Network will sell, install, bill, and support its satellite Internet access service called dishNet, the Internet access service will be provided through the satellites and facilities of two satellite Internet access companies, ViaSat and Hughes. (Hughes is a wholly-owned subsidiary of EchoStar and Charles Ergen is the majority shareholder of both companies.) DISH Network, *DISH Launches dishNET Broadband, Bringing High-Speed Internet to Rural Americans with Slow or No Access* (press release), Sept. 27, 2012. *See also* Daniel Cooper, *DISH Network Launches Nationwide Satellite Broadband Service with ViaSat, Hughes, Call it dishNet*, Sept. 27, 2012, http://www.engadget.com/2012/09/27/dish-network-dishnet/ (visited Feb. 21, 2013).

[27] The exceptions include approximately 135 community-owned cable MVPDs, which provide facilities-based competition to incumbent cable MVPDs. In some cases, these cable overbuilders have been the first to introduce advanced telecommunications services. NATOA Reply Comments at 1-2.

[28] AT&T U-verse service launched commercially in San Antonio, TX on June 26, 2006. AT&T, *AT&T U-verse Timeline*, http://www.att.com/Common/merger/files/pdf/U-verse%20Timeline41907.pdf (visited Sept. 19, 2012). Verizon FiOS service launched in September 2005. Mari Sibley, *Timeline: The Evolution of FiOS TV*, MediaExperiences2Go, http://connectedhome2go.com/2010/08/19/timeline-the-evolution-of-fios-tv (visited Sept. 19, 2012). *See also* Verizon Comments at 3.

[29] NCTA, *Industry Data, Number of Cable Operating Companies (June 2012)*, http://www.ncta.com/Statistics.aspx (visited Sept. 28, 2012).

[30] The number of active, registered cable systems comes from the Commission's Cable Operations and Licensing System (COALS) database on Sept. 20, 2012. This number includes cable systems operated by Verizon.

homes in multiple geographic areas operate many cable systems.[31] These large cable MVPDs often cluster cable systems together using some of the same infrastructure to provide cable service to a larger geographic area (*e.g.*, metropolitan area). Small cable MVPDs that serve few homes in one geographic area often operate only one cable system.

25. The geographic reach of cable MVPDs varies from company to company. No cable operator provides nationwide coverage or statewide coverage. There are always geographic areas or populations within a state not served by the cable operator. The largest MVPD, Comcast, offers video programming in parts of 39 states and the District of Columbia.[32] Some cable MVPDs focus their provision of video programming on a regional basis. For example, Mediacom focuses on serving the smaller cities, with a significant concentration in the Midwestern and Southeastern regions of the United States.[33] BendBroadband serves 12 communities in Central Oregon. Most cable MVPDs are smaller companies offering video programming to a few communities or a single town.[34]

26. Consistent with the information contained in the *14th Report*,[35] the five largest cable MVPDs at the end of 2012 were Comcast, Time Warner Cable, Cox Communications, Charter Communications, and Cablevision Systems.[36] At the end of 2010, the five largest cable MVPDs accounted for approximately 80.1 percent of all cable MVPD subscribers.[37] At the end of June 2012, these companies accounted for approximately 81.7 percent of all cable MVPD subscribers.[38] The ten largest cable MVPDs at the end of 2010 included the top five and Bright House Networks, Suddenlink Communications, Mediacom, Insight Communications, and Cable One.[39] There were two changes to this list in the 18 months between the end of 2010 and the end of June 2012. Insight Communications was acquired by Time Warner Cable, resulting in Wide Open West moving into the top ten.[40] At the end of

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[31] For additional discussion of clustering, *see Revision of the Commission's Program Access Rules*, MB Docket Nos. 12-68, 07-18, 05-192, 07-29, Report and Order in MB Docket Nos. 12-68, 07-18, 05-192, Further Notice of Proposed Rulemaking in MB Docket No. 12-68, Order on Reconsideration in MB Docket No. 07-29, 27 FCC Rcd 12605, 12817, ¶¶ 18-19 (2012).

[32] Comcast Corp., *SEC Form 10-K for the Year Ended December 31, 2011*, at 1 ("Comcast 2011 Form 10-K").

[33] Mediacom Communications Corp., *Mediacom Broadband LLC and Mediacom LLC Report Results for Fourth Quarter and Full Year 2011* (press release), March 9, 2012, http://phx.corporate-ir.net/phoenix.zhtml?c=98270&p=irol-newsArticle&ID=1671224&highlight= (visited Sept. 19, 2012).

[34] For additional information regarding the characteristics of small and medium-sized cable MVPDs, *see* American Cable Association, http://www.americancable.org/about_us (visited Sept. 19, 2012).

[35] *See 14th Report*, 27 FCC Rcd at 8621, ¶ 30.

[36] SNL Kagan, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Sept. 19, 2012); SNL Kagan, *Broadband Cable Financial Databook*, 2011 Edition, at 25.

[37] At the end of 2010, there were approximately 59.8 million basic cable subscribers and the top five cable MVPDs accounted for approximately 47.9 million subscribers. SNL Kagan, *Broadband Cable Financial Databook*, 2011 Edition, at 12 & 25.

[38] At the end of June 2012, there were approximately 57.3 million basic cable subscribers and the top five cable MVPDs accounted for approximately 46.8 million subscribers. SNL Kagan, http://www.snl.com/interactivex/CableMSOOperatingMetrics.aspx?Defaults=5 (visited Sept. 19, 2012).

[39] SNL Kagan, *Broadband Cable Financial Databook*, 2007 Edition, at 20.

[40] SNL Kagan, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Sept. 20, 2012). Insight Communications was a privately held company purchased by Time Warner Cable (continued….)

2012, the ten largest cable MVPDs accounted for approximately 90.4 percent of all cable MVPD subscribers,[41] an increase from 89.1 percent of all cable MVPD subscribers reported at the end of 2010.[42] The combined shares of all cable MVPDs accounted for approximately 57.4 percent of MVPD subscribers at the end of 2011,[43] down from 59.3 percent at the end of 2010.[44]

27. *DBS MVPDs.* The two DBS MVPDs, DIRECTV and DISH Network, offer video service to most of the land area and population of the United States.[45] DIRECTV is the second largest MVPD in the United States with approximately 19.9 million subscribers at the end of June 2012.[46] DISH Network is the third largest MVPD with approximately 14.1 million subscribers at the end of June 2012.[47] The combined shares of the two DBS MVPDs accounted for approximately 33.6 percent of MVPD subscribers at the end of 2011,[48] up from 33.1 percent at the end of 2010.[49]

28. *Telephone MVPDs.* The two largest telephone MVPDs, AT&T and Verizon, have constructed systems for delivering video services in some of the areas where they offer traditional landline telephone services. Verizon FiOS has registered with the Commission as a cable system whereas AT&T U-verse has not. The geographic footprints for Verizon FiOS and AT&T U-verse do not overlap. It is almost always the case, however, that the geographic footprints for AT&T U-verse and Verizon FiOS overlap areas already served by incumbent cable MVPDs. Verizon FiOS is the seventh largest MVPD

(Continued from previous page)
on February 29, 2012. *See Applications Filed for the Transfer of Control of Insight Communications Company, Inc. to Time Warner Cable Inc.*, WC Docket No. 11-148, Memorandum Opinion and Order, 27 FCC Rcd 497 (IB, WCB, WTB 2012). *See also* Time Warner Cable, Inc., *Time Warner Cable Completes Acquisition of Insight Communications* (press release), Feb. 29, 2012.

[41] At the end of June 2012, there were approximately 57.3 million basic cable subscribers and the top ten cable MVPDs accounted for approximately 51.8 million subscribers. SNL Kagan, http://www.snl.com/interactivex/CableMSOOperatingMetrics.aspx?Defaults=5 and http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Sept. 20, 2012).

[42] At the end of 2010, there were approximately 59.8 million basic cable subscribers and the top ten cable MVPDs accounted for approximately 53.3 million subscribers. SNL Kagan, *Broadband Cable Financial Databook*, 2011 Edition, at 12 & 25.

[43] At the end of 2011, there were approximately 101.0 million MVPD subscribers and cable MVPDs accounted for approximately 58.0 million subscribers. SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Sept. 20, 2012).

[44] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[45] We recognize that some homes are not able to receive DBS signals and DBS does not provide coverage to some land areas in Alaska.

[46] DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012.

[47] DISH Network, *DISH Network Announces Second Quarter 2012 Financial Results* (press release), Aug. 8, 2012.

[48] At the end of 2011, there were approximately 100.1 million MVPD subscribers and DBS MVPDs accounted for approximately 33.4 million subscribers. SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[49] *Id*.

with approximately 4.5 million subscribers at the end of June 2012.[50] AT&T U-verse is the ninth largest MVPD with approximately 4.1 million subscribers at the end of June 2012.[51]

29. The remaining telephone MVPDs are small by comparison to AT&T and Verizon. In 2012, Consolidated Communications, with 35,834 video subscribers, acquired SureWest Communications, with 66,700 video subscribers.[52] CenturyLink has 94,000 video subscribers and Cincinnati Bell has 46,400 video subscribers.[53] Similar to the largest telephone MVPDs, some smaller telephone MVPDs register with the Commission as cable systems while others do not. For example, Cincinnati Bell has registered with the Commission while CenturyLink has not.

30. Little data exists regarding other telephone MVPDs. A survey conducted by the National Telecommunications Cooperative Association, ("NTCA") shows that approximately 417 members served as MVPDs in 2010 and this increased to 447 in 2011.[54] NTCA estimates that the number of members offering MVPD service using legacy coaxial cable technology declined from 252 in 2010 to 210 in 2011. The number of members using cooperative arrangements with DBS MVPDs to provide video service also declined, from 66 in 2010 to 35 in 2011. In contrast, the number of members using Internet Protocol Television ("IPTV") technology to provide video service increased from 159 in 2010 to 202 in 2011.[55] We estimate that the combined shares of all telephone MVPDs accounted for approximately 8.4 percent of MVPD subscribers at the end of 2011,[56] compared to 6.9 percent at the end of 2010.[57]

31. *Other MVPDs.* We received few comments, and there is little or no publically available data for HSD, OVS, electric and gas utilities, wireless cable systems, PCO, CMRS and other wireless providers. With the exception of CMRS,[58] most of these other types of MVPDs serve few subscribers

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[50] Verizon, *Investor Quarterly Second Quarter 2012*, July 19, 2012, at 14, http://www22.verizon.com/idc/groups/public/documents/adacct/2012_q2_quarterly_bulletin.pdf (visited Sept. 20, 2012).

[51] AT&T, *Investor Briefing Second Quarter 2012*, July 24, 2012, at 8, http://www.att.com/Investor/Earnings/2q12/ib_final_2q12.pdf (visited Sept. 20, 2012).

[52] Consolidated Communications Holdings, Inc., *Consolidated Communications Completes Acquisition of SureWest Communications* (press release), July 2, 2012. Consolidated Communications, *Consolidated Communications Reports Second Quarter 2012 Results* (press release), Aug. 2, 1012. SureWest, *SureWest Reports First Quarter 2012 Results* (press release), May 2, 2012.

[53] CenturyLink, *CenturyLink Reports Second Quarter 2012 Earnings* (press release), Aug. 8. 2012. Cincinnati Bell, *Cincinnati Bell Reports Second Quarter 2012 Results* (press release), Aug. 8, 2012.

[54] The Associations Comments at 2. These are not all facilities-based MVPDs but include members that have cooperative arrangements with DBS MVPDs to provide video service.

[55] *Id*. The Associations explain that the IPTV network used for MVPD service is also used for broadband services. Thus, factors that impede the provision of video services in rural areas also impede the provision of broadband services. *Id*. at 3.

[56] At the end of 2011, there were approximately 101.0 million MVPD subscribers and telephone MVPDs accounted for approximately 8.5 million subscribers. SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[57] *Id*.

[58] We do not discuss CMRS in this Report because all aspects of CMRS and the larger mobile wireless industry are covered in the *16th Mobile Wireless Report*. Here we simply note that subscribers to a mobile wireless data plan may receive delivered video programming for viewing on some mobile wireless devices.

and their subscriber base is declining.[59] Data for September 2012 suggest that these other types of MVPDs collectively account for approximately 0.6 percent of all MVPD subscribers.[60] PCOs account for the overwhelming bulk of the alternative MVPD subscribers, with approximately 650,000 subscribers.[61] The HSD, or large dish, segment of the satellite industry is the original satellite-to-home service offered to consumers. Although SNL Kagan data show no reported HSD subscribers, a company called Skyvision offers HSD service during limited hours of each day.[62]

32. We have previously noted that OVS activity has been limited.[63] However, Media 3 Corp. recently applied for certification as an OVS in Manhattan.[64] Although some entities have filed for certifications to operate OVS systems, we suspect that most OVS subscribers are included in cable MVPD subscriber data and we have no way to count them separately. Although there may be some companies still offering wireless cable service, SNL Kagan data show that there are not any subscribers.[65] Because the alternative MVPDs account for such a small and shrinking share of the market for the delivery of video programming, and because data for these alternative MVPDs are not available, we focus our MVPD discussion on cable, DBS, and telephone MVPDs.

33. Table 1 shows estimates of the number of homes passed by cable, DBS, and telephone MVPDs for year-end 2010, end of June 2011, year-end 2011, and end of June 2012. Some data necessary to meaningfully compare cable, DBS, and telephone MVPDs are available only on an end-of-year basis. Specifically, reliable data regarding the number of homes in the United States and the number of homes passed by all cable MVPDs are available only on an end-of-year basis and not on an end-of-June basis. Nonetheless, Table 1 provides the end-of-June data that are available. Cable MVPDs have built out and to a large extent upgraded their systems.[66] At the end of 2010, cable MVPD service was available to 128.8 million homes (97.6 percent of the 132.0 million U.S. homes). At the end of 2011, cable MVPD service was available to 130.7 million homes (98.6 percent of the 132.5 million U.S. homes). We assume that DBS MVPDs are available to all homes, but recognize that this slightly overstates the actual

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[59] SNL Kagan states, "We do not see a viable future for alternative multichannel providers. MMDS and wireless cable providers … represent a negligible 0.6% of the total multichannel universe. Our 10-year outlook calls for further declines in customer and market share for those providers." SNL Kagan, *Cable TV Investor: Deals & Finance*, Sept. 27, 2012, at 3.

[60] *Id*. In September 2011, these MVPDs collectively accounted for approximately 0.7 percent of all MVPD subscribers. *See 14th Report*, 27 FCC Rcd at 8623, ¶ 35.

[61] SNL Kagan, *Cable TV Investor: Deals & Finance*, Sept. 27, 2012, at 2.

[62] *Id*. at 2; and Skyvision, http://www.skyvision.com/ and http://skyvision.com/programming/index.html (visited Sept. 25, 2012).

[63] *13th Report*, 24 FCC Rcd at 607, ¶ 135.

[64] *See Media Three Corporation, Inc. Files an Application for Open Video System Certification*, Public Notice, DA 12-1362 (Aug. 21, 2012). *See also* Josh Wein, *CLEC Plans IPTV Service, Triple Play in Manhattan*, COMMUNICATIONS DAILY, Aug. 22, 2012, at 9-10.

[65] *See 14th Report*, 27 FCC Rcd at 8624, ¶ 36.

[66] The upgrading of cable systems often includes increasing bandwidth capacity to provide additional channels, more HD channels, and faster Internet service. In addition, in their upgrades, cable MVPDs have included the use of data over cable service interface specifications ("DOCSIS"), which is a standard interface for cable modems that handle incoming and outgoing data signals between cable MVPDs and computers or television sets. *See* SearchNetworking, http://searchnetworking.techtarget.com/definition/DOCSIS (visited Sept. 25, 2012).

availability of DBS.[67] At the end of 2010, facilities-based telephone MVPD service was available to 42.9 million homes (32.5 percent). At the end of 2011, telephone MVPD service had become available to 46.8 million homes (35.3 percent).[68]

[67] We recognize that physical features (*e.g.*, tall buildings, cliffs, trees) can prevent some homes from receiving DBS signals.

[68] Our estimates for homes passed by telephone MVPDs include only data from AT&T and Verizon. As such, we underestimate the number of homes passed by all telephone MVPDs.

Table 1: Homes Passed by MVPDs (in millions)

	End of Year 2010	End of June 2011	End of Year 2011	End of June 2012
Cable[69]	**128.8**	**N/A**	**130.7**	**N/A**
Comcast	51.9	52.2	52.5	52.8
Time Warner	27.5	27.6	27.9	29.4
Cox	9.9	10.1	10.1	10.2
Charter	11.8	11.8	12.0	12.0
Cablevision	5.5	5.6	5.6	5.6
DBS[70]	**132.0**	**N/A**	**132.5**	**N/A**
DIRECTV	132.0	N/A	132.5	N/A
DISH Network	132.0	N/A	132.5	**N/A**
Telephone[71]	**42.9**	**45.1**	**46.8**	**47.3**
AT&T U-verse[72]	27.3	29.0	30.3	30.3[73]
Verizon FiOS[74]	15.6	16.1	16.5	17.0

[69] Cable industry homes passed excludes overlap from overbuilders (defined as companies that build additional cable systems "over" one that already exists and offer customers a competitive alternative). Data for the cable industry homes passed come from SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2012 (visited Sept. 26, 2012). Data for the five largest cable companies come from SNL Kagan, *U.S. Cable Subscriber Highlights*, http://www.snl.com/interactivex/CableMSOOperatingMetrics.aspx?OpMetric=CableHPAggr&Form_Name=UserInputs&Defaults=0 (visited Sept. 26, 2012).

[70] For simplification, we assume that DBS is available to every housing unit. Data for the number of housing units come from SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Sept. 26, 2012). A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room that is occupied, or, if vacant, is intended for occupancy as separate living quarters. Both occupied and vacant housing units are included in the housing unit inventory, except recreational vehicles, boats, vans, tents, railroad cars, etc. are included only if occupied as a usual place of residence. Vacant mobile homes are included if intended for occupancy on site. Vacant mobile homes on dealer sales lots, at the factory, or in storage yards are excluded from the housing unit inventory.

[71] For telephone, we simply add the estimates for AT&T U-verse and Verizon FiOS. We do not have reliable estimates for the number of homes passed by other telephone companies offering their own facilities-based video services. As such, we underestimate the number of homes passed by telephone MVPDs.

[72] AT&T, *2010 Annual Report*, at 42; AT&T, *AT&T Reports Strong Wireless Gains, Record Mobile Broadband Sales and Continued Strength in U-Verse and Strategic Business Services in Second-Quarter Results* (press release), July 21, 2011; AT&T, *2011 Annual Report*, at 41 (where AT&T noted that it had reached its deployment goal of 30 million living units and that during 2012, the company would continue efforts to increase sales to this base).

[73] AT&T did not report the number of homes passed by U-verse at the end of June 2012. We note that at the end of 2011, AT&T stated that it had reached its deployment goal of 30 million living units and that, during 2012, the company would continue efforts to increase sales to this base. As such, we estimate that the number for end of June 2012 is the same as the number reported by AT&T for the end of 2011. *See* AT&T, *2011 Annual Report*, at 41.

[74] Verizon, *2010 Annual Report*, at 15; Verizon, *Investor Quarterly Second Quarter 2011*, July 22, 1011, at 6; Verizon, *Investor Quarterly Fourth Quarter 2011*, Jan. 24, 2012, at 6; Verizon, *Investor Quarterly Second Quarter 2012*, July 19, 2012, at 6. *See also* Verizon Comments at 4.

b. Horizontal Concentration

34. High market concentration may suggest the potential for competitive concerns. However, an analysis of other factors, such as entry conditions and the degree of price and non-price rivalry, may evidence robust competition, even in a highly concentrated market. The Commission does not collect data for cable, DBS, and telephone MVPDs on a uniform geographic basis and, therefore, cannot compare the availability of one type of MVPD with another in a particular geographic area.[75] Instead, we estimate here the number of homes on a nationwide basis that have access to two, three, or four MVPDs.

35. Consumers can only choose among the MVPD alternatives available in the areas where they live. However, determining which MVPDs offer video service in which geographic areas is difficult as a result of the wide variation in the geographic footprints of MVPDs and the lack of available data that would allow comparison of the geographic coverage of one type of MVPD with another type of MVPD.[76] As a general rule, the geographic footprint of a cable MVPD rarely overlaps the geographic footprint of another cable MVPD.[77] As such, cable MVPDs rarely compete with one another for the same video subscriber. The situation is similar for telephone MVPDs.[78] The geographic footprint of one telephone MVPD rarely overlaps the geographic footprint of another telephone MVPD, so telephone MVPDs rarely compete with one another for the same video subscriber. In contrast, the geographic footprints of both DBS MVPDs are national and they almost always compete with one another for the same video subscriber. We also assume that a cable MVPD or a telephone MVPD almost always competes with both DBS MVPDs for the same subscriber. Finally, we assume that the two largest telephone MVPDs offer video service in geographic areas already served by incumbent cable companies and, therefore, almost always compete with a cable MVPD for the same subscriber.[79] We have little data on additional telephone MVPDs and other types of MVPDs, and we have no means of determining the geographic footprints of these entities and, therefore, no means of determining whether they do or do not compete

[75] *See 14th Report*, 27 FCC Rcd at 8618-19, ¶ 24.

[76] The Commission's Mobile Wireless Report collects data on a census block basis and the Commission's Broadband Report collects data on a census block basis. For video services, however, we do not collect data on a census block basis. *16th Mobile Wireless Report*, ¶ 2; *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Amended by the Broadband Data Improvement Act*, GN Docket No. 11-121, Eighth Broadband Progress Report and Order on Reconsideration, 27 FCC Rcd 10342, 10363-64, ¶ 28 (2012).

[77] A large cable MVPD will operate many cable systems of varying sizes. The geographic configuration of a cable system is determined by its physical system, which consists of a cable system technically integrated to a principal headend. The Commission collects cable system data in its Annual Report of Cable Television Systems (FCC Form 325). Only a limited number of cable systems provide data to the Commission. All cable systems with more than 20,000 subscribers are subject to the reporting requirement. The Commission also collects information on a random sample of cable systems with between 5,000 and 20,000 subscribers and a random sample of cable systems with fewer than 5,000 subscribers.

[78] There are exceptions to this rule and in some areas companies, such as RCN, have overbuilt incumbent cable systems. *See 13th Report*, 24 FCC Rcd at 591-93,¶¶ 100-103.

[79] Verizon states that "In every area where FiOS TV is available, Verizon faces competition from an incumbent cable operator that offers a bundle of video, broadband, and voice services as well as the two national direct broadcast satellite ("DBS") providers." Verizon Comments at 4.

with incumbent cable systems.[80] We do not include these other MVPDs in our estimates and recognize that their absence may marginally understate access to MVPDs.[81]

36. Using our assumptions and the data from Table 1 above, we estimate MVPD concentration nationwide – specifically, the number of homes that have access to two, three, or four MVPDs. Our estimates are shown in Table 2.

In 2010,

- There were 132 million homes in the United States and we assume that all of them had access to at least the two DBS MVPDs.
- Approximately 128.8 million homes had access to at least three MVPDs (*i.e.*, a cable MVPD and two DBS MVPDs, but not a telephone MVPD).
- Approximately 42.9 million homes had access to at least four MVPDs (*i.e.*, a cable MVPD, two DBS MVPDs, and a telephone MVPD).[82]

In 2011,

- There were 132.5 million homes in the United States and we assume that all of them had had access to at least the two DBS MVPDs only.
- Approximately 130.7 million homes had access to at least three MVPDs (*i.e.*, a cable MVPD and two DBS MVPDs, but not a telephone MVPD).
- Approximately 46.8 million homes had access to at least four MVPDs (*i.e.*, a cable MVPD, two DBS MVPDs, and a telephone MVPD).[83]

These estimates are only approximations due to the limits of available data, but they highlight the fact that with the entry of large telephone MVPDs into the market for video services, almost 47 million homes have access to four MVPDs. This represents a continuing increase in competition in the market for the delivery of video programming.[84] Specifically, the most recent data show that over 35 percent of U.S. homes have access to at least four MVPDs.

[80] We do not have reliable data on homes passed by Consolidated Communications, CenturyLink, Cincinnati Bell and other telephone MVPDs.

[81] In addition, there are geographic areas where the presence of a cable overbuilder provides some households with access to five MVPDs.

[82] We assume that homes that have access to one of the two largest telephone MVPDs also have access to a cable MVPD and the DBS MVPDs. Thus, our estimate is simply the number of homes that have access to telephone MVPDs (42.9 million).

[83] We assume that homes that have access to one of the two largest telephone MVPDs also have access to a cable MVPD and the DBS MVPDs. Thus, our estimate is simply the number of homes that have access to telephone MVPDs (46.8 million).

[84] *See 14th Report*, 27 FCC Rcd at 8627, ¶ 40. From 2006 to 2010, the percent of U.S. homes with access to four MVPDs grew from 4.7 percent to 32.8 percent. In the *14th Report*, the data from SNL Kagan showed that there were 130.8 million U.S. homes in 2010. Revised data from SNL Kagan show that there were 132.0 million U.S. homes in 2010. Thus, we now estimate that the percent of U.S. homes with access to four MVPDs grew from 4.7 percent in 2006 to 32.5 percent in 2010.

Table 2: Access to Multiple MVPDs

	Homes 2010	**Percent of Homes 2010**	**Homes 2011**	**Percent of Homes 2011**
Access to at Least Two MVPDs	132 million	100%	132.5 million	100%
Access to at Least Three MVPDs	128.8 million	97.5%	130.7 million	98.6%
Access to at Least Four MVPDs	42.9 million	32.5%	46.8 million	35.3%

37. We cannot calculate a Herfindahl-Hirschman Index ("HHI"), the traditional metric for measuring horizontal concentration, because we do not have geographic data for all MVPDs on any common geographic basis.[85] We, however, can state with some degree of confidence that in geographic areas where homes have access to four MVPDs, the HHI is over 2500.[86] Likewise, in geographic areas where homes have access to three MVPDs, the HHI is over 3333, and in geographic areas where homes have access to two MVPDs, the HHI is over 5000. Although these HHI may appear high, the entry of DBS in the 1990s and the more recent entry of telephone MVPDs have resulted in an ongoing reduction in MVPD market concentration. Stated differently, since the Commission's first report on the status of

[85] The HHI is calculated by summing the squares of the individual market shares of all the participants. For example, a market consisting of four firms with market shares of 30 percent, 30 percent, 20 percent and 20 percent has an HHI of 2600 ($30^2 + 30^2 + 20^2 + 20^2 = 2600$). The HHI ranges from 10,000 (in the case of a pure monopoly) to a number approaching zero (in the case of an atomistic market). Lack of information about small firms is not critical to the calculation because such firms do not affect the HHI significantly. *See* Horizontal Merger Guidelines, U.S. Department of Justice and the Federal Trade Commission, August 19, 2010, http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf, at § 5.3 ("*Horizontal Merger Guidelines*").

The Commission has applied an HHI screen in its analysis of transactions involving MVPDs. *See, e.g., EchoStar-DIRECTV HDO*, 17 FCC Rcd at 20614-16, ¶¶ 133-39 (2002). *See also Applications for Consent to the Assignment and/or Transfer of Control of Licenses Adelphia Communications Corporation, (and subsidiaries, debtors-in-possession), Assignors, to Time Warner Cable Inc. (subsidiaries), Assignees; Adelphia Communications Corporation, (and subsidiaries, debtors-in-possession), Assignors and Transferors, to Comcast Corporation (subsidiaries), Assignees and Transferees; Comcast Corporation, Transferor, to Time Warner Inc., Transferee; Time Warner Inc., Transferor, to Comcast Corporation, Transferee*, MB Docket No. 05-192, Memorandum Opinion and Order, 21 FCC Rcd 8203, 8239-43, ¶¶ 75-83 (2006) ("*2006 Adelphia, Comcast, Time Warner Cable MO&O*").

In addition, in some past reports, we have estimated a national MVPD HHI for purposes of analyzing concentration in the market for the purchase of video programming. *See, e.g., 13th Report*, 24 FCC Rcd at 627-28, ¶ 179; *id.* at 689, Table B-4. In the market for the purchase of video programming, our economic concern was one of monopsony power where few or large buyers could drive down the prices received by the owners of video programming. In this Report, and our *14th Report*, our focus is the market for the delivery of video programming and our economic concern is one of monopoly power where few sellers of MVPD video services could drive up the prices paid by subscribers.

[86] For a given number of firms, the value of the HHI increases as the inequality in subscriber shares increases. For example, if four firms are identified as participants in the relevant markets and each firm accounts for 25 percent of total sales, the value of HHI would be 2500 (25^2 x 4). If there are still only four firms but the top firm has a 40 percent subscriber share while each of the remaining three firms has 20 percent, the value of HHI increases from 2500 to 2800 ($40^2 + (20^2 x 3)$).

competition in the market for the delivery of video programming in 1995, almost no subscriber has fewer MVPD choices and most subscribers have more MVPD choices.

c. Vertical Integration

38. Our examination of vertical integration in the MVPD industry focuses on common ownership of entities that deliver video programming and entities that supply video programming. Vertical relationships may have beneficial effects,[87] or they may deter competitive entry in the video marketplace or limit the diversity of video programming.[88] In 1992, Congress enacted various provisions related to vertical integration between cable operators and programming networks (*e.g.*, program access, channel occupancy limit).[89] In 1992, a large number of the most popular cable programming networks were owned by cable operators. Congress was concerned that cable operators had the ability and incentive to thwart the competitive development of additional programming networks by refusing to carry unaffiliated networks, by insisting on an ownership stake in return for carriage, or by withholding their most popular programming networks from competing MVPDs.[90]

39. In the last report, we reviewed vertical integration in early 2012 and identified 127 national networks (49 of these were HD networks) affiliated with the top five cable MVPDs.[91] At that time, Comcast had ownership interests in 78 national networks (30 were HD).[92] Comcast's sale of its shares in 17 A&E television networks to non-MVPDs was the most significant change in the number of cable MVPD-affiliated national networks since the *14th Report*.[93] We now find that there are 99 national networks (47 of these HD networks) affiliated with the top five cable MVPDs. As of early 2013. we report that Comcast has ownership interests in 50 national networks (23 are HD), Time Warner Cable has ownership interests in four national networks (two are HD), Cox has ownership interests in six national networks (three are HD), Cablevision has ownership interests in ten national networks (five are HD), and Bright House has ownership interests in 29 national networks (14 are HD). In addition, we identified 62 national networks that were affiliated with a DBS MVPD (25 were HD).[94] A summary of MVPD

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[87] Beneficial effects can include efficiencies in the production, distribution, and marketing of video programming, as well as the incentive to expand channel capacity and create new programming by lowering the risks associated with program production ventures. *See, e.g.*, H.R. REP. NO. 862, 102nd Congress, 2d Sess. (1992), at 41-43.

[88] Possible detrimental effects can include unfair methods of competition, discriminatory conduct, and exclusive contracts that are the result of coercive activity. *See Second Report*, 11 FCC Rcd at 2135, ¶ 157; *Implementation of Section 11(c) of the Cable Television Consumer Protection and Competition Act of 1992 Vertical Ownership Limits*, MB Docket No. 92-264, 10 FCC Rcd 7364, 7365, ¶ 4 (1995).

[89] *See* 47 U.S.C. §§ 533, 548.

[90] *See* 47 U.S.C § 521(5).

[91] For a list of the national networks owned by each of the top five cable MVPDs, *see* Appendix B, Table B-1.

[92] As noted in the last report, in 2011, Comcast consummated a joint venture with General Electric involving NBCU which increased the number of networks it owned. *See 14th Report*, 27 FCC Rcd at 8629-30, ¶ 45. On March 19, 2013, Comcast completed its acquisition of the 49 percent common equity stake in NBCU held by GE. *See* Comcast, *SEC Form 8-K, Current Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934*, filed Mar. 19, 2013.

[93] Comcast Comments at 14. According to Comcast, cable MVPDs now hold ownership interests in only four of the top 20 networks. *Id.*

[94] For a list of the national networks owned by DBS MVPDs, *see* Appendix B, Table B-1. Most of these networks we list as affiliated with Liberty Media. On February 21, 2008, the Commission approved the transfer of license and authorization that resulted in Liberty Media Corporation ("Liberty") acquiring a *de facto* controlling interest in (continued….)

ownership of programming networks is included in Appendix B, Table B-1; Appendix C, Table C-1; and Appendix D of this Report.

d. Entry Conditions

40. MVPD entry decisions are determined primarily by entry conditions and expected profitability.[95] Entry conditions are important in understanding the degree to which incumbent firms may or may not possess market power.[96] Entry occurs in the context of underlying market and regulatory conditions that directly influence the total number of firms that can compete successfully in a market. Such conditions are relevant for determining if, and when, actual entry will occur. Both market conditions and regulatory conditions are important for facilitating competition in the marketplace. Because the Commission oversees the regulatory conditions potentially affecting entry, we discuss these first.[97] We then discuss some of the market ("non-regulatory") conditions potentially affecting entry.

(i) Regulatory Conditions Influencing Entry

41. *Franchising and Licensing.* MVPDs must obtain the proper regulatory authority before providing video services. Section 621(a)(1) of the Act gives local governments the authority to control the entry of cable operators into their respective markets through franchise agreements; but it prevents them from granting an exclusive franchise or from unreasonably refusing to award competitive franchises.[98] Each state determines which political jurisdiction (*e.g.*, state, county, city, or town) has the authority to grant local franchises for cable service. In 2007, the Commission adopted rules under its Section 621(a)(1) authority eliminating unreasonable entry barriers placed on competitive franchises by local franchising authorities ("LFAs") and encouraging investment in broadband facilities.[99] As of December 2012, 21 states have streamlined the franchising process further by adopting laws that place

(Continued from previous page)
DIRECTV. On November 19, 2009, Liberty through a series of transactions transferred its interest in DIRECTV, three RSNs and GSN to a wholly owned subsidiary called DIRECTV Group, Inc.

[95] High economic profits encourage entry to the market; low economic profits discourage entry; and prolonged negative economic profits induce exit from the market. *See* Hal R. Varian, INTERMEDIATE MICROECONOMICS: A MODERN APPROACH 394-95, 503 (W. W. Norton and Company) (1999) ("*Intermediate Microeconomics*"); Dennis W. Carlton & Jeffrey M. Perloff, MODERN INDUSTRIAL ORGANIZATION 61-76 (Addison, Wesley, Longman, Inc.) (4th ed. 2005).

[96] Market power for a seller is the ability profitably to maintain prices above competitive levels for a significant period of time. Sellers with market power also may lessen competition on dimensions other than price, such as product quality, service, or innovation. For a discussion of market power, *see Horizontal Merger Guidelines*, *supra*, n.85.

[97] The regulatory process, itself, may hinder entry if the process is characterized by unnecessary delay. One example of a regulatory delay would be the time a cable franchising authority may take to make a decision regarding an application. Economists argue that some operating licenses and other legal restrictions that serve to limit access to the market are barriers to entry, *i.e.*, they create positive economic profits for incumbents that are not bid away by new entry. *See* Jean Tirole, THE THEORY OF INDUSTRIAL ORGANIZATION 305 (MIT Press) (1988). *See also Intermediate Microeconomics* at 395.

[98] 47 U.S.C. §§ 522(10), 541(a)(1).

[99] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, MB Docket No. 05-311, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101 (2007), *aff'd sub nom. Alliance for Community Media v. FCC*, 529 F.3d 763 (6th Cir. 2008). *See also Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, MB Docket No. 05-311, Second Report and Order, 22 FCC Rcd 19633 (2007).

franchising authority with the state instead of local governments.[100] Cable operators also typically need licenses or authorizations from the Commission for facilities to deliver their programming to consumers.[101]

42. In contrast, satellite carriers must obtain Commission authority prior to operating satellites and earth stations to deliver video services.[102] Similarly, LECs that provide video services through the OVS framework must secure certification from the Commission before initiating service.[103] In addition, wireless cable systems and other wireless providers that use spectrum to transmit video programming must comply with the Commission's spectrum licensing policies as well as the appropriate interference and technical rules.[104] The Commission also has the authority to review any business arrangements involving the transfer and control of its licenses or authorizations.[105]

43. *Effective Competition*. Section 623(a) of the Act exempts cable operators subject to effective competition from basic cable service rate regulation.[106] LFAs are permitted therefore to regulate cable operators' basic cable service rates until the Commission has granted a petition for effective competition.[107] A cable operator is subject to effective competition in a local community when one of

[100] The states that have adopted statewide video franchising laws are: California, Connecticut, Florida, Georgia, Illinois, Indiana, Idaho, Iowa, Kansas, Louisiana, Michigan, Missouri, Nevada, New Jersey, North Carolina, Ohio, South Carolina, Tennessee, Texas, Virginia, and Wisconsin. *See* State of Idaho Legislature, *House Bill 539*, http://legislature.idaho.gov/legislation/2012/H0539.htm (visited Nov. 1, 2012); *14th Report*, 27 FCC Rcd at 8631, ¶ 47 n.111. *See also* ACT Comments at 6. CenturyLink advocates for the adoption of statewide video franchise laws for those states interested in attracting competitive video services in their local communities. CenturyLink Comments at 3. In 2012, the United States Court of Appeals for the Fifth Circuit found that the provisions in Texas's video franchising law barring the state's incumbent cable operators from obtaining a state franchise until the expiration of their municipal licenses violated the First Amendment. *See Time Warner Cable, Inc. v. Paul Hudson*, 667 F.3d 630 (5th Cir. 2012).

[101] For example, many cable operators hold licenses under Part 78 of the Commission's rules for Cable Television Relay Service ("CARS") stations, which enable them to distribute programming to microwave hubs where it is impossible and too expensive to run cables and cover live events. *See Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licenses*, WT Docket No. 10-153, Report and Order, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order, 26 FCC Rcd 11614, 11620, ¶ 10 (2011). *See also Revisions to Broadcast Auxiliary Service Rules in Part 74 and Conforming Technical Rules for Broadcast Auxiliary Service, Cable Television Relay Service and Fixed Services in Parts 74, 78 and 101 of the Commission's Rules*, ET Docket No. 01-75, Report and Order, 17 FCC Rcd 22979, 22980, n.1 (2002).

[102] 47 C.F.R. § 25.102(a).

[103] 47 U.S.C. § 573(a)(1); 47 C.F.R. § 76.1502. It is left to the discretion of the LFA whether to require an OVS operator to negotiate a franchise for the service area or to impose no franchise obligation on the OVS operator. *See City of Dallas Texas v. FCC*, 165 F.3d 341 (5th Cir. 1999).

[104] *See 16th Mobile Wireless Report*, ¶ 75.

[105] 47 U.S.C. § 310(d).

[106] 47 U.S.C. § 543(a)(2).

[107] 47 U.S.C. § 543(a)(2)(A); 47 C.F.R. §§ 76.905(a), 76.907. LFAs must obtain certification from the Commission prior to regulating the basic service tier. 47 U.S.C. § 543(a)(3)-(4); 47 C.F.R. § 76.910. The basic level of cable service for cable operators subject to rate regulation includes: (1) all commercial and noncommercial local broadcast stations entitled to carriage under the Act's must-carry provisions; (2) any public, educational, and governmental access channels the LFA requires; and (3) any other local broadcast station provided to any subscriber. 47 U.S.C. § 543(b)(7)(A).

four conditions is met: (1) fewer than 30 percent of the households subscribe to the operator's cable programming service; (2) the operator and at least one other MVPD provide comparable services to at least 50 percent of the households in the community and at least 15 percent of the community's households subscribe to an MVPD that is not the largest in the area; (3) a municipality offers MVPD service to at least 50 percent of its households; or (4) an LEC or its affiliate, or an entity using the facilities of an LEC or its affiliate, offers a comparable MVPD service by means other than DBS to an area that an unaffiliated cable operator also serves.[108]

44. *Program Access*. New MVPD entrants cannot successfully compete in the video marketplace without access to programming. Sections 628(b) and 628(c)(1) of the Act give the Commission broad authority to prevent cable operators from engaging in unfair acts that have the purpose or effect of significantly hindering or preventing an MVPD from providing satellite-delivered programming to consumers.[109] Section 628(c)(2) of the Act ensures that competitive MVPDs obtain access to satellite programming affiliated with a cable operator by establishing the minimum requirements for the Commission's program access regulations.[110] In accordance with these statutory directives, the Commission's program access rules prevent a cable operator with an attributable interest in a satellite-delivered programming vendor from improperly influencing the vendor in the sale or delivery of its programming to a competing MVPD. In addition, a cable-affiliated satellite-programming vendor may not discriminate in the price, terms, and conditions of sale for its programming among competing MVPDs.[111] MVPDs may allege violations of the program access rules by initiating an adjudicatory proceeding with the Commission through the filing of a program access complaint.[112] In 2010, the Commission adopted rules preventing cable operators from engaging in unfair acts with respect to terrestrially delivered cable-affiliated programming pursuant to Section 628(b).[113] In 2011, the Commission found that MSG and Cablevision violated both Section 628(b) and the Commission's rules when they denied AT&T and Verizon access to the terrestrially delivered HD version of the MSG and MSG+ networks.[114]

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[108] 47 C.F.R. § 76.905(b).

[109] 47 U.S.C. §§ 548(b), (c)(1).

[110] 47 U.S.C. § 548(c)(2).

[111] 47 C.F.R. §§ 76.1001-02. *See also Revision of the Commission's Program Access Rules*, MB Docket No. 12-68, Report and Order, in MB Docket Nos. 12-68, 07-18, 05-192, Further Notice of Proposed Rulemaking, MB Docket No. 12-68, Order on Reconsideration in MB Docket No. 07-29, 27 FCC Rcd 12605 (2012) ("*2012 Program Access Order*"); *Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements*, MB Docket No. 07-198, First Report and Order, 25 FCC Rcd 746 (2010) ("*2010 Program Access Order*"), *aff'd in part and vacated in part sub nom. Cablevision Systems Corp. et al. v. FCC*, 649 F.3d 695 (D.C. Cir. 2011). The Commission's program access rules also apply to common carriers and their affiliates. 47 C.F.R. § 76.1004.

[112] 47 C.F.R. § 76.1003. *See also* 47 U.S.C. § 548(d); *2012 Program Access Order*, 27 FCC Rcd at 12640-48, ¶¶ 52-64; *2010 Program Access Order*, 25 FCC Rcd at 777-87, ¶¶ 46-57.

[113] *Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements*, MB Docket No. 07-198, First Report and Order, 25 FCC Rcd 746, 777-78, ¶ 46 (2010) ("*2010 Program Access Order*"). The United States Court of Appeals for the District of Columbia ("D.C. Circuit") upheld substantially all of this order. *Cablevision Systems Corp. et al. v. FCC*, 649 F.3d 695, 699 (D.C. Cir. 2011).

[114] *Verizon Tel. Cos. et al.*, Order, 26 FCC Rcd 13145 (MB 2011) (concluding that withholding the MSG HD and MSG+ HD Regional Sports Networks from Verizon is an "unfair act" that has the "effect" of "significantly hindering" Verizon from providing satellite cable programming and satellite broadcast programming to subscribers and consumers in New York and Buffalo), *aff'd Verizon Tel. Cos. et al.*, Memorandum Opinion and Order, 26 FCC (continued….)

45. Pursuant to Section 628(c)(2)(D), the Commission, prior to October 5, 2012, banned any cable operator from entering into an exclusive programming agreement with any cable-affiliated satellite-programming vendor in areas served by a cable operator.[115] Although that prohibition was originally scheduled by statute to expire on October 5, 2002, the Commission, pursuant to the terms of Section 628(c)(5), extended the ban on two separate occasions for five years each.[116] The Commission declined to extend the prohibition beyond its scheduled October 5, 2012 sunset date, finding a preemptive prohibition was no longer necessary to preserve and protect competition and diversity in the distribution of video programming in light of the fact that a case-by-case approach remained in place to evaluate the impact of individual exclusive contracts.[117]

46. Several commenters express concern about access to programming. Generally, competitive MVPDs indicate that without access to programming content at reasonable rates, they are unable to offer an economically viable alternative to the service from cable providers.[118] Also, Cox urges the Commission to investigate volume discounts and establish presumptive limits on the size of such discounts.[119] Further, the Writers Guild of America, West ("WGAW") asks the Commission to enact à la carte requirements as a means to facilitate competition.[120] On the other hand, several content providers encourage the Commission to avoid any actions that limit the ability of programming vendors to package or otherwise structure their distribution agreements. These providers contend that they must maintain flexibility in configuring their distribution agreements given the array of options now available to access video content.[121] To promote competition in the MVPD marketplace, Comcast urges the Commission to examine the need for regulations applicable solely to cable providers, such as the program access rules, and generally "revisit regulations adopted some twenty years ago when the only MVPD available to most Americans was the local cable operator."[122]

47. *Program Carriage*. MVPDs must obtain carriage agreements with video programming vendors in order to provide a competitive video service. Section 616 of the Act directs the Commission to regulate the program carriage agreements and related practices between cable operators or other

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Rcd 15849 (2011). *See also AT&T Servs. Inc. et al.*, Order, 26 FCC Rcd 13206 (MB 2011) (reaching the same conclusion with respect to AT&T in the State of Connecticut), *aff'd AT&T Servs. Inc. et al.*, Memorandum Opinion and Order, 26 FCC Rcd 15871 (2011).

[115] 47 U.S.C. § 548(c)(2)(D); *2012 Program Access Order*, 27 FCC Rcd at 12607-08, ¶ 1.

[116] 47 U.S.C. § 548(c)(5).

[117] *Id.* at 12608-10, ¶¶ 2-4.

[118] *See* AT&T Comments at 2; DIRECTV Comments at 18-19; CenturyLink Comments at 3; Google Reply at 5. Small and rural MVPDs also report facing difficulties in obtaining access to video content under competitive prices and terms. These concerns are raised in Section IV of this Report. Several commenters also advocated for extending the exclusive contract prohibition. *See* Verizon Comments at 13-16; AT&T Comments at 2-3; CenturyLink Comments at 5-7.

[119] Cox Comments at 5-7. Cox also asked the Commission to examine its currents rules surrounding buying groups. *Id.* at 7-8. The Commission has initiated a proceeding that seeks comment on modifications to the program access rules surrounding buying groups. *See 2012 Program Access Order*, 27 FCC Rcd at 12658-68, ¶¶ 82-100.

[120] WGAW Comments at 16-17.

[121] Content Interests Reply at 2.

[122] Comcast Comments at 3, 32-33.

MVPDs and video programming vendors.[123] The Commission's rules prohibit cable operators or other MVPDs from requiring a financial interest in a video programming vendor or obtaining exclusive rights to programming as conditions for carriage.[124] MVPDs also are prevented from discriminating against video programming vendors on the basis of affiliation in the selection, terms, or conditions of carriage if the effect of such conduct is to unreasonably restrain the ability of an unaffiliated video programming vendor to compete fairly.[125] An aggrieved MVPD or video programming vendor may file a complaint for alleged violations.[126]

48. The Commission released an order in 2011 streamlining the program carriage complaint process.[127] In particular, this order codified the requirements for establishing a *prima facie* program carriage violation; established deadlines for action by the Media Bureau and Administrative Law Judges in response to a complaint; extended the deadline for a defendant to respond to a complaint; and implemented a process for the Media Bureau to consider requests seeking a temporary standstill of an existing programming contract pending the resolution of a complaint.[128] The Commission also issued a Notice of Proposed Rulemaking requesting comment on additional proposed revisions to the procedural and substantive program carriage rules to assist in the resolution of carriage disputes.[129]

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[123] 47 U.S.C. § 536. Congress enacted Section 616 after determining that some cable operators required non-affiliated programmers to give them exclusive rights to their programming or provide them with a financial interest in it as a condition for carriage. *See 14th Report*, 27 FCC Rcd at 8634, ¶ 53 n.132.

[124] 47 C.F.R. § 76.1301(a)-(b).

[125] 47 C.F.R. § 76.1301(c).

[126] 47 C.F.R. § 76.1302(a). In July 2012, the Commission affirmed an ALJ's conclusion that Comcast violated Section 616 of the Act and Section 76.1301(c) of its rules by discriminating against the Tennis Channel on the basis of affiliation. The Commission ordered Comcast to carry the Tennis Channel on the same distribution tier as its affiliated networks, the Golf Channel and Versus (now the NBC Sports Network). *Tennis Channel, Inc., Complainant v. Comcast Cable Communications, Defendant*, MB Docket No. 10-204, Memorandum Opinion and Order, 27 FCC Rcd 8508, 8519, 8543, ¶¶ 27, 92 (2012). Comcast appealed the Commission's decision to the D.C. Circuit. On May 28, 2013, the D.C. Circuit overturned the Commission's decision on evidentiary grounds, finding that the record evidence did not establish that affiliation had played a role in the level of carriage that Comcast had provided Tennis Channel. *See Comcast Cable Communications, LLC v. FCC*, No. 12-1337 (D.C. Cir. May 28, 2013). In addition, in October 2011, the Game Show Network ("GSN") filed a program carriage complaint against Cablevision alleging that the cable operator violated the anti-discrimination provision of the program carriage rules when it repositioned GSN from the expanded basic tier to a sports tier. GSN argues that this move separates it from its primarily female audience and is advantageous for WE tv and Wedding Central, two networks affiliated with Cablevision. *Game Show Network v. Cablevision Systems Corp.*, Program Carriage Complaint, CSR-8529-P (filed Oct. 12, 2011). The Media Bureau issued a Hearing Designation Order for the complaint in May 2012. *Game Show Network v. Cablevision Systems Corp.*, MB Docket No. 12-122, Hearing Designation Order and Notice of Opportunity for Hearing for Forfeiture, 27 FCC Rcd 5113 (MB 2012). In response to a joint request from GSN and Cablevision, the hearing is being held in indefinite abeyance. *See Game Show Network v. Cablevision Systems Corp.*, MB Docket No. 12-122, Order, FCC 13M-12 (rel. June 25, 2013).

[127] *Revision of the Commission's Program Carriage Rules; Leased Commercial Access; Development of Competition and Diversity in Video Programming Distribution and Carriage*, MB Docket No. 11-131, MB Docket No. 07-42, Second Report and Order and Notice of Proposed Rulemaking, 26 FCC Rcd 11494 (2011) ("*2011 Program Carriage Order and NPRM*"). This order is currently on appeal in the Second Circuit. *See Time Warner Cable Inc. v. FCC*, No. 11-4138 (2d Cir.).

[128] *2011 Program Carriage Order and NPRM*, 26 FCC Rcd at 11495-96, 11500-01, ¶¶ 2, 8.

[129] *Id.* at 11496-97, 11521-22, ¶¶ 3, 37.

49. In its comments, Verizon states that expanding the program carriage rules to newer video providers that compete with incumbent cable operators would hinder them from offering a competitive service. Verizon explains that a budding alliance has developed between such competitive video providers and independent programmers as competitive video providers have the incentive to assemble attractive programming packages that provide consumers with the diversity of content they desire. Verizon argues, therefore, that any new rules must recognize that competitive providers, like Verizon, have no reason to discriminate in favor of vertically-integrated cable operators and must be exempt from program carriage complaint proceedings.[130] In its comments, Public Knowledge encourages the Commission to enforce its program carriage policies in a more expeditious manner.[131]

50. *Retransmission Consent and Must Carry*. The ability of MVPDs to access local broadcast programming impacts their entry into the video services marketplace.[132] In 1992, Congress enacted Sections 325, 614, and 615 of the Act to facilitate cable operators' carriage of local broadcast television stations[133] and subsequently adopted a similar carriage regime for DBS providers in 1999.[134] Pursuant to Section 325 of the Act, MVPDs may not retransmit a local broadcaster's signal without the station's express permission.[135] Cable operators are required to carry local television stations in every market they serve unless a station elects retransmission consent. DBS operators need not carry any local television signals. But where a DBS operator chooses to carry any such station, it must carry all stations in that market ("carry one, carry all") except for those stations electing retransmission consent.[136] Under this regime, broadcasters maintain control over their signals. And commercial broadcasters electing retransmission consent may request compensation from MVPDs for the carriage of their signals.[137]

51. In local television markets, as defined by The Nielsen Company's ("Nielsen's") designated market areas ("DMAs"),[138] every three years commercial television stations must select between the right

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[130] Verizon Comments at 25-27.

[131] Public Knowledge Comments at 14.

[132] For a complete description of the retransmission consent and must-carry provisions, *see In-State Broadcast Programming: Report to Congress Pursuant to Section 304 of the Satellite Television Extension and Localism Act of 2010*, MB Docket No. 10-238, Report, 26 FCC Rcd 11919 (MB 2011) ("*STELA Report*"); *Retransmission Consent and Exclusivity Rules: Report to Congress Pursuant to Section 208 of the Satellite Home Viewer Extension and Reauthorization Act of 2004*, MB Docket No. 05-28 (Sept. 8, 2005), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-260936A1.doc ("*SHVERA Report*").

[133] 47 U.S.C. §§ 325(b), 534, 535.

[134] The Satellite Home Viewer Improvement Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (1999) ("SHVIA").

[135] 47 U.S.C. § 325(b).

[136] 47 C.F.R. § 338(a)(1); 47 C.F.R. § 76.66.

[137] *See STELA Report*, 26 FCC Rcd at 11922-23, ¶ 7.

[138] A DMA is a Nielsen-defined television market consisting of a unique group of counties. The United States is divided into 210 DMA markets. Nielsen identifies television markets by placing each U.S. county (except for certain counties in Alaska) in a market based on measured viewing patterns and by MVPD distribution. Typically, each U.S. county is assigned to the one market whose stations receive the preponderance of the audience in that county. Yet in a few cases where a county is large and viewing patterns differ significantly between parts of the county, a portion of the county is assigned to one television market and another portion of the county is assigned to another market. Several counties in Alaska, however, are not assigned to any DMA. *See STELA Report*, 26 FCC Rcd at 11921, ¶ 5 & n.10.

to grant retransmission consent or the right to mandatory carriage.[139] If a station selects retransmission consent, the broadcaster and MVPD negotiate a carriage agreement; the carriage agreement may include monetary or other types of compensation in return for the right to carry the broadcast signal.[140] Where a station selects must carry, it is generally entitled to carriage but it is prohibited from receiving compensation.[141] Qualified local noncommercial educational ("NCE") stations have a right to mandatory carriage within the same market, but do not have retransmission consent rights.[142] Cable operators also are permitted to negotiate for retransmission consent with any other broadcast station they seek to carry irrespective of the station's television market.[143]

52. The Commission issued a Notice of Proposed Rulemaking in 2011 seeking comment on several proposed revisions to the retransmission consent regime.[144] Among other things, the Commission sought comment on modifying the good faith negotiation standards to include additional negotiation violations, revising the "totality of the circumstances" standard used to determine whether actions in the negotiation process are undertaken in good faith, and altering the consumer notice requirements for retransmission consent disputes.[145]

53. Several MVPDs urge the Commission to reform the regulatory framework for retransmission consent. They argue that retransmission consent negotiations between broadcasters and video providers occur in a marketplace that is skewed towards broadcasters. These commenters claim that the current regime effectively grants monopoly status to local broadcasters, which especially harms new video providers. They also allege that consumers are harmed in the process because MVPDs either must agree to rising retransmission consent fees or face service disruptions when broadcasters withhold their programming when the terms and conditions they demand are not met.[146] Commenters propose several modifications to the Commission's retransmission consent regime to address these concerns, including amending the good faith standards and defining the term "competitive marketplace considerations" as used in Section 325(b)(3)(C) of the Act.[147] Specifically, some MVPDs have raised concern that the practice of unaffiliated broadcast stations jointly negotiating retransmission consent agreements has a negative impact on competition in local markets and allows broadcasters to secure higher retransmission fees from MVPDs.[148]

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[139] 47 U.S.C. § 325(b)(3)(B); 47 C.F.R. §§ 76.56(b), 76.64.

[140] 47 U.S.C. § 325(b)(3)(C); 47 C.F.R. § 76.64. *See also STELA Report*, 26 FCC Rcd at 11923, ¶ 8.

[141] 47 U.S.C. § 614(b)(1); 47 C.F.R. § 76.60.

[142] 47 U.S.C. § 325(b)(2)(A).

[143] 47 U.S.C. § 325(b); 47 C.F.R. § 76.64. These carriage arrangements might be limited though by other contractual restrictions, such as network affiliation arrangements, or by the Commission's network non-duplication and syndicated exclusivity rules. *See infra*, ¶ 55. *See also STELA Report*, 26 FCC Rcd at 11923, n. 22.

[144] *Amendment of the Commission's Rules Related to Retransmission Consent*, MB Docket No. 10-71, Notice of Proposed Rulemaking, 26 FCC Rcd 2718, 2719, ¶ 1 (2011) ("*Retransmission Consent NPRM*").

[145] *Id.* at 2729-38, ¶¶ 20-37.

[146] *See, e.g.*, Verizon Comments at 16-18; DIRECTV Comments at 18-19; CenturyLink Comments at 4-5; AT&T Comments at 1-4; Public Knowledge Comments at 14. We address the retransmission concerns of small and rural carriers in Section IV.

[147] CenturyLink Comments at 5; DIRECTV Comments at 19; Verizon Comments at 18.

[148] *See* ACA Comments at 11-15; CenturyLink Comments at 5; DIRECTV Comments at 18-19; OPASTCO/NCTA Comments at 11-12.

54. NAB and broadcast station licensees urge the Commission to refrain from altering the existing retransmission consent rules.[149] They argue that broadcasters cannot afford to offer locally oriented programming, including news, without the revenue from retransmission consent fees.[150] NAB explains that broadcasters must increasingly rely on non-advertising revenue to support local news budgets because consumers are using a combination of media platforms to obtain information and entertainment.[151] The ABC Affiliates also note that without retransmission consent fees, broadcasters would not be able to purchase popular network programming and sports programming, which aids them in competing with cable and satellite networks as well as OVDs.[152] NAB comments that joint negotiations by broadcasters help level the playing field for broadcasters negotiating with MVPDs, reducing transaction costs, and generate efficiencies.[153] NAB also states that stations involved in joint arrangements are less likely to be involved in carriage negotiations that result in carriage interruptions.[154]

55. *Exclusivity Rules.* MVPDs must abide by the Commission's rules protecting the exclusive distribution rights of local broadcast stations.[155] For cable operators, the Commission's network non-duplication rules permit a local broadcast station to request the blackout of duplicated programming in the local station's zone of protection when carried on another station imported by the operator.[156] Similarly, the Commission's syndicated exclusivity rules give a local broadcaster the right to black out its exclusive syndicated programming when that programming is carried on another station imported by a cable operator within its zone of protection.[157] The Commission's sports blackout rule protects a sports team's or sports league's distribution rights to a live sporting event occurring in a local market. The rule prevents a cable operator from providing the live sporting event on a distant signal in a market where the game is blacked out on the local broadcast station.[158] As mandated by Congress, the Commission's network non-duplication, syndicated exclusivity, and sports blackout rules apply to satellite carriers.[159]

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[149] NAB Reply at 3; ABC Affiliates Reply at 5-6, 10. *See also, e.g.*, CBS Television Network Affiliates Association Comments, MB Docket No. 10-71 (filed May 27, 2011) ("CBS Affiliates 10-71 Comments"); Sinclair Broadcast Group, Inc. Comments, MB Docket No. 10-71 (filed May 27, 2011) ("Sinclair 10-71 Comments"); Belo Corp. Comments, MB Docket No. 10-71 (filed May 27, 2011) ("Belo 10-71 Comments").

[150] NAB Comments at 24-25; ABC Affiliates Reply at 9-10. *See also e.g.*, CBS Affiliates 10-71 Comments at 1; Sinclair 10-71 Comments at 14; Belo 10-71 Comments at 6; CBS Corporation Comments, MB Docket 10-71 at 11 (filed May 27, 2011) ("CBS Corp. 10-71 Comments").

[151] NAB Comments at 24-25.

[152] ABC Affiliates Reply at 2-3.

[153] *See* NAB Reply at 4-6.

[154] *Id*.

[155] For a more detailed description of these rules, *see generally SHVERA Report*, *supra*, n.132.

[156] 47 C.F.R. § 76.92. For purposes of this rule, a broadcast station's zone of protection is 35 miles (55 miles in smaller markets). 47 C.F.R. § 73.685(m).

[157] 47 C.F.R. § 76.101. For purposes of this rule, a broadcast station has a 35-mile geographic zone of protection. 47 C.F.R. § 73.685(m).

[158] 47 C.F.R. § 76.111.

[159] 47 U.S.C. § 339(b); 47 C.F.R. §§ 76.122-23, 76.127. In 1999, Congress directed the Commission to extend the network non-duplication and syndicated exclusivity rules to satellite carriers, but only with respect to the retransmission of nationally distributed superstations. It also required the Commission to extend the sports blackout rules to the carriage of nationally distributed superstations and network stations. *See* SHVIA, Pub. L. No. 106-113, 113 Stat. 1501A-534.

56. The Commission has sought comment on the elimination of the network non-duplication and syndicated exclusivity rules as they apply to cable[160] and on a Petition for Rulemaking requesting the Commission to eliminate the sports blackout rule.[161] Some MVPDs encourage the Commission to eliminate its network non-duplication and syndicated exclusivity rules as part of a broader effort to reform the Commission's retransmission consent process.[162] NAB and broadcast station licensees, on the other hand, ask the Commission to refrain from repealing the exclusivity rules.[163] In particular, NAB argues that the exclusivity rules promote localism by preserving the revenue base of local stations, allowing for their continued production of local news and investment in entertainment programming.[164]

57. *Ownership Limits.* Section 613(f) of the Act requires the Commission to establish reasonable limits on the number of subscribers a cable operator may serve nationwide ("horizontal" limit) and the number of channels a cable operator may dedicate to its affiliated programming networks ("vertical" limit).[165] Although the Commission adopted rules placing limitations on the horizontal and vertical ownership of cable operators,[166] the D.C. Circuit has repeatedly struck them down.[167]

58. *Public Interest Programming.* Local franchising authorities may, pursuant to Sections 611 and 621 of the Act, require cable operators to provide both channel capacity and certain types of financial support to public, educational, and governmental ("PEG") channels.[168] Cable operators also are

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[160] *See Retransmission Consent NPRM*, 26 FCC Rcd at 2740-43, ¶¶ 42-45.

[161] *See Commission Seeks Comment on Petition for Rulemaking Seeking Elimination of the Sports Blackout Rule*, MB Docket No. 12-3, Public Notice, 27 FCC Rcd 260 (MB 2012).

[162] *See, e.g.*, Verizon Comments at 17; CenturyLink Comments at 5; AT&T Comments at 4. *See also* DIRECTV Comments at 19 (advocating for the Commission to allow the "temporary importation of distant signals" when impasses occur in retransmission consent negotiations).

[163] *See, e.g.*, NAB Reply at 2; CBS Affiliates 10-71 Comments at 2-3; Belo 10-71 Comments at 2, 29-30; Gilmore Comments, MB Docket No. 10-71 at 16 (filed May 27, 2011); Joint Comments of Barrington Broadcasting Group, LLC, Bonten Media Group, LLC, Dispatch Broadcast Group, Gannett Co., Inc., Newport Television, LLC, Post-Newsweek Stations, Inc., and Raycom Media, Inc., MB Docket No. 10-71 at 3-4 (filed May 27, 2011).

[164] NAB Reply at 2-3.

[165] 47 U.S.C. § 533(f).

[166] *See Implementation of Sections 11 and 13 of the Cable Television Consumer Protection and Competition Act of 1992 Horizontal and Vertical Ownership Limits*, MM Docket No. 92-264, Second Report and Order, 8 FCC Rcd 8565, 8567, ¶¶ 3-4 (1993). *See also* 47 C.F.R. §§ 76.503(a), 76.504(a)-(b).

[167] *See Time Warner Entm't Co. v. FCC*, 240 F.3d 1126, 1136, 1139 (D.C. Cir. 2001). The Commission's third attempt in 2008 to implement a horizontal limit preventing an individual cable operator from serving more than 30 percent of MVPD subscribers nationwide was struck down by the D.C. Circuit. *See Comcast Corp. v. FCC*, 579 F.3d 1, 10 (D.C. Cir. 2009).

[168] 47 U.S.C. §§ 531(a)-(b), 541(a)(4)(B). Comcast is subject to heightened PEG requirements after its merger (transaction) involving NBCU. The Commission reaffirmed the importance of PEG programming in its *Comcast-NBCU Order* and imposed requirements on Comcast to protect the public interest as well as preserve diversity and localism in the video services marketplace. *Comcast-NBCU Order*, 26 FCC Rcd at 4326, ¶ 213. The conditions prohibit Comcast from migrating PEG channels to a digital tier until all channels are converted to a digital format. They require carriage of all PEG channels on Comcast's digital starter tier. Comcast may not change the method by which it delivers PEG channels if the change would result in the material degradation of signal quality or impair viewer reception of PEG channels. *Id.* at 4326-27, 4376-77, ¶ 214 & App. A, § XIV. Comcast further agreed to develop a platform for hosting PEG content On Demand and On Demand Online within three years of closing the transaction. *Id.* at 4327, 4376-77, ¶ 215 & App. A, § XIV.

obligated to carry any PEG channels on their basic service tier.[169] Some state video franchising laws, however, have removed or reduced the PEG requirements typically found in local franchising agreements; this has led to a decline in PEG funding and support.[170]

59. Several commenters indicate the importance of PEG programming to local communities. For instance, American Community Television ("ACT") and the Alliance for Community Media ("ACM") explain that PEG channels fill a local information void due to media consolidation and the loss of local media outlets.[171] According to commenters, PEG programming may include city/county council meetings, school board meetings, second language courses, vocational training and employment preparation, as well as high school and college events.[172] ACM states that in recent years, community media has expanded production and distribution services to non-commercial and low power radio, Internet streaming, podcasts, social media, and mobile applications. ACM's alliance members also offer youth media and digital literacy training.[173] ACT notes that in comparison to local broadcast stations that produce approximately 1,500 hours of programming per year, government access produces 1,250 hours per year, educational access produces 1,500 hours per year, and public access produces 2,000 hours per year.[174] ACT clarifies that there is no one source quantifying the number of PEG channels in existence in the United States today; it estimates as many as 5,000 channels and 2,500 access operations.[175]

60. Some commenters also raise concerns surrounding the service and delivery treatment of PEG channels. For instance, commenters note that PEG programing is not described in many MVPDs' electronic programming guides.[176] The City of Boston suggests this discrepancy is a result of the negotiated "nationwide/systemwide" agreements between cable operators and publishers of programming guides that make it impossible for the guides to include specific PEG programming details.[177] Montgomery County, Maryland urges the Commission to consider adopting a rule requiring MVPDs to provide equal treatment to PEG channels and commercial channels in their programming guides.[178] In addition, commenters indicate that some MVPDs do not provide PEG programming in HD despite the ability of community media centers to supply them with HD signals. They assert this can result in signal degradation.[179] The City of Boston notes that cable operators should provide PEG channels with the

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[169] 47 U.S.C. § 543(b)(7)(A)(ii); 47 C.F.R. § 76.901(a).

[170] *See 14th Report*, 27 FCC Rcd at 8639, ¶ 63. *See also* ACT Comments at 6-7.

[171] ACT Comments at 1; ACM Comments at 2.

[172] *See, e.g.*, ACT Comments at 2-4; ACM Comments at 2; City of Boston Comments at 5; Montgomery County Reply at 9-12.

[173] ACM Comments at 1-5. *See also e.g.*, City of Boston Comments at 7-8; Montgomery County Reply at 12-13.

[174] ACT Comments at 5. *See also* ACM Comments at 2 (identifying that community media centers on average provide more than 1,100 original hours of programming to the communities they serve); Montgomery County Reply at 9.

[175] ACT Comments at 5.

[176] *See, e.g.*, City of Boston Comments at 5-6; Montgomery County Reply at 48-49; Community Media Center of Marin at 3; Wisconsin Community Media Comments at 6.

[177] City of Boston Comments at 6.

[178] Montgomery County Comments at 49.

[179] *See, e.g.*, City of Boston Comments at 8-9; Community Media Center of Marin Comments at 3; Chicago Access Corporation Comments at 2-3; Lowell Telecommunications Corporation Reply at 2.

bandwidth capacity to transport HD signals especially if the bandwidth is available to other content offered on the basic service tier, such as that of local broadcasters.[180]

61. Finally, some commenters urge the Commission to act on an ACM et al. petition regarding AT&T's treatment of PEG programming.[181] In particular, ACM and the City of Boston argue that the Commission must act to preserve community media and prevent discriminatory practices that exclusively target PEG channels.[182] In response, AT&T explains that it has repeatedly refuted claims that its U-verse Channel 99 is inaccessible or otherwise inferior and demonstrated the benefits of providing the entire PEG programming in a given DMA.[183] AT&T also states that it has demonstrated the benefits of its PEG offering, including its ability to provide all PEG programming within a DMA to every subscriber in in that DMA – a service not offered by cable companies.

62. With respect to DBS MVPDs, in 1992, Congress established a public interest programming requirement for DBS operators. The statute requires DBS operators to dedicate between four and seven percent of their capacity to public interest programming.[184] The Commission's rules implementing the statute require DBS operators to reserve four percent of their channel capacity to qualified programmers providing "noncommercial programming of an educational or informational nature."[185] DIRECTV reports carrying several channels of public interest programming.[186] DISH Network reports providing 19 channels of public interest programming.[187]

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[180] City of Boston Comments at 8-9.

[181] *See Petition for Declaratory Ruling that AT&T's Method of Delivering Public, Educational and Government Access Channels over its U-verse System is Contrary to the Communications Act of 1934, as amended, and Applicable Commission Rules*, MB Docket No. 09-13, Petition of ACM *et al.* (filed Jan. 30, 2009); *Petition for Declaratory Ruling on Requirements for a Basic Service Tier and for PEG Channel Capacity Under Sections 543(b)(7), 531(a) and the Commission's Ancillary Jurisdiction Under Title I*, MB Docket No. 09-13, Petition of the City of Lansing, MI (filed Jan. 27, 2009). *See also Entities File Petitions for Declaratory Ruling Regarding Public, Educational, and Governmental Programming*, MB Docket 09-13, Public Notice, 24 FCC Rcd 1340 (MB 2009).

[182] ACM Comments at 5-6; ACM Reply at 2; City of Boston Reply at 5. *See also 14th Report*, 27 FCC Rcd at 8639-40, ¶¶ 66-67.

[183] AT&T Reply at 3.

[184] 47 U.S.C. § 335(b)(1)(A). Qualified DBS providers may alter dedicated capacity to between 3.5 and 7 percent if they provide state public affairs networks to their subscribers in at least 15 states. 47 U.S.C. § 335(b)(1)(B).

[185] 47 C.F.R. § 25.701(f). In order to qualify, programmers need to be: (1) organized for a noncommercial, nonprofit purpose; (2) a national educational programming supplier; and (3) responsible for 50 percent of the direct costs the DBS provider occurs in making the programming available. *See id. See also 14th Report*, 27 FCC Rcd at 8640, ¶ 68 n.190.

[186] Among others, DIRECTV offers the following channels: World Harvest Television, C-SPAN 2, Daystar, Trinity Broadcasting Network, the WORD Network, BYU TV, LINK TV, NASA TV, TCT, Once Mexico, EWTN, HITN, NRB, MHz, V-Me, CTN, Gem Net, Hope Channel, JLTV, Enlace, Golden Eagle Broadcasting, Free Speech TV, GOD TV, BabyFirstTV, and numerous local PBS channels. DIRECTV Comments at 12-13.

[187] DISH Network carries the following public interest programming channels: 3ABN, Alma Vision, Baby First, Brigham Young University, C-SPAN, Christian Television Network, Classic Arts Showcase, Enlace, EWTN, Free Speech TV, HITN, Impact Network, Kids & Teens Television, KBS World, KCET – Community Television, NASA Channel, Pentagon Channel, Trinity Broadcasting Network, and V-Me. DISH Network provided updated information to Media Bureau staff on Feb. 22, 2013.

63. *Leased Access.* Section 612 of the Act requires cable operators to designate a portion of their channel capacity for commercial use by unaffiliated parties.[188] The requirement is intended to provide competition and diversity in the video programming marketplace.[189] The Commission regulates the prices, terms, and conditions for access to these channels and reviews petitions for relief from aggrieved parties.[190]

64. *Access to Multiple Dwelling Units.* The Commission's rules prevent cable operators from enforcing or entering into exclusive contracts for video service delivery with multiple dwelling units ("MDUs") and other centrally managed residential real estate developments.[191] The Commission determined that this type of exclusivity was a barrier to broadband deployment and entry into the MVPD marketplace, as well as an unfair act under Section 628(b).[192]

65. *Inside Wiring.* Section 624(i) of the Act provides the Commission with the authority to enact rules concerning the disposition of inside wiring after a cable subscriber terminates service.[193] The Commission's rules initially only provided subscribers with the opportunity to purchase the wiring inside their homes after the termination of cable service and before the removal of such wiring.[194] The Commission later adopted rules that: (1) provide for the sale or transfer of "home run" wiring in an MDU; (2) gave competitive MVPDs access to molding in an MDU containing the incumbent provider's wiring for installation purposes; or (3) gave subscribers access to existing inside wiring prior to

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[188] 47 U.S.C. § 532(b).

[189] 47 U.S.C. § 532(a).

[190] 47 C.F.R. §§ 76.970-78. In 2008, the Commission released a Report and Order modifying the leased access rules. *See Leased Commercial Access*, MB Docket No. 07-42, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 2909 (2008). The Report and Order was stayed by the U.S. Court of Appeals for the Sixth Circuit. *See* Order, *United Church of Christ Office of Communications, Inc. v. FCC*, No. 08-3245 (6th Cir. 2008). The order included rule changes requiring approval by the Office of Management and Budget that was denied on July 9, 2008. No further action has been taken by the Commission to date and the rule changes remain in abeyance.

[191] 47 C.F.R. § 76.2000. The rule applies to cable operators, common carriers, and OVS. *Id. See also Lansdowne on the Potomac Homeowners Ass'n, Inc. v. OpenBand at Lansdowne, LLC*, 713 F.3d 187, 207-08 (4th Cir. 2013) (affirming the district court's judgment that OpenBand violated the Commission's rule banning cable operators from entering into exclusive agreements with MDUs); *Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments*, MB Docket No. 07-51, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 20235, 20235-36, 20238, 20251, ¶¶ 1-2, 7, 30 (2007) ("*MDU Order and FNPRM*"), *aff'd sub nom. Nat'l Cable & Television Ass'n v. FCC*, 567 F.3d 659 (2009). The Commission has determined though that MVPDs are permitted to use bulk billing arrangements – those arrangements in which one MVPD offers video service to every resident of an MVPD at a substantial discount than what each individual resident would pay if he or she contracted with the MVPD individually. *Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments*, MB Docket No. 07-51, Second Report and Order, 25 FCC Rcd 2460, 2463-71, ¶¶ 10-28 (2010). The Commission has also determined that MVPDs are allowed to enter exclusive marketing agreements with MDU owners. *Id.* at 2471-73, ¶¶ 29-37.

[192] *See MDU Order and FNPRM*, 22 FCC Rcd at 20248-49, ¶¶ 26-27. The pending Further Notice of Proposed Rulemaking seeks comment on extending the MDU exclusivity ban to DBS providers, PCOs, and other MVPDs not subject to Section 628. *See id*. at 20264, ¶¶ 61-62.

[193] 47 U.S.C. § 544(i).

[194] 47 C.F.R. §§ 76.801-02. *See also Implementation of the Cable Television Consumer Protection and Competition Act of 1992: Cable Home Wiring*, MM Docket No. 92-260, Report and Order, 8 FCC Rcd 1435 (1993).

terminating service in order to avoid service interruptions.[195] The Commission classifies inside wiring behind sheet rock as physically inaccessible due to the significant cost and physical damage that might occur in accessing such wiring; this facilitates the transfer of ownership for that wiring when an incumbent provider ceases service.[196]

66. *Over-the-Air Reception Devices.* Pursuant to the Act, the Commission has adopted a rule preempting restrictions that impair viewers from receiving video services using over-the-air reception devices ("OTARD").[197] The rule prohibits restrictions impairing the installation, maintenance, or use of antennas to receive video programming on property within the exclusive use or control of the antenna user.[198] Specifically, the rule bars restrictions that: (1) unreasonably delay or prevent installation, maintenance, or use; (2) unreasonably increase the cost of installation, maintenance, or use; and (3) preclude reception or transmission of an acceptable quality signal.[199]

67. DIRECTV indicates in its comments that three major municipalities in the last year – Philadelphia, Chicago, and Boston – have enacted ordinances restricting the placement of satellite dishes. DIRECTV argues that none of the ordinances are permissible under the Commission's OTARD rule, and therefore asks the Commission to find these three ordinances in violation of that rule.[200] The City of Philadelphia disputes DIRECTV's characterization of its ordinance; it contends that the ordinance is

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[195] 47 C.F.R. §§ 76.804-06. *See also Telecommunications Services Inside Wiring; Implementation of the Cable Television Consumer Protection and Competition Act of 1992: Cable Home Wiring*; CS Docket No. 95-184; MM Docket No. 92-260, Report and Order and Second Further Notice of Proposed Rulemaking, 13 FCC Rcd 3659 (1997). "Home run" wiring is the wiring which runs from just outside an MDU resident's unit back to that point where the provider's wiring becomes devoted to that resident. 47 C.F.R. § 76.800(d).

[196] *See Telecommunications Services Inside Wiring Customer Premises Equipment; Implementation of the Cable Television Consumer Protection and Competition Act of 1992: Cable Home Wiring; Clarification of the Commission's Rules and Policies Regarding Unbundled Access to Incumbent Local Exchange Carriers' Inside Wire Subloop*, CS Docket No. 95-184, MM Docket No. 92-260, WC Docket No. 01-338, Report and Order and Declaratory Ruling, 22 FCC Rcd 10640, 10646-61, ¶¶ 12-47 (2007), *aff'd sub nom. Nat'l Cable & Television Ass'n v. FCC*, No. 07-1356, 2008 WL 4808911 (D.C. Cir. Oct. 23, 2008).

[197] 47 U.S.C. § 303 note. *See also* Telecommunications Act of 1996, Pub. L. No. 104-04, § 207, 110 Stat. 56, 114 (1996) ("1996 Act").

[198] 47 C.F.R. § 1.4000(a)(1). The rule applies to direct broadcast satellite antennas that are one meter or less in diameter, or any size in Alaska; antennas that are one meter or less in diameter or diagonal measurement and are designed to receive or transmit either video programming services through multipoint distribution services, including multichannel multipoint distribution services, instructional television fixed services, and local multipoint distribution services, or fixed wireless signals other than via satellite; and antennas designed to receive television broadcast signals. 47 C.F.R. § 1.4000(a)(1)(i)-(iii). The antenna user also must have a direct or indirect ownership interest, or leasehold interest, in the property. 47 C.F.R. § 1.4000(a)(1). DIRECTV points out the OTARD rules protect Alaskan customers' right to larger receiver antenna sizes, but the rules do not cover Hawaiian customers, who are unable to receive reliable service due to the smaller dish sizes. It argues that the OTARD rules should be adjusted to include Hawaiian subscribers. DIRECTV Comments at 14.

[199] 47 C.F.R. § 1.4000(a)(3)(i)-(iii).

[200] DIRECTV Comments at 19-21. The Media Bureau is currently reviewing a petition for rulemaking filed by DIRECTV and DISH Network requesting the Commission to amend its OTARD rule. *See Media Bureau Seeks Comment on Petition for Rulemaking Requesting the Commission to Amend the Over-The-Air Reception Devices Rule to Clarify the Extent to Which Local Governments Can Regulate Non-Exclusive Areas*, MB Docket No. 12-121, Public Notice, 27 FCC Rcd 5074 (MB 2012). DIRECTV and DISH Network have also petitioned the Commission for a declaratory ruling on the legitimacy of the Philadelphia ordinance. *See Media Bureau Seeks Comment on Petition for Declaratory Ruling That An Ordinance of the City of Philadelphia, Pennsylvania is Preempted By The Commission's Over-The-Air Reception Device Rule*, CSR-8541-O, Public Notice, 26 FCC Rcd 16074 (MB 2011).

consistent with the Commission's OTARD rule and should be upheld.[201] The City of Boston also contests DIRECTV's claim that it is attempting to deter the use of satellite dishes in the city, stating that it will defend its ordinance in any Commission proceeding.[202]

(ii) Market Conditions Influencing Entry

68. A number of market conditions, in addition to regulatory conditions, may also influence if, and when, entry occurs. Economies of scale, industry profit margins, capital requirements, first-mover advantages and the reaction of competitors to new entrants all affect a firm's ability and incentive to enter into a market. Economies of scale appear to produce cost advantages, especially with respect to the cost of acquiring programming and consumer premise equipment,[203] and thus may play a major role in profitability and the willingness to enter the MVPD industry. If current industry profit margins are high, this could entice entry by a firm with economies of scale, while lower profit margins may indicate an already highly competitive market with efficiently operating competitors, which would likely deter entry.[204] Capital requirements, especially large fixed costs, may also influence if and when MVPD entry takes place. The expected reaction from existing competitors, especially in terms of price competition, also influences entry.[205] Each of these elements is discussed in turn below.

69. *Economies of Scale*. The term "economies of scale" refers to the situation where there is a decline in unit costs as the total number of units produced per period increases. Economies of scale may deter entry if new MVPDs must enter the market at a large scale in order to obtain cost advantages similar to those enjoyed by incumbent MVPDs.[206] According to SNL Kagan, economies of scale have grown increasingly significant to maintain or grow margins as cable MVPDs have been challenged by basic-subscriber losses and programming cost increases.[207] SNL Kagan contends that compared to the smaller and mid-sized MSOs, Comcast, Time Warner Cable, and Charter can better leverage their scale in programming cost negotiations.[208] Statements from MVPDs suggest that scale economies affect the cost of acquiring programming and customer premises equipment, such as set-top boxes. For example, Comcast stressed the importance of achieving scale in both content and distribution in its transaction with NBC-Universal.[209] And Time Warner Cable announced annual cost efficiencies of approximately $100 million through programming expense savings and other cost reductions in its transaction with Insight Communications.[210] DIRECTV states that it believes that its large subscriber base creates an opportunity to obtain programming and make equipment purchases on favorable terms.[211]

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[201] City of Philadelphia Reply at 2-6.

[202] City of Boston Reply at 6-7.

[203] For a discussion of market-based conditions that influence entry, *see* Porter at 7-17.

[204] *See, e.g.*, *Horizontal Merger Guidelines*, § 9.2 ("Entry is more likely if it is profitable….").

[205] Porter at 17-23.

[206] *Id*. at 7-9.

[207] Michelle Ow, *Historical Benchmarks: Cable Margins by Segment, 2007 – Q1'12*, SNL Kagan, *Cable TV Investor: Deals & Finance*, July 31, 2012, at 12-13.

[208] *Id*.

[209] Comcast, *2010 Annual Review, Letter to Shareholders*, http://www.comcast.com/2010annualreview/?SCRedirect=true#/ceoletter (visited Sept. 28, 2012).

[210] Time Warner Cable, *Time Warner Cable to Acquire Insight Communications* (press release), Aug. 15, 2011.

[211] DIRECTV, *SEC Form 10-K for the Year Ended December 31*, 2011, at 3 ("DIRECTV 2011 Form 10-K").

70. Mid-size and smaller MVPDs assert that they are at a competitive disadvantage. Cox Communications, with 4.7 million subscribers is the fifth largest MVPD, but serves less than 40 percent as many subscribers as the fourth largest MVPD.[212] According to Cox, the top four MVPDs far exceed all others in terms of their bargaining power with programmers and this represents one of the most significant competitive threats that mid-sized MVPDs face.[213] The American Cable Association ("ACA") also emphasizes the importance of scale by calling attention to the higher prices paid for video programming by small cable operators that lack scale economies.[214]

71. *Capital Requirements*. The need to invest large financial resources in order to compete may also influence MVPD entry, especially in a mature market where most customers wanting MVPD service already subscribe to an MVPD. Large fixed costs and an entrant's recognition that most of its subscribers would need to switch from an incumbent MVPDs may delay the entrance of a new MVPD. Disincentives to enter may increase if current profit margins are low, which would suggest that the recovery of capital investment is risky or would be delayed. For example, Charter notes that constructing a competing cable system involves a capital intensive process with a high degree of risk.[215]

72. *First Mover Advantages*. First mover advantages that benefit incumbent providers may represent another condition influencing entry.[216] Years of advertising and customer relationships may provide incumbents with a degree of brand identification and customer loyalty.[217] Entrants must often spend heavily to win customers from incumbents, which often results in start-up losses. [218] Given the maturity of the MVPD market, new MVPDs recognize that they must win customers from incumbents.[219] If it costs more to induce a subscriber to switch than it costs the incumbent to win the customer initially, this constitutes a first-mover advantage that deters entry. According to Charter, to be successful, a competitor's overbuild would need to be able to serve customers in the overbuilt area with equal or better service quality than that offered by the incumbent provider, on a more cost-effective basis than Charter can provide.[220]

73. *Reaction from Existing Competitors*. A potential entrant's expectations regarding the reaction from incumbent MVPDs may influence entry. For instance, the possibility of "predatory

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[212] Cox Comments at 1.

[213] *Id*. at 1-2.

[214] ACA Comments at 9-10.

[215] Charter, *SEC Form 10-K for the Year Ended December 31, 2011*, at 11 ("Charter 2011 Form 10-K").

[216] For a discussion of first-mover advantages, *see* David Montgomery & Marvin Lieberman, *First-Mover Advantages*, STRATEGIC MANAGEMENT JOURNAL, Summer 1988, at 41-58.

[217] Porter at 9. *See also* DIRECTV 2011 Form 10-K at 3 (DIRECTV believes that the strength of its brand name is an important factor in its ability to attract new subscribers and retain existing subscribers).

[218] *Id*.

[219] DISH Network explained that "as the pay-TV industry matures, we and our competitors increasingly must seek to attract a greater proportion of new subscribers from each other's existing subscriber bases rather than from first-time purchasers of pay-TV services." DISH Network, *SEC Form 10-K for the Year Ended December 31, 2011*, at 19 ("DISH Network 2011 Form 10-K").

[220] Charter 2011 Form 10-K at 11.

pricing," where an incumbent lowers price in an effort to discourage entry or drive an entrant from the market before it can establish itself, may inhibit market entry.[221]

e. Recent Entry and Exit

74. There are different types of MVPD entry, and each has a potentially different impact on competition in the market for the delivery of video programming. Meaningful entry that substantially increases competition requires bringing new capacity, upgraded capacity, or efficiencies into the market with a desire to gain market share.[222] Since 2005, the entry and extension of video delivery systems by AT&T, Verizon, and CenturyLink may have had the most significant impact on competition. In addition to constructing high-capacity, fiber-based, all-digital systems, these three telephone MVPDs compete in areas already served by cable MVPDs. In the 18 months between the end of 2010 and end of June 2012, AT&T and Verizon slowed expansion of their video delivery systems. According to SNL Kagan, AT&T completed its planned build-out of its U-verse network, although the company recently announced plans to extend its service area.[223] Verizon neared completion of its FiOS network, and CenturyLink continued to take a "cautious approach" to the build-out of its Prism network.[224] Another type of entry, the acquisition of an existing video delivery system, may strengthen competition, even when it does not change the number of competitors, to the extent that the acquisition provides efficiencies and other benefits, including increased capital investments to upgrade the system. An example of this type of entry is the acquisition of cable systems in Virginia, West Virginia, and western Maryland by Shentel, which was followed by system upgrades to provide digital television, HD channels, and VOD and DVR services.[225]

75. In 2011, cable MVPD transactions involved 1.0 million subscribers and the total value of the transactions was $3.8 billion.[226] This represents a decline from 2010, which involved 1.6 million subscribers with a total value of $5.4 billion.[227] Acquisitions by Time Warner Cable, which included the $3.0 billion acquisition of Insight Communications, accounted for $3.3 billion, about 86 percent of the total value of transactions in 2011.[228] This contrasts with 2010, where transactions among smaller rural cable systems made up the majority of the transactions.[229] The average value per home passed and the average value per subscriber was $1,637 and $3,757 respectively in 2011.[230] This compares with an

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[221] For a discussion of predatory pricing, *see*, Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239 (2000), http://www0.gsb.columbia.edu/faculty/pbolton/PDFS/BBRPrincetonDP.pdf (visited Nov 16, 2012).

[222] Porter at 7.

[223] *See infra*, ¶ 141, n.522.

[224] Mari Rondeli, *Telcom Video Paradox Points to Higher Subs Penetrations, Limits on Footprint Expansion*, Multichannel Market Trends, SNL KAGAN, June 20, 2012, http://www.snl.com/interactivex/article.aspx?id=15117039&KPLT=6 (visited Oct. 2, 2012).

[225] Shentel, *SEC Form 10-K for the Period Ending December 31, 2011*, at 7 ("Shentel 2011 Form 10-K").

[226] SNL Kagan, *Cable TV Investor: Deals & Finance*, Dec. 30, 2011, at 1. According to SNL, the pursuit of economies of scale, combined with the continued availability of capital, drove mergers and acquisitions in 2011. *Id.*

[227] SNL Kagan, *Broadband Cable Financial Databook*, 2011 Edition, at 91.

[228] SNL Kagan, *Cable TV Investor: Deals & Finance*, Dec. 30, 2011, at 2.

[229] SNL Kagan, *Broadband Cable Financial Databook*, 2011 Edition, at 91.

[230] SNL Kagan, *Cable TV Investor: Deals & Finance*, Dec. 30, 2011, at 1.

average value per home passed and an average value per subscriber of $1,540 and $3,447 respectively in 2010.[231]

76. In the first six months of 2012, cable MVPD transactions involved 206,000 subscribers with a total value of $1.07 billion.[232] This was dominated by a private equity group's sale of its 90 percent stake in Wave Broadband for $950 million to another private equity group.[233] The average value per home passed and the average value per subscriber was $1,447 and $5,186 respectively in the first half of 2012.[234]

77. Two transactions involving 1.5 million subscribers and valued at $7.94 billion were announced in July 2012.[235] Private equity groups are buying Suddenlink Communications from other private equity groups for $6.6 billion.[236] The average value per home passed and the average value per subscriber for the Suddenlink transaction is $2,184 and $5,263 respectively.[237] In addition, Canada-based Cogeco is acquiring Atlantic Broadband Group LLC for $1.36 billion.[238] The average value per home passed and the average value per subscriber for the Atlantic Broadband transaction is $2,644 and $5,357 respectively.[239] In February 2013, Charter Communications' $1.6 billion acquisition of Cablevision's Bresnan Broadband Holdings, LLC ("Optimum West"), which serves 366,000 subscribers was announced.[240] This transaction, which was completed on July 1, 2013, has an average value per home passed of $2,462 and an average value per subscriber of $5,345.[241]

78. ACA notes that the number of cable systems has declined over the past five years.[242] While acknowledging that the reduction is due, in part, to eliminating headends and interconnecting with other cable systems, ACA maintains that some of the reduction is due to cable system closures (*i.e.*, some cable systems are not sold to new owners, they are simply shut down and video service to the area served

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[231] SNL Kagan, *Broadband Cable Financial Databook*, 2011 Edition, at 91.

[232] SNL Kagan, *Cable TV Investor: Deals & Finance*, June 29, 2012, at 1. SNL Kagan explains that its estimated value of transactions does not include WideOpenWest Networks LLC's $1.43 billion acquisition of Knology Inc., because the transaction involves primarily overbuilder subscribers. Including the overbuilder deal would boost the total value of transactions for the first half of 2012 to $2.5 billion. *Id*.

[233] *Id*.

[234] *Id*.

[235] SNL Kagan, *Cable TV Investor: Deals & Finance*, July 31, 2012, at 13-14.

[236] *Id*. at 13.

[237] *Id*. at 14.

[238] *Id*. at 13.

[239] *Id*. at 14.

[240] Charter Communications, Inc., *Charter to Acquire Optimum West from Cablevision* (press release), Feb. 7, 2013. *See also Applications Filed for the Transfer of Control of Bresnan Broadband Holdings, LLC to Charter Communications Inc.*, MB Docket No. 13-77, Public Notice, 28 FCC Rcd 3026 (MB 2013).

[241] SNL Kagan, *Cable TV Investor: Deals & Finance*, Feb. 28, 2013, at 8. *See Applications Granted for the Transfer of Control of Bresnan Broadband Holdings, LLC to Charter Communications, Inc.*, MB Docket No. 13-77, Public Notice, 28 FCC Rcd 7031 (MB 2013). *See also* Charter Communications, Inc., *Charter Completes its Acquisition of Optimum West from Cablevision* (press release), July 1, 2013.

[242] ACA Comments at 5. ACA says that "between 2005 and 2011, the total number of cable systems has decreased by more than 26%, shrinking from 7,208 to 5,312." Based on the Commission's COALS database, we estimate that there were 7,798 cable systems in 2005 compared to the 5,127 we report for 2012. *See supra*, ¶ 24.

by the cable system is terminated).[243] ACA contends that over the past five years nearly 800 cable systems serving over 35,000 subscribers have closed mostly in small and rural communities, leaving those communities without any wireline MVPD service.[244] ACA believes that the primary causes of cable system closures in small and rural communities are increasing programming costs and pole attachment fees.[245]

3. MVPD Conduct

79. The second element of our analysis of MVPD competition is an examination of the conduct of MVPDs. In particular, we consider the business models and competitive strategies that MVPDs have adopted to attract and retain subscribers and generate profits. In this section of the Report, we discuss MVPD competition in terms of both price and non-price rivalry. We then provide an overview of the current business models and competitive strategies of a sample of MVPDs.

a. Price Rivalry

80. Pricing represents one component of every MVPD's competitive strategy. Some MVPDs market themselves as offering "premium" services while others market themselves as providing "value" services. Over time, MVPDs have altered their pricing in response to changes in the competitive landscape. Going forward, SNL Kagan anticipates greater experimentation with various programming packages and pricing schemes.[246] In addition, some cable operators are highlighting or separately listing the costs of RSNs on subscribers' bill.[247]

81. Today, the largest and most mid-sized MVPDs offer one or more high-end pricing plans that include hundreds of channels and a complement of HD, DVR, VOD services, and some mix of premium channels. In addition, these MVPDs offer one or more mid-priced video service plans that include fewer channels and a smaller complement of video services. MVPDs offer, but are less likely to market, lower-priced video service plans with fewer channels and few, if any, additional video services.[248] An MVPD may charge different prices in the different cities and towns it serves. These differences may reflect system upgrades or differences in the number of channels or advanced video services offered from one city to the next. They also may reflect differences in the number of competitors or differences in the competitive strategies competitors use in different locations.

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[243] *Id*. at 5.

[244] *Id*. at 5-7. Although the FCC collects data that enable us to estimate the number of active and inactive cable systems, we do not collect information on the reasons cable systems become inactive. In addition, our data do not identify whether households previously served by a now inactive cable system are currently being served by another cable system.

[245] *Id*. at 8. In February 2013, the D.C. Court of Appeals upheld the Commission's *2011 Pole Attachment Order*, in which the Commission reformulated the rate ceiling that pole-owning utilities can charge telecommunication carriers requesting to make pole attachments as well as clarified the rates cable operators must pay for their commingled services. *See American Electric Power Service Corp. v. FCC*, No. 11-1146 (D.C. Cir. Feb. 26, 2013); *see also Implementation of Section 224 of the Act*, WC Docket No. 07-245, Report and Order and Order on Reconsideration, 26 FCC Rcd 5240, 5295-5327, ¶¶ 126-98 (2011) ("*2011 Pole Attachment Order*").

[246] SNL Kagan, *Cable TV Investor: Deals and Finance*, Sept. 27, 2012, at 2.

[247] *See infra*, ¶ 347.

[248] Marketing includes the information prominently displayed on the MVPD's website. Our review of the websites of a number of MVPDs suggests that it is often much easier to find the higher-priced video service plans than it is to find the lowest price video service plan offered by the MVPD.

82. *Discounts for New Subscribers*. One of the most common pricing strategies among MVPDs takes the form of reduced introductory or promotional prices for new subscribers. Typically, these new subscriber discounts are for a limited time (*e.g.*, six months or a year) and often include additional video services (*e.g.*, premium channels) or bundles of video, Internet access, and telephone service. At the end of the introductory period, promotional materials usually indicate that prices will rise to the "normal" price. For example,[249] DIRECTV offers five video packages ranging from $29.99 per month to $89.99 per month for 12 months after rebate with a 24-month agreement.[250] According to DIRECTV, the prices for these video packages are available only to new customers and represent a savings of $35-$40 per month in the first year and $20 per month in the second year.[251] A promotion by Verizon offers FiOS TV Prime HD, Internet (15/5 Mbps), and telephone for $84.99 per month for one year, without a contract.[252] According to Verizon, the offer is available only to new customers who subscribe online to a FiOS Triple Play bundle.[253] Charter offers new customers triple bundles ranging from $89.97 to $129.97 per month for 12 months.[254] The price increases $20 per month during the second year.[255] MVPD advertisements typically note that prices at the end of the promotional period rise to the "standard" rates. For example, Charter's promotional details state, "standard rates apply after 2 years."[256]

83. *Prices for Existing Subscribers*. Some existing subscribers may be paying less than list prices by negotiating discounts with their current MVPD, although MVPDs do not advertise such discounts for existing subscribers.[257] In this regard, DISH Network has communicated to its shareholders that the company has offered free programming and/or promotional pricing for limited periods for existing customers in exchange for a contractual commitment.[258]

b. Non-Price Rivalry

84. Central to every MVPD business model are decisions about where to offer services and which technology to use to deliver video programming. Each specific technology has its own set of advantages and disadvantages. Moreover, technologies change over time and the competitive advantages of one technology may fade as new technologies are introduced. Originally, coaxial cable defined the

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[249] The examples included here are snapshots of recent offerings and may not reflect current service offerings and prices available to new subscribers.

[250] DIRECTV, http://www.directv.com/DTVAPP/new_customer/base_packages.jsp?footernavtype=-1 (visited Oct. 4, 2012).

[251] *Id*.

[252] Verizon, http://www22.verizon.com/home/aboutfios/ (visited Oct. 4, 2012).

[253] *Id*.

[254] Charter, https://connect.charter.com/landing/pages/DLP_Shell.aspx?id=12A (visited Oct. 4, 2012).

[255] Charter, http://charter.com/footer/footerPage.jsp?tag=DISCLAIM_GLOBALOFFER (visited Oct. 4, 2012).

[256] *Id*.

[257] Brianna Golodryga, Maureen White, and Alice Gomstyn, *Cut Your Bills With Just a Phone Call*, ABC NEWS, Jan. 23, 2009, http://abcnews.go.com/Business/Economy/story?id=6715239&page=1 (visited Nov. 29, 2012); Lauren A. E. Schuker, *Customers Say to Cable Firms, 'Let's Make a Deal,'* WALL ST. J., Dec. 29, 2011, http://online.wsj.com/article/SB10001424052970203479104577124494272500550.html?mod=WSJ_hp_mostpop_read (visited Nov. 29, 2012).

[258] DISH Network 2011 Form 10-K at 5. Data on DISH Network's free programming or promotional prices for existing customers is not available.

MVPD market. When DIRECTV and DISH Network began offering MVPD service in the 1990s, the digital DBS systems provided significantly greater channel capacity compared to existing analog cable systems. Cable MVPDs upgraded their cable systems in response to DBS's technology advantage. These upgrades included incorporating more optic fiber into coaxial networks and transitioning from analog to digital technology. In addition, some telephone companies offer MVPD service using digital fiber-to-the-node and/or digital fiber-to-the-home systems.[259]

85. The different technologies used by MVPDs also affect the quality of bundled services, which DBS operators argue are increasingly important to competition in the market for the delivery of video programming.[260] DIRECTV explains that its one-way system does not provide telephone or Internet access service, so it has entered into cooperative arrangements with local exchange carriers in certain markets to provide bundles (*i.e.*, video programming from DIRECTV and telephone and Internet access using digital subscriber line ("DSL") technology from the local exchange carriers).[261] DIRECTV explains that the Internet service provided over DSL does not offer the broadband capability available through a fiber-based system (such as FiOS) or a DOCSIS 3.0 cable modem service.[262] Because DSL service is decreasingly viewed as an equivalent broadband service, DIRECTV maintains that DBS operators increasingly find themselves at a competitive disadvantage.[263] In 2012, DISH Network entered into cooperative arrangements with ViaSat and Hughes to provide Internet service using two-way satellite technology with speeds up to 10 Mbps.[264]

86. To attract new subscribers and retain existing subscribers, MVPDs use various competitive strategies, including, as described below, freeing up bandwidth for additional services, delivering video to computers, tablets, and mobile devices, and differentiating their services from those of competitors.

87. Many cable MVPDs have transitioned or are in the process of transitioning their analog channels to all digital to free up bandwidth for additional services (*e.g.*, more digital channels, more HD channels, more VOD programming, and faster Internet speeds).[265] The transition requires deployment of

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[259] According to SNL Kagan, 298 telephone companies are deploying fiber-to-the-home to support facilities-based video. Mari Rondeli, *Telco video footprint for ILECs and CenturyLink to Double by 2016*, Multichannel Market Trends, SNL KAGAN, July 19, 2012, http://www.snl.com/Cache/snlpdf_48556f64-5ca0-4227-b77b-7c6d3be1ad29.pdf (visited Jan. 28, 2013).

[260] DIRECTV Comments at 1-2.

[261] *Id*. at 4, 13, and 15-17. DIRECTV discusses the risk factors associated with competing in the MVPD industry against cable and telephone MVPDs and other land-based systems that have the ability to offer video, Internet access, telephone, and other two-way services. DIRECTV, *SEC Form 10-K for the Year Ended December 31, 2012* at 20-21. The DIRECTV and DISH Network cooperative arrangements are typically with telephone and broadband companies that do not offer video services in the same geographic area. For example, DIRECTV typically has cooperative arrangements with Verizon to provide Internet access and telephone service where Verizon offers DSL and not in areas where Verizon offers FiOS TV. Verizon, http://www22.verizon.com/home/directv/#packages (visited Oct. 4, 2012).

[262] DIRECTV Comments at 14-17.

[263] *Id*. at 16-17.

[264] DISH Network, *DISH Launches dishNET Broadband, Bringing High-Speed Internet to Rural Americans with Slow or No Access* (press release), Sept. 27, 2012.

[265] One analog video program requires an entire 6 MHz channel. By converting analog signals to digital video signals, the MVPD can carry 10 to 12 standard definition programs on a 6 MHz channel or two or three HD programs on a 6 MHz channel. Ian Olgeirson, *Cable's All-Digital Transition Marches on Without Universal* (continued….)

additional set-top boxes and digital terminal adapters.[266] At the end of 2012, the all-digital transition had reached slightly more than half of the collective footprints of the top eight cable MVPDs.[267] Among the largest cable MVPDs, Comcast and Cablevision have moved aggressively to transition to all-digital.[268] Other large cable MVPDs, such as Charter, Cox, Bright House, and Time Warner Cable, are moving more slowly.[269]

88. Cable MVPDs continue to transition from analog to all-digital systems. Using data from FCC Form 325 for years 2009, 2010, 2011, and 2012, Tables 3 and 4 show the growth in the number of all-digital cable systems for all cable systems with over 20,000 subscribers and for a sample of cable systems with 5,000 to 20,000 subscribers, respectively.[270] We define an all-digital cable system as a system that has no analog channels. Most cable systems with more than 20,000 subscribers remain hybrid systems (*i.e.*, they have both digital channels and analog channels). Hybrid systems, however, are removing analog channels and replacing them with digital channels (*i.e.*, they are becoming more digital).[271] No cable systems with more than 20,000 subscribers remain all analog.

(Continued from previous page)
Support, Multichannel Market Trends, SNL KAGAN, Dec. 14, 2011, http://www.snl.com/interactivex/article.aspx?id=13843856&KPLT=6 (visited Oct. 10, 2012).

[266] Subscribers with analog televisions use a digital terminal adapter to convert digital signals to analog signals.

[267] Ian Olgeirson, *Cable's All-Digital Migration Makes Modest Gains in 2012*, Multichannel Market Trends, SNL KAGAN, Dec. 17, 2012, http://www.snl.com/interactivex/article.aspx?id=16632971&KPLT=6 (visited May 15, 2013).

[268] *Id*.

[269] *Id*.

[270] We also collect FCC Form 325 data from a sample of cable systems with under 5,000 subscribers systems. Due to data limitations, cable systems with less than 5,000 subscribers are not included in the charts. *See also supra*, n.77.

[271] Ian Olgeirion, *Cable's All-Digital Migration Makes Modest Gains in 2012*, Multichannel Market Trends, SNL KAGAN, Dec. 17, 2012, http://www.snl.com/interactivex/article.aspx?id=16632971&KPLT=6 (visited May 15, 2013).

Table 3: All Digital Cable Systems With More than 20,000 Subscribers

Filing Year	Total Systems Filed	More than 20K Subs	All Digital Systems	Annual Growth %
2009	1074	596	18	
2010	982	570	24	33%
2011	1062	576	50	108%
2012	1023	557	151	202%

Table 4: All-Digital Cable Systems With Between 5,000 and 20,000 Subscribers

Filing Year	Total Systems Filed	5K - 20K Subs	All Digital Systems	Annual Growth %
2009	1074	242	8	
2010	982	252	15	88%
2011	1062	326	28	87%
2012	1023	282	63	125%

89. Some cable operators are implementing another competitive strategy for reclaiming bandwidth through the deployment of switched digital video ("SDV"). SDV frees up bandwidth because it transmits only those digital channels that are being watched within a given group of homes at any given time, rather than transmitting all digital channels to all subscribers at the same time. At the end of 2012, approximately 43 percent of digital cable subscribers of the top eight cable MVPDs were served using SDV.[272] SNL Kagan explains that the choice between transitioning to all-digital systems and using SDV is not mutually exclusive. Both transitioning to all-digital systems and employing SDV free up bandwidth, and there is a broad expectation that cable MVPDs will need to do both to meet their long-term bandwidth needs.[273] Cablevision moved aggressively in the transition to all-digital systems and the deployment of SDV. Comcast moved aggressively in the transition to all-digital systems but has been slow to deploy SDV.[274] Charter, Cox, Bright House, and Time Warner Cable have moved slowly in the transition to all-digital systems, but all have moved aggressively to deploy SDV.[275]

90. Another competitive strategy for freeing up bandwidth involves the migration to managed IP video. The cable industry's initial efforts were directed at migrating VOD content to IP, but the migration to IP is now targeted at moving some linear video content from MPEG/QAM to IP.[276]

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[272] Ian Olgeirson, *Switched Digital Deployments Gain Depth, Little Breadth in 2012*, Multichannel Market Trends, SNL KAGAN, Dec. 20, 2012, http://www.snl.com/interactivex/article.aspx?id=16659391&KPLT=6 (visited May 15, 2013).

[273] *Id*.

[274] *Id*.

[275] *Id*.

[276] Ian Olgeirson, *Cable's Managed IP Video Poised for Progress in 2013*, Multichannel Market Trends, SNL KAGAN, Dec. 21, 2012, http://www.snl.com/interactivex/article.aspx?id=16669807&KPLT=6 (visited June 25, 2013).

Recent reports suggest that the cable industry's upcoming transition from the DOCSIS 3.0 telecommunications standard to the DOCSIS 3.1 telecommunications standard may facilitate migration to an all IP network.[277]

91. Another competitive strategy for attracting and retaining subscribers is the "TV Everywhere" initiative, which allows consumers to access both linear and VOD programs on a variety of in-home and mobile Internet-connected devices. To restrict access to TV Everywhere content, MVPDs use an authentication process that requires a subscriber to select his or her MVPD service provider, then provide a user ID and password. First introduced in 2010, SNL Kagan explains that TV Everywhere has struggled to gain traction with consumers due to limited awareness of the product and the difficulty some subscribers experience with the authentication process.[278] Other impediments to the adoption of TV Everywhere include licensing issues between MVPDs and programmers over content, limitations on which devices may receive programs, and restrictions on which programs customers may access outside their homes.[279] Adoption of TV Everywhere increased when the 2012 Olympic Games were streamed live and made available on demand online.[280] SLN Kagan estimates 5.1 percent of MVPD subscribers qualifying for TV Everywhere access viewed TV Everywhere videos in September 2012.[281]

92. Cable companies also are incorporating WiFi hotspots to add value to their subscribers.[282] A collaboration among Bright House Networks, Cox Communications, Cablevision's Optimum, Time Warner Cable, and Comcast's Xfinity allows each company's Internet subscribers to access more than 150,000 WiFi hotspots.[283] This means that Cablevision subscribers from New York can access Time Warner Cable WiFi networks in Los Angeles, and vice versa.

93. MVPDs continue to compete through attempts to differentiate their services from their competitors' services. Some MVPDs differentiate their services by highlighting bundles of video, Internet access, and telephone services while other MVPDs focus on video packages. The major cable and telephone MVPDs focus their marketing on bundles.[284] Their emphasis usually is that bundles offer better prices for consumers, relative to individual service offerings. In contrast, the two DBS MVPDs

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[277] Brian Santo and Mike Robuck, *DOCSIS 3.1 Takes Center Stage at Cable-Tec Expo*, CED, Nov. 21, 2012, http://www.cedmagazine.com/articles/2012/11/docsis-31-takes-center-stage-at-cable-tec-expo (visited Mar. 18, 2013).

[278] Perkin di Grazia, *Networks Have Their Own Plans for TV Everywhere*, Economics of Internet Media, SNL KAGAN, Sept. 27, 2012, http://www.snl.com/interactivex/article.aspx?id=15887619&KPLT=6 (visited Oct. 11, 2012).

[279] *Id*.

[280] *Id*.

[281] Tony Lenoir, *TV Everywhere Viewers Only 5.1% of Eligible Subscribers*, Cable TV Investor: Deals & Finance, SNL KAGAN, Oct. 30, 2012, at 14-16.

[282] Robert Palmer, Cable's Extinct, WiFi's the Future, The Motley Fool, July 17, 2013, http://beta.fool.com/robertnpalmer/2013/07/17/citywide-wi-fi-sposts/40304/ (visited July 17, 2013).

[283] See http://www.cablewifi.com/ (visited July 17, 2013). See also Marguerite Reardon, Cable Companies Expand Free Wi-Fi, CNET News, May 21, 2012, http://news.cnet.com/8301-1023_3-57438006-93/cable-companies-expand-free-wi-fi/ (visited July 17, 2013).

[284] *See, e.g.*, Comcast, http://wwwb.comcast.com/ (visited Mar. 13, 2013); Time Warner Cable, http://www.timewarnercable.com/en/residential-home.html (visited Mar. 13, 2013); Charter, http://charter.com/ (visited Mar. 13, 2013); Cablevision, http://www.cablevision.com/ (visited Mar. 13, 1013); AT&T, http://www.att.com/shop/u-verse.html#fbid=1dQ9_R-dnE4 (visited Mar. 13, 2013); and Verizon, http://www22.verizon.com/home/aboutFiOS/ (visited Mar. 13, 2013).

focus their marketing on video services, in part, because the satellite technology they use for delivering video programming limits their ability to provide non-video (*i.e.*, Internet access and telephone) services.[285] To differentiate its service, DIRECTV offers the NFL Sunday Ticket, which is available only on DIRECTV.[286] And DISH Network differentiates its service by claiming it offers the lowest all-digital package prices nationwide.[287] Some MVPDs claim to offer more channels than competitors or more channels of a specific type. Verizon claims that FiOS TV offers more children's, sports, and premium movie channels than cable.[288]

94. Some MVPDs differentiate their service by claiming they offer superior quality. Verizon claims that FiOS TV customers rate FiOS picture quality higher than cable and satellite customers rate their own.[289] Some MVPDs claim to offer better DVR or VOD service. DISH Network claims that its Hopper DVR, which can record up to six channels at once and automatically skip commercials, is the most advanced DVR available.[290] Comcast claims to offer the world's largest collection of VOD television shows and movies.[291] Some MVPDs attempt to differentiate their services through better customer service. For example, Charter's new ALL IN Customer Guarantee assures customers that the company will deliver what it says it will, backed with financial commitments.[292] DIRECTV explains that customer service and top rankings in customer satisfaction studies are important elements in minimizing subscriber cancelation and attracting new subscribers.[293]

c. Business Models and Competitive Strategies of Select MVPDs

95. The MVPD group is comprised of 1,141 cable MVPDs, two DBS MVPDs, two large telephone MVPDs and many smaller telephone MVPDs.[294] Although each MVPD has its own business model and competitive strategy, as suggested above, there are some similarities within types of MVPDs. Below, we provide an overview of the business models and competitive strategies focusing on three large cable MVPDs (Comcast, Time Warner, and Charter) and a few selected mid-sized and smaller cable MVPDs (Cable ONE, Midcontinent Communications, Shentel, Inter Mountain Cable, and Rainbow Communications). We also provide an overview of the business models and competitive strategies of the two DBS MVPDs (DIRECTV and DISH Network). Finally, we provide an overview of the business models and competitive strategies of five telephone MVPDs (*i.e.*, AT&T, Verizon, CenturyLink, Consolidated Communications, and Cincinnati Bell).

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[285] *See, e.g.*, DIRECTV, http://www.directv.com/ (visited Mar. 13, 2013); and DISH Network, http://www.dish.com/ (visited Mar. 13, 2013).

[286] DIRECTV, http://www.directv.com/DTVAPP/ (visited Oct. 10, 2012).

[287] DISH Network, http://www.dish.com/why-dish/ (visited Oct. 10, 2012).

[288] Verizon, http://www22.verizon.com/home/fiostv/ (visited Oct. 10, 2012).

[289] Verizon, http://www22.verizon.com/home/aboutfios/ (visited Oct. 10, 2012).

[290] DISH Network, http://www.dish.com/technology/hopper/ (visited Oct. 11, 2012). *See infra*, ¶ 115, n.380. *See also infra*, ¶ 357.

[291] Comcast, http://www.comcast.com/Corporate/Learn/DigitalCable/digitalcable.html (visited Oct. 11, 2012).

[292] Charter, *Charter Backs Up Commitment to a Better Experience with New Customer Guarantee* (press release), Mar. 12, 2012.

[293] DIRECTV 2011 Form 10-K at 3. *See also* DIRECTV 9/10/12 Comments at 7-8 (where DIRECTV says that excellent programming and innovative products alone are not sufficient to compete in the MVPD market. Excellent customer service is an integral part).

[294] *See supra*, ¶¶ 17, 24.

(i) Cable MVPD Business Models and Competitive Strategies

96. *Large Incumbent Cable MVPDs*. In this category, we focus primarily on the business models and competitive strategies of three of the largest cable MVPDs: Comcast, Time Warner Cable, and Charter. Comcast is the largest cable MVPD and the largest MVPD, with 22.1 million video subscribers clustered in the mid-Atlantic, Chicago, Denver, and Northern California.[295] Comcast is a vertically integrated MVPD with ownership interests in numerous networks. Comcast has interests in national networks including E!, Golf Channel, Versus, Style, G4, Bravo, Chiller, CNBC, MSNBC, Oxygen, Sleuth, SyFy, and The Weather Channel.[296] Comcast also has interests in numerous regional sports networks ("RSNs").[297] In addition Comcast has ownership interests in the NBC network and its owned and operated ("O&O") NBC affiliated local television stations, the Telemundo network and its O&O Telemundo affiliated local television stations, and Universal Pictures.[298]

97. Time Warner Cable is the second largest cable MVPD and the fourth largest MVPD, with 12.5 million video subscribers clustered in five geographic areas – New York State (including New York City), the Carolinas, Ohio, Southern California (including Los Angeles), and Texas.[299] Time Warner Cable has ownership interests in national networks including MLB, MLS Direct Kick, NBA League Pass, NHL Center Ice, and Team HD, and numerous regional news networks and RSNs.[300]

98. Charter is the fourth largest cable MVPD, with 4.3 million video subscribers clustered in the far West, Northeast, Southeast, Michigan, Wisconsin, and Minnesota. Charter also has ownership interests in an RSN.[301] Several years ago, the company experienced net losses and entered bankruptcy. It emerged from protection under Chapter 11 of the Bankruptcy Code in November 2009.[302]

99. *Technology*. Comcast, Time Warner Cable, and Charter all use hybrid fiber optic and coaxial cable networks that provide two-way transmissions.[303] The Comcast and Time Warner Cable systems provide at least 750 MHz capacity. The Charter systems provide at least 550 MHz capacity. As noted above, Comcast has moved aggressively to transition its cable systems to all-digital systems but has not deployed SDV.[304] Comcast recently introduced a cloud-enabled platform known as X1, intended to

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[295] At the end of June 2012, Comcast passed 52.8 million homes but subscribership had declined to 22.1 million. Comcast 9/10/12 Comments at 4.

[296] For a list of Comcast's national programming interests, *see* Appendix B, Table B-1.

[297] For a list of Comcast's regional programming interests, *see* Appendix C, Table C-1.

[298] Comcast 2011 Form 10-K at 1.

[299] Time Warner Cable, *SEC Form 10-K for the Year Ended December 31,* 2011, at 1 ("Time Warner Cable 2011 Form 10-K").

[300] For a list of Time Warner Cable's programming interests, *see* Appendix B, Table B-1 and Appendix C, Table C-1.

[301] Comcast/Charter Sports Southeast and Comcast/Charter Sports Southeast HD.

[302] Charter 2011 Form 10-K at 1.

[303] For a summary of the technology used by Comcast, Time Warner Cable, and Charter, *see* Comcast 2011 Form 10-K at 5-6; Time Warner Cable 2011 Form 10-K at 7-8; Charter 2011 Form 10-K at 7-8.

[304] Ian Olgeirson, *Cable's All-Digital Transition Marches on Without Universal Support*, Multichannel Market Trends, SNL KAGAN, Dec. 14, 2011, http://www.snl.com/interactivex/article.aspx?id=13843856&KPLT=6 (visited Oct. 10, 2012); and Ian Olgeirson, *Switched Digital Footprint Growth Slowed by Divided MSO Priorities*, Multichannel Market Trends, SNL KAGAN, Dec. 19, 2011,
(continued….)

enable Comcast to add new features and functions without having to swap out a subscriber's set-top receiver.[305] It also introduced XfinityTV on Xbox 360, which is Comcast's first nationwide deployment of an IP-based cable service.[306] Time Warner Cable has transitioned only its New York and Los Angeles cable systems to all-digital systems but has deployed SDV in all of its service areas.[307] Time Warner Cable also offers a simulcast of its tradition linear lineups in IP.[308] Charter has signaled its intent to transition its systems to all digital but actual deployments are not expected until 2013.[309]

100. *Programming Packages*. Like most cable MVPDs, Comcast, Time Warner Cable, and Charter offer various tiers of residential video programming. Pursuant to statutory requirements, all video subscribers receive the basic service tier, which provides 15 to 40 channels consisting of local broadcast stations, PEG channels, and a few additional non-broadcast channels.[310] At the top end, these three cable MVPDs offer digital video service with access to hundreds of channels.[311] The digital video service includes all the channels offered on the basic tier (15-40 channels), the expanded basic tier (40-60 channels), one or more digital packages, and the option to add specialty digital packages of genre-based programming.[312] Specialty channel packages often include a sports package, a movie package, and a family package. Digital video subscribers may also purchase premium channels, such as HBO, Showtime, Starz, and Cinemax, which generally offer, without commercial interruption, movies, original programming, live and taped sporting events, concerts, and other special features. These three cable MVPDs offer channels and packages that appeal to different audiences.[313] For example, Time Warner Cable offers El Paquetazo, with English and Spanish-language channels designed to appeal to Hispanics, and Time Warner Cable TV Essentials, which targets budget-conscious customers.[314]

101. *HD, VOD, and DVR Services*. Comcast, Time Warner Cable, and Charter offer over 100 HD channels.[315] These usually include the major broadcast networks, leading national cable networks,

(Continued from previous page)
http://www.snl.com/interactivex/article.aspx?id=13887707&KPLT=6 (visited Oct. 10, 2012). *See also* Comcast Comments at 3-4.

[305] Comcast 9/10/12 Comments at 5-6.

[306] *Id*. at 7.

[307] Ian Olgeirson, *Cable's All-Digital Transition Marches on Without Universal Support*, Multichannel Market Trends, SNL KAGAN, Dec. 14, 2011, http://www.snl.com/interactivex/article.aspx?id=13843856&KPLT=6 (visited Oct. 10, 2012).

[308] Ian Olgeirson, *Cable's Managed IP Video Poised for Progress in 2013*, Multichannel Market Trends, SNL KAGAN, Dec. 21, 2012, http://www.snl.com/interactivex/article.aspx?id=16669807&KPLT=6 (visited Mar. 27, 2013).

[309] Ian Olgeirson, *Cable's All-Digital Migration Makes Modest Gains in 2012*, Multichannel Market Trends, SNL KAGAN, Dec. 17, 2012, http://www.snl.com/interactivex/article.aspx?id=16632971&KPLT=6 (visited Mar. 27, 2013).

[310] 47 U.S.C. § 543(b)(7).

[311] Comcast offers over 300 channels and Time Warner Cable offers over 400 channels. Comcast 2011 Form 10-K at 3; Time Warner Cable 2011 Form 10-K at 2.

[312] The basic digital tier usually includes 30 to 40 music channels.

[313] For a description of Comcast's program offerings to Hispanic and other audiences, *see* Comcast 9/10/12 Comments at 11-13.

[314] Time Warner Cable 2011 Form 10-K at 3.

[315] For example, Time Warner Cable offers over 140 HD channels. *Id*.

premium channels, and RSNs. HD channels are generally provided at no additional charge. Additional charges generally apply only for packages of HD channels that do not have standard-definition counterparts. In addition to standard definition and HD channels, these three cable MVPDs offer thousands of standard definition and HD programs through their VOD services.[316] Many VOD programs are offered to digital video subscribers at no additional charge. In addition, digital video customers who subscribe to premium channels have access to the premium network's VOD content without additional fees. VOD service also offers a selection of movies and special events on a pay-per-view basis. The DVR service offered by these three cable MVPDs for an additional monthly fee allows digital video subscribers to select, record, and store programs on their set-top boxes, as well as pause and rewind "live" television. Time Warner Cable and Charter also offer whole-home or multi-room DVR service, which allows a program recorded on a DVR to be watched on any connected television in a subscriber's home.[317] Time Warner Cable also offers Start Over, which enables digital video subscribers using a Time Warner Cable-provided set-top box to restart select "in progress" programs directly from the relevant channel and Look Back, which extends the window for viewing a program to 72 hours after it has aired.[318] All three cable MVPDs offer the ability to view television listings and to program DVRs online using a computer, smartphone, or tablet.

102. *TV Everywhere*. Comcast, Time Warner Cable, and Charter offer subscribers the ability to view video content online using Internet connected devices (*e.g.*, computers, smartphones, and tablets).[319] For example, in February 2012, Comcast launched Xfinity Streampix, a new service that enables Comcast's cable subscribers to watch movies and television programs as a VOD service on their televisions, and as streaming video on an authenticated basis on Internet connected devices.[320] Most of the video content available online is VOD content. Recently, however, these three cable MVPDs began streaming live video content. For example, Comcast, in 2012, began streaming certain live television programming in some of its markets.[321] Most of the streaming live video content delivered to mobile devices is currently restricted to viewing while in the home.[322] Time Warner Cable, for example, enables video subscribers to watch live cable channels on mobile devices on their premises.[323] Currently, most of the live video content available to mobile devices outside the home is dominated by sports, such as ESPN, Speed2, and the Big Ten Network.[324]

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[316] For example, Comcast's VOD service provides digital video customers with more than 30,000 programming choices, with 6,000 in HD. Comcast 2011 Form 10-K at 3.

[317] This service is generally referred to as whole home DVR service.

[318] Time Warner Cable 2011 Form 10-K at 3.

[319] Comcast, http://wwwb.comcast.com/Corporate/Learn/DigitalCable/digitalcable.html (visited Oct. 23, 2012); Time Warner Cable, http://www.timewarnercable.com/en/residential-home/tv/features/twc-tv.html (visited Oct. 23, 2012); Charter, http://www.myaccount.charter.com/customers/support.aspx?menuitem=2 (visited Oct. 23, 2012).

[320] Comcast Comments at 8-9.

[321] Comcast 2011 Form 10-K at 4; and Comcast Comments at 8-11.

[322] In 2012, Comcast began offering the AnyPlay device in select markets, which allows subscribers to stream linear programming on iPad and Android-based tablets in and around the home using a WiFi connection. Comcast Comments at 7.

[323] Time Warner Cable 2011 Form 10-K at 3; and Time Warner Cable, http://www.timewarnercable.com/en/residential-home/tv/features/twc-tv.html (visited Oct. 23, 2012).

[324] *Id*. and Charter 2011 Form 10-K at 6.

103. *Bundling*. Like most cable MVPDs, Comcast, Time Warner Cable, and Charter sell video services separately, but promote bundled packages of video, Internet access, and telephone services provided over their own two-way cable systems.[325] Cable MVPDs promote bundling as a way for subscribers to save money, relative to purchasing these services separately. More recently, Comcast and Time Warner Cable have begun offering bundles that include mobile wireless services through cooperative arrangements with Verizon Wireless.[326] To promote these quadruple bundles, Comcast and Time Warner Cable have recently offered gift cards, rather than price discounts for the services.[327] In May, 2012, SNL Kagan reported that Comcast and Time Warner Cable offered the quadruple bundle (*i.e.*, video, Internet access, wireline telephone, and mobile wireless) in 15 markets, but none of these markets overlapped with those served by Verizon FiOS.[328]

104. *Small and Midsized Incumbent Cable MVPDs.* In this category, we consider five cable MVPDs: Cable ONE, Midcontinent Communications, Shentel, Inter Mountain Cable, and Rainbow Communications. All five small and mid-sized cable MVPDs described in this section have upgraded or are in the process of upgrading their cable systems. One MVPD is transitioning to an all-digital system, and another is using FTTH in one of its cable systems. Although small and midsized cable MVPDs may sometimes offer fewer total channels, fewer HD channels and VOD offerings, less advanced DVRs, and less TV Everywhere, relative to the offerings of the largest MVPDs, some may also offer lower prices, relative to the largest MVPDs.

105. Cable ONE is a subsidiary of the Washington Post Company and the ninth largest cable MVPD with 612,729 video subscribers, representing about 44 percent of the 1.4 million homes it passes in 19 Midwestern, Western, and Southern states.[329] Cable ONE offers an Economy video package with up to 20 channels for $20 per month, a Standard video package with up to 100 channels for $33 per month, and a Digital Value package with 40 additional channels for an additional $10 per month.[330]

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[325] At the end of June 2012, almost 40 percent of Comcast video subscribers purchased the triple-play bundle. Comcast Comments at 17.

[326] Comcast, http://www.comcast.com/wireless (visited Oct. 23, 2012). *See also* http://www.dslreports.com/shownews/Cox-Time-Warner-Cable-Expand-Verizon-Wireless-Partnership-121744?nocomment=1 (visited Oct. 23, 2012). In August 2012, the Commission approved Verizon Wireless's purchase of spectrum from several cable companies. As part of the spectrum transfer, Verizon Wireless entered into commercial agreements with the respective cable companies that, among other things, permitted the cross-selling of services. While the Commission found the commercial agreements as originally drafted to be contrary to the public interest, the Commission and the DOJ Antitrust Division negotiated a Consent Decree with the parties that preserves the agreements without harming consumers or competition. *See Applications of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC and Cox TMI, LLC for Consent to Assign AWS-1 Licenses*, WT Docket No. 12-4, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd 10698, 10700, 10750-53, ¶¶ 6, 139, 143-44 (2012).

[327] *Id*.

[328] Michelle Ow, *Verizon Wireless Partnerships Bring Quad-Play to 15 Markets*, Cable TV Investor: Deals & Finance, SNL KAGAN, May 31, 2012, at 9-10.

[329] The Washington Post Company, *SEC Form 10-K for the Period Ending December 31, 2011*, at 13; and SNL Kagan, *Top Cable MSOs*, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Nov. 14, 2012).

[330] Cable ONE, https://www.cableone.net/FYH/Pages/cabletvservices.aspx (visited Nov. 14, 2012).

Cable ONE offers HD service, but its VOD service is limited to pay-per-view; its DVR service is not whole-home; and it does not offer TV Everywhere.[331]

106. Midcontinent Communications is the 15th largest cable MVPD with 229,359 video subscribers in 340 communities throughout South Dakota, North Dakota, and Minnesota.[332] In late 2010, Midcontinent began converting its cable systems from analog to digital.[333] In 2011, the company reported that many of its cable systems had been converted to all digital cable.[334] In 2011, Midcontinent completed acquisition of 113 Minnesota and Wisconsin cable franchises from U.S. Cable, which added approximately 86,000 homes and 33,000 subscribers to Midcontinent's cable systems.[335] Midcontinent offers hundreds of channels, HD, and TV Everywhere service.[336] The VOD service offers free programming from more than 40 networks but the DVR is not whole home.[337] Midcontinent offers its own MidcoSN sports network, which provides live game coverage from high schools and colleges in South Dakota, North Dakota, and Minnesota.[338]

107. Shentel is the 27th largest cable MVPD with 62,737 video subscribers. Shentel is a diversified telecommunications holding company with three segments (wireless, wireline, and cable) operating in the Southeastern United States.[339] In the past four years Shentel has expanded its cable MVPD service beyond its home base in Shenandoah County, Virginia, through a series of cable acquisitions.[340] The company now owns cable systems in West Virginia, Southern and Southwestern Virginia, and Western Maryland.[341] Shentel has been upgrading the acquired cable systems and completed all but one system at the end of 2012.[342] The final cable system to be upgraded is McDowell County, West Virginia. Shentel states that "due to the extremely poor condition of the existing facilities, we are constructing a completely new Fiber-to-the-Home broadband network."[343] Shentel offers an

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[331] *Id*.

[332] Midcontinent, http://www.midcocomm.com/aboutmidcontinent/ (visited Nov. 14, 2012); and SNL Kagan, *Top Cable MSOs*, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Nov. 14, 2012).

[333] Midcontinent, Next Generation Internet Service Doubles Speeds for Midcontinent Customers (press release), July 14, 2011. *See also* Midcontinent, http://www.midcocomm.com/pressroom/videolibrary/?video=All-Digital-Cable---The-More-youre-looking-for!--_50 (visited Mar. 18, 2013).

[334] Midcontinent, http://www.midcocomm.com/_files/files/ADC_Schedule.pdf (visited Mar. 18, 2013). The company reports that it is upgrading Basic Cable channels 23-99 to a digital signal.

[335] Midcontinent, *Midcontinent Communications Purchases Systems from US Cable* (press release), Oct. 3, 2011.

[336] Midcontinent, http://www.midcocomm.com/video/; and http://www.midcocomm.com/video/tveverywhere/ (visited Nov. 14, 2012).

[337] Midcontinent, http://www.midcocomm.com/video/ondemand/; and http://www.midcocomm.com/video/equipment/ (visited Nov. 14, 2012).

[338] Midcontinent, http://www.midcocomm.com/video/featuresoptions/ (visited Nov. 14, 2012).

[339] Shentel 2011 Form 10-K at 5.

[340] *Id*. at 7.

[341] *Id*.

[342] Shentel, *2012 Annual Report*, at 5.

[343] *Id*. *See also* Shentel, *Shentel Brings Faster Internet, Clearer TV and Home Phone Service to McDowell County* (press release), Sept. 7, 2012.

Economy package with 20 channels for $25.95 per month, an Essentials package with approximately 68 channels for $55.95 per month, and a Digital Essentials package with an additional 64 digital channels for $68.95 per month.[344] There is an additional fee of $11.95 per month for HD channels; VOD service is limited to pay-per-view; the DVR is not whole home; and there is no offering of TV Everywhere.[345]

108. Inter Mountain Cable is the 40th largest cable MVPD with 18,519 video subscribers in Virginia, West Virginia, and Kentucky.[346] In addition to a basic package with 13 channels for $22.95 per month, and an expanded basic package with an additional 57 channels for $64.95 per month, Inter Mountain offers digital service in some of its markets.[347] The digital package includes approximately 80 standard-definition digital channels for an additional $14.95 per month.[348] There is an additional fee of $8.95 per month for 44 HD channels; VOD is limited to pay-per-view; the DVR is not whole-home; and there is no offering of TV Everywhere.[349]

109. Rainbow Communications is the 53rd largest cable MVPD with 5,759 video subscribers in Northeast Kansas.[350] Rainbow has been a telecommunications company since 1952 and entered the MVPD market in 2005 with the purchase of Carson Communications.[351] Rainbow offers five different video packages, but not all packages are available in all of the communities it serves. The Basic package includes 16 channels for $26 per month; a Bronze package includes 64 channels for $46.50 per month; a Silver package includes 130 channels for $61.50 per month; a Gold package includes 175 channels for $106.50 per month; and a Platinum package includes 200 channels for $116.50 per month.[352] Rainbow offers approximately 40 HD channels.[353] VOD is limited to pay-per-view; the DVR is not whole home; and there is no offering of TV Everywhere.[354]

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[344] Shentel, https://www.shentel.com/montgomery-county/shop/tv (visited Nov. 14, 2012).

[345] Shentel, https://www.shentel.com/montgomery-county/shop/tv/hd%20package; https://www.shentel.com/montgomery-county/shop/tv/hddvr%20package; and https://www.shentel.com/montgomery-county/shop/tv/digital%20essentials (visited Nov. 14, 2012).

[346] Inter Mountain Cable, http://imctv.com/index.html (visited Nov. 14, 2012); and SNL Kagan, *Top Cable MSOs*, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Nov. 14, 2012).

[347] Inter Mountain Cable, http://imctv.com/digital_tv.html; and http://imctv.com/digital_tv/digital_tv_pricing.html (visited Nov. 14, 2012).

[348] Inter Mountain Cable, http://imctv.com/digital_tv/digital_tv_pricing.html (visited Nov. 14, 2012).

[349] Inter Mountain Cable, http://imctv.com/digital_tv/digital_tv_pricing.html; http://imctv.com/digital_tv/high_definition.html; http://imctv.com/video_on_demand.html, and http://imctv.com/digital_tv/dvr.html (visited Nov. 14, 2012).

[350] Rainbow, http://www.rainbowtel.net/about/index.php (visited Nov. 14, 2012); SNL Kagan, *Top Cable MSOs*, http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q2&sortcol=subscribersbasic&sortorder=desc (visited Nov. 14, 2012).

[351] Rainbow, http://www.rainbowtel.net/about/history.php (visited Nov. 14, 2012).

[352] Rainbow, http://www.rainbowtel.net/services/television/index.php (visited Nov. 14, 2012).

[353] Rainbow, http://www.rainbowtel.net/services/television/hdtv.php (visited Nov. 14, 2012).

[354] Rainbow, http://www.rainbowtel.net/services/television/payPerView.php; http://www.rainbowtel.net/services/television/dvr.php (visited Nov. 14, 2012).

(ii) DBS MVPD Business Models and Competitive Strategies

110. DIRECTV is the second largest MVPD, with approximately 19.9 million subscribers in the United States.[355] The company is organized into two operating segments: DIRECTV U.S. and DIRECTV Latin America.[356] Since November 2009, DIRECTV has had ownership interests in three RSNs, and a 60 percent interest in Game Show Network, a cable television network dedicated to game-related programming and Internet interactive game playing.[357]

111. DISH Network is the third largest MVPD, with approximately 14.1 million subscribers.[358] The company does not have significant ownership interests in programming networks. In 2011, DISH Network acquired Blockbuster, Inc. and now offers movies online through the blockbuster.com website and the BLOCKBUSTER On Demand service.[359]

112. *Technology*. DIRECTV and DISH Network use geostationary satellites to deliver all-digital video programming to subscribers with small satellite dish antenna connected to one or more set-top receivers.[360] In contrast to upgraded cable systems, which have larger bandwidth and use two-way technology, DBS systems have less bandwidth and use one-way technology. To deliver two-way video services like VOD, DIRECTV and DISH Network subscribers must also subscribe to a broadband service.[361] Although DBS systems have the disadvantage of using one-way technology, they have the advantage of providing a nationwide footprint.[362] As such, DBS systems provide service to areas with low population density and can add subscribers anywhere in the United States with minimal incremental infrastructure cost.[363]

113. *Programming Packages*. DIRECTV and DISH Network offer all-digital English language, Spanish language, and International packages ranging from an 18 video channel East Asian package to a 295 video and music channel package.[364] Differences in packages are based, in part, on the

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[355] DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012.

[356] In this Report, we focus only on the DIRECTV U.S. segment.

[357] DIRECTV 2011 Form 10-K at 2.

[358] DISH Network, *DISH Network Announces Second Quarter 2012 Financial Results* (press release), Aug. 8, 2012.

[359] DISH Network 2011 Form 10-K at 5.

[360] DIRECTV uses 12 geosynchronous satellites, including eleven owned satellites and one leased satellite. DIRECTV 2011 Form 10-K at 7. DISH Network uses 13 satellites, including six owned satellites and seven leased satellites. DISH Network 2011 Form 10-K at 7.

[361] DIRECTV says that its VOD content requires an HD DVR connected to a broadband service and a DIRECTV CINEMA Connection kit. DIRECTV, http://www.directv.com/technology/on_demand?footernavtype=-1&lpos=header#learnmore (visited Oct. 23, 2012). DISH Network says that its VOD content requires an HD DVR connected to broadband. DISH Network, http://www.dish.com/entertainment/vod/ (visited Oct. 23, 2012).

[362] In addition to the contiguous 48 states, DIRECTV states that it provides the same programming packages for the same prices to customers in Alaska and Hawaii. DIRECTV Comments at 14. DISH Network also appears to offer similar programming packages to the contiguous 48 states and Alaska and Hawaii. *See* SatelliteSales.com, http://www.satellitesales.com/ak-fairbanks-dish-network.html; D&M Satellite Solutions, http://www.dishtvhawaii.com/ (visited Nov. 9, 2012). Subscribers in Alaska and Hawaii require slightly larger (1.2 meter) receiving antennas than subscribers in the lower 48 states. DIRECTV Comments at 14.

[363] DIRECTV 2011 Form 10-K at 4.

[364] DIRECTV, http://www.directv.com/DTVAPP/new_customer/base_packages.jsp, http://www.directv.com/DTVAPP/new_customer/base_packages.jsp?language=SPANISH, http://www.directv.com/DTVAPP/content/packages/international?footernavtype=-1&lpos=header; and DISH (continued….)

number of premium channels and regional sports channels included.[365] DIRECTV provides local broadcast channels to approximately 99 percent of U.S. households and DISH Network provides local broadcast channels to all households.[366] DIRECTV has exclusive rights through 2014 to offer the NFL Sunday Ticket package, which allows subscribers to view the largest selection of National Football League ("NFL") games, including rights to provide related broadband, HD, VOD, interactive and mobile services.[367] DISH Network promotes its programming packages as providing a better "price-to-value" relationship than those available from other MVPDs by offering the lowest everyday prices after introductory promotions expire.[368]

114. *HD, VOD, and DVR Services*. DIRECTV reports that it provides one of the most extensive HD offerings with over 170 national HD channels, and DISH Network indicates that it offers more HD channels than most MVPDs.[369] DIRECTV provides local broadcast channels in HD to 96 percent of U.S. households, and DISH Network provides local broadcast channels in HD to 97 percent of U.S. households.[370] Both DBS MVPDs offer VOD service but deliver most or all VOD content over broadband, which requires DBS subscribers to also subscribe to a broadband service provided by a separate entity. DIRECTV offers over 10,000 television shows and movies on demand.[371] DIRECTV provides some VOD by "pushing" movies from its satellites to the subscriber's DVR.[372] Most VOD, however, is delivered by connecting the subscriber's HD DVR to a broadband service using a DIRECTV CINEMA Connection Kit.[373] Subscribers access DISH Network's VOD content by connecting their HD DVRs to broadband service.[374] Some of DISH Network's HD DVRs are IP-compatible and can be connected directly to broadband service, without the need for additional equipment.[375]

115. In 2011, DIRECTV introduced the "Home Media Center," a whole-home HD DVR service with a terabyte hard drive, which can record five programs simultaneously.[376] In 2012, DIRECTV added remote viewing capability to its Home Media Center, which allows subscribers to view and control

(Continued from previous page)
Network, http://www.dish.com/entertainment/packages/ (visited Oct. 24, 2012). *See also* DIRECTV Comments at 10-12.

[365] *Id*.

[366] DIRECTV offers local television service in 194 of Nielsen's 210 designated market areas ("DMAs"). DIRECTV 2011 Form 10-K at 2. *See also* DIRECTV Comments at 10. DISH Network offers local television service in all 210 DMAs. DISH Network 2011 Form 10-K at 2.

[367] DIRECTV 2011 Form 10-K at 2-3.

[368] DISH Network 2011 Form 10-K at 1-2.

[369] DIRECTV 2011 Form 10-K at 2. DISH Network 2011 Form 10-K at 1.

[370] DIRECTV 2011 Form 10-K at 2. DISH Network 2011 Form 10-K at 2. DIRECTV provides local television service in HD in 183 markets. DIRECTV 9/10/12 Comments at 10.

[371] DIRECTV, http://www.directv.com/technology/on_demand?footernavtype=-1&lpos=header (visited Oct. 24, 2012).

[372] DIRECTV 2011 Form 10-K at 2.

[373] DIRECTV, http://www.directv.com/technology/on_demand?footernavtype=-1&lpos=header (visited Oct. 24, 2012).

[374] DISH Network, http://www.dish.com/entertainment/vod/ (visited Oct. 24, 2012).

[375] DISH Network 2011 Form 10-K at 2.

[376] DIRECTV 2011 Form 10-K at 5. *See also* DIRECTV Comments at 6.

content from the Home Media Center to other rooms in the house.[377] The remote viewing capability also allows subscribers to watch live or recorded programs on televisions and other devices with a consistent user interface across devices.[378] Recently, DIRECTV introduced Genie, which DIRECTV claims is the most advanced HD DVR to date, with three times more HD recording capacity than cable.[379] DISH Network asserts that to maintain and enhance its competitiveness over the long term, it recently introduced the Hopper, a whole-home HD DVR receiver, which can record up to six programs and allows customers to automatically skip commercials in primetime television on ABC, CBS, FOX, and NBC.[380]

116. *TV Everywhere*. DIRECTV's TV Everywhere service offers a large amount of VOD content to stationary and mobile devices in the home and outside the home.[381] This service also allows subscribers to watch live programming on some mobile devices in their home.[382] Live programming to mobile devices outside the home is limited but includes NFL Sunday Ticket To Go.[383] To provide TV Everywhere, DISH Network uses online access and Slingbox "placeshifting" technology.[384] DISHOnline.com gives DISH subscribers the ability to watch television programs, movies, and clips online.[385] DISH Remote Access, which uses a Sling Adapter, provides the same live channels and shows received at home and can be accessed on smartphones and tablets anywhere where there is Internet access.[386] DISH Network also owns and offers Blockbuster@Home, which gives DISH subscribers access to more than 100,000 DVD movies, television shows, and games by mail with unlimited in-store exchanges, streaming access on their television to more than 10,000 movies and television shows, and online access on their computer to more than 25,000 movies and television shows.[387]

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[377] *Id*.

[378] *Id*.

[379] DIRECTV, http://www.directv.com/technology/genie (visited Oct. 24, 2012).

[380] DISH Network 2011 Form 10-K at 1; DISH Network, http://www.dish.com/technology/hopper/ (visited Oct. 24, 2012). *See* Dish Network L.L.C., Hopper Whole-Home HD DVR System Now Available From Dish (press release), Mar. 15, 2012, http://about.dish.com/press-release/products-and-services/hopper-whole-home-hd-dvr-system-now-available-dish (visited Nov. 26, 2012). Several broadcast networks have filed suit alleging that Dish's Hopper technology infringes on their copyrights and breaches their contracts with Dish. Don Jeffrey, *Dish Tells Judge Ad-Free TV Suits Should Be in New York*, BLOOMBERG, July 3, 2012, at http://www.businessweek.com/news/2012-07-02/dish-tells-judge-tv-ad-skipping-case-should-be-heard-in-new-york (visited Nov. 26, 2012). While the case is still pending, a California court recently denied the broadcasters a preliminary injunction against the Hopper. John Eggerton, *Court Denies Fox Injunction Against Dish's Hopper*, MULTICHANNEL NEWS, Nov. 8, 2012, at http://www.multichannel.com/distribution/court-denies-fox-injunction-against-dishs-hopper/140179 (visited Nov. 26, 2012).

[381] DIRECTV, http://www.directv.com/entertainment/?lpos=header; and http://www.directv.com/technology/directv_everywhere (visited Oct. 24, 2012). *See also* DIRECTV Comments at 5-6.

[382] DIRECTV 2011 Form 10-K at 5.

[383] *Id*.; and DIRECTV, http://www.directv.com/technology/mobile_apps?footernavtype=-1&lpos=header (visited Oct. 25, 2012).

[384] DISH Network 2011 Form 10-K at 1.

[385] *Id*. at 2.

[386] DISH Network, http://www.dish.com/technology/tv-everywhere/ (visited Oct. 25, 2012).

[387] DISH Network 2011 Form 10-K at 2.

117. *Bundles*. To provide bundles of video, Internet access, and phone services, DIRECTV and DISH Network have entered into cooperative arrangements with other entities that provide two-way Internet access and telephone services. Most of these cooperative arrangements use DSL technology to provide Internet access and telephone service is provided over the traditional landlines. DIRECTV states that it has agreements with most of the major telephone companies nationwide to offer bundles that include the DIRECTV service.[388] In 2011, DIRECTV began implementing an ordering tool to streamline the process of offering bundles.[389] DIRECTV contends that it is important to continue working closely with broadband providers to further streamline the bundle process and offer broadband services with higher speeds.[390] Similarly, DISH Network partners with certain telecommunications companies to bundle DISH programming with broadband and telephone services.[391] In 2012, DISH Network announced dishNET, which allows subscribers to bundle DISH's video programming with Internet access service provided over satellites through cooperative arrangements with ViaSat and Hughes Network Systems.[392] DISH states that the bundle is ideal for rural residents who are not served by wireline broadband.[393] The dishNET Internet access service will provide up to 10 Mbps download and 1 Mbps upload speeds.[394]

(iii) Telephone MVPD Business Models and Competitive Strategies

118. Verizon and AT&T are large telecommunications holding companies operating both wireless and wireline networks. The FiOS and U-verse video services offered by Verizon and AT&T, respectively, are part of their Wireline segments, which also offer traditional landline voice and data services to consumers and businesses in the United States and in international markets.[395] Verizon and AT&T are relatively new to the market for the delivery of video programming. Verizon began offering its own, facilities-based FiOS video service in 2005. At the end of 2011, Verizon FiOS passed 16.5 million homes and is now the sixth largest MVPD.[396] Verizon set a target to pass 18.0 million homes with its FiOS network.[397] AT&T began offering its own, facilities-based U-verse video service in late

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[388] DIRECTV 2011 Form 10-K at 4-5.

[389] *Id*.

[390] *Id*.

[391] DISH Network 2011 Form 10-K at 3.

[392] DISH Network, http://www.dish.com/entertainment/internet-phone/ (visited Oct. 25, 2012). *See also* DISH Network, *DISH Launches dishNET Broadband, Bringing High-Speed Internet to Rural Americans with Slow or No Access* (press release), Sept. 27, 2012; and Todd Spangler, *DISH Pushes Rural Broadband with DishNET Bundles*, Sept. 27, 2012, MULTICHANNEL NEWS, http://www.multichannel.com/news-article/dish-pushes-rural-broadband-dishnet-bundles/139476 (visited Oct. 25, 2012).

[393] DISH Network, *DISH Launches dishNET Broadband, Bringing High-Speed Internet to Rural Americans with Slow or No Access* (press release), Sept. 27, 2012.

[394] *Id*.

[395] Verizon, *SEC Form 10-K for the Year Ended December 31, 2011*, at 36 &56; AT&T, *SEC Form 10-K for the Year Ended December 31, 2011*, at 31, 33, & 37-38 ("AT&T 2011 Form 10-K").

[396] Verizon, *2011 Annual Report*, at 3.

[397] In an interview with UBS analyst John Hodulik, Lowell McAdam, Verizon President & CEO, stated, "With FiOS we are about 16 million POPs at this point and we want to get to about 18 million." *See VZ-Verizon at UBS Global Media and Communications Conference*, Final Transcript, THOMSON STREETEVENTS, Dec. 7, 2011, http://www22.verizon.com/idc/groups/public/documents/adacct/event_1012_trans.pdf (visited Oct. 26, 2012).

2006. At the end of 2011, AT&T U-verse passed approximately 30.3 million homes and is now the eighth largest MVPD.[398] Neither Verizon nor AT&T has ownership interests in video programming networks.

119. *Technology*. Verizon FiOS uses an all-digital fiber-to-the-premises network.[399] Verizon uses QAM technology to deliver linear video programming and IP technology to deliver VOD and other advanced features.[400] Although AT&T U-verse uses fiber-to-the-home technology for new homes, it uses fiber-to-the-node technology for existing homes, which includes fiber-optic cable to the node and copper wire from the node to the home.[401]

120. *Programming Packages*. Verizon FiOS TV offers three television plans with 210 to 385 all-digital channels.[402] AT&T U-verse TV offers a basic package with local channels only, a family package with 130 channels, and additional packages with up to 430 channels.[403] Both Verizon FiOS and AT&T U-verse offer additional premium movie, sports, and international channel packages.[404]

121. *HD, VOD, and DVR Services*. Verizon offers over 145 HD channels and over 40,000 VOD titles each month.[405] AT&T U-verse offers 170 HD channels and an extensive library of VOD programming.[406] Verizon offers a Multi-Room HD DVR that can store up to 80 hours of standard-definition programming, and AT&T offers a Total Home HD DVR that can record up to four programs simultaneously and store up to 233 hours of standard-definition programming or 65 hours of HD programming.[407]

122. *TV Everywhere*. In late 2010, Verizon FiOS also began offering FlexView, which enables subscribers to stream over 40,000 VOD titles to Windows computers, iPads, and iPhone and

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[398] AT&T 2011 Form 10-K at 41.

[399] Verizon, http://about.verizon.com/index.php/about/innovative-solutions/fios (visited Oct. 26, 2012). *See also* http://computer.howstuffworks.com/fios1.htm (visited Oct. 26, 2012).

[400] Other advanced features include Verizon Widgets, which allow subscribers to access interactive and information services on their television sets, such as localized traffic and weather, Pandora Internet radio, YouTube, Twitter, and Facebook. Verizon Comments at 9-10.

[401] AT&T, http://www.att.com/Common/about_us/files/pdf/HowUverseIsDelivered_2-22.pdf (visited Oct. 26, 2012). A node is a communications control unit in a video system that interconnects traditional coaxial cable and fiber-optics. It is the place where an optical signal is converted to a radio frequency (RF) signal, or vice versa. *See also* http://www.uverseusers.com/index.php?option=com_openwiki&Itemid=36&id=faq (visited Oct. 26, 2012); and Mari Rondeli, *Telco Video Paradox Points to Higher Subs Penetrations, Limits on Footprint Expansion*, Multichannel Market Trends, SNL KAGAN, June 20, 2011, http://www.snl.com/interactivex/article.aspx?id=15117039&KPLT=6 (visited Oct. 26, 2012).

[402] Verizon, http://www22.verizon.com/home/fiostv/#plans (visited Oct. 26, 2012).

[403] AT&T, http://www.att.com/shop/tv.html#fbid=_WrtX1cTd1k (visited Oct. 26, 2012).

[404] Verizon, http://www22.verizon.com/home/fiostv/#plans (visited Oct. 26, 2012); AT&T, http://www.att.com/u-verse/explore/tv-landing.jsp (visited Oct. 26, 2012). *See also* Verizon Comments at 6-8.

[405] Verizon, http://www22.verizon.com/home/fiostv/ (visited Oct. 26, 2012). *See also* Verizon Comments at 6.

[406] AT&T, http://www.att.com/u-verse/explore/tv-landing.jsp (visited Oct. 26, 2012).

[407] Verizon, http://www22.verizon.com/home/fiosTV/#equipment (visited Oct. 26, 2012); AT&T, http://www.att.com/u-verse/explore/tv-landing.jsp (visited Oct. 26, 2012). Verizon says that it was the first video provider to offer multi-room DVR service. Verizon Comments at 10.

Android smartphones.[408] More recently, Verizon launched the My FiOS mobile application, which allows subscribers to watch movies on the go.[409] AT&T offers some VOD content to smartphones.[410]

123. *Bundling*. Although FiOS TV and U-verse TV can be purchased on a stand-alone basis, both Verizon and AT&T typically market video services in a bundle that includes video, Internet access, and telephone service.[411] Although both Verizon and AT&T offer mobile wireless services, their marketing for video bundles has rarely included their own wireless services.[412]

124. *Other Telephone MVPDs*. CenturyLink, Consolidated Communications, and Cincinnati Bell also provide facilities-based MVPD systems. CenturyLink refers to itself as a large telecommunications provider with a smaller, but growing video distribution operation.[413] CenturyLink uses a fiber-optic network and IP technology to deliver Prism TV to over 94,000 subscribers in eight markets, and plans to expand to other markets.[414] Prism TV offers hundreds of channels, and HD, VOD, and DVR services. Using the same network, CenturyLink offers bundles of video, Internet access, and telephone services. CenturyLink explains that Prism TV is generally offered in markets where customers also have access to an incumbent cable system.[415] Consolidated Communications, which recently merged with SureWest Communications, offers video service to approximately 520,000 homes in Illinois, Texas, Pennsylvania, California, Kansas, and Missouri.[416] At the end of September 2012, Consolidated Communications had 105,202 video subscribers (approximately 20 percent of homes passed).[417] Consolidated's video services range from limited basic service to digital television packages with hundreds of channels, HD, VOD, and DVR services.[418] Cincinnati Bell uses a fiber-based network to deliver video, Internet access, and telephone service to 169,000 homes in Greater Cincinnati and Dayton.[419] Cincinnati Bell reports a strong demand for Fioptics TV, which had 46,400 subscribers at the end of June 2012, up 38 percent from a year earlier.[420]

4. MVPD Performance

125. The structural and behavioral characteristics of a competitive market are desirable not as ends in themselves, but rather as a means of bringing tangible benefits to consumers, such as lower prices, higher quality, and greater choice of video services. To determine if the market for the delivery of video

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[408] Verizon, http://www22.verizon.com/home/fiostv/ (visited Oct. 26, 2012). *See also* Verizon Comments at 10-11.

[409] Verizon Comments at 11.

[410] AT&T, http://www.att.com/u-verse/explore/tv-landing.jsp (visited Oct. 26, 2012).

[411] Verizon, http://www22.verizon.com/home/aboutfios/ (visited Oct. 26, 2012); AT&T, http://www.att.com/shop/u-verse.html#fbid=iy_jkV0w7a5 (visited Oct. 26, 2012).

[412] *See* Verizon, http://www22.verizon.com/home/bundles/fios/ (visited Oct. 26, 2012); AT&T, http://www.att.com/u-verse/shop/index.jsp#fbid=Gatke1wS-MB (visited Oct. 26, 2012).

[413] CenturyLink 9/10/12 Comments at 1.

[414] *Id*. at 1-2. CenturyLink's video-delivery technology is similar to that used by AT&T U-verse.

[415] *Id*. at 2.

[416] Consolidated Communications, *SEC Form 10-Q for the Period Ending September 30, 2012*, at 22.

[417] *Id*.

[418] *Id*. at 25.

[419] Cincinnati Bell, *SEC Form 10-Q for the Period Ending June 30, 2012*, at 28.

[420] *Id*.

programming is producing these kinds of positive outcomes, we look at video prices and provide current prices for a sample of video packages offered by some MVPDs. We also examine competition in the market for the delivery of video programming from an investor perspective, including how the various types of MVPDs are performing relative to one another. As such, we report on video subscribers and penetration, revenue, investment, and profitability.

a. Video Programming Pricing

126. Section 623(k) of the Act, as amended by the Cable Television Consumer Protection and Competition Act of 1992 ("Cable Act"),[421] requires the Commission to publish annually a statistical report on the average rates that cable operators[422] charge for "basic cable service, other cable programming," and cable equipment.[423] The Cable Act also requires the Commission to compare the rates of cable operators subject to effective competition, as identified through specific adjudications, with those of cable operators without an adjudicated finding of effective competition.[424] Table 5 uses data from the Commission's most recent report on cable industry prices to show prices for basic service,

[421] 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).

[422] *See Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, MM Docket No. 92-266, Report on Cable Industry Prices, DA 13-1319 (rel. MB June 7, 2013) ("*2013 Cable Price Report*"). All averages in the *Cable Price Report* are weighted averages where the weight given to an individual cable operator depends on the number of subscribers to the operator in the reporting community. For the purpose of the 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 the report, the term cable operator includes operators of traditional coaxial and fiber wireline cable systems, municipalities, and telephone companies, including Verizon FiOS. It does not include MVPD operators of wireless systems, direct broadcast satellite (DBS), or AT&T U-verse, because these operators are not associated with any FCC Community Unit Identifiers (CUID). The Commission assigns a CUID code to each registered operator for each community that operator serves. *See* 47 C.F.R. § 76.1801.

[423] The Cable Act requires operators to offer an entry-level basic service, which must include, at a minimum, all commercial and noncommercial 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).

[424] *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 tests: (1) fewer than 30 percent of households subscribe to the operator's cable programming service (low penetration test); (2) the operator and at least one other MVPD offer comparable service to at least 50 percent of households and at least 15 percent of 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 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 in an area that an unaffiliated MVPD also serves (LEC test). *See* 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). As required by statute, the Commission does not take into consideration those communities that have not been formally adjudged as being subject to effective competition. *See* 47 U.S.C. § 543(k)(1).

expanded basic service, and the next most popular service (plus equipment) for the years 2011 and 2012.[425] Table 5 shows that prices for basic service, expanded basic service, and the next most popular service (plus equipment) increased over the period 2011 to 2012.[426]

Table 5: Average Monthly Prices

Year	Basic Service Price	Expanded Basic Service Price	Next Most Popular Service & Equipment Price	Price Per Channel – Basic Service	Price Per Channel – Expanded Basic Service
2011	$19.36	$58.83	$71.47	$0.622	$0.507
2012	$20.55	$61.63	$74.57	$0.631	$0.506
Annual Change	6.2%	4.8%	4.3%	1.5%	-0.4%

127. Table 6 provides examples of prominently displayed video packages from MVPD websites. Table 6 does not show all of the video packages offered by the MVPDs. Table 6 shows the name of the video package, the advertised price, and the number of channels.[427] The advertised video packages are often promotional prices for new customers. At the end of the promotional time period, the price for services rises to the "normal" price. It is important to note that some of the video packages shown in Table 6 include advanced video services (*e.g.*, DVR service), some include equipment (*e.g.*, an HD/DVR set-top receiver), and some include premium channels (*e.g.*, HBO). Even where the number of channels is similar, each package contains a different mix of channels.[428] Many services and features that affect the value of a video package are not shown in Table 6. Therefore, at best, this information provides only a starting point for comparing video packages since there is no standard video package for making direct price comparisons. For these reasons, Table 6 contains only a sample of advertised prices for prominently displayed video package offerings.

[425] *See 2013 Cable Price Report*, Table 1, Attachment 2 & Attachment 4. For additional information regarding cable industry prices, *see 2013 Cable Price Report generally*.

[426] The 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. *2013 Cable Price Report* at ¶ 11.

[427] When MVPDs advertise the number of channels, they usually include both video channels and music channels. The video channels in Table 6 include those found on the basic and expanded basic service and a range of digital channels.

[428] For example, some MVPDs include all of the premium movie channels in their most expensive advertised video package while other MVPDs include fewer premium movie channels in their most expensive advertised video package.

Table 6: Examples of MVPD Video Package Prices

Cable				
Comcast[429]	Digital Starter $29.95 (45 channels)	Digital Preferred $39.99 (160 channels)	Digital Premier $84.99 (200 channels)	
Time Warner Cable[430]	Broadcast Basic TV with Int'l Package $33.99 (20 channels)	Digital TV $49.99 (200 channels)		
Cox Communications[431]	Economy TV $34.99 (100 channels)	Advanced TV $65.99 (280 channels)	Advanced TV Preferred $70.99 (340 channels)	Advanced TV Premier $78.49 (380 channels)
DBS				
DIRECTV[432]	Entertainment $29.99 (140 channels)	Choice $34.99 (150 channels)	Choice Ultimate $44.99 (225 channels)	Premier $80.99 (285 channels)
DISH Network[433]	Smart Pack $19.99 (55 channels)	America's Top 120 $24.99 (190 channels)	America's Top 200 $34.99 (235 channels)	America's Top 250 $39.99 (290 channels)
Telephone				
AT&T U-verse[434]	U-Family $57.00 (130 channels)	U200 $72.00 (270 channels)	U300 $87.00 (360 channels)	U450 $119.00 (430 channels)
Verizon FiOS[435]	Prime HD $64.99 (210 channels)	Extreme HD $74.99 (290 channels)	Ultimate HD $89.99 (385 channels)	

[429] Comcast, http://wwwb.comcast.com/Corporate/Learn/DigitalCable/digitalcable.html (visited Oct. 30, 2012).

[430] Time Warner Cable, http://www.timewarnercable.com/en/residential-home/tv/plans.html (visited Oct. 30, 2012).

[431] Cox Communications, http://ww2.cox.com/residential/northernvirginia/tv/cox-advanced-tv.cox (visited Oct. 30, 2012).

[432] DIRECTV, http://www.directv.com/DTVAPP/new_customer/base_packages.jsp (visited Oct. 30, 2012).

[433] DISH Network, http://www.dish.com/entertainment/packages/ (visited Oct. 30, 2012).

[434] AT&T, http://www.att.com/u-verse/explore/tv-landing.jsp (visited Oct. 30, 2012).

[435] Verizon, http://www22.verizon.com/home/fiostv/#plans (visited Oct. 30, 2012).

b. Video Subscribers and Penetration

128. *Video Subscribers*. Table 7 shows the number of video subscribers for cable, DBS, and telephone MVPDs for year-end 2010, end of June 2011, year-end 2011, and end of June 2012. Some data necessary to meaningful compare cable, DBS, and telephone MVPDs are available only on an end of year basis. Specifically, reliable data regarding the number of telephone MVPD subscribers and, therefore, the total number of MVPD subscribers are available only on an end of year basis and not on an end of June basis. Nonetheless, Table 7 provides the end of June data that are available.

129. Between 2010 and 2011, the number of subscribers to MVPD service grew from 100.8 million in 2010 to 101.0 million in 2011, a net increase of approximately 200,000 subscribers.[436] Over that period, however, cable MVPDs lost video subscribers and market share. At the end of 2010, cable MVPDs had 59.8 million video subscribers (59.3 percent of the 100.8 million MVPD video subscribers).[437] By year-end 2011, the number of cable MVPD subscribers had declined to 58.0 million (57.4 percent of the MVPD subscribers), a loss of approximately 1.8 million subscribers.[438] During the first six months of 2012, the number of cable MVPD subscribers declined to 57.3 million. NCTA estimates that cable MVPDs accounted for 55.7 percent of MVPD subscribers at the end of June 2012.[439]

130. Table 7 shows that DBS MVPDs and telephone MVPDs gained video subscribers and market share during the period 2010 to 2011. In 2010, DBS MVPDs had 33.4 million video subscribers (33.1 percent of the 100.8 million MVPD subscribers).[440] By 2011, the number of DBS MVPD video subscribers increased to 33.9 million (33.6 percent of the 101.0 million MVPD subscribers), a gain of approximately 500,000 subscribers.[441] In the first six months of 2012, the number of DBS MVPD subscribers had increased to 34.0 million. NCTA estimates that DBS MVPDs accounted for 33.6 percent of MVPD subscribers at the end of June 2012.[442] In 2010, telephone MVPDs had approximately 6.9 million video subscribers (6.9 percent).[443] In 2011, the number of telephone MVPD video subscribers had increased to 8.5 million (8.4 percent of MVPD video subscribers), a gain of 1.6 million subscribers.[444] In the first six months of 2012, the combined number of AT&T and Verizon video subscribers had increased to 8.6 million. Although we do not have reliable June 2012 data for the number

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[436] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[437] *Id*.

[438] *Id*.

[439] NCTA Comments at 3.

[440] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[441] *Id*.

[442] NCTA Comments at 3.

[443] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[444] *Id*.

of video subscribers for the remaining telephone MVPDs, NCTA estimates that telephone MVPDs accounted for 9.1 percent of MVPD subscribers at the end of June 2012.[445]

Table 7: MVPD Video Subscribers (in millions)

Year	End of Year 2010	End of June 2011	End of Year 2011	End of June 2012
MVPD Total[446]	**100.8**	**N/A**	**101.0**	**N/A**
Cable[447]	**59.8**	**58.9**	**58.0**	**57.3**
Comcast	22.8	22.5	22.3	22.1
Time Warner Cable	12.4	12.2	12.1	12.5
Cox	4.9	4.8	4.8	4.7
Charter	4.5	4.4	4.3	4.3
Cablevision	3.3	3.3	3.3	3.3
All Other Cable[448]	11.9	11.6	11.3	10.5
DBS[449]	**33.4**	**33.5**	**33.9**	**34.0**
DIRECTV[450]	19.2	19.4	19.9	19.9
DISH Network[451]	14.1	14.1	14.0	14.1

[445] NCTA Comments at 3.

[446] Table 7 does not include subscribers to PCO, HSD, OVS, and wireless cable MVPDs, which collectively had fewer than one million subscribers between 2010 and 2011. In addition, the number of video subscribers for individual companies in Table 7 is rounded to the nearest 100,000. Because some types of MVPDs are not included and because of rounding, the sum of the individual entries does not equal the MVPD totals.

[447] Cable MVPD total and individual cable MVPD data come from SNL Kagan, *U.S. Cable Subscriber Highlights, Basic Subscribers*, http://www.snl.com/interactivex/CableMSOOperatingMetrics.aspx?Defaults=0 (visited Oct. 30, 2012).

[448] All other cable subscribers are estimated by subtracting the subscribers of the five largest cable MVPDs from total cable subscribers.

[449] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012). Because the number of video subscribers for DIRECTV and DISH Network are rounded to the nearest 100,000, the sum of the individual entries may not equal the DBS totals SNL Kagan reported for end of year 2010 and 2011.

[450] DIRECTV subscriber numbers come from DIRECTV 2011 Form 10-K at 41; DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012. *See also* DIRECTV Comments at 8.

[451] DISH Network subscriber numbers come from DISH Network 2011 Form 10-K at 47; DISH Network, *SEC Form 10-Q for the Period Ending June 30, 2012*, at 53.

Table 7: MVPD Video Subscribers (in millions) (continued)

Year	End of Year 2010	End of June 2011	End of Year 2011	End of June 2012
Telephone[452]	**6.9**	**N/A**	**8.5**	**N/A**
AT&T U-verse[453]	3.0	3.4	3.8	4.1
Verizon FiOS[454]	3.5	3.8	4.2	4.5
All Other Telephone[455]	0.4	N/A	0.5	N/A

131. SNL Kagan estimates that at the end of 2011, there were 132 million housing units, with 117 million occupied housing units, and 101 million MVPD subscribers.[456] In a mature industry, with most householders already purchasing MVPD services, SNL Kagan argues that subscription gains for individual MVPDs can only be achieved at the expense of other MVPDs.[457] Similarly, DISH Network told its shareholders: "We and our competitors increasingly must seek to attract a greater proportion of new subscribers from each other's existing subscriber bases rather than from first-time purchasers of pay-TV services."[458]

132. From 2010 to 2011, an increasing number of consumers streamed an increasing amount of video content directly from the Internet to computers, television sets, tablets, and smartphones.[459] Although some consumers may consider online video to be a substitute for MVPD video, other consumers may consider online video to be a complement to MVPD video. According to Nielsen, during the first quarter of 2012, Americans watched each week on average 34 hours and 7 minutes of traditional television, two hours and 40 minutes of time-shifted television, 40 minutes of Internet video, and 10 minutes of smart phone video.[460] Although consumers are watching more video online, the concerns of MVPD executives regarding the threat of online video to traditional MVPD business models have diminished.[461] In addition, Netflix, the largest online video subscription service, argues that it is a

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[452] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 30, 2012).

[453] AT&T, *2011 Annual Report*, at 38; AT&T, *Investor Briefing: 2nd Quarter 2012*, July 24, 2012, at 8.

[454] Verizon, *2011 Annual Report*, at 36; Verizon, *Investor Quarterly, Second Quarter 2012*, July 19, 2012, at 14. At the end of June 2012, the number of FiOS TV subscribers had increased to 4.5 million. *See also* Verizon Comments at 4.

[455] All other telephone MVPD subscribers are estimated by subtracting AT&T U-verse and Verizon FiOS video subscribers from the total telephone MVPD subscribers estimated by SNL Kagan.

[456] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 31, 2012).

[457] Maria Rondeli, *SNL Kagan Multichannel Projections: Telco TV Gains Market Share*, Cable TV Investor: Deals & Finance, SNL KAGAN, Sept. 27, 2012, at 1.

[458] DISH Network 2011 Form 10-K at 19.

[459] We discuss online video distributors in Sec. III.C.

[460] Nielsen, *The Cross-Platform Report*, Quarter 1, 2012, at 6.

[461] *See* Ian Olgeirson and Michelle Ow, *Operators, Programmers Enjoy Fortification of TV Everywhere, Bolster Usage-Based Billing Defenses*, Cable TV Investor: Deals & Finance, SNL KAGAN, May 31, 2012, at 1-4.

complement, not a substitute, for MVPD service, implying that its service does not lead to cord-cutting by most of its subscribers.[462] Netflix explains that it does not offer live news or sports programming and that the overwhelming majority of its subscribers continue to subscribe to an MVPD.[463] According to SNL Kagan, while MVPDs will have to remain mindful of the nimbleness and consumer appeal of OVDs, online video is no longer considered a fundamental threat to the MVPD business model.[464] SNL Kagan also advises MVPDs that the substitution to online video, particularly among young adults, should not be dismissed.[465]

133. *Video Penetration*. Because a large part of all MVPD video delivery systems represents fixed costs (costs that do not vary with the number of subscribers), higher levels of video penetration (the number of video subscribers divided by the number of homes passed by the MVPD) typically translate into lower costs per subscriber and increased profit.[466] Comparing the video penetration of one type of MVPD with the video penetration of another type of MVPD can be problematic, however, because the different types of MVPDs have different fixed costs.[467] For instance, the fixed costs of offering cable MVPD service to every home in the United States are much higher than the fixed costs of offering DBS MVPD service to every home in the United States.[468] As such, a DBS MVPD may be on solid financial footing with lower video penetration, relative to a cable MVPD with higher video penetration. Regardless of technology, however, every MVPD seeks to increase levels of video penetration.

134. Table 8 shows video penetration for cable, DBS, and telephone MVPDs for year-end 2010, end of June 2011, year-end 2011, and end of June 2012. Because data regarding the number of U.S. homes and the number of homes passed by cable MVPDs are available only on an end of year basis, some end of June estimates are omitted from Table 8. Table 8 shows that video penetration for cable MVPDs decreased from 46.5 percent of homes passed by cable in 2010 to 44.4 percent in 2011. Table 8 also shows that video penetration declined consistently for five of the largest cable MVPDs from end of year 2010 to end of June 2012. This is consistent with our finding that cable MVPDs lost subscribers over the same period. In contrast, DBS MVPD video penetration increased from 25.3 percent of all homes in 2010 to 25.5 percent in 2011. While telephone MVPDs extended their MVPD systems, video penetration (based on data from AT&T U-verse and Verizon FiOS) increased consistently from 15.2 percent at the end of 2010 to 18.2 percent at the end of June 2012.

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[462] Netflix Comments at 6-7.

[463] *Id*.

[464] *See* Robin Flynn, *What to Watch For (and Not Worry About) in 2012*, Cable TV Investor: Deals & Finance, SNL KAGAN, Jan. 31, 2012, at 3.

[465] *See* Tony Lenoir, *Factors Impacting Cable Churn in 2011-2012*, Cable TV Investor: Deals & Finance, SNL KAGAN, Oct. 30, 2012, at 10.

[466] Harold L. Vogel, ENTERTAINMENT INDUSTRY ECONOMICS 339-43 (Cambridge University Press) (8th ed. 2011) ("Vogel").

[467] *Id*. at 344-46.

[468] DIRECTV explains that its satellite-based service provides many advantages over ground-based cable television services including the ability to distribute video programming to millions of recipients nationwide with minimal incremental infrastructure cost per additional subscriber. Satellites also provide comprehensive coverage to areas with low population density. DIRECTV 2011 Form 10-K at 4.

Table 8: MVPD Video Penetration

Year	End of Year 2010	End of June 2011	End of Year 2011	End of June 2012
Cable[469]	**46.5%**	**N/A**	**44.4%**	**N/A**
Comcast	43.9%	43.1%	42.5%	41.9%
Time Warner Cable	45.2%	44.4%	43.2%	42.5%
Cox	49.5%	47.9%	47.0%	45.6%
Charter	38.4%	37.3%	36.1%	35.6%
Cablevision	59.9%	59.1%	58.2%	58.0%
DBS[470]	**25.3%**	**N/A**	**25.6%**	**N/A**
DIRECTV	14.5%	N/A	15.0%	N/A
DISH Network	10.7%	N/A	10.6%	N/A
Telephone[471]	**15.2%**	**16.0%**	**17.1%**	**18.2%**
AT&T U-verse	11.0%	11.7%	12.5%	13.5%[472]
Verizon FiOS	22.4%	23.6%	25.5%	26.5%

135. *Digital Video, Internet Access, and Telephone Subscription and Penetration*. Although the number of video subscribers to cable MVPDs has declined, reports indicate that the remaining cable customers added subscriptions to digital video, Internet access, and telephone services. Specifically, the number of cable customers who subscribe to digital video service grew from 44.7 million in 2010 to 46.0

[469] Total cable MVPD and individual cable MVPD data come from SNL Kagan, U.S. Cable Subscriber Highlights, http://www.snl.com/interactivex/CableMSOOperatingMetrics.aspx?OpMetric=PenetrationBasicBest&Form_Name=UserInputs&Defaults=0 (visited Oct. 31, 2012).

[470] Estimates are derived by dividing all DBS MVPD subscribers by the number of homes in the United States. SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 31, 2012). DIRECTV and DISH Network video penetration estimates are derived by dividing the company's subscribers (as reported in their annual reports) by the number of homes in the United States. Because we have rounded estimates to the nearest 100,000, the sum of the individual company estimates may differ slightly from the total DBS MVPD estimate.

[471] We do not have data on the number of homes passed by all telephone MVPDs, so we do not estimate total telephone MVPD video penetration. Our estimates for telephone MVPD video penetration are based only on data from AT&T and Verizon. Our estimates are derived by summing AT&T and Verizon MVPD subscribers and dividing by the number of AT&T U-verse and Verizon FiOS homes passed. Because Verizon and AT&T do not offer MVPD service in the same geographic area, video penetration is a weighted average of the video penetration of these two telephone MVPDs. Verizon and AT&T estimates are derived by dividing a company's MVPD subscribers by the number of homes passed by the company's MVPD system (as reported in their annual and quarterly financial reports).

[472] We estimate AT&T's video penetration for June 2012 by assuming that the number of homes passed at end of June 2012 was the same as the number reported by AT&T for the end of 2011. *See supra*, n.56.

million in 2011, and digital video penetration rose from 74.8 percent to 79.4 percent (*i.e.*, the number of digital video subscribers divided by the number of basic cable subscribers).[473] In addition, the number of cable Internet access subscribers grew from 44.4 million in 2010 to 47.3 million in 2011, increasing Internet penetration (*i.e.*, the number of Internet subscribers divided by the number of cable homes passed) from 36.0 percent to 37.2 percent.[474] In addition, the number of telephone subscribers grew from 23.5 million in 2010 to 24.7 million in 2011, with telephone penetration (*i.e.*, the number of telephone subscribers divided by the number of occupied homes passed) increasing from 20.5 percent to 21.3 percent.[475]

c. Revenue

136. The varied business models of the different types of MVPDs complicate any discussion of revenue. For example, cable and telephone MVPDs, which have two-way systems, offer video, Internet access, and telephone services and earn revenue from each of these services. In contrast, DBS MVPDs, which have one-way systems, earn almost all of their revenue from delivered video services. A discussion of revenue is further complicated by the fact that AT&T and Verizon operate wireless networks and traditional landline networks and offer telecommunication services in international markets. We also note that Comcast owns cable networks and broadcast networks, broadcast television stations, movie studios, and theme parks. Because this Report is focused on the delivery of video programming, we report those revenues that are directly related to video. In addition, we report revenues for bundles that include delivered video services. Thus, we exclude revenue from international operations, mobile wireless services, cable and broadcast networks, theme parks, etc.

137. Table 9 shows MVPD revenue for video services and bundles that include delivered video services for year-end 2010 and year-end 2011, and also for year to date June 2011 and year to date June 2012. Because data regarding total cable MVPD revenue and telephone MVPD revenue for video services are available only on an end of year basis, some year to date June estimates are omitted from Table 9. Table 9 shows that MVPD revenue for the delivered video services and bundles that include delivered video services offered over cable systems increased from $93.8 billion in 2010 to $97.9 billion in 2011. Revenue for DBS MVPDs increased from $32.9 billion in 2010 to 35.9 billion in 2011. Table 9 shows revenue for the delivered video services and bundles that include delivered video services offered over AT&T U-verse and Verizon FiOS networks. AT&T U-verse revenue grew from $4.3 billion in 2010 to $6.7 billion in 2011 and Verizon FiOS revenue grew from $6.9 billion in 2010 to $8.3 billion in 2011.

[473] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 31, 2012).

[474] *Id.*

[475] *Id.*

Table 9: MVPD Revenue (in billions)

Year	End of Year 2010	End of Year 2011		Year to Date June 2011	Year to Date June 2012
Cable[476]	**$93.8**	**$97.9**		**N/A**	**N/A**
Comcast[477]	$35.4	$37.2		$18.4	$19.5
Time Warner Cable[478]	$18.9	$19.7		$8.6	$9.1
Charter[479]	$7.1	$7.2		$3.6	$3.7
DBS[480]	**$32.9**	**$35.9**		**$17.2**	**$18.3**
DIRECTV[481]	$20.3	$21.9		$10.4	$11.1
DISH Network[482]	$12.6	$14.0		$6.8	$7.2
Telephone[483]	**$11.2**	**$15.0**		**N/A**	**N/A**
AT&T[484]	$4.3	$6.7		N/A	N/A
Verizon[485]	$6.9	$8.3		N/A	N/A

[476] Estimates for total revenue for all cable MVPDs come from SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Oct. 31, 2012). This estimate may include revenue that are not directly related to video and bundles that include video. Therefore, this estimate may overstate the revenue that is the focus of this Report.

[477] End of year data come from Comcast 2011 Form 10-K at 50; year to date June data come from Comcast, *Comcast Reports 2nd Quarter 2012 Results* (press release), Aug. 1, 2012.

[478] End of year data come from Time Warner Cable 2011 Form 10-K at 44; year to date June data come from Time Warner Cable, *Time Warner Cable Reports 2012 Second-Quarter Results* (press release), Aug. 2, 2012.

[479] End of year data come from Charter 2011 Form 10-K at 33; year to date June data come from Charter, *Charter Second Quarter 2012 Results Focus on Strategic Initiatives to Drive Growth* (press release), Aug. 7, 2012.

[480] Revenue for DBS is the sum of revenue for DIRECTV and DISH Network.

[481] End of year data come from DIRECTV 2011 Form 10-K at 35; year to date June data come from DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012. Table 9 shows revenue for DIRECTV U.S.

[482] End of year data come from DISH Network 2011 Form 10-K at 55; year to date June data come from DISH Network, *SEC Form 10-Q filed for the Period Ending June 30, 2012*, at 2.

[483] The estimates shown are the sum of revenue for AT&T U-verse and Verizon FiOS and do not include other telephone companies that offer MVPD service. As such, the estimates understate revenue for telephone MVPDs.

[484] Mari Rondeli, *RBOCs Grab Video but Cede HSD*, Cable TV Investor: Deals & Finance, SNL KAGAN, Jan. 31, 2012, at 11-13.

[485] *Id*.

138. Table 10 shows MVPD revenue from video services for year-end 2010 and year-end 2011, and also for end of June 2011 and end of June 2012. Because some data are available only on an end of year basis, some end of June estimates are omitted from Table 10. Cable MVPD video revenue increased from $64.8 billion in 2010 to $66.6 billion in 2011. Although the number of basic cable MVPD subscribers decreased from 2010 to 2011, the remaining subscribers purchased an increasing number of subscriptions to advanced video services (*e.g.*, digital programming packages, DVR, and VOD services). For example, the number of cable MVPD digital subscribers increased from 44.7 million in 2010 to 46.0 million in 2011, and the number DVR subscribers increased from 18.1 million in 2010 to 19.6 million in 2011.[486] DBS MVPD video revenue increased from $32.9 billion in 2010 to $35.9 billion in 2011. Video revenue for all telephone MVPDs increased from $5.9 billion in 2010 to $8.0 billion in 2011.[487]

[486] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Nov. 1, 2012).

[487] AT&T and Verizon do not report video revenue separately to their shareholders, although SNL Kagan makes estimates of thee video revenues, which we report in Table 10.

Table 10: Video Revenue (in billions)

Year	End of Year 2010	End of Year 2011		Year to Date June 2011	Year to Date June 2012
Cable[488]	**$64.8**	**$66.6**		**N/A**	**N/A**
Comcast[489]	$19.4	$19.6		$9.8	$10.0
Time Warner Cable[490]	$10.6	$10.6		$5.3	$5.5
Charter[491]	$3.7	$3.6		$1.8	$1.8
DBS[492]	**$32.9**	**$35.9**		**$17.2**	**$18.3**
DIRECTV[493]	$20.3	$21.9		$10.4	$11.1
DISH Network[494]	$12.6	$14.0		$6.8	$7.2
Telephone[495]	**$5.9**	**$8.0**		**N/A**	**N/A**

139. *Average Revenue Per Unit*. Average revenue per unit ("ARPU") is a performance metric that estimates the value of an average MVPD subscriber by dividing revenue from delivered video services and bundles that include delivered video services by the number of subscribers. All MVPDs do

[488] SNL Kagan, *U.S. Multichannel Industry Benchmarks*, http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx?startYear=2010&endYear=2011 (visited Nov. 1, 2012). Cable video revenue is derived by subtracting revenue from Internet access and phone service from total revenue. Because some cable MVPDs derive revenue from sources not directly related to delivered video and bundles that include delivered video, our estimate may overstate cable MVPD video revenue.

[489] End of year data come from Comcast 2011 Form 10-K at 50; year to date June data come from Comcast, *Comcast Reports 2nd Quarter 2012 Results* (press release), Aug. 1, 2012.

[490] End of year data come from Time Warner Cable 2011 Form 10-K at 45; year to date June data come from Time Warner Cable, *Time Warner Cable Reports 2012 Second-Quarter Results* (press release), Aug. 2, 2012.

[491] End of year data come from Charter 2011 Form 10-K at 43 year to date June data come from Charter, *Charter Second Quarter 2012 Results Focus on Strategic Initiatives to Drive Growth* (press release), Aug. 7, 2012.

[492] DBS MVPD video revenue is the sum of DIRECTV U.S. and DISH Network video revenue. Because DBS is a one-way system and DBS revenues from cooperative arrangements for the provision of Internet access and telephone services is small, the video revenue estimates shown in Table 10 are the same as the revenue estimates shown in Table 9.

[493] End of year data come from DIRECTV 2011 Form 10-K at 35; year to date June data come from DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012. Table 8 shows revenue for DIRECTV U.S.

[494] End of year data come from DISH Network 2011 Form 10-K at 55; year to date June data come from DISH Network, *SEC Form 10-Q filed for the Period Ending June 30, 2012*, at 2.

[495] Mari Rondeli, *Telco TV Providers to Grab larger Share of Multichannel Revenue Pie*, Cable TV Investor; Deals & Finance, SNL KAGAN, June 30, 2011, at 12-14; and Mari Rondeli, *Telco TV Revenues Driven by Customer Growth*, Cable TV Investor: Deals & Finance, SNL KAGAN, June 29, 2012, at 18-19.

not measure ARPU uniformly.[496] As such, ARPU may more accurately reflect a trend within a company than provide comparisons across companies. In addition, MVPDs experience seasonal variation, so it may be more appropriate to look at trends in ARPU from winter to winter, rather than winter to summer. Table 11 shows that APRU has increased from the fourth quarter 2010 to the fourth quarter 2011 and from the second quarter 2011 to the second quarter 2012 for Comcast, Time Warner Cable, Charter, DIRECTV, and DISH Network.[497] Monthly ARPU for Verizon FiOS and AT&T U-verse increased from the fourth quarter 2010 to the fourth quarter 2011. From the second quarter 2011 to the second quarter 2012, monthly ARPU increased for Verizon FiOS but remained flat for AT&T U-verse.

[496] DISH Network states: "We are not aware of any uniform standards for calculating ARPU and believe presentations of ARPU may not be calculated consistently by other companies in the same or similar businesses." DISH Network 2011 Form 10-K at 54.

[497] Whereas revenue for ARPU estimates for cable and telephone MVPDs come from a mix of video, Internet access, and telephone services; revenue for ARPU estimates for DBS MVPDs come almost exclusively from video services.

Table 11: Monthly ARPU

Year	Fourth Quarter 2010	Fourth Quarter 2011		Second Quarter 2011	Second Quarter 2012
Cable					
Comcast[498]	$131.98	$141.31		$137.58	$148.57
Time Warner Cable[499]	$110.36	$115.01		$113.64	$117.41
Charter[500]	$104.09	$106.28		$104.39	$106.00
DBS					
DIRECTV[501]	$96.64	$101.38		$90.58	$94.40
DISH Network[502]	$73.32	$76.93		$78.06	$78.11
Telephone					
AT&T[503]	$160	$170		$170	$170
Verizon[504]	$146	$148		$146	$149

[498] Comcast, http://www.cmcsk.com/earningdetails.cfm?QYear=2012&QQuarter=2 (visited Nov. 28, 2012).

[499] Time Warner Cable, http://ir.timewarnercable.com/files/doc_financials/Quarterly/2012/TWC_Trending_Schedules_Q2_2012_FINAL.pdf (visited Nov. 28. 2012).

[500] Charter, *Charter Announces Fourth Quarter and Full Year 2011 Results* (press release), Feb. 27, 2012; Charter, *Charter Second Quarter 2012 Results Focus on Strategic Initiatives to Drive Growth* (press release), Aug. 4, 2012.

[501] We report ARPU data for DIRECTV's U.S. Segment. DIRECTV, *DIRECTV Announces Fourth Quarter and Full Year 2011 Results* (press release), Feb. 16, 2012; DIRECTV, DIRECTV Announces Second Quarter 2012 Results (press release), Aug. 2, 2012.

[502] DISH Network 2011 Form 10-K, at 47; DISH Network, *SEC Form 10-Q for the Period Ending June 30, 2012*, at 53. The estimates for fourth quarter 2010 and 2011 are actually year-end estimates based on 12 months of data, whereas the data for second quarter 2011 and 2012 are quarterly estimates based on three months of data.

[503] Data is reported for triple-bundle AT&T U-verse subscribers only. Thus, the estimates for AT&T in Table 9 overstate the monthly ARPU for all U-verse subscribers. AT&T, *AT&T Reports Record 2.8 Million Wireless Net Adds, Strong U-verse Sales, Continued Revenue Gains in the Fourth Quarter* (press release), Jan. 27, 2011; AT&T, *Best Ever Mobile Broadband Sales and Strong Cash Flows Highlight AT&T's Fourth-Quarter Results* (press release), Jan. 26, 2012; AT&T, *AT&T Reports Strong Wireless Gains, Record Mobile Broadband Sales and Continued Strength in U-verse and Strategic Business Services in Second-Quarter Results* (press release), July 21, 2011; and AT&T, *AT&T Reports 10 Percent Earnings Growth, Strong Revenue and Margin Gains and Best-Ever Wireless Margins and Churn in Second-Quarter Results* (press release), July 24, 2012.

[504] Verizon, *Investor Quarterly: Fourth Quarter 2010*, Jan. 25, 2011, at 6; Verizon, *Investor Quarterly: Fourth Quarter 2011*, Jan. 24, 2012, at 3; Verizon, *Investor Quarterly: Second Quarter 2011*, July 22, 2011, at 6; Verizon, *Investor Quarterly: Second Quarter 2012*, July 19, 2012, at 6.

140. Table 12 shows monthly ARPU for video services alone. Monthly video ARPU for cable increased from the fourth quarter of 2010 to the fourth quarter of 2011 and from the second quarter of 2011 to the second quarter of 2012. Because DBS MVPDs earn almost all of their operating revenue from subscription video services, we estimate monthly ARPU for video services to be the same as monthly ARPU for all services. Although AT&T and Verizon do not report monthly video ARPU for U-verse and FiOS, SNL Kagan estimates that it increased for all telephone MVPDs from $82.02 in 2010 to $86.37 in 2011.[505]

Table 12: Monthly ARPU for Video Services

Year	Fourth Quarter 2010	Fourth Quarter 2011		Second Quarter 2011	Second Quarter 2012
Cable[506]					
Comcast	$74.23	$77.09		$76.63	$80.40
Time Warner Cable	$70.96	$73.53		$73.54	$75.29
Charter	$70.39	$72.17		$71.24	$73.51
DBS					
DIRECTV[507]	$96.64	$101.38		$90.58	$94.40
DISH Network[508]	$73.32	$76.93		$78.06	$78.11

d. Investment

141. Cable MVPD capital expenditures were $12.9 billion in 2010 and remained unchanged in 2011.[509] Consumer premise equipment, which is the largest category of cable MVPD capital expenditure, declined from $6.2 billion in 2010 to $5.5 billion in 2011.[510] Comcast reported that capital expenditures in its cable segment declined from $4.9 billion in 2010 to $4.8 billion in 2011, and remained unchanged

[505] Mari Rondeli, *Telco TV Providers to Grab Larger Share of Multichannel Revenue Pie*, Cable TV Investor: Deals & Finance, SNL KAGAN, June 30, 2011, at 12-14; and Mari Rondeli, *Telco TV Revenues Driven By Customer Growth*, Cable TV Investor: Deals & Finance, SNL KAGAN, June 29, 2012, at 18-19.

[506] Individual company data for cable MVPDs come from *Cable MSO Margin Analysis by Product – Historical Benchmarks*, Cable TV Investor: Deals & Finance, SNL KAGAN, Sept. 27, 2012, at 11-12.

[507] We report ARPU data for DIRECTV's U.S. Segment. DIRECTV, *DIRECTV Announces Fourth Quarter and Full Year 2011 Results* (press release), Feb. 16, 2012; DIRECTV, DIRECTV Announces Second Quarter 2012 Results (press release), Aug. 2, 2012.

[508] DISH Network 2011 Form 10-K, at 47; DISH Network, *SEC Form 10-Q for the Period Ending June 30, 2012*, at 53. The estimates for fourth quarter 2010 and 2011 are actually year-end estimates based on 12 months of data, whereas the data for second quarter 2011 and 2012 are quarterly estimates based on three months of data.

[509] Mari Rondeli, *MSOs Generated $8B in Surplus Funds in 2011*, Cable TV Investor: Deals & Finance, SNL KAGAN, Aug. 30, 2012, at 11. *See also* NCTA Comments at 4.

[510] *Id*.

for the first six months of 2012 ($2.2 billion) relative to the first six months of 2011 ($2.2 billion).[511] Capital expenditures for Time Warner Cable were $2.9 billion in 2010 and remained unchanged for 2011.[512] Time Warner Cable also reported that capital expenditures were unchanged for the first six months of 2012 ($1.4 billion) relative to the first six months of 2011 ($1.4 billion).[513] Charter reported that capital expenditures increased from $1.2 billion in 2010 to $1.3 billion in 2011.[514] Charter also reported that capital expenditures increased for the first six months of 2012 ($0.8 billion) relative to the first six months of 2011 ($0.7 billion).[515] DIRECTV reported that capital expenditures increased from $1.6 billion in 2010 to $1.7 billion in 2011.[516] DIRECTV reported that the company had placed orders for three satellites.[517] One of these satellites was placed into service and the other two are expected to go into service in 2014.[518] DIRECTV reported that capital expenditures were unchanged for the first six months of 2012 ($0.7 billion) relative to the first six months of 2011 ($0.7 billion).[519] DISH Network explained that it entered an agreement to lease all of the capacity on EchoStar XVI, which was initially expected to launch in late 2012 but was postponed due to rocket failure.[520] At the end of 2011, AT&T reported that it reached its U-verse deployment goal of 30 million homes passed and planned to increase sales to this base.[521] On November 7, 2012, however, AT&T announced plans to expand U-verse TV for a total potential U-verse market of 33 million customer locations.[522] The expansion is expected to be complete by year-end 2015. Verizon reported at the end of 2011, that it was still expanding the number of homes passed by FiOS.[523] SNL Kagan explains that expansion of FiOS is tied mostly to build out requirements in existing markets.[524] According to SNL Kagan, AT&T's, Verizon's, and CenturyLink's

[511] Comcast 2011 Form 10-K at 64. Comcast, *Comcast Reports 2nd Quarter 2012 Results* (press release), Aug. 1, 2012.

[512] Time Warner Cable 2011 Form 10-K at 60.

[513] Time Warner Cable, *Time Warner Cable Reports 2012 Second-Quarter Results* (press release), Aug. 2, 2012.

[514] Charter 2011 Form 10-K at 53.

[515] Charter, *Charter Second Quarter 2012 Results Focus on Strategic Initiatives to Drive Growth* (press release), Aug. 7, 2012.

[516] DIRECTV 2011 Form 10-K at 35.

[517] *Id*. at 48.

[518] *Id*.

[519] DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012.

[520] DISH Network 2011 Form 10-K at 8. The launch appears to have been delayed. *See* Steve Donohue, *Rocket Failure Will Delay Launch of Dish Network's EchoStar XVI Satellite*, Aug. 9, 2012, http://www.fiercecable.com/story/rocket-failure-will-delay-launch-dish-networks-echostar-xvi-satellite/2012-08-09 (visited Nov. 7, 2012).

[521] AT&T, *2011 Annual Report*, at 41.

[522] AT&T, *AT&T to Invest $14 Billion to Significantly Expand Wireless and Wireline Broadband Networks, Support Future IP Data Growth and New Services* (press release), Nov. 7, 2012.

[523] Verizon, *2011 Annual Report*, at 36.

[524] Mari Rondeli, *RBOC CapEx Shifts to Support Wireless Growth*, Cable TV Investor: Deals & Finance, SNL KAGAN, Sept. 27, 2012, at 14-15.

aggregate wireline capital expenditures declined 15 percent in the first half of 2012, relative to the first half of 2011.[525]

e. Profitability

142. In reporting profitability, MVPDs often combine revenues and costs from multiple services.[526] For example, cable MVPDs that offer video, Internet access, and telephone services often combine the revenues and costs of these services to estimate profitability. As such, for cable MVPDs we are not able to separate out profitability metrics for video services only. In contrast, DBS MVPDs focus on video services and derive the vast majority of their revenue and profits from video services. Thus, estimates of DBS profitability may be interpreted as profits from video services. AT&T and Verizon combine revenues and costs from video, Internet access, and telephone services from residential, commercial, and international customers from both their upgraded and their legacy wireline systems.[527] Because they combine a wide range of services from two systems, we cannot derive meaningful profit metrics for AT&T and Verizon that relate to video services or bundles that include video services.

143. Because MVPDs may be at different stages in building out or upgrading their systems, it may be more appropriate to examine trends in financial performance within a company, rather than to make comparisons across companies. One measure of financial performance is operating cash flow.[528] Table 13 shows that operating cash flow generally increased from 2010 to 2011 for Comcast, Time Warner Cable, DIRECTV, and DISH Network. With the exception of DISH Network, operating cash flow generally increased for the first six months of 2012, compared to the first six months of 2011.

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[525] *Id*.

[526] Profit is defined as revenue minus costs, although its measurement may vary in different contexts. *See* Donald S. Watson & Mary A. Holman, PRICE THEORY AND ITS USES 144 (Houghton Mifflin Company) (4th ed. 1977). *See also* Brian Butler, A DICTIONARY OF FINANCE AND BANKING 280-81 (Oxford University Press) (2nd ed. 1997) (stating that it is not always possible to derive one single figure for profit for an organization from an accepted set of data). *See also* Vogel at 336, Table 8.3 (showing select cable MVPD operating revenues and expenses).

[527] *See* Verizon, *2011 Annual Report*, at 36-38.

[528] Operating cash flow is a measure of the amount of cash generated by a company's normal business operations. Operating cash flow indicates whether a company is able to generate sufficient positive cash flow to maintain and grow its operations, or whether it may require external financing. Operating cash flow is calculated by adjusting net income for items such as depreciation, changes to accounts receivable and changes in inventory. Financial analysts sometimes prefer to look at cash flow metrics, because the metrics strip away certain accounting effects and are thought to provide a clearer picture of the current reality of the business operations. For example, booking a large sale provides a big boost to revenue, but if the company is having a hard time collecting the payment, then the sale is not a true economic benefit to the company. On the other hand, a company may be highly profitable on a cash flow basis, but may have a low net income if it has a lot of fixed assets and uses accelerated depreciation calculations. Investopedia, http://www.investopedia.com/terms/o/operatingcashflow.asp#axzz2EJ18VnmI (visited Dec. 6, 2012).

Table 13: MVPD Operating Cash Flow (in billions)

Year	End of Year 2010	End of Year 2011		Year to Date June 2011	Year to Date June 2012
Cable					
Comcast[529]	$14.3	$15.3		$7.6	$8.1
Time Warner Cable[530]	$6.9	$7.2		$3.6	$3.9
Charter[531]	$1.4	$1.4		$0.7	$0.7
DBS					
DIRECTV[532]	$5.2	$5.3		$2.8	$3.0
DISH Network[533]	$2.0	$2.4		$1.4	$1.1

144. Another measure of financial performance is free cash flow.[534] The free cash flow is relevant to evaluating the financial health of MVPDs that have completed system upgrades. Table 14 shows that from 2010 to 2011, free cash flow increased for Comcast and Time Warner Cable, but decreased for Charter and DIRECTV.[535] When comparing the first six months of 2011 with the first six

[529] For Comcast, we report operating income before depreciation and amortization ("OIBDA"). The estimates shown for Comcast in Table 11 are for Comcast's cable segment only, and do not include operating cash flow for other segments (*i.e.*, broadcast television, filmed entertainment, and theme parks). Comcast 2011 Form 10-K at 50; Comcast, *Comcast Reports 2nd Quarter 2012 Results* (press release), Aug. 1, 2012.

[530] For Time Warner Cable, we report OIBDA. Time Warner Cable, *Time Warner Cable Reports 2011 Fourth-Quarter and Full Year Results* (press release), Jan. 26, 2012; Time Warner Cable, *Time Warner Cable Reports 2012 Second-Quarter Results* (press release), Aug. 2, 2012.

[531] Charter does not report OIBDA, however, Charter does report earnings before interest, taxes, depreciation, and amortization ("EBITDA"). Our estimates for operating cash flow are derived by subtracting interest expense and income tax from EBITDA. Charter, *Charter Announces Fourth Quarter and Full Year 2011 Results Delivered on Strategic Priorities and Executed on Disciplined Financial Strategy* (press release), Feb. 27, 2012; Charter, *Charter Second Quarter 2012 Results Focus on Strategic Initiatives to Drive Growth* (press release), Aug. 7, 2012.

[532] Estimates include DIRECTV U.S. segment only. DIRECTV does not report OIBDA, however, DIRECTV does report operating profit before depreciation and amortization, which we use as an estimate for operating cash flow. DIRECTV 2011 Form 10-K at 35; DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug 2, 2012.

[533] DISH Network does not report OIBDA, however DISH Network does report EBITDA. Our estimates for operating cash flow are derived by subtracting interest expense and income tax from EBITDA. DISH Network 2011 Form 10-K at 58; DISH Network, *SEC Form 10-Q for the Period Ending June, 30, 2012*, at 59.

[534] A measure of financial performance calculated as operating cash flow minus capital expenditures. Note that negative free cash flow is not bad in itself. If free cash flow is negative, it could be a sign that a company is making large investments. If these investments earn a high return over time, the strategy has the potential to pay off in the long run. Investopedia, http://www.investopedia.com/terms/f/freecashflow.asp#axzz2EJ9HMwld (visited Dec. 6, 2012).

[535] Free cash flow estimates for individual cable companies come from Cable TV Investor: Deals & Finance, SNL KAGAN, Mar. 30, 2012, at 4.

months of 2012, Table 14 shows that free cash flow generally increased for Comcast, DIRECTV, and DISH Network, but declined for Time Warner Cable and Charter.

Table 14: MVPD Free Cash Flow (in billions)

Year	End of Year 2010	End of Year 2011		Year to Date June 2011	Year to Date June 2012
Cable					
Comcast[536]	$5.4	$7.0		$3.7	$4.6
Time Warner Cable[537]	$2.3	$2.7		$1.7	$1.5
Charter[538]	$0.7	$0.5		$0.2	$0.1
DBS					
DIRECTV[539]	$2.3	$1.8		$0.9	$1.5
DISH Network[540]	$0.9	$1.8		$0.9	$0.9

B. Broadcast Television Stations

1. Introduction

145. We next consider the strategic group of broadcast television stations. Broadcast stations package video programming and deliver it directly over the air to those consumers who do not subscribe to an MVPD, as well as to MVPD subscribers who own television sets that are not connected to an MVPD service. Broadcast television stations' programming is also an input for MVPD services.

146. Commercial broadcast stations cater to two distinct sets of customers: audiences and advertisers.[541] They seek to provide desirable content to attract and maximize their audiences. In turn,

[536] The estimates shown for Comcast in Table 12 combine free cash flow for all Comcast's business segments (*i.e.*, cable networks, broadcast television, filmed entertainment, and theme parks). Comcast, *Comcast Reports 4th Quarter and Year End 2011 Results* (press release), Feb. 15, 2012; Comcast, *Comcast Reports 2nd Quarter 2012 Results* (press release), Aug. 1, 2012.

[537] Time Warner Cable, *Time Warner Cable Reports 2011 Fourth-Quarter and Full Year Results* (press release), Jan. 26, 2012; Time Warner Cable, *Time Warner Cable Reports 2012 Second-Quarter Results* (press release), Aug. 2, 2012.

[538] Charter, *Charter Announces Fourth Quarter and Full Year 2011 Results Delivered on Strategic Priorities and Executed on Disciplined Financial Strategy* (press release), Feb. 27, 2012; Charter, *Charter Second Quarter 2012 Results Focus on Strategic Initiatives to Drive Growth* (press release), Aug. 7, 2012.

[539] Estimates include DIRECTV U.S. segment only. DIRECTV, *DIRECTV Announces Fourth Quarter and Full Year 2011 Results* (press release), Feb. 16, 2012; DIRECTV, *DIRECTV Announces Second Quarter 2012 Results* (press release), Aug. 2, 2012.

[540] DISH Network 2011 Form 10-K at 63; DISH Network, *SEC Form 10-Q for the Period Ending June, 30, 2012*, at 61.

[541] Advertisers and audiences are mutually dependent. Television stations need to attract audiences in order to earn money from advertising. They need advertising revenues in order to make investments in programming that will (continued….)

they primarily derive revenues by selling time during their broadcasts to advertisers based on the size and demographic characteristics of the audiences they reach.[542] Individual commercial stations compete primarily with other commercial broadcast stations within their local markets (DMAs) for audiences and advertising revenue.[543] Noncommercial educational ("NCE") stations, while not relying on advertising revenues,[544] compete with commercial stations for viewers. Other media, including daily newspapers, local and national cable networks, and Internet sites, earn advertising revenues by attracting audiences within the geographic areas they serve.[545] A broadcast station's advertising revenues depends on viewership of its television programs, regardless of whether consumers receive the station's signal over the air or via an MVPD. Today, broadcast stations are turning to additional revenue sources, including retransmission consent fees from MVPDs, ancillary digital television revenues, and advertising sold on their web sites.[546] Noncommercial broadcast stations rely on underwriters, viewer donations, and government funding for their operations, and seek to attract audiences as a way to increase their revenues from these sources.

147. On June 12, 2009, full-power television stations completed the transition from analog to digital service pursuant to a statutory mandate.[547] The flexibility provided by digital broadcasting allows television stations to offer high definition ("HD") programming, provide multiple streams of programming and/or distribute programming to mobile devices. Utilizing multicasting,[548] stations can provide a more diverse array of locally-oriented programming specifically designed to serve their audiences.[549] In addition, stations may affiliate their multicast streams with established networks to give viewers in smaller markets more over-the-air viewing options. Digital television stations also can use a

(Continued from previous page)

attract audiences. *See* David S. Evans & Richard Schmalensee, *The Industrial Organization of Markets with Two-Sided Platforms*, COMPETITION POL'Y INT'L 151, 155-56 (2007) (discussing the economics of two-sided platforms and its application to competition policy issues, especially as it relates to advertising-supported media).

[542] "[B]roadcasting in any and all of its forms is an audience aggregation business." *See* Vogel at 288.

[543] Under Commission rules, broadcast television stations serve a community of license. *See supra*, n.138.

[544] In light of their noncommercial nature, NCE stations are statutorily prohibited from airing commercial advertisements in exchange for consideration. *See* 47 U.S.C. § 399(B)(a)(1), 47 C.F.R. § 73.621(e).

[545] *See, e.g.*, Nexstar Broadcasting Group, Inc., *SEC Form 10-K for the Year Ended December 31, 2012*, at 7 ("Nexstar 2012 Form 10-K"); Sinclair Broadcast Group, Inc., *SEC Form 10-K for the Year Ended December 31, 2012*, at 23 ("Sinclair 2012 Form 10-K").

[546] Gray Television, Inc., *SEC Form 10-K for the Year Ended December 31, 2012*, at 4 ("Gray 2012 Form 10-K"); Sinclair 2012 Form 10-K at 5; LIN Television Corp., *SEC Form 10-K for the Year Ended December 31, 2012*, at 12 ("LIN 2012 Form 10-K"). *See also infra*, Sec. III.B.3.b.

[547] 47 U.S.C. §309(j)(14)(A). Full-power analog television service has terminated, and full-power stations are now broadcasting in digital mode only. *See Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations*, MB Docket No. 03-185, Second Report and Order, 26 FCC Rcd 10732, 10733, ¶ 1 (2011). Low-power stations (including Class A TV stations and TV translators) must transition to digital by September 1, 2015. *See id.* at 10733, ¶ 2 and n. 1; *see also infra*, n.550.

[548] Multicasting allows broadcast stations to offer digital streams or channels (*i.e.*, digital multicast signals) of programming simultaneously, using the same amount of spectrum previously required for analog programming. *See* FCC, *DTV.gov: What is DTV?*, http://www.dtv.gov/whatisdtv.html.

[549] Under Commission rules, digital stations asserting must-carry rights are entitled to carriage only of a single programming stream and other programming-related content on that stream. *See Carriage of Digital Television Broadcast Signals*, CS Docket No. 98-120, First Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 2598, 2622, ¶ 57 (2001).

portion of their spectrum to provide ancillary and supplementary services, such as subscription video, data transfer, and audio signals.

2. Broadcast Television Industry Structure

148. In this section of the Report, we describe critical elements of the broadcast television industry. We then explain horizontal concentration and vertical integration in the market. Next, we describe conditions affecting market entry during the relevant period, including an overview of existing regulations and market conditions that might influence entry decisions. Finally, we describe recent entry into and exit from the market.

149. The broadcast television station group consists of commercial and noncommercial, full-power, Class A, and low-power stations.[550] In this Report, however, we focus on commercial, full-power broadcast stations because of their impact on competition in the market for the delivery of video programming and the limitations on available data for other types of stations. The Commission licenses broadcast television stations to both individual and group owners to serve local communities within DMAs.

150. Nationally, the number of broadcast stations has not changed much since the last report. As of June 30, 2011, there were 1025 commercial UHF stations and 359 commercial VHF stations. In addition, there were there were 286 noncommercial educational UHF stations and 107 noncommercial educational VHF stations. There were also 6,843 television translators, Class A stations, and low power television stations. As of December 31, 2011, there were 1,027 commercial UHF stations and 360 commercial VHF stations in the United States. In addition, there were 289 noncommercial educational UHF stations and 107 noncommercial educational VHF stations. There were also 6,739 television translators, Class A stations, and low power television stations. As of June 30, 2012, there were 1029 commercial UHF stations and 358 commercial VHF stations. The figures for NCE stations were unchanged from the end of 2011, and there were 6,642 television translators, Class A stations, and low power television stations. At the end of 2012, there were 1,028 commercial UHF stations, 358 commercial VHF stations, 288 noncommercial UHF stations, 107 noncommercial VHF stations, and 6,609 television translators, Class A stations, and low power television stations.[551]

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[550] Not included in this group are television translator stations which rebroadcast the programs of a full-power television broadcast station. Television translator stations typically serve communities that cannot receive the signals of free over-the-air television stations because they are too far away from a full-power television station or because of geographic limitations. *See, e.g.*, FCC Consumer Advisory: The DTV Transition and LPTV/Class A and Translator Stations, http://www.fcc.gov/cgb/consumerfacts/DTVandLPTV.html. In 2000, the Commission established the Class A television service to implement the Community Broadcasters Protection Act of 1999. *See* Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, § 5008, 113 Stat. 1501, 1501A-594-98 (1999) (codified as amended at 47 U.S.C. § 336(f)). Thus, certain qualifying low-power television (LPTV) stations are accorded Class A status, which indicates that these stations have "primary" status as television broadcasters and have a measure of interference protection from full service television stations. *See id*. § 336(f)(1)(A)(ii). Pursuant to Commission rules, stations eligible for this status must provide locally originated programming, often to rural and certain urban communities that have little or no access to such programming. *See id.* § 336(f)(2)(A)(ii)(II); *Establishment of a Class A Television Service*, MM Docket No. 00-10, Report and Order, 15 FCC Rcd 6355, 6357, 1 (2000). Created by the Commission in 1982, low-power television service has been a secondary spectrum priority. *See Inquiry Into the Future Role of Low-power Television Broadcasting and Television Translators in the National Telecommunications System*, Report and Order, BC Docket No. 78-253, 51 Rad. Reg. 2d (P & F) 476, 486 (1982), *aff'd sub nom. Neighborhood TV Co. v. FCC*, 742 F.2d 629 (D.C. Cir. 1984).

[551] *See* FCC, *Licensed Broadcast Station Totals*, http://transition.fcc.gov/mb/audio/BroadcastStationTotals.html ("FCC Broadcast Station Totals").

Table 15: Total Full Power Broadcast Television Stations by Year[552]

Station Type	12/31/10	6/30/11	12/31/11	6/30/12	12/31/12
UHF Commercial	1,022	1025	1,027	1,029	1,028
VHF Commercial	368	359	360	358	358
Total	**1,390**	**1,384**	**1,387**	**1,387**	**1,386**
UHF Noncommercial	284	286	289	289	288
VHF Noncommercial	107	107	107	107	107
Total	**391**	**393**	**396**	**396**	**395**
Grand Total	**1,781**	**1,777**	**1,783**	**1,783**	**1,781**

151. The transition from analog to digital service described in the *14th Report* has allowed broadcast television stations to offer more programming, including both HD signals and standard-definition ("SD") multicast signals.[553] Between the end of 2010 and the end of 2011, the number of multicast channels grew from 4,552 to 4,597.[554] Much of this growth has been fueled by the launch of new digital networks and the affiliate expansions of such digital networks, including networks targeting minorities and Spanish language offerings, as well as multicasting by low power stations.[555]

152. Programming is a critical input for broadcast television stations to compete effectively in the industry. Stations combine local programming, either produced in-house or acquired from independent sources, syndicated programming, and/or network programming. The mix of programming varies by station, and depends on whether the station is affiliated with a network or operates as an independent station.[556] Whether or not a station is affiliated with one of the four major networks (ABC, CBS, FOX, or NBC) has a significant impact on the composition of the station's revenues, expenses, and operations.[557]

[552] *See* FCC Broadcast Station Totals.

[553] *See 14th Report*, 27 FCC Rcd 8682, ¶ 157.

[554] SNL Kagan, *TV Stations Multiplatform Analysis '13 Update: Expansion of Digital Multicasting, Mobile, Social Media Content*, Feb. 21, 2013. These figures do not include digital class A and low-power TV stations.

[555] *See id.* at ¶ 3; *TV Stations Multiplatform Analysis '12 Update: New Digital Networks, Mobile TV Channels Expand Content Options*, SNL KAGAN (Jan. 31, 2012) at 1; Bounce Media, LLC, *About Bounce*, http://www.bouncetv.com/about-bounce/ (visited Nov. 14, 2012). *See also infra*, ¶ 184.

[556] The Commission defines broadcast television networks as "any person, entity, or corporation which offers an interconnected program service on a regular basis for 15 or more hours per week to at least 25 affiliated television licensees in 10 or more states; and/or any person, entity, or corporation controlling, controlled by, or under common control with such person, entity, or corporation." 47 C.F.R. § 73.3613(a)(1). Stations affiliated with a network may be owned and operated by the network (O&Os) or owned by other entities that have agreements with a network for distribution of the network's programming.

[557] Nexstar 2012 Form 10-K at 7; Gray 2012 Form 10-K at 9. Station groups differ in the importance they ascribe to network affiliation contracts with respect to their broadcast licenses. *See infra*, n.608.

153. Most full-power commercial stations (approximately 92 percent) get at least some of their programming from broadcast networks on their primary signals.[558] Commercial broadcast networks generally fall into five main categories: English-language (*e.g.*, ABC, CBS, FOX, NBC, The CW, and MyNetworkTV); Spanish-language (*e.g.*, Univision, Telemundo, and TeleFutura); shopping (*e.g.*, HSN), religious (*e.g.*, TBN and CTN), and regional specialty networks (*e.g.*, Memorable Entertainment Television). Three of the major networks (ABC, CBS, and NBC) generally provide their affiliates with about 22 hours per week of prime time programming.[559] FOX, MyNetworkTV, and The CW supply affiliates with up to 15 hours per week of prime time programming.[560] In addition, these networks may supply affiliates with daytime programming (*e.g.*, morning news programs, game shows, talk shows (including Sunday public affairs), and late night programs). Spanish language and religious networks provide nearly round-the-clock programming for affiliates.[561]

154. Broadcast stations also acquire programming from television syndicators that distribute original ("first-run syndication") programming, such as *Jeopardy!* and *Judge Judy*, or reruns of network television series ("off-net" syndication), such as reruns of *Seinfeld* and *The Simpsons*, to television stations.[562] In addition, local broadcast stations produce programming in-house, such as local newscasts, public affairs shows, and coverage of regional and local sporting events.[563]

a. Horizontal Concentration

155. *National Group Ownership*. The Act imposes a cap that limits the percentage of television households that one television station group owner can serve to 39 percent of U.S. television households.[564] According to SNL Kagan, as of 2012, the largest group owners by coverage total of U.S. television households, include ION Media Networks (owned by Avenue Capital, Black Diamond Capital, and Trilogy Capital), Univision Communications (Broadcast Media Partners Inc.), CBS Television Stations (CBS Corp.), FOX Television Stations (News Corp.), NBC Universal Stations (Comcast Corp. and General Electric),[565] Tribune Broadcasting (owned by an Employee Stock Ownership Plan),[566] ABC Owned Television Stations (The Walt Disney Company), Gannett Broadcasting (Gannett Company),

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[558] BIA/Kelsey, BIA Media Access Pro Television Database as of October 2012 (evaluation of network affiliation data for all Nielsen DMAs).

[559] Nexstar 2012 Form 10-K at 16.

[560] *Id*.

[561] *See, e.g.*, Entravision Communications Corp., *SEC Form 10-K for the Year Ended December 31, 2012*, at 6-7 ("Entravision 2012 Form 10-K"); Trinity Broadcasting Network, *Watch Us: Broadcast Schedule*, http://www.tbn.org/watch-us/broadcast-schedule (visited Mar. 20, 2013).

[562] Some firms specialize in one type of syndication. Financial arrangements between syndicators and stations vary. Some syndication rights are acquired for a per episode or series fee, but others involve sharing advertising time or barter. Vogel at 212-15. Under a barter agreement, a national program distributor retains a fixed amount of advertising time within the program in exchange for the programming it supplies. *See, e.g.*, Gray 2012 Form 10-K at 9.

[563] *See, e.g.*, Nexstar 2012 Form 10-K at 10; Gray 2012 Form 10-K at 10.

[564] 1996 Act, § 202(c); 47 C.F.R. §73.3555(e).

[565] *See supra*, n.92.

[566] On July 1, 2013, Tribune and Local TV Holdings, LLC, announced that they had entered into an agreemet for Tribune to acquire Local TV's television stations. *See* Tribune, *Tribune to Acquire Local TV, Creating Content and Distribution Powerhouse* (press release), July, 1, 2013. The applications for consent to transfer control were filed on July 15, 2013.

Sinclair Broadcast Group, Inc., and Hearst Corp. During the 2011-2012 season, Sinclair increased its coverage of TV households from 19 percent to 25 percent of U.S. television households.[567]

156. Analyzing the largest group owners in terms of revenue results in a similar list. According to *TVNewsCheck*, the top station groups in 2011 in terms of revenue include Fox, CBS, NBCUniversal, ABC, Tribune, Sinclair, Gannett, Hearst, Belo Corp., and Univision.[568]

157. *Local Duopolies*. Commission rules limit the number of broadcast television stations that a single entity can own within a DMA based on the number of independently owned stations in the market.[569] The local television ownership limit permits a single entity to own two television stations in the same local market if (1) the "Grade B" contours of the stations do not overlap; or (2) at least one of the stations in the combination is not ranked among the top four stations in terms of audience share, and (3) at least eight independently owned and operating commercial or noncommercial full-power broadcast television stations would remain in the market after the combination.

158. Using BIA data and counting stations in the same market with a common parent, we estimate that as of 2012, there are about 128 duopolies among commonly owned stations in the United States and approximately an additional 58 local marketing agreements ("LMAs").[570] Broadcast stations owned-and-operated by parents of multiple broadcast networks are generally more likely than other stations to participate in duopolies. Through the dual network rule, the Commission limits the extent to which broadcast television licensees can affiliate with broadcast networks under common ownership.[571] The dual network rule effectively permits common ownership of multiple broadcast networks, but prohibits a merger of two out of the "top four" networks (*i.e.*, ABC, CBS, FOX, and NBC). Univision Corporation, Inc., which owns the Univision and TeleFutura broadcast networks, operates 12 duopolies; CBS Corp., which has ownership interests in the CBS and The CW networks, has 10 duopolies; News Corp., which owns the FOX and MyNetwork TV networks, has nine duopolies; Comcast/NBCUniversal ("Comcast/NBCU"), which owns the NBC and Telemundo broadcast networks, operate six duopolies. In contrast, Disney Corp., whose sole broadcast network is ABC, does not operate any duopolies.

159. Large television group owners with major broadcast network affiliates are also more likely to operate duopolies. Sinclair, which owns 59 full-power stations as of 2012, is involved in more duopolies than any other station group, with 14 co-owned duopolies and 12 LMAs. LIN TV Corp ("LIN") operates nine duopolies of co-owned stations and is involved in two LMAs. Belo Corp. operates

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[567] SNL Kagan, *TV Station Deals Databook*, 2012 Edition, at 14, 15.

[568] Kim McAvoy, *Fox is TV's New Station Group Leader*, TVNewsCheck, Apr. 15, 2012, at http://www.tvnewscheck.com/article/58737/fox-is-tvs-new-station-group-leader (visited Nov. 26, 2012).

[569] *See* 47 C.F.R. §73.3555(b). *See also infra*, ¶ 179. In the context of the Media Ownership proceeding, the Commission is considering revising this rule. *See 2010 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996; Promoting Diversification of Ownership In the Broadcasting Services*, MB Docket Nos. 09-182, 07-294, Notice of Proposed Rulemaking, 26 FCC Rcd 17489, 17493, 17498-511, ¶¶ 8, 25-59 (2011) ("*Media Ownership NPRM*").

[570] *See* BIA/Kelsey, BIA Media Access Pro Television Database as of July 2012 ("BIA Database July 2012") (evaluation of station ownership information for all Nielsen DMAs). For purposes of this analysis, we count full-power stations within a DMA that have a common parent company (*i.e.*, co-owned) as a duopoly. We also count two stations linked by LMAs, if the programmer provides more than 15 percent of a station's weekly broadcast programming. *See* 47 C.F.R § 73.3555 note 2(j). For the purposes of this Report, the Commission has not verified the BIA data.

[571] 47 C.F.R. § 73.658(g).

five duopolies and is involved in two LMAs. Hearst Television Inc., Newport Television LLC, and the Tribune Company each operate four duopolies. Newport Television LLC is also involved in four LMAs.

160. There was at least one duopoly in 72 markets as of July 2012.[572] Five top ranked markets have four duopoly combinations: New York, Los Angeles, Dallas-Ft. Worth, San Francisco-Oakland-San Jose, and Seattle-Tacoma.[573] While larger DMAs tend to have a greater number of duopolies, smaller DMAs have duopolies as well. Smaller markets are more likely to have LMAs than co-owned stations. Seven markets ranked below 100 have co-owned duopolies, while 23 markets ranked below 100 have LMAs. The smallest market with a duopoly is Victoria, Texas, ranked 204.

b. Vertical Integration

161. Some stations are vertically integrated upstream, with suppliers of programming, as well as downstream, with distributors of programming. For instance, the stations' parent company may have ownership interests in television production studios, movie studios, sports teams, broadcast television networks, cable networks, or syndicators. Similarly, Comcast's acquisition of NBC/Universal resulted in downstream vertical integration of NBC's O&O stations with a cable MVPD.[574]

162. As reflected in the *14th Report*, the parent companies of six of the top seven station groups – ION Media Networks, Univision Communications, Inc., CBS Television Stations, FOX Television Stations, NBC Universal Stations, and ABC Owned Television Stations, representing 188 O&Os, own all or part of at least one broadcast television network.[575] Broadcast networks typically own and operate their own stations in the largest television markets. Spanish-language broadcast networks, *e.g.*, Univision and Telemundo, own and operate television stations in the largest Spanish-speaking markets.

163. In addition to ownership of broadcast networks, a number of owners of local broadcast stations have affiliations with cable networks. Through its ownership of NBC Universal, Comcast has ownership interests in 50 national cable networks.[576] Other broadcast station owners with affiliated cable networks are: The Walt Disney Company with interests in 39 cable networks; Univision with interests in nine affiliated cable networks; and CBS Corporation with interests in 28 cable networks.[577] News Corp. has ownership interests in 29 national cable networks. In addition, since the last report, News Corp. took an interest in the Yankee Entertainment & Sports Network ("Yes Network"), increasing its count of affiliated regional cable networks to 46.[578] Several broadcast television groups owners that are not vertically integrated with broadcast networks also have ownership interests in cable networks. These owners include Hearst Television Inc. (32 cable networks), InterMedia Partners (five cable networks),

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[572] *See* BIA Database July 2012 (evaluation of station ownership information for all Nielsen DMAs). In addition, San Juan, Puerto Rico, which is not part of any DMA, has six television station combinations.

[573] These markets are ranked one, two, five, six, and twelve respectively as of the 2011-2012 television season. *See* Nielsen 2011-12 Local Market Estimates.

[574] *See supra*, n.92.

[575] *See 14th Report*, 27 FCC Rcd at 8688, ¶ 172.

[576] In this Report, we count SD and HD networks separately.

[577] *See 14th Report*, 27 FCC Rcd at 8688, ¶ 173. Comcast, Viacom, News Corp., and The Walt Disney Company also control production studios, which are the primary source of programming for their networks, and hold ultimate distribution rights for their programming, subject to contractual negotiations. *See infra*, Sec. V.A.

[578] *See 14th Report*, 27 FCC Rcd at 8688, ¶ 173; News Corporation, *News Corporation And Yankee Global Enterprises Announce News Corporation's Acquisition Of An Equity Stake In The YES Network* (press release), Nov. 20, 2012, at http://www.newscorp.com/news/news_548.html (visited Nov. 27, 2012).

Tribune Company (six cable networks), Cox Communications Inc. (six cable networks), and Hubbard Broadcasting Corp. (four cable networks). Combined, Hearst, InterMedia, Tribune, Cox, and Hubbard, own 83 stations. Other broadcast station groups operate local and regional cable news channels.[579] Belo Corp., for example, owns 20 television stations and six regional cable news channels.[580]

164. Both Viacom and E.W. Scripps hold their broadcast television station groups and cable network holdings in separate corporate entities. Because their station groups and cable networks have common corporate directors, however, we consider them to be affiliated. Counting Viacom's 34 cable networks and CBS's 28 cable networks, these affiliated companies have interests in 62 cable networks. Including Scripps Networks Interactive, E.W. Scripps has interests in 11 cable networks. [581]

165. Comcast is the only distributor of video programming with ownership interests in each mode of video distribution covered by this Report; it is an MVPD that owns and operates 26 full-power television stations (10 NBC O&Os and 16 Telemundo O&Os) and maintains an ownership interest in Hulu, an OVD.[582] News Corp. (which holds 27 broadcast television stations) and Disney/ABC (which holds 8 broadcast television station) also have ownership interests in Hulu.[583] Other than Comcast, Cox Media Holdings is the only MVPD that owns broadcast stations serving a DMA where it also owns a cable system.[584]

c. Entry and Exit Conditions

166. Entry and exit in the broadcast television industry occurs subject to the broadcast television allocation and licensing regime: ownership of television station properties can change hands; licensees may go out of business and return broadcast licenses for the Commission to reissue; or the Commission may auction channels for new broadcast stations. The amount of spectrum the Commission has authorized exclusively for broadcast television use and the allocation of that spectrum across the United States limits the number of entities that can enter and exit the industry. In addition to spectrum, programming is another critical input for broadcast television stations. Stations also require access to capital in order to remain competitive and operational. Both regulatory and non-regulatory conditions affecting the availability of programming may impact stations' entry and exit decisions, and we discuss those conditions below. We then describe recent entry and exit from the market.

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[579] *See 14th Report*, 27 FCC Rcd at 8688, ¶ 173.

[580] Belo Corp., *SEC Form 10-K for the Year Ended December 31, 2012*, at 17 ("Belo 2012 Form 10-K"). On June 13, 2013, Belo and Gannett announced that they have entered into a merger agreement. *See* Gannett, Belo, *Gannett to Acquire Belo, Accelerating Ongoing Transformation Into Diversified Higher-Margin Multi-Media Company* (press release), June 13, 2013. The applications for consent to transfer control were filed on June 19, 2013.

[581] *See 14th Report*, 27 FCC Rcd at 8689, ¶ 174.

[582] *See id.* at 8689, ¶ 175; *infra*, ¶ 226**.** Comcast's cable systems overlap with NBCUniversal's stations in six markets: San Francisco, Philadelphia, Chicago, Miami, Hartford, and Washington, DC. *Comcast-NBCU Order*, 26 FCC Rcd at 4289, ¶ 126 n.302. On July 1, 2013, NBCUniversal acquired Philadelphia Telemundo affiliate WSSI-TV from ZGS Communications. *See* Telemundo, *Telemundo Stations Group Acquires Philadelphia Affiliate WWSI-TV* (press release), July 2, 2013.

[583] *See infra*, ¶ 226.

[584] *See 14th Report*, 27 FCC Rcd at 8689, ¶ 175. In the Orlando-Daytona Beach-Melbourne DMA, Cox owns two television stations –WFTV, an ABC affiliate, and WRDQ, an independent station – as well as a cable system serving Ocala, Florida. *See* Cox Media Group, *Orlando*, http://www.coxmediagroup.com/orlando/ (visited Nov. 27, 2012); Cox Communications, Inc., *Welcome*, http://ww2.cox.com/ (visited Nov. 27, 2012).

(i) Regulatory Conditions

167. *Licensing of Broadcast Spectrum.* A broadcast station may not operate in the United States without first receiving Commission authorization.[585] The Commission therefore is responsible for licensing broadcast spectrum to respective applicants and ensuring that the spectrum is used to serve the public interest.[586] Courts have consistently held that the Commission retains significant discretion under its public interest standard in approving applications for broadcast spectrum licenses.[587] The Act also prohibits broadcast stations from assigning or transferring control of their licenses without obtaining Commission approval.[588] In addition, certain obligations are imposed on licensees during each license term, which is generally eight years.[589] Under the Act, in order to grant an application for renewal of a broadcast license, the Commission must find that, during the previous license term, the station has served the public interest, convenience, and necessity; there have been no serious violations of the licensee of the Act or the Commission's rules and regulations; and there have been no other violations by the licensee of the Act or the Commission's rules and regulations which, taken together, would constitute a pattern of abuse.[590]

168. *Ownership Limits.* The Commission has adopted several rules limiting the ownership interests of broadcasters to further the Act's goals of competition, localism, and diversity.[591] Congress mandates that the Commission review its media ownership rules every four years to determine whether they "are necessary in the public interest as a result of competition."[592] Currently, the Commission's media ownership rules limit local television ownership, local radio ownership, newspaper/broadcast cross-ownership, radio/television cross-ownership, and dual network ownership.[593] The local television ownership rule permits a single entity to own two television stations in the same market only if certain

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[585] 47 U.S.C. § 301.

[586] 47 U.S.C. §§ 303(c), 308(a), 309(a).

[587] *See, e.g.*, *FCC v. RCA Communications, Inc.*, 346 U.S. 86, 90 (1953) ("In choosing among applicants, the Commission was to be guided by the 'public interest, convenience, or necessity[.]' . . . The statutory standard no doubt leaves wide discretion and calls for imaginative interpretation."); *FCC v. Pottsville Broadcasting Co.*, 309 U.S. 134, 137-38 (1940) ("In granting or withholding permits for the construction of stations, and in granting, denying modifying or revoking licenses for the operation of stations, 'public convenience, interest, or necessity' was the touchstone for the exercise of the Commission's authority. While this criterion is as concrete as the complicated factors for judgment in such a field of delegated authority permit, it serves as a supple instrument for the exercise of discretion by the expert body which Congress has charged to carry out its legislative policy.").

[588] 47 U.S.C. § 310(d).

[589] 47 U.S.C § 307(c); 47 C.F.R. § 73.1020. Among other things, each licensee is required to maintain a main studio in or within a prescribed distance of its station's community of license (47 C.F.R § 73.1125(a)); establish and enforce an equal opportunity program (47 C.F.R. § 73.2080); and maintain an accessible public inspection file (47 C.F.R §§ 73.3526-27). In 2012, the Commission began requiring each television broadcast station to place its public inspection file online in a central, Commission-hosted database instead of maintaining the file at the station's main studio. *See Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations*, MM Docket No. 00-168, Second Report and Order, 27 FCC Rcd 4535, 4536-37, ¶¶ 1-3 (2012).

[590] *See* 47 U.S.C. § 309(k)(1).

[591] *See* 47 C.F.R. § 73.3555.

[592] 1996 Act, § 202(h).

[593] *Id.*

conditions are met.[594] The newspaper/broadcast cross-ownership rule prevents the common ownership of a radio or television broadcast station and a daily newspaper where the station's broadcast signal encompasses the entire community where the newspaper is published.[595] The radio/television cross-ownership rule restricts the common ownership of radio and television broadcast stations in a single market after factoring in the size of the relevant market.[596]

169. *Territorial Exclusivity.* The territorial exclusivity rules restrict the geographic area in which a television broadcast station may obtain exclusive rights to video programming. Under the network territorial exclusivity rule, a broadcast station may not have an agreement with a network preventing another station located in a different community from broadcasting any of the network's programming, or preventing another station located in the same community from broadcasting the network's programs not purchased by the broadcast station.[597] Under the rule governing territorial exclusivity for non-network (*i.e.*, syndicated programming) programming, a broadcast station may not enter into an agreement with a non-network programming distributor that prevents another station located in a community more than 35 miles away from broadcasting the same programming.[598]

170. *Incentive Spectrum Auctions.* On February 22, 2012, President Obama signed legislation providing the Commission with the authority to conduct a broadcast incentive auction by which full power and Class A television broadcast licensees can submit voluntarily bids to relinquish or modify their spectrum usage rights in exchange for a portion of the spectrum auction proceeds.[599] The Commission released a Notice of Proposed Rulemaking seeking comment on the broadcast incentive auctions in October 2012.[600] The incentive auction of broadcast television spectrum will have three major pieces: (1) a "reverse auction" in which broadcast television licensees submit bids to voluntarily relinquish spectrum usage rights in exchange for payments; (2) a reorganization or "repacking" of the broadcast television bands in order to free up a portion of the UHF band for other uses; and (3) a "forward auction" of initial licenses for flexible use of the newly available spectrum.[601] Under the legislation, broadcasters interested in exiting the business may bid to entirely relinquish a station's spectrum usage rights in the reverse auction.[602] Such exit would reduce the overall number of competing broadcast television stations.[603] Broadcasters that wish to remain in the business also have an opportunity to strengthen their finances

[594] 47 C.F.R. § 73.3555(b). *See supra*, ¶ 157. Similarly, the local radio ownership rule limits the number of commercial radio stations one entity may own in a local market. 47 C.F.R. § 73.3555(a).

[595] 47 C.F.R. § 73.3555(d).

[596] 47 C.F.R. § 73.3555(c).

[597] 47 C.F.R. § 73.658(b).

[598] 47 C.F.R. §§ 73.658(m), 76.53. An exception is made, however, for communities located in hyphenated markets, *i.e.*, television markets that include more than one city (*e.g.*, Dallas-Fort Worth, TX). 47 C.F.R. §§ 73.658(m), 76.51.

[599] *See* Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §§ 6401-05, 126 Stat. 156, 222-30 (2012).

[600] *See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Docket No. 12-268, Notice of Proposed Rulemaking, 27 FCC Rcd 12357 (2012).

[601] *Id.* at 12359, ¶ 5.

[602] *Id.* at 12364, ¶ 16.

[603] *Id.*

through the cash infusion resulting from a winning reverse auction bid to channel share or to move from a UHF to a VHF channel. [604]

(ii) Non-regulatory Conditions

171. The primary means of entering the television broadcast industry is to purchase broadcast properties from licensees who are already operating stations rather than constructing new broadcast station infrastructure and obtaining a new license. Once the Commission has approved the transaction and the new owner takes over the operations of an existing station, the new owner may decide to change programming by affiliating with a different network, purchasing new syndicated programming, or changing on-air talent for local programming, such as newscasts, subject to the terms of their contracts.

172. *Access to Capital*. Entities seeking to enter the broadcasting industry, either by purchasing properties or launching a new station, require access to capital, which may come in the form of debt or equity financing. In determining whether to lend money or invest in a licensee, banks or other firms look at expected revenues and expenses, especially whether new owners could increase profits by changing programming or reducing expenses. Structural changes in the media industry, combined with the strong correlation of their revenues and profits to economic cycles, indicate that financing media transactions with debt entails some risk.[605] In particular, high interest rates may lead station owners to file for bankruptcy and transfer control to lenders or sell their stations,[606] while reducing the number of potential station buyers who can obtain loans and service debt without strain.[607]

173. *Programming*. Access to programming also affects the ability of licensees to enter and remain in the industry.[608] Network affiliation agreements and syndication contracts often last several years. For example, if a station loses its network affiliation, it may not be able to affiliate with an alternative network, because that alternative network is likely to already have a distribution agreement in

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[604] *Id.*

[605] Historically, the broadcast sector has been highly leveraged, and the recent recession increased financial strain. Price Colman, *TV Groups Cope with Leverage Troubles*, TVNEWSCHECK, Mar. 4, 2009, http://www.tvnewscheck.com/article/2009/03/04/30075/tv-groups-cope-with-leverage-troubles (visited Oct. 19, 2012). Lenders impose restrictions (covenants) on the ratio of debt to equity and earnings before interest and taxes (EBIT) to interest. LIN 2012 Form 10-K at 27-28; Sinclair 2012 Form 10-K at 25-26; Nexstar 2012 Form 10-K at 15-16; Gray 2012 Form 10-K at 19-20. Some station groups have faced concerns about breaching such loan covenants. *See, e.g.*, Taigh Khan, *S&P Cuts Media General on Declining Revenue, Tightening Covenants*, SNL KAGAN (Oct. 28, 2012).

[606] LIN 2012 Form 10-K at 27-28; Sinclair 2012 Form 10-K at 25-26; Nexstar 2012 Form 10-K at 15-16; Gray 2012 Form 10-K at 19-20.

[607] "[W]hen credit markets froze in 2007, a big no-exit sign was hung over TV broadcasting. The gap between bid and ask is more like a gulf." Price Colman, Hot Trend: Outsourcing Management, TVNewsCheck, Aug. 25, 2010, http://www.tvnewscheck.com/article/2010/08/25/44718/hot-trend-outsourcing-station-management (visited Oct. 28, 2012). On August 31, 2012, the Coalition for Broadcast Investment ("CBI") submitted a letter asking the Commission to clarify its policies and procedures under Section 310(b)(4) of the Communications Act, which restricts foreign ownership and voting interest in entities that control Commission licenses. The Media Bureau invited comment on CBI's letter. *See Media Bureau Announces Filing of Request for Clarification of the Commission's Policies and Procedures under 47 U.S.C. § 310(b)(4) by the Coalition for Broadcast Investment*, DA 12-281 (MB Feb. 26, 2013).

[608] Broadcasters differ in the value they place on programming with respect to a station's purchase price. For example, Gray and LIN believe that the value of a television station is derived primarily from the attributes of its broadcast license, rather than its type of programming, *i.e.*, whether or not it is an affiliate of one of the major four broadcast networks. Gray 2012 Form 10-K at 55-56; LIN 2012 Form 10-K at 43.

place with another station in the market. The loss of this programming could require the station to obtain replacement programming at a higher cost, and that may be less attractive to its target audience, thereby causing it to lose advertising revenues while potentially increasing expenses. Similarly, popular syndicated programming may not be available for a new station due to exclusive distribution arrangements with competing stations or cable networks.[609] As an alternative to contracting for expensive third-party programming, stations may produce their own programming in-house or lease time to other parties (*e.g.*, producers of infomercials) willing to pay stations.

(iii) Recent Entry and Exit

174. Overall, between June 30, 2011, and June 30, 2012, the number of full-power commercial television stations on the air increased by three, going from 1,384 to 1,387.[610] During this period, the total number of full-power noncommercial television stations also increased by three, going from 393 to 396.[611] In 2011, 55 full-power stations were sold, for a total of $1.18 billion, or $21.5 million per station, with an average cash flow multiple of 8.8.[612] By the second quarter of 2012, 35 stations were purchased for a total of $445.91 million, or $12.74 million per station, with an average cash flow multiple of 9.3.[613] By the third quarter of 2012, 81 stations were purchased for a total $1.76 billion, or $21.7 million per stations, with an average cash flow multiple of 9.1.[614] These figures are consistent with a general increase in station transaction volume since 2010, when just 23 full-power stations traded hands in deals totaling $152 million.[615] Average cash flow multiples for 2011 and 2012 (per available data) are similar to the 2010 value of 9.3.[616]

175. Since the last report, several broadcast station owners have exited the television broadcast business by selling stations.[617] For example:

- At the end of 2011, McGraw Hill sold its broadcasting group to Scripps for $212 million. The deal involved ABC affiliates in Denver, San Diego, Bakersfield and Indianapolis, as well as Azteca America affiliates in Denver, Fort Collins, Colorado Springs, San Diego and Bakersfield.[618]

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[609] Stations compete against in-market broadcast stations for exclusive access to syndicated programming within their markets. In addition, cable networks occasionally acquire programs that might otherwise be offered to stations, and some programs are available via OVDs. Nexstar 2012 Form 10-K at 10; LIN 2012 Form 10-K at 14. Stations usually purchase syndicated programming two to three years in advance, and sometimes must make multi-year commitments. Gray 2012 Form 10-K at 21; Sinclair 2012 Form 10-K at 28.

[610] *See* FCC, *Licensed Broadcast Stations Totals*, http://transition.fcc.gov/mb/audio/BroadcastStationTotals.html.

[611] *Id.*

[612] SNL Kagan, *B-Stats Data for the Second Quarter of 2012*, July 30, 2012.

[613] *Id*.

[614] SNL Kagan, *B-Stats Data for the Third Quarter of 2012*, Oct. 30, 2012.

[615] SNL Kagan, *B-Stats Data for the Second Quarter of 2012*, July 30, 2012.

[616] *Id*.

[617] There does not appear to be any entry of new broadcast station owners since the *14th Report*.

[618] Azam Ahmed, *McGraw-Hill to Sell Broadcasting Unit to Scripps for $212 Million*, N.Y TIMES, Oct. 2, 2011, http://dealbook.nytimes.com/2011/10/03/mcgraw-hill-to-sell-broadcasting-unit-to-e-w-scripps-for-212-million (visited Nov. 12, 2012); Merrill Knox, *Scripps Completes Purchase of 9 McGraw-Hill Stations*, TV Spy, Dec. 3, 2011, https://www.mediabistro.com/tvspy/scripps-completes-purchase-of-9-mcgraw-hill-stations_b34408 (visited Nov. 12, 2012).

- In a transaction that closed in October 2012, New Vision Television sold its 13 network affiliates to LIN TV Corp. for $330.4 million and the assumption of $12 million of debt.[619]
- We noted in the last report that Clear Channel Communications had sold all of its television assets, 60 full-power stations, in 2008 to new entrant Newport Television ("Newport"), a holding company formed by private equity firm Providence Equity Partners.[620] In 2012, Newport entered into agreements to sell all but four of its stations to third parties, including Nexstar Broadcasting Group, Sinclair, Cox, and Shield Media, for approximately $1 billion.[621] Newport is still seeking buyers for its remaining stations.

3. Broadcast Television Industry Conduct

176. A second key element of our analysis of broadcast television station competition is an examination of the conduct of industry participants – in particular, the business models and competitive strategies of these entities. Broadcast stations derive most of their revenue from local and national advertising, selling on-air time to advertisers so they may reach viewers.[622] To differentiate themselves, stations primarily invest in the purchase and production of programming. In this section of the Report, we discuss broadcast television station competition in terms of both price and non-price rivalry.

a. Price Rivalry

177. *Price to Consumers.* Broadcast television stations do not compete on price in the traditional sense because they do not charge consumers directly for the delivery of their signals. Broadcast television is free to consumers who receive it over-the-air. Nevertheless, since about 90 percent of all television households receive broadcast stations from an MVPD, most consumers indirectly pay for broadcast stations as part of their MVPD service fees, which are calculated, in part, to cover retransmission consent fees that the MVPD pays to local stations.[623] In the case of cable, broadcast television stations are part of the basic service package, which is generally a low price offering.[624] As of January 1, 2012, the average cable system charged $20.55 per month for its basic service tier, which includes 49 channels on average.[625] As of November 2012, AT&T U-verse charges $19 per month for a basic television service including only local channels.[626] As of November 2012, Verizon offers 72 channels as part of its FiOS TV Local Digital plan for $12.99 per month.[627] DBS providers may charge

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[619] Mikolo Ilas, *LIN TV Completes Purchase of New Vision TV Stations*, SNL KAGAN, Oct. 12, 2012; Haseeb Ali, *LIN TV Buying Network Affiliates From New Vision*, SNL Kagan, May 7, 2012.

[620] *See 14th Report*, 27 FCC Rcd at 8693, ¶ 186.

[621] Volker Moerbitz, Shield Media Becomes TV Group Owner With $14.4M Acquisition, SNL KAGAN, Oct.22, 2012; *Newport Sells 22 Stations for $1 Billion*, TVNewsCheck, July 19, 2012, http://www.tvnewscheck.com/article/60876/newport-sells-22-stations-for-1-billion (visited Nov. 12, 2012).

[622] We discuss additional sources of revenue further, *infra*, Sec. III.B.4 & Table 19.

[623] *National Universe Estimates -- Market Breaks*, Nielsen, Jan. 1, 2013. *See also infra*, Table 17.

[624] 47 U.S.C. § 543(b)(7), 47 C.F.R. § 76.901(a).

[625] *See 2013 Cable Price Report*, at Tables 1, 4.

[626] *See* AT&T Inc., *Shop: Compare TV Packages*, http://www.att.com/u-verse/explore/tv-landing.jsp (visited Nov. 6, 2012). This plan only includes local channels; AT&T does not specify the number.

[627] *See* Verizon Communications Inc., *FiOS TV, Local Channel Plan* (using 22201 zip code in Arlington, VA), http://www22.verizon.com/home/FiOSTV/Plans (visited Nov. 6, 2012). This plan includes 72 channels, including 14 in HD. In addition to the broadcast stations' primary signals, this package includes broadcast multicast signals (continued….)

subscribers an additional fee to receive broadcast television stations. As of November 2012, DIRECTV generally offers local channels at no additional charge as part of its packages, but eligibility for this offer is based on a customer's service area.[628] As of November 2012, DISH includes local television station services as part of some packages, but charges an additional $6.00 per month to subscribers opting for local television stations in other packages.[629]

178. *Price to Advertisers.* Television broadcast stations earn about 88 percent of their revenue through the sale of advertising time during their programs, a slight decline since the last report.[630] In the broadcasting industry, competition for advertising revenue occurs primarily within individual markets.[631] Generally, advertising rates are determined by a station's overall ability to attract viewers in its market area and a station's ability to attract viewers generally and among particular demographic groups that an advertiser may be targeting.[632] Specifically, advertising rates depend upon factors such as: (1) the size of a station's market; (2) a station's overall ratings; (3) a program's popularity among targeted viewers; (4) the number of advertisers competing for available time; (5) the demographic makeup of the station's market; (6) the availability of alternative advertising media in the market; (7) the presence of effective sales forces; (8) the development of projects, features and programs that tie advertiser messages to programming; and (9) the level of spending commitment made by the advertiser.[633] Within network shows, stations are generally permitted to sell a fixed amount of advertising time, about 2.5 to three minutes per hour. The network sells any remaining advertising time and includes such advertising in network programming. The network retains the associated revenue. In the alternative, stations can use their allotted 2.5 to three minutes of time during network shows to promote their own programming. In newscasts or during other non-network shows, stations may sell approximately nine minutes of advertising time per hour.[634]

179. Local advertisers purchase time directly from a station's local sales staff. Such advertisers typically include car dealerships, retail stores, and restaurants.[635] National advertisers that wish to reach a particular region or local audience buy advertising time through national advertising sales representative firms.[636] Such advertisers typically include automobile manufacturers and dealer groups, telecommunications companies, fast food franchisers, and national retailers.[637] Stations compete for

(Continued from previous page)
and PEG channels, as well as WGN America and the Weather Channel. Additional national networks are available to households that bundle video services with broadband or voice service from Verizon.

[628] DIRECTV, *English Packages* (using 22314 zip code in Alexandria, VA), http://www.directv.com/DTVAPP/new_customer/base_packages.jsp?footernavtype=-1&lpos=header (visited Nov. 6, 2012).

[629] DISH Network, *Entertainment: Channels, Washington, DC/Hagerstown* (using 22314 zip code in Alexandria, VA), http://www.dishnetwork.com/packages/local/default.aspx (visited Nov. 6, 2012).

[630] SNL Kagan, Radio/TV Station Revenue Projections: 2011-2021, Aug. 28, 2012. *See* 14th Video Competition Report, 27 FCC Rcd at 8695, ¶ 190. *See also infra*, Sec. III.B.3.b.

[631] Nexstar 2012 Form 10-K at 10; Gray 2012 Form 10-K at 11; Sinclair 2012 Form 10-K at 23-24.

[632] Nexstar 2012 Form 10-K at 7-8; Gray 2012 Form 10-K at 4; Sinclair 2012 Form 10-K at 23.

[633] Nexstar 2012 Form 10-K at 7-8; LIN 2012 Form 10-K at 11-12; Sinclair 2012 Form 10-K at 23.

[634] Vogel at 317, n. 29.

[635] Nexstar 2012 Form 10-K at 7-8.

[636] Nexstar 2012 Form 10-K at 7-8; Entravision 2012 Form 10-K at 11.

[637] Nexstar 2012 Form 10-K at 8.

advertising revenue with other stations in their respective markets; advertisers may also place advertisements with other media including newspapers, radio stations, magazines, outdoor advertising, transit advertising, yellow page directories, direct mail, local cable systems, DBS systems, and web sites online, as well as telephone and/or wireless companies.[638]

180. While individual stations do not make their advertising rates publicly available, prices for a composite group of television stations are available.[639] Local advertisers typically use the cost per rating point ("CPP") measure to value advertising time, which represents the percentage of households in a local market with television sets watching a station or show at a given time.[640] CPPs vary by the time of day, with prime time (8 p.m.-11 p.m., Eastern and Pacific Time; 7 p.m.-10 p.m., Central and Mountain Time), being the most expensive.[641] For the top 100 television markets, on average, a station's CPP for a 30-second advertisement during prime time was $27,667 in 2011, up from $26,343 in 2010. That is, on average, a station within the top 100 markets charged advertisers $27,667 to reach one percent of the television households within its DMA with a 30-second commercial. In 2012, the average prime time CPP for a station rose to $32,019. During the late newscasts (11 p.m. Eastern and Pacific Time; 10 p.m., Central and Mountain Time), on average, stations charge lower prices. In 2011 and 2012, on average, the CPPs for a 30-second advertisement during this time slot were $15,800 and 17,716, respectively (up from $14,934 in 2010).[642] Advertisers assess the relative expense and efficiency of delivering a message via different media, *e.g.*, a broadcast network compared with a group of broadcast television stations, on the basis of cost per thousand households ("CPM").[643] Table 16 includes CPM figures to provide another basis for comparing prices charged to advertisers.

[638] Gray 2012 Form 10-K at 11; Belo 2012 Form 10-K at 5.

[639] *See* TVB, *Trends: TV Cost & CPM Trends*, http://www.tvb.org/trends/4718 (visited Nov. 28, 2012) ("TV Cost & CPM Trends").

[640] *See* The Museum of Broadcast Communications, *Cost-Per-Thousand (CPM) and Cost-Per-Point (CPP)*, http://www.museum.tv/eotvsection.php?entrycode=cost-per-thou (visited Nov. 6, 2012); Vogel at 290-91, 574-75. For example, if 100,000 households in a DMA own television sets, and 20,000 of those households are tuned to a particular broadcast television station, then a station's rating is 20. If it charges $25,000 per point during a particular program, then it can earn $500,000.

[641] TV Cost & CPM Trends.

[642] Other non-advertising sources of revenue for broadcast television stations include retransmission consent fees, network compensation, DTV revenue, online revenue, and mobile revenue. These sources of revenue are discussed further, *infra*, Sec. III.B.4.b.

[643] Vogel at 292.

Table 16: Top 100 Television Markets: Average Price of a 30-Second Commercial[644]

Year	Prime Time		Late News	
	CPP	CPM	CPP	CPM
2010	$26,343	$26.76	$14,934	$15.17
2011	$27,677	$28.00	$15,880	$15.99
2012	$32,019	$32.08	$17,716	$17.75

181. *Price to MVPDs*. As discussed above, broadcast television stations are entitled to carriage on MVPDs' systems.[645] Commercial stations are entitled to decide whether to seek mandatory carriage or negotiate for compensation for their signals. As noted above, the Commission has an open proceeding addressing issues related to retransmission consent.[646] In that proceeding, the Commission sought comment on whether it should be a per se violation of the good faith standard for a station to grant another station (or station group) the right to negotiate its retransmission consent agreement(s) when the stations are not commonly owned ("joint negotiations").[647] MVPDs have argued to the Commission that such joint negotiations lead to broadcast stations charging higher prices to MVPDs, which leads to higher prices for consumers.[648] Broadcast stations, in turn, claim that joint negotiations help lower the transactions costs of negotiating retransmission consent agreements, and help level the playing field between broadcasters and MVPDs.[649] Broadcasters also claim that revenue from retransmission consent is necessary to support stations' public service obligations, such as local news and information programming, and for stations to remain economically viable.[650]

[644] *See* TV Cost & CPM Trends (visited Nov. 28, 2012) (citing SQAD Media Market Guide 1st Quarter Projections (Fall books)).

[645] *See supra*, ¶¶ 50-54, for further discussion of retransmission consent.

[646] *See Retransmission Consent NPRM*, *supra*, n.144.

[647] *See Retransmission Consent NPRM*, 26 FCC Rcd at 2731-32, ¶ 23 (noting that consent for Joint Negotiations "might be reflected in local marketing agreements ("LMAs"), Joint Sales Agreements ("JSAs"), shared services agreements, or other similar agreements.").

[648] *See, e.g.*, Time Warner Cable Comments, MB Docket No. 09-182, at 7 (filed July 12, 2010) (citing an economist who believes that it is "very likely" that retransmission consent is jointly negotiated where stations are involved in some sort of sharing agreement); ACA Comments, MB Docket No. 09-182, at 2, 13-17 (filed July 12, 2010) (arguing that "available evidence . . . suggests" that higher rates are being paid by cable operators where one broadcast station negotiates retransmission consent on behalf of another station in the same market). ACA Comments at 14-19; CenturyLink Comments at 3-5; DIRECTV Comments at 18-19; OPASTCO/NTCA Comments at 12.

[649] *See, e.g.*, NAB Reply at 4-5,

[650] *See, e.g.*, NAB Comments at 24-25; ABC Affiliates Reply at 2-10 (arguing, inter alia, that that retransmission consent revenue is needed to replace the compensation previously paid by the broadcast networks to their affiliates, which no longer exists and in many cases has been replaced by license fees that stations are required to pay to the networks for network programming).

b. Non-Price Rivalry

182. Broadcast stations compete with each other for viewers and advertisers on two major non-price criteria: (1) programming[651] and (2) the type of viewing experience.[652] Each of these items is described below in turn.

183. *Programming.* The largest point of differentiation among broadcast stations is the type of programming they offer and when such programming is offered. Consumers watch multiple broadcast stations and switch stations based on the type of programming carried. When choosing the type of programming to air, stations weigh the cost of acquiring programming, the number of viewers they can expect to attract, the amount of advertising they can sell, and the prices they can charge to advertisers.

184. Commercial stations also use multicast streams to offer consumers additional programming choices. For instance, multicast streams often carry newer networks such as This TV (with 133 digital multicast affiliates), Bounce TV (with 154 digital multicast affiliates), and Retro TV (with 44 digital multicasting affiliates).[653] In addition, multicasting enables stations in smaller markets to affiliate with multiple established networks. For example, The CW (with 115 digital multicast outlets) and My Network TV (92 outlets) are examples of more established networks that enhance their coverage with multicasting.[654]

185. Network affiliates typically market themselves based on their broadcast network affiliation and channel position (*e.g.*, FOX 5) and their on-air news talent. Programming from broadcast networks can attract large audiences, and broadcast networks provide their affiliates with entertainment programming and sporting events, such as the Olympics, NFL games, Major League Baseball ("MLB") games, and the Academy Awards, that are extremely popular with both viewers and advertisers.[655] Networks also tend to schedule their most popular programming during the months of the year when Nielsen measures television audiences for all 210 markets (February, May, July, and November) to determine local advertising rates.[656]

186. Local news programming is another source of product differentiation for broadcast television stations in their competition for both advertisers and viewers.[657] This programming, which

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[651] Nexstar 2012 Form 10-K at 10; Gray 2012 Form 10-K at 10-11; Sinclair 2012 Form 10-K at 22-23.

[652] Signal coverage and MVPD carriage also impact a television station's competitive position. Gray 2010 Form 11-K at 8, 20.

[653] SNL Kagan, *TV Station Database* (Oct. 2, 2012).

[654] *Id*.

[655] Nexstar 2012 Form 10-K at 4; Sinclair 2012 Form 10-K at 13. The network affiliation agreements, generally exclusive for each of the 210 television markets, provide affiliates with the right to air network programming first. The contracts may run from two to 10 or more years. The Commission's right-to-reject rule grants an affiliate the right to (1) reject or refuse network programs which the station reasonably believes to be unsatisfactory, unsuitable, or contrary to the public interest and (2) substitute a program which, in the station's opinion, is of greater local or national importance. 47 C.F.R. § 73.658(e). The financial arrangements between networks and their affiliated stations regarding payments for programming are evolving. *See infra*, Sec. III.B.4.b.

[656] While networks and stations consider May to be the most important measuring period of the year, they also compete intensely in February and November, when audiences are likely to stay at home. Vogel at 291. *See also* Nielsen Media Research, *Glossary of Media Terms*, *Sweeps*, http://www.nielsenmedia.com/glossary/ (visited Mar. 22, 2012). Nielsen refers to these months as "sweep months." Nielsen excludes the Honolulu, Fairbanks, and Juneau DMAs from its July measurement period.

[657] LIN 2012 Form 10-K at 9-10; Sinclair 2012 Form 10-K at 11.

stations produce, is typically the largest source of their revenue, accounting for 35 to 40 percent of their advertising base.[658] Some stations seek to increase their local advertising revenues in part by producing programming with local advertising appeal and sponsoring or co-promoting local events and activities.[659] To attract audiences, stations also strive to provide exclusive news stories, unique features such as investigative reporting, and coverage of community events, and to secure broadcast rights to regional and local sporting events.[660] In 2011, the average television station aired 5.5 hours of local news per weekday, up from 5.3 hours in 2010.[661] NAB contends that operating agreements among non-commonly owned broadcasters enable stations to maintain and sometimes expand news on stations, despite a difficult economic climate.[662]

187. Stations also air syndicated programming, including off-network programs (*e.g.*, *Criminal Minds* or *How I Met Your Mother*), first-run programs (*e.g.*, *Jeopardy*, *Entertainment Tonight*, or *Wheel of Fortune*) and sporting events.[663] Competition for programming involves negotiating with national program distributors or syndicators that sell first-run and rerun packages of programming in their

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[658] Vogel at 304. *See also* Robert Papper, *Part I: TV News Staffing Soars to 2nd Highest Level Ever with More Hiring Projected; Profitability Rises Again*, Hofstra University, 2012, http://www.rtdna.org/media/Part1_2012.pdf ("RTNDA/Hofstra 2012 Survey") (visited Nov. 6, 2012) (noting that local news produces, on average, about 48 percent of a TV station's revenue).

[659] *See, e.g.*, Nexstar 2012 Form 10-K at 8; LIN 2012 Form 10-K at 12. Nexstar states that each of the stations it owns, operates, programs, or provides sales and other services to create a highly recognizable brand, primarily through the quality of news programming and community presence. Nexstar asserts that strong local news typically generates higher ratings among attractive demographic groups and enhances audience loyalty, potentially resulting in higher ratings for programs preceding and following the newscasts. Nexstar claim that high ratings and strong community identities also makes stations attractive to advertisers. In 2010, Nexstar earned approximately 30 percent of its advertising revenues from spots aired during local news programming. Nexstar's stations produce between 15 to 25 hours per week of local news programming. Nexstar 2012 Form 10-K at 3.

[660] Nexstar 2012 Form 10-K at 10; Gray 2012 Form 10-K at 10-11.

[661] RTNDA/Hofstra 2012 Survey, *Part II: A Record Amount of TV News…Again*, Hofstra University, 2012, http://www.rtdna.org/media/Parttwo.pdf at 1. While RTNDA/Hofstra released survey results in 2012, the survey was conducted during the fourth quarter of 2011. This survey presents the national average hours of news for all stations. A 2011 FCC staff analysis found, however, that 520 commercial and 262 noncommercial stations do no local news. *See* FCC, *The Information Needs of Communities*, July 2011, at 100, http://www.fcc.gov/infoneedsreport.

[662] *See, e.g.*, NAB Comments at 20-23. Such arrangements include joint sales agreements, shared services agreements, and local marketing agreements. As stated above, our attribution rules currently make attributable certain LMAs, also referred to as time brokerage agreements ("TBAs"), in which a broker purchases discrete blocks of time from a licensee and supplies programming and sells advertising for the purchased time. According to commenters, a local news service ("LNS") agreement is as an agreement in which multiple local broadcast television stations contribute certain news staff and equipment to a joint news gathering effort coordinated by a single managing editor. According to commenters in the ownership proceeding, a shared service agreement ("SSA") is an agreement, or series of agreements, in which one in-market station provides operational support and programming for another in-market station. We are currently seeking comment on LNS agreements and SSAs in the Media Ownership proceeding. *See Media Ownership NPRM*, 26 FCC Rcd at 17564-70, ¶¶ 195-208.

[663] *See, e.g.*, LIN 2012 Form 10-K at 12; Nexstar 2012 Form 10-K at 2, 10; Sinclair 2012 Form 10-K at 13; Gray 2012 Form 10-K 10-11; ESPN Inc., *WDCW-TV/DC50 Named SEC Network Affiliate in Washington DC – DC50 to Air Men's SEC Basketball and Football Through ESPN Regional Television's Syndicated Network* (press release), Jan. 4, 2012. ESPN, a cable network, has a division called ESPN Regional Television that syndicates collegiate sports programming. *See* The Walt Disney Company, *SEC Form 10-K for the Year Ended September 29, 2012*, at 3.

respective markets.[664] Stations compete against in-market broadcast stations for exclusive access to syndicated programming within their markets.[665] Syndicated programming can be expensive for stations and may represent a long-term financial commitment.[666] Stations usually purchase syndicated programming two to three years in advance and sometimes must make multi-year commitments.[667] An average broadcast station spends about 23.6 percent of its expenses on acquiring syndicated programming.[668] For example, syndication rights for the series *The Big Bang Theory* and *Modern Family* cost stations about $2.5 million per episode in barter and cash.[669]

188. Despite its price tag, a popular program may be a profitable investment for a station if it provides a lead-in audience for a station's local newscasts, differentiates the station from competing stations, and/or increases audience and revenues. Other factors may help to reduce the costs of syndicated programming for stations. For example, large group owners can use economies of scale to negotiate favorable contractual terms with program suppliers.[670]

189. *Viewing Experience.* Several factors affect consumers' viewing experiences, including the availability of HD programming, availability of content via a television station's website, and consumers' ability to view video on a time-shifted basis on television sets, personal computers, and/or mobile devices. As of 2012, 85.3 million U.S. television households, or 74.4 percent of such households, had sets capable of displaying and/or receiving digital signals, including HD television signals.[671] This figure is up from 75.5 million, or 65.1 percent of television households, in 2011.[672] Broadcasters have provided increasing amounts of HD programming in response to the increasing number of HD televisions. As of the end of 2011, 1,501 (82.2 percent) of full-power stations were broadcasting in HD, up from 1,036 stations in 2010.[673] Approximately 60 percent of stations broadcast local news in HD, with figures higher in larger markets.[674]

190. Penetration of DVRs continues to rise as well. Approximately 46.3 million, or 40.4 percent of television households, had DVRs in 2011.[675] In 2012, DVR households increased to 50.34

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[664] Nexstar 2012 Form 10-K at 10.

[665] *Id.*; Gray 2012 Form 10-K 10-11. In addition, cable networks occasionally acquire programs that might otherwise be offered to stations.

[666] Syndicated programming can impose financial risks on stations. Broadcast stations cannot predict whether a particular show will be sufficiently popular to enable it to sell enough related advertising time to cover the costs of the program. A station may have to replace a poorly performing program before it has recovered the costs of obtaining it. Sinclair 2012 Form 10-K at 28; Gray 2012 Form 10-K at 21; Belo 2012 Form 10-K at 11.

[667] Gray 2012 Form 10-K at 21; Belo 2012 Form 10-K at 11.

[668] NAB, *Television Financial Report*, 2012, at 3 ("*2012 NAB Television Financial Report*").

[669] Deana Myers, *What is a Sitcom's Chance of Success*, SNL KAGAN, Feb. 9, 2012.

[670] Nexstar 2012 Form 10-K at 3.

[671] Nielsen, *July 2012 National Media Related Universe Estimates*, Jul. 26, 2012. ("Nielsen July 2012 Universe Estimates"). Figures apply to the television season at issue. MVPD households with HD television sets wishing to receive HD service must have HD service included in their subscriptions.

[672] *Id.*

[673] *See* NAB Comments at 10 (citing *TV Stations Multiplatform '13 Update: New Digital Networks, Mobile TV Channels Expand Content Options*, SNL KAGAN (Jan. 31, 2012) ("Kagan Multiplatform Analysis 2012"))

[674] *Id.*

[675] *November 2011 National Media Related Universe Estimates*, Nielsen, Nov. 29, 2011.

million or 43.8 percent of all television households.[676] The availability of DVRs coupled with other technological developments has spurred consumers' desire and ability to watch video on a time shifted basis. As digital video recorders have gained popularity, Nielsen began reporting "live-plus-same-day playback," ("LSD") viewing as the currency for buying and selling local television time, where such ratings are available.[677] In August 2010, it found that while the total effect of DVR playback on ratings was small, the audience composition changed.[678]

Table 17: Television Households and Media Usage Estimates (in thousands)[679]

	2010-2011	2011-2012
Total U.S. Households	117,220	118,590
U.S. TV HHs	115,900	114,700
Broadcast Only	11,080	10,970
MVPD	104,820	103,730
DVR Owner	42,540	46,320
HD TV Households	75,490	85,250

191. Television stations use their online and mobile platforms to address consumers' increasing desire to view video programming in more places and times and on more devices. Broadcasters use their websites as extensions of their local brands, and offer advertisers online promotions coordinated with the on-air advertisements. SNL Kagan estimates that at the end of 2012, 94 percent of full-power commercial television stations operated a website and about 86 percent streamed video content.[680] Sixty-nine percent of broadcast television station websites provided updates on local news and weather, while 55 percent provided local classified advertisements.[681] About 81 percent of websites contained links to stories via Facebook and 76 percent had links via Twitter.[682] Nearly 44 percent of station websites had mobile app downloads for smartphones.[683] A Radio Television Digital News Association ("RTNDA") and Hofstra University study found that 82.2 percent of television stations surveyed took a "three-screen approach" – distributing news programming online and via mobile devices,

[676] Nielsen July 2012 Universe Estimates.

[677] Katy Bachman, *Nielsen Returns 'Live' to the Ratings*, ADWEEK, July 1, 2010, http://www.adweek.com/news/advertising-branding/nielsen-returns-live-ratings-102743 (visited Nov. 6, 2012). *See also* The Nielsen Company, *Measurement, Television Measurement, 2011-12 Sweeps Dates*, http://www.nielsen.com/us/en/measurement/television-measurement.html (visited Nov. 6, 2012).

[678] Katy Bachman, *Nielsen Releases Analysis of LSD Data*, ADWEEK, Aug. 5, 2010, http://www.adweek.com/news/advertising-branding/nielsen-releases-analysis-lsd-data-115873 (visited Nov. 6, 2012). LSD viewers tended to be younger and higher-income than live viewers generally. As described in Section III.B.4, *infra*, advertisers buy time on broadcast and cable networks on the basis of viewership of commercials.

[679] Nielsen, National Media Related Universe Estimates, Sept. 3, 2011; Nielsen, National Media Related Universe Estimates, Sept. 11, 2010.

[680] 2012 SNL Kagan TV Stations Databook at 11.

[681] *Id*.

[682] *Id*.

[683] *Id*.

as well as over-the-air."[684] The larger the news department, the more likely the station was to use the three-screen approach. While most stations with a three-screen approach were broadcast network affiliates, the size of their markets did not appear to impact their decision to utilize this approach.[685]

192. In addition, since the last report, broadcasters increasingly are using mobile DTV to provide consumers with on-the-go access to local news and other video content. At the end of 2010, 60 operating commercial mobile DTV stations broadcast more than 80 live mobile video channels in major markets.[686] This number increased to 105 live mobile DTV stations at the end of 2011.[687] According to NAB, currently "[m]ore than 130 stations in 30 states have commenced providing mobile DTV service, and are offering over 150 channels of programming."[688] As noted in the last report, the Open Mobile Video Coalition ("OMVC") had a successful mobile DTV trial in September 2010.[689] In August 2012, Mobile Content Venture ("MCV"), a joint venture of 12 station groups,[690] launched the Dyle Mobile DTV service in 35 markets, reaching more than 55 percent of the U.S. population.[691] NAB notes that the Mobile 500 Alliance is "aggressively moving forward with a Mobile DTV rollout."[692] This consortium of

[684] RTNDA/Hofstra 2012 Survey, *Part III: TV News Business Isn't Limited to Just TV Anymore*, at 4-5. Stations use social media for promotion and as a tool for conversations with their audiences. Belo notes that the websites of its television stations provide consumers with news and information as well as a variety of other products and services. Belo obtains immediate feedback through online communication with its audience, which allows the Belo to tailor the way in which it delivers news and information to serve the needs of its audience. Belo 2012 Form 10-K at 4-5.

[685] RTNDA/Hofstra 2012 Survey, *Part III* at 4-5.

[686] *See 14th Report*, 27 FCC Rcd 8702-03, ¶¶ 204-205.

[687] Justin Nielson, *TV Stations Multiplatform Analysis '12 Update: New Digital Networks and Mobile TV Channels Expand Content Options*, SNL KAGAN, Jan. 31, 2012, at 10.

[688] NAB Comments at 12 (citing SNL Kagan Service, TV Station Database (Aug. 20, 2012)).

[689] *14th Report*, 27 FCC Rcd at 8703, ¶ 205. Membership in OMVC is open to U.S.-based television broadcasters and related entities dedicated to advancing mobile digital television and currently includes over 900 TV stations, including public television stations, and sixteen out of the top 20 station groups. OMVC, Who are the OMVC's Members?, *at* http://www.openmobilevideo.com/about-omvc/members/ (visited Nov. 8, 2012). On January 1, 2013, OMVC's functions were integrated within NAB. *See* NAB, *Mobile TV Industry Pioneer OMVC to Integrate Functions Within NAB* (press release), Dec. 18, 2012.

[690] The twelve founding broadcast groups were FOX, NBC (including the Telemundo stations), ION, Belo Corp., Cox Media Group, E.W. Scripps, Gannett Broadcasting, Hearst, Media General, Meredith Corp., Post-Newsweek Stations, Inc., and Raycom Media – that separately formed Pearl Mobile DTV Company LLC, as a vehicle for their involvement in MCV. MVC, *Twelve Major Broadcast Groups to Form Joint Venture to Develop National Mobile Content Service* (press release), Apr. 13, 2010.

[691] NAB Comments at 12. Deborah Yeo, *Up Close with Dyle Mobile TV*, SNL KAGAN, Aug 30, 2012. The markets are Atlanta, GA; Austin, TX; Birmingham, AL; Boston, MA; Charlotte, NC; Chicago, IL; Cincinnati, OH; Cleveland, OH; Columbus, OH; Dallas, TX; Dayton, OH; Denver, CO; Detroit, MI; Greenville, SC ; Houston, TX; Kansas City, MO; Knoxville, TN; Las Vegas, NV; Los Angeles, CA; Miami, FL; Minneapolis, MN; Montgomery, AL; New York, NY; Orlando, FL; Philadelphia, PA; Phoenix, AZ; Portland, OR; Raleigh, NC; San Francisco, CA; Seattle, WA; St. Louis, MO; Tampa, FL; Tulsa, OK; Washington, DC; and West Palm Beach, FL. MVC, *About MVC*, http://www.themcv.com/about-mcv (visited Nov. 6, 2012).

[692] NAB Comments at 13.

50 member companies, including two public broadcasters, which hold licenses to 437 television stations, plans to launch 15 to 20 Mobile DTV channels in markets across the country.[693]

4. Broadcast Television Industry Performance

193. In this section of the Report, we examine broadcast stations' performance generally in terms of audience, revenue, and profitability, as well as investment and innovation. We also review the interplay between the trends in broadcasters' sources of revenues and expenses, their strategies for distributing video programming, and other factors influencing broadcasters' performance. While the majority of broadcast television station licensees are part of parent companies that are involved in other industries, some group owners are only involved in broadcast television. To provide context to our discussion of the profitability of the broadcast television station industry as a whole, as well as investment and innovation by television broadcast stations, we examine a select group of these "pure play" television station-only group owners: Belo Corp.,[694] Gray Television Inc., LIN, Nexstar Broadcasting Group, and Sinclair[695] (together, the "Pure Play Companies").[696] As publicly traded pure play companies, they provide detailed information about their performance in the broadcast industry.

194. Because of its dependence on advertising revenue, which is highly correlated with overall economic conditions, broadcasting is a highly cyclical industry.[697] This is in part because marketers often view advertising as a discretionary expense and cut back when the economy declines.[698] In addition, some categories of advertisers, especially the automobile sector, are responsible for a large proportion of stations' advertising revenues. Automobile dealers can account for 25 percent of a typical television station's revenues in good times.[699] While the automobile sector's share of station groups' advertising fell in recent years, these revenues appear to be rebounding somewhat.[700] Station revenues tend to be higher in even years, due to political advertising, which tends to peak immediately before elections.[701] In addition, NBC affiliates experience higher revenues during Olympic Games broadcasts, which air in even years.[702]

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[693] Mobile 500 Alliance, About, http://mobile500alliance.com/about-2 (visited Nov. 8, 2012); Mobile 500 Alliance, Members, http://mobile500alliance.com/members/ (visited Nov. 8, 2012).

[694] Belo spun off its newspaper businesses and related assets into a separately traded company, A. H. Belo Corporation, in February 2008. Belo Corp., *SEC Form 10-K for the Year Ended December 31, 2010*, at 5. As a result, for the time period covered by our analysis, Belo was a pure play television company.

[695] While Sinclair has invested in non-broadcast businesses in order to diversify its risks, these only represent a small portion of its overall operating results. Sinclair 2012 Form 10-K at 13.

[696] SNL Kagan used these five companies in its tracking index for the broadcast television station industry as of June 30, 2012.

[697] Vogel at 301-03; Gray 2012 Form 10-K at 17; LIN 2012 Form 10-K at 23; Sinclair 2012 Form 10-K at 25.

[698] "Advertisers generally reduce their spending during economic downturns . . . ." Belo 2012 Form 10-K at 9. *See also* Nexstar 2012 Form 10-K at 21.

[699] Vogel at 309.

[700] *See* 14th Video Competition Report, 27 FCC Rcd at 8704, ¶ 207. *See also, e.g.*, Belo 2012 Form 10-K at 9 ("for the year ended December 31, 2012, 23.1 percent of our total spot revenues were from the automotive industry"); Gray 2012 Form 10-K at 6 ("For the years ended December 31, 2012…, we derived approximately 18% . . . of our total broadcast advertising revenue from customers in the automotive industry").

[701] Nexstar 2012 Form 10-K at 7; Gray 2012 Form 10-K at 6.

[702] Belo 2012 Form 10-K at 10.

195. In the short run, most of a station's operating costs are fixed.[703] Regardless of the amount of advertising inventory it sells, a station must pay for the cost of operating its facilities as well as the costs of programming rights. Therefore, when economic conditions are favorable and a station is able to charge high prices for its commercial inventory, it can be profitable. Conversely, because stations remain highly dependent on advertising revenues, when they decline, aside from laying off employees and reducing sales commissions, stations usually are unable to reduce expenses, and thus profits can decline sharply. Other sources of station revenue include retransmission consent fees, ancillary DTV services, and online advertising.[704]

196. Broadcast television stations face changing technology. Industry participants note that information delivery and programming alternatives such as MVPDs, the Internet, mobile devices, DVRs, and home video entertainment systems have fractionalized television viewing and audiences, expanded the number of outlets for advertisers, and increased competition for the acquisition of programming.[705] Industry participants also note that video compression techniques enable MVPDs and competing television stations to carry more programming (*e.g.*, via multicasting), potentially fractionalizing audiences and advertisers even further.[706]

a. Audiences

197. The industry relies on Nielsen data to measure broadcast television station audiences. Nielsen measures television ratings as a percentage of households with television sets who view a program.[707] Consistent with the trend noted in the *14th Report*, both television penetration and the total number of television households continue to decline.[708] For the 2010-2011 season, Nielsen reports television penetration at 99 percent, or about 115.9 million U.S. television households.[709] Nielsen estimates these figures at approximately 97 percent and 114.7 million households for the 2011-2012 season.[710] According to Nielsen, factors that may have contributed to this downward trend include the digital transition, the economic downturn leading rural and lower-income households to conclude that the price of acquiring television sets is too high, and younger, urban consumers who may substitute online viewing for traditional television viewing.[711]

198. The percentage of television households relying exclusively on over-the-air broadcast service (as opposed to accessing broadcast stations via an MVPD) remained relatively steady since the last report. According to Nielsen, in July 2011, approximately 9.6 percent of all U.S. television

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[703] Vogel at 304.

[704] *See infra*, Sec. III.B.4.b.

[705] Belo 2012 Form 10-K at 9-10; Nexstar 2012 Form 10-K at 21; Gray 2012 Form 10-K at 23; Sinclair 2012 Form 10-K at 35; LIN 2012 Form 10-K at 30.

[706] Nexstar 2012 Form 10-K at 22; Sinclair 2012 Form 10-K at 35.

[707] Nielsen, *News & Insights: Top Tens & Trends, Television*, http://www.nielsen.com/us/en/insights/top10s/television.html (visited Nov. 13, 2012).

[708] *See 14th Report*, 27 FCC Rcd at 8705, ¶ 210.

[709] Nielsen 2010 & 2011 Television Audience Report at 4-5.For the purposes of this Report, we use Nielsen's January 1 estimates for our December 31 estimates of the prior year.

[710] Nielsen, *National Universe Estimates 01-01-2013*, August 24, 2012.

[711] Other studies indicate that college students are watching video content on computers and laptops in lieu of television sets. *See College-Age TV Watchers Have No Cords to Cut*, eMarketer, Dec. 15, 2011, http://www.emarketer.com/Article.aspx?id=1008735&R=1008735 (visited Nov. 13, 2012).

households, or about 11.1 million households, were broadcast only.[712] As of July 2012, there were also almost 11.1 million broadcast-only households, which represented 9.7 percent of all television households at that time.[713] NAB provides different figures that show a larger increase. According to NAB, the most recent data suggests that 17.8 percent of the 116.3 million U.S. television households, or 20.7 million households, rely solely on over-the-air television service.[714] This figure is up from 15 percent of households in the previous year.[715] NAB states that over-the-air reliance is higher among lower income households and racial/ethnic minorities, and homes headed by younger adults.[716]

199. Viewing shares of broadcast network affiliates and non-commercial broadcast television stations held steady between the 2010-2011 and 2011-2012 television seasons, and viewing shares of independent stations, whose shares are relatively low, increased in primetime during this period. In contrast, the combined viewing shares of advertising-supported cable networks decreased in total day shares during this period. As shown in Table 18, the total day share of viewing for broadcast network affiliates stayed at 28 percent between the 2010-2011 television season and the 2011-2012 television season.[717] During prime time,[718] their share stayed at 33 percent for both the 2010-2011 and 2011-2012 television seasons. Independent stations' total share was three percent in both the 2010-2011 season and 2011-2012 season. During prime time, their share rose from two percent in the 2010-2011 season to three percent in the 2011-2012 season. NCE stations' total and prime time shares were two percent in the 2010-2011 and 2011-2012 seasons.[719]

[712] Nielsen July 2012 Universe Estimates.

[713] *Id.* The actual number of households declined from 11.09 million to 11.08 million, while the percentage increased, due to Nielsen's lowering its estimate of total television households.

[714] NAB Comments at 2 (citing GfK-Knowledge Networks, Home Technology Monitor 2012 Ownership Survey and Trend Report (Spring 2012-March 2012)).

[715] *Id.*

[716] *Id.* at 3-4.

[717] Nielsen 2011 Television Audience Report at 18 & Nielsen 2012 Television Audience Report at 15. Total day viewing includes viewing Monday-Sunday, 6 a.m.-6 a.m. A share is the percentage of television households watching television who are watching a particular programming source. Due to simultaneous multiple-set viewing, Nielsen reports audience shares that exceed 100 percent when totaled. We have normalized the audience shares by recalculating them on a base (or denominator) equaling 100 percent and adjusting the numerators accordingly.

[718] Monday-Saturday, 8-11 p.m. Eastern and Pacific Time (7-10 p.m. Central and Mountain Time), Sunday 7-11 p.m. Eastern and Pacific Time (6-10 p.m. Central and Mountain Time).

[719] For the 2009-2010 television season, Nielsen began releasing "C3" ratings data for television viewing, which measures the commercials watched both live and for three days via DVR playback. This is the metric under which much of broadcast and cable network advertising is bought and sold. *See* Nielsen, *"C3" TV Ratings Show Impact of DVR Ad Viewing*, Oct. 14, 2009, http://nielsen.com/us/en/newswire/2009/c3-tv-ratings-show-impact-of-dvr-ad-viewing.html (visited Nov. 14, 2012). To include VOD, and online viewing in their ratings, networks must include the same set of commercials that appear in the initial live telecast. This measurement does not apply to local ratings.

Table 18: Audience Shares[720]

Total Day	**2009-2010**	**2010-2011**	**2011-2012**
Viewing Source:			
Network Affiliates	29	28	28
Independents	2	3	3
Non-Commercial Networks	2	2	2
Ad Supported Cable	52	53	52
Premium Pay Networks	4	4	4
All Other Cable Networks	5	5	6
All Other Tuning	6	5	5
Total Day Total:	**100**	**100**	**100**

Prime Time	**2009-2010**	**2010-2011**	**2011-2012**
Viewing Source:			
Network Affiliates	34	33	33
Independents	2	2	3
Non-Commercial Networks	2	2	2
Ad Supported Cable	50	51	51
Premium Pay Networks	3	4	3
All Other Cable Networks	4	4	4
All Other Tuning	5	4	4
Prime Time Total:	**100**	**100**	**100**

200. In addition, stations are attracting audiences on their digital multicast streams. For example, WVUE in New Orleans, after launching Bounce TV on a digital multicast channel in November 2011, earned higher ratings than several basic cable networks and is competing strongly with several broadcast outlets.[721] Stations also are attracting consumers to their websites. In this regard, one report citing a Fall 2010 survey indicates that out of 80 markets measured, television websites attracted more

[720] Nielsen 2012 Television Audience Report at 15. Figures apply to the television season at issue.

[721] *Bounce TV Powers Ratings on WVUE*, TVNEWSCHECK, Jan. 13, 2012, http://www.tvnewscheck.com/article/2012/01/13/56717/bounce-tv-powers-ratings-on-wvue (visited Nov. 13, 2012). In December 2011, WVUE reported that its Bounce TV signal earned a 0.4 total day local market rating, tying CNN's Headline News (0.4) and outranking cable networks TV One (0.2), Oxygen (0.2), BBC America (0.2) and CNBC (0.1).

visitors than newspaper websites in 22 markets (or 27 percent), while the major daily newspapers' websites led in the amount of traffic attracted in the remaining markets.[722]

b. Revenue

201. This section of the Report describes broadcast television stations' revenue from advertising during the relevant period. It then considers other sources of broadcast television station revenue during the period, including network compensation, retransmission consent fees, revenues from non-broadcast ancillary services, online revenues, and other revenues.

202. Broadcast television station revenues reached a high of $26.30 billion in 2000 and declined thereafter.[723] In 2010, however, industry revenues showed some recovery and, rose by 23 percent from the prior year to $22.31 billion.[724] Industry revenues fell approximately three percent in 2011 to $21.62 billion, but were projected to report a 16 percent rebound to $25.04 billion when 2012 data was available.[725]

Table 19: Broadcast Television Station Industry Revenue Trends (in millions)[726]

Revenue Sources	**2010**	**2011**	**2012 (projected)**
Advertising	$19,944	$18,639	$21,300
Network Compensation	$48	$25	>$1
Retransmission Consent	$1236	$1,757	$2,361
Online	$1,087	$1,195	$1,375
Total	**$22,314**	**$21,617**	**$25,035**
Percentage Change	23%	-3%	16%

203. *Advertising Revenue.* On-air advertising is by far the most significant source of revenue for televisions stations, although its share of overall broadcast television station industry revenues is declining. It represented about 86 percent of broadcast television station industry net revenues in 2011 and was expected to represent 85 percent of industry revenues in 2012, down from 89 percent of net revenues in 2010.[727]

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[722] Borrell Associates Inc., *Benchmarking TV's Local Online Sales*, February 2011, at 19, http://www.tvb.org/media/file/Borrell_2010_TV_Internet_Growth_Feb2011.pdf ("Borrell Study 2011"). Citing data from the Media Audit, Borrell measured the number of visitors who logged onto a major newspaper website during a month within the Fall of 2010 and compared it with the number of visitors who had logged onto individual television stations' sites.

[723] Tony Lenoir, *Negative Growth Outlook for TV Station Revenue in '11 but Double-Digit Gains Seen in '12*, SNL KAGAN, Oct. 3, 2011. As noted above, revenues tend to be higher in even years.

[724] SNL Kagan, *Total TV Station Industry Revenue Projections, 2006-2018*, Dec. 17, 2012.

[725] *Id.*

[726] *Id.*

[727] Net revenues equal all advertising, online revenues, and network compensation received by stations, plus retransmission consent revenues received from MVPDs, minus retransmission consent revenues network affiliates pay networks. *See also 14th Report*, 27 FCC Rcd at 8708, ¶ 216.

204. Broadcast television stations sell two categories of advertising: local spot and national spot. Local advertisers purchase local spot advertising to reach viewers within a station's market. They may work with local advertising agencies or directly with a station's sales staff.[728] Local advertising is more sensitive to the economic climate of a station's geographic market. For example, even if a station is attracting large audiences, if the local economy is struggling, local businesses may choose not to advertise or to limit their advertising.[729] Using SNL Kagan data, we estimate that local advertising represented about 48 percent or $10.3 billion of broadcast television station industry revenues in 2011, and represented about 47 percent or $11.8 billion of industry revenues in 2012, compared to $11.3 billion in 2010, representing approximately 50 percent of industry revenues.[730] NAB estimates that, in 2011, on average, about 62.2 percent of a station's gross advertising revenues were from local advertising.[731] The percentages may vary depending on the station and the DMA a station serves. Local advertisers may choose to advertise using local broadcast television or radio stations, newspapers, regional cable networks, geographically-targeted websites, or other local media. Between 2010 and 2011, broadcast stations' share of local advertising revenue decreased from 15.8 percent to 15.0 percent. During that same period, however, total advertising spending across all local media dropped from $71.0 billion nationwide to $68.5 billion, and broadcast television stations' collective local advertising revenues declined from $11.3 billion to $10.3 billion. Between 2011 and 2012, broadcast stations' share of local advertising revenue increased from 15.0 percent to 16.8 percent. Total advertising spending across all local media rose from $68.5 billion nationwide to $70.3 billion, and broadcast television stations' collective local advertising revenues went up from $10.3 billion to $11.8 billion.

[728] Nexstar 2012 Form 10-K at 35-36.

[729] Smaller local businesses generally feel a recession's impact more immediately than large national businesses, and would be more likely to curtail local television advertising spending. Vogel at 303.

[730] SNL Kagan, *U.S. Advertising Market Overview, 2002-2021*, Dec. 27, 2012. Some broadcast station groups cite lower percentages. Nexstar states that local advertising, excluding political, represented 57.3 percent of it stations' gross revenues (that is, revenues before subtracting agency commissions) in 2011 and 47.8 percent in 2012. Nexstar 2012 Form 10-K at 37. Gray's percentages were similar: 60.9 percent in 2011, and 47.3 percent in 2012. Gray 2012 Form 10-K at 37. *See also 14th Report*, 27 FCC Rcd at 8709, ¶ 217.

[731] NAB, Television Financial Report, 2012, at 2 ("*2012 NAB Television Financial Report*").

Table 20: Local Advertising Revenue by Sector (in millions)[732]

Revenue	2010	2011	2012 (projected)
Broadcast TV Stations	$11,265	$10,308	$11,802
Cable TV	$4,270	$4,164	$4,867
Radio	$11,300	$11,264	$11,405
Internet	$10,341	$11,602	$12,274
Daily Newspaper	$18,574	$16,915	$15,720
Regional Sports Networks	$763	$842	$925
Mobile	$494	$974	$2,064
Telco	$105	$161	$230
Other	$13,899	$12,313	$11,061
Total Local	**$71,011**	**$68,543**	**$70,348**

205. National advertising time is sold through national sales representative firms ("reps") working with advertising agencies, whose clients typically include automobile manufacturers and dealer groups, telecommunications companies, fast food franchisers, and national retailers.[733] In exchange for representing the stations, the rep firms typically earn commissions of about seven to eight percent of net billings, defined as dollars paid for advertising minus ad agency commissions.[734] National advertising is generally bought through advertising agencies. The advertising agencies generally receive commissions of 15 percent of the gross advertising rates paid for advertising they place.[735] National spot advertising represented about 39.1 percent of total broadcast television station industry revenues, or $8.3 billion, in 2011, and is projected to be about 37.9 percent, or $9.5 billion, of industry revenues in 2012. In its television financial reports, NAB estimates that as of 2011, about 35.6 percent of an average station's revenues come from national and regional advertising.[736] National advertisers may choose to advertise on broadcast stations but are more likely to utilize arrangements with broadcast networks, cable networks, television syndicators, or DBS. National sales tend to represent a larger proportion of revenues for stations in larger markets.[737] Broadcast television stations' share of the national advertising market was 5.8 percent in 2011 and was projected to be 6.4 percent in 2012. In the last report, we reported that cable networks and VOD surpassed broadcast television networks in their share of overall national advertising revenue in 2008. This trend continued in 2011 and 2012, with the gap between broadcast television

[732] SNL Kagan, *U.S. Advertising Market Overview, 2002-2021*, Dec. 27, 2012.

[733] Nexstar 2012 Form 10-K at 8.

[734] Vogel at 312-13, n. 7. Gross advertising revenues refer to the total amount spent by advertisers, while net revenues refer to amount of advertising revenues received by stations.

[735] Nexstar 2012 Form 10-K at 35.

[736] *2012 NAB Television Financial Report* at 2.

[737] Vogel at 312-13, n.7. Sinclair states that it has focused on decreasing its dependence on national advertising, as overall spending by national advertisers has declined, and other outlets have merged. Sinclair 2012 Form 10-K at 43.

networks and cable networks and VOD decreasing slightly. In 2011, broadcast television networks and cable networks and VOD accounted for 12.0 percent and 17.2 percent of national advertising revenues, respectively. In 2012, those figures were projected to be 12.5 percent and 17.5 percent.

Table 21: National Advertising Revenue by Sector (in millions)[738]

Revenue	2010	2011	2012 (projected)
Broadcast TV Stations	$8,678	$8,331	$9,498
Broadcast Networks	$17,687	$17,177	$18,619
Cable & VOD Networks	$22,550	$24,564	$26,074
DBS	$842	$918	$1,069
Internet	$15,879	$17,082	$18,700
Radio	$2,881	$2,795	$2,816
Satellite Radio	$76	$87	$98
Radio Network	$1,102	$1,136	$1,193
Daily Newspaper	$4,221	$3,777	$3,433
Barter Syndication	$2,813	$2,756	$2,640
Mobile	$885	$1,533	$2,685
Other	$62187	$63,044	$62,019
National Total	**$139,801**	**$143,200**	**$148,844**

206. Political advertising can be both local and national.[739] For example, a mayoral candidate may only need to purchase advertising in one DMA in order to reach potential voters, in which case the advertising is local.[740] Candidates running for statewide offices, however, or presidential candidates seeking to reach audiences in swing states, will frequently purchase time within multiple DMAs covering the particular state, in which case a national rep firm may purchase time on behalf of the candidates. In 2010, the Pure Play Companies earned $244 million in political advertising, representing ten percent of their revenues.[741] In 2012, these companies were expected to earn a combined $317.7 million in political advertising revenues.[742] Political advertising was projected to represent approximately 11 percent of total broadcast television revenue in 2012.[743] SNL Kagan estimates that, in 2010, broadcast television stations

[738] SNL Kagan, *U.S. Advertising Market Overview, 2002-2021*, Dec. 27, 2012.

[739] *See, e.g.*, Sinclair 2012 Form 10-K at 48-49.

[740] Kate Brady, *Political Ads: Final Tips From the Rep*, TVNEWSCHECK, Oct. 1, 2010, http://www.tvnewscheck.com/article/2010/10/01/45773/political-ads-final-tips-from-the-rep (visited Dec. 3, 2012).

[741] Tony Lenoir, *Broadcast TV Guide to the 2012 Elections*, SNL KAGAN, Aug. 24, 2011, at 14 ("2012 Election Guide").

[742] Peter Leitzinger, *TV Political Ad Revenue on Pace for 68% Growth Over '08*, SNL KAGAN, Sept. 20, 2011, at 24, Table 4.

[743] Tony Lenoir, SNL Broadcast Investor: Broadcast TV Political Ad Revenue Projections 2012-2021, SNL KAGAN, Jan 11, 2012, at Fig. 1.

received 75 percent of political advertising revenues.[744] NAB estimates that for an average station, political advertising represented 2.2 percent of revenues in 2011.[745]

207. The ability of advertisers to switch among media depends on how they plan their media budgets. Broadcast television advertising can be purchased in several ways: by flight (*e.g.*, for a one-week period, such as for movie openings or sales) or monthly, quarterly, or annually, (*e.g.*, the entire advertising campaign at once).[746] Annual buys give media buyers leverage to negotiate the best rates. The closer the media buyer is to the beginning of the television season schedule when placing the buy, the higher the rates will likely be. If the media is sold out, the rates may need to be high enough to bump another advertiser's spots. At times, it may be so close to the flight that the station does not have any space available to sell. On the other hand, buyers who plan annually run the risk of unexpected scheduling changes. For example, a buyer may have purchased advertising time on an NBC affiliate on a Thursday evening, but reached fewer people than expected when a program turned out to be less popular than expected, or a competing network scheduled a more popular program during the same time period.

208. *Network Compensation*. Compensation from broadcast networks previously was the second largest revenue stream for network-affiliated broadcast stations. Traditionally networks have compensated affiliates with cash payments closely related to affiliates' local market ratings performances. Since the late 1990s, however, broadcast networks began to phase out these payments. As of 2011, NAB began reporting network programming as an expense rather than a revenue source.[747] SNL Kagan estimates that between 2010 and 2011, total network affiliate compensation dropped from about $48.2 million, or 0.2 percent of the total $22.3 billion in industry revenues, to 25.1 million, or 0.1 percent of the total $21.6 billion in industry revenues.[748] These figures were projected to drop further for 2012 to $287 thousand, or 0.001 percent of the total $25.0 billion in industry revenues. Network compensation to television broadcast stations has all but disappeared, and today, television stations instead commonly pay compensation to networks in order to air their programming.[749]

209. *Retransmission Consent Fees.* As compensation from networks has disappeared, broadcast stations are demanding larger retransmission consent fees from MVPDs. As a result, such fees have replaced network compensation as the second largest source of revenue for broadcast television stations.[750] Like cable networks, broadcast stations negotiate per subscriber fees from MVPDs in exchange for carriage rights. Since the last report, retransmission consent fees have increased in dollar terms and as a share of industry revenues. SNL Kagan data show that retransmission consent fees represented about 8.1 percent, or $1.76 billion in broadcast television station industry revenues in 2011,

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[744] 2012 Election Guide at 14.

[745] *2012 NAB Television Financial Report* at 2.

[746] Kerri Byrd, *What to Know About an Annual Media Buy*, Evōk Advertising, Dec. 21, 2010, http://www.evokad.com/2010/12/what-to-know-about-an-annual-media-buy/ (visited Dec. 3, 2012).

[747] *See 2011 NAB Television Financial Report* at ii.

[748] SNL Kagan, TV Station Deals Databook, 2012 Edition, at 3; SNL Kagan, *Total TV Station Industry Revenue Projections, 2006-2018*, Dec. 17, 2012.

[749] *See* TV Network Industry Benchmarks; ABC Affiliates Reply Comments at 4-5.

[750] 2011 SNL Kagan TV Stations Databook at 5. Numerous commenters in this proceeding have noted that retransmission consent fees continue to rise and have become a significant part of television station's overall revenue picture. *See, e.g.*, ABC Affiliates Reply at 4-10; ACA Comments at 12-14; AT&T Comments at 12-13; CenturyLink Comments at 3-4. DIRECTV Comments at 18-19.

and about 9.4 percent, or $ 2.36 billion in 2012.[751] Local broadcasters, however, do not retain all of this revenue. Instead, television stations are required to pay a portion of such fees to their networks for programming, often on a per MVPD subscriber basis.[752] Station groups that are vertically integrated with broadcast networks or affiliated with cable networks may have more leverage than other station owners, since they can integrate retransmission consent negotiations with carriage of their networks. Group owners may be able to earn more than individual station owners because they have more experience and leverage with MVPDs. Stations in smaller markets may not earn as much in total dollars from retransmission consent fees because there are not as many subscribers, but they may earn the same per-subscriber fees as stations in larger markets.[753]

210. *Ancillary DTV Revenues*. DTV technology allows broadcasters to use part of their licensed digital spectrum to provide non-broadcast "ancillary or supplementary" services (*e.g.*, subscription video, data transfer, or audio signals), provided they pay the Commission a five percent fee of gross revenues received from such services.[754] Compared with other revenue sources, ancillary services remain a small portion of total revenue. Commercial and noncommercial educational DTV broadcast station licensees file FCC Form 317 on an annual basis, reporting whether they have provided ancillary services at any time during the 12 month period preceding September 30 of the filing year.[755] Licensees that earn revenues from such services are required to pay fees to the Commission. As of 2011, gross revenues from feeable services are modest. Yearly numbers are as follows:

[751] *See supra*, Table 17. For Nexstar, retransmission consent revenues (consisting of a per-subscriber-based compensatory fee and excluding advertising revenue) represented 9.1 percent of net revenues in 2010, 11.8 percent in 2011, and 15.4 percent in 2012. Nexstar 2012 Form 10-K at 37. Nexstar explains that the increases are due to renegotiated contracts providing for higher rates per subscriber, as well as the addition of new television stations in December 2012 and the second half of 2011. Similarly, Gray's retransmission consent revenues increased due to improved terms of renegotiated contracts, representing 5.4 percent of revenues in 2010, 6.6 percent in 2011, and 8.3 percent in 2012. Gray 2012 Form 10-K at 37. Neither LIN nor Sinclair break out retransmission consent revenues separately. *See* 2012 Form LIN 10-K at 47; Sinclair 2012 Form 10-K at 39.

[752] *See, e.g.*, ABC Affiliates Reply Comments at 4-5, 8.

[753] *See 14th Report*, 27 FCC Rcd at 8714, ¶ 225.

[754] *Filing of FCC Annual DTV Ancillary/ Supplementary Services Report*, Public Notice, 18 FCC Rcd 23972, 23973 (MB 2003). *See also* 47 U.S.C. § 336(a)(2), (e).

[755] Fees are reported in the year received, although they may be for services rendered in past years, in future years, or both. This occurs very few times and involves small sums of money. As broadcast stations decide to use DTV for broadcasting, *e.g.*, to launch a new network such as Bounce TV, rather than for ancillary services, fluctuations in the reported figures for non-broadcast ancillary services may occur.

Table 22: Ancillary DTV Revenues

Predominant Year	Number of DTV Licensees That Reported Feeable Services	Gross Revenues From Feeable Services	Fees Collected From Feeable Services
1999	0	$0	$0
2000	4	$570,000	$28,500
2001	2	$390,000	$19,500
2002	6	$148,280	$7,414
2003	3	$45,000	$2,250
2004	10	$78,625	$3,931
2005	11	$176,777	$8,839
2006	38	$798,153	$39,888
2007	35	$417,649	$20,868
2008	54	$337,857	$16,897
2009	57	$2,044,454	$102,223
2010	99	$7,125,374	$356,268
2011	85	$841,177	$42,059
2012	81	$499,970	$24,998

211. *Online Revenues.* In addition to selling advertising time over-the-air, stations often sell advertising on their websites. SNL Kagan estimates that online revenues represented about $1.2 billion, or 5.5 percent of $21.6 billion in the total broadcast station industry revenues in 2011, and $1.4 billion, or 5.5 percent of the $25.0 billion in total broadcast television station industry revenues in 2012.[756] Other sources have slightly higher or lower estimates. NAB estimates that in 2011, online advertising represented about $465,454, or 2.7 percent of an average station's $16.175 million in net revenues.[757]

212. Borrell also estimated the total amount of money advertisers spent on local online advertising nationwide and the share represented by broadcast television station websites. Borrell considers broadcast television station sites to primarily compete with the websites of other local media, such as newspapers' websites, as well as online sites unaffiliated with a media entity, *e.g.*, Craigslist and Patch.[758] According to Borrell, between 2011 and 2012, broadcast television stations decreased their market share of local online advertising. Borrell estimates that television broadcasters accounted for 11.9 percent, or about $2.2 billion of the $18.5 billion spent on local online advertising in 2012, down from

[756] *See* Table 17.

[757] *2012 NAB Television Financial Report* at 2. NAB calculates online revenue as a percentage of a broadcast station's net revenue (*i.e.*, the amount spent by advertisers on a station (gross advertising revenues) – advertising agency commission – national and regional sales rep firm commission = all other sources of station revenue).

[758] Borrell Associates Inc., *Benchmarking TV's Local Online Revenues*, May 2013, at 8, http://www.tvb.org/media/file/Borrell2013_LocalTVStations_OnlineRevReport.pdf ("Borrell Study 2013").

12.8 percent, or $2.0 billion in 2011.[759] It states that the average station's market share depended on market size, with the stations in the smallest markets averaging 1.74 percent of local online advertising and larger-market stations averaging 0.35 percent of local online advertising, due to heavy competition from stand-alone sites and other local media.[760] Borrell states that local television online revenues grew to $2.3 billion in 2012, a 17 percent increase from 2011, and estimates for this trend to continue into 2013.[761] Borrell suggests that growth will continue due to new digital development (e.g., app development and social media management) by stations.[762] Average station's online revenues for 2012 differ based on market size, with stations in the smallest markets averaging $0.3 million and the largest market stations averaging $1.4 million.[763]

213. *Other Revenues*. Advertising revenues from mobile services and applications are still nascent for most stations. NAB estimates that mobile revenues represented $12,254, less than 0.1 percent of an average station's total $17,439,709 in net revenues in 2011.[764] In Borrell's survey, few stations reported any advertising revenue from mobile applications in 2010, and of those that did, mobile advertising represented on average 2.5 percent of total revenues, with the typical station, getting between $20,000 and $50,000.[765] NAB estimates that in 2011 advertising revenues from multicast channels represented almost 0.5 percent of an average station's total net revenues.[766]

c. Profitability

214. To assess profitability trends in the broadcast television station sector in 2011 and 2012, we consider data on a station-level basis, using benchmarks in NAB's Television Financial Reports and, on a company-level basis, examining the Pure Play Companies. When entering the broadcast television station industry, companies often buy or sell individual stations or the portfolio of assets of a broadcast television station group owner based on a multiple of profitability.[767]

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[759] *Id*. at 6-8. For its calculations, Borrell relied on three sources: a database of Local Ad Spending Report (LA$R) estimates for all Television Market Areas (TMAs), a database of ad revenue and expenses for 6,260 U.S. and Canadian online operations, and a survey of 70 station managers on digital operations. *Id*. at 4.

[760] *Id*. at 12.

[761] *Id*. at 5, 7.

[762] *Id.* at 5.

[763] *Id.* at 11.

[764] *2012 NAB Television Financial Report* at 2. NAB defines mobile revenue as any revenue derived directly from streaming to mobile devices. *Id*. at 164.

[765] Borrell Study 2011 at 22. Borrell defines mobile advertising as advertising derived from mobile applications. *Id*. at 5-7. Borrell states that "[b]y 2015, most forecasters agree, the majority of all 'online' advertising will become untethered from desktops and delivered to mobile devices such as iPads, smart phones, and GPS-enabled laptops." *Id*. at 7.

[766] *2012 NAB Television Financial Report* at 2. To calculate total net revenues, NAB subtracts agency and rep firm commission for gross advertising revenues, and adds all other forms of revenue.

[767] Vogel at 307-10. *See also* Price Colman, *For Sale: Young Broadcasting for Just $350M*, TVNEWSCHECK, June 30, 2011, http://www.tvnewscheck.com/article/2011/06/30/52237/for-sale-young-broadcasting-for-just-350m (visited Dec. 5, 2012).

Table 23: Broadcast Television Station Industry Profitability

a. Net Operating Revenue (in thousands)

	2010	06/2011	2011	06/2012	2012
Belo	$687,395	$317,849	$650,142	$337,517	$714,719
Nexstar	$313,350	$145,450	$206,491	$172,506	$378,632
Gray	$346,058	$145,943	$307,131	$175,365	$404,831
LIN	$420,047	$196,754	$409,072	$224,210	$553,462
Sinclair	$767,186	$366,074	$720,387	$451,293	$1,061,679

Average NAB Station	**$16,175**	**N/A**	**$17,440**	**N/A**	

b. (Recurring) EBITDA (in thousands)

	2010	06/2011	2011	06/2012	2012
Belo	$241,659	$93,736	$204,970	$111,708	$259,183
Nexstar	$112,656	$45,826	$96,278	$63,525	$146,922
Gray	$136,160	$43,394	$98,762	$65,029	$176,618
LIN	$141,806	$51,973	$113,890	$69,610	$112,370
Sinclair	$295,696	$134,704	$278,402	$176,719	$426,490

Average NAB Station	**$5,498**	**N/A**	**$5,669**	**N/A**	

c. Net Income before Taxes (in thousands) [768]

	2010	06/2011	2011	06/2012	2012
Belo	$139,020	$22,435	$87,856	$63,277	$156,659
Nexstar	$4,926	($6,077)	($6,166)	$14,988	$45,074
Gray	$36,610	(806)	$13,574	$23,580	$47,317
LIN	$56,724	$13,311	$33,656	$33,479	$22,491
Sinclair	$113,851	$53,711	$121,373	$82,486	$212,340

Average NAB Station	**$3,863**	**N/A**	**$4,228**	**N/A**	

[768] Information in this table is based on data from NAB Financial Reports and SNL Kagan.

215. We use NAB average station financial statistics as an indicator of profitability: station EBITDA (which NAB calls "cash flow") and station pre-tax profits.[769] NAB calculates an average broadcast television station's cash flow by subtracting station operational expenses (expenses from all of the station's departments: engineering, programming, production, news, sales, advertising and promotions, and general administrative expenses) from total net revenues, which are gross advertising revenues minus agency commissions and national and regional rep firm commissions. Similarly, we can examine the recurring EBITDA[770] of the Pure Play Companies. Recurring EBITDA excludes earnings or losses from nonrecurring events, such as the gain or sale of assets, early retirement of debt, restructuring, or asset write-downs, and facilitates consideration prior to widely varying debt-financing arrangements.[771] For the purpose of this Report, we believe recurring EBITDA and EBIDTA are better indicators of profitability within the broadcast television industry than pre-tax income, which incorporates revenues and expenses from extraordinary events, as well as interest payments on debt.

216. To better compare trends among a single station and select station groups, we can calculate the profit margins, *i.e.*, EBITDA (or recurring EBITDA) divided by net operating revenues (*i.e.*, revenues earned by the station or station group, minus commissions from advertising agencies and rep firms).[772] As seen in Table 24, the profit margins for 2011 and 2012 were similar. As noted above, broadcast station revenues generally tend to be higher in even-numbered years, primarily due to the influx of political advertising, and NBC affiliates also earn additional revenues from their coverage of the Olympics in those years.

Table 24: Profit Margins

	2010	06/2011	2011	06/2012	2012
Belo	0.352	0.295	0.315	0.331	0.363
Nexstar	0.360	0.315	0.466	0.368	0.388
Gray	0.393	0.297	0.322	0.371	0.436
LIN	0.338	0.264	0.278	0.310	0.203
Sinclair	0.385	0.368	0.386	0.392	0.402
Average NAB Station	0.340	**N/A**	0.325	**N/A**	

[769] We report national average figures, but recognize that profitability varies by a number of station characteristics, including market size.

[770] *See supra*, n.528. SNL Kagan, Nexstar EBIDTA and FCF (Free Cash Flow) Analysis. Free cash flow is a measure of financial performance calculated as operating cash flow minus capital expenditures. It represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base. Investopedia, *Dictionary: Free Cash Flow*, http://www.investopedia.com/terms/f/freecashflow.asp#axzz1qAPFGRjM (visited June 19, 2013).

[771] Vogel at 308-09.

[772] This report compares year-end figures for 2010 and 2011. For 2012, profit margins for the Pure Play Companies ranged from 20.3 percent (LIN) to 43.6 percent (Gray). The average station profit margin for 2012 from NAB is not yet available.

d. Investment and Innovation

217. As in our analysis of profitability, we analyze broadcast station industry investment trends by examining (1) an average television station's average capital expenditures divided by net operating income and (2) capital expenditures divided by net income for the Pure Play Companies.

Table 25: Broadcast Television Station Industry Investment[773]

a. Capital Expenditures (in thousands)

	2010	06/2011	2011	06/2012	2012
Belo	$14,968	$6,742	$15,758	$10,788	$21,289
Nexstar	$13,799	$6,952	$13,349	$7,198	$17,260
Gray	$19,395	$16,652	$24,274	$11,561	$24,523
LIN TV	$17,648	$7,997	$20,069	$13,716	$28,230
Sinclair	$11,694	$20,656	$35,835	$18,473	$43,986
Average NAB Station	**$541**	**N/A**	**$665**	**N/A**	

b. Net Operating Revenue (in thousands)

	2010	06/2011	2011	06/2012	2012
Belo	$687,395	$317,849	$650,142	$337,517	$714,719
Nexstar	$313,350	$145,450	$206,491	$172,506	$378,632
Gray	$346,058	$145,943	$307,131	$175,365	$404,831
LIN	$420,047	$196,754	$409,072	$224,210	$553,462
Sinclair	$767,186	$366,074	$720,387	$451,293	$1,061,679
Average NAB Station	**$16,175**	**N/A**	**$17,440**	**N/A**	

218. To calculate the capital expenditure ratios for station groups we divide capital expenditures by net operating revenues. We then compare these ratios for different years to analyze investment trends in the industry.[774] The capital expenditure ratios for several Pure Play Companies increased significantly between 2010 and 2011, as seen in Table 26. Nexstar's 2011 capital expenditure ratio was higher due to decreased revenue,[775] and Sinclair notes that it had had higher capital expenditures in 2011 primarily for news operations and HD upgrades to its master control systems.[776]

[773] Information in this table is based on data from NAB Financial Reports and SNL Kagan.

[774] This Report compares year-end figures for 2010 and 2011. For 2012, capital expenditure ratios for the Pure Play Companies ranged from 3.0 (Belo) to 6.1 (Gray). The average station capital expenditure ratio for 2012 from NAB is not yet available.

[775] Nexstar 2012 Form 10-K at 44.

[776] Sinclair 2012 Form 10-K at 54.

Table 26: Capital Expenditure Ratios

	2010	06/2011	2011	06/2012	2012
Belo	0.022	0.021	0.024	0.032	0.030
Nexstar	0.044	0.048	0.065	0.042	0.046
Gray	0.056	0.114	0.079	0.066	0.061
LIN	0.042	0.041	0.049	0.061	0.051
Sinclair	0.015	0.056	0.050	0.041	0.041
Average NAB Station	0.033	**N/A**	0.038	**N/A**	

C. Online Video Distributors

1. Introduction

219. Consistent with the *14th Report*, we define OVDs as entities that distribute video content to consumers over the Internet.[777] This section of the Report examines the structure, conduct, and performance of OVDs.

220. In contrast to an MVPD, whose market typically is tied to the provider's own facilities-based infrastructure, or a broadcaster, whose market typically is defined by the station's signal coverage area and DMA, an OVD's geographic market generally covers all regions capable of receiving high-speed Internet service. Consumers can access online video via multiple Internet-enabled devices, including computers, smartphones, tablets, gaming consoles, television sets, and other equipment.

221. In this Report, we examine entities that offer video content akin to the professional programming traditionally offered by broadcast stations, or broadcast and cable networks, and which is usually created or produced by media and entertainment companies using professional-grade equipment, talent, and production crews that hold or maintain the rights for distribution. We distinguish professionally produced content from both (1) semi-professionally produced video, which refers to consumer or user-generated content that has professional or industrial qualities (*e.g.*, shot with professional-grade equipment, using professional talent), and which may be produced exclusively for online audiences; and (2) user-generated content that is publicly available, created or produced by end users, often with little to no brand equity or brand recognition.[778]

222. In the *Comcast-NBCU Order*, the Commission concluded that, regardless of whether online video currently is a complement to or a substitute for MVPD service, it is potentially a substitute product.[779] Public Knowledge commends the Commission for not categorizing OVDs as either "competitors" or "not competitors" to MVPDs. It notes that MVPDs, OVDs, and broadcast television stations are related entities that interact in complex ways with mixed incentives.[780] Public Knowledge

[777] *See supra*, n.4.

[778] *See, e.g.*, *Comcast-NBCU Order*, 26 FCC Rcd at 4298-99, ¶¶ 144-46 & n. 365; Letter from William T. Lake, Chief, Media Bureau, to Michael H. Hammer, Counsel, Comcast Corporation, *et al.*, MB Docket No. 10-56, Attach. at 3-6, 8-9, 14 (May 21, 2010).

[779] *See Comcast-NBCU Order*, 26 FCC Rcd at 4256, ¶ 41. *See also 14th Report*, 27 FCC Rcd at 8721, ¶ 240.

[780] Public Knowledge Comments at 2.

also states that OVDs primarily compete with some non-core services offered by MVPDs, such as video-on-demand,[781] but only represent a substitute for a minority (albeit a growing minority) of viewers.[782] Comcast, Netflix, and Google contend that OVDs primarily complement, rather than supplement, traditional MVPD services.[783] For example, Netflix states that OVDs more closely resemble premium networks such as HBO than MVPD services, which offers entire packages of networks.[784] Verizon and WGAW, however, state that OVDs are emerging as an alternative to traditional MVPD service, including Verizon's FiOS service.[785] ABC Affiliates argue that OVDs compete directly with broadcast television stations to distribute broadcast network programming.[786]

2. OVD Structure

223. We begin our consideration of OVDs with an examination of the industry structure. We focus on several U.S. players in today's OVD marketplace.[787] We then consider horizontal concentration and vertical integration in the market. Next, we describe conditions affecting market entry and rivalry, including an overview of existing regulations and market conditions that might influence entry decisions and rivalry. Finally, we describe recent entry into and exit from the OVD market.

224. *Programmers and Content Producers/Owners*. Individual content owners or programming networks make their programming available online on their websites, sometimes referred to as "verticals" or "portals."[788] The websites may be brand extensions of existing media properties and/or

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[781] Public Knowledge Comments at 3. Likewise in its third quarter 2012 earnings statement, Netflix lists TV Everywhere services as a primary source of competition. Netflix, Inc., *3Q 2012 Earnings Statement*,Oct. 23, 2012, at 6.

[782] Public Knowledge Comments at 3.

[783] Comcast Comments at 31; Netflix Comments at 6-7; Google Reply at 1-2. In addition, Comcast states that while OVDs are complimentary to MVPDs, OVDs have had a significant impact on MVPD behavior and innovation, undercutting any claim that today's video distribution marketplace is not competitive. Comcast Reply at 4-5.

[784] Netflix Comments at 4. *See also* Netflix, Inc., *2Q 2012 Earnings Statement*, July 24, 2012. at 1. For example, Netflix states that audiences of for AMC's *Med Men*, *Breaking Bad*, and *The Walking Dead* as well as FX's *Sons of Anarchy* grew because Netflix's library of prior seasons of these programs enabled new viewers to catch up with the series. Netflix *2Q 2012 Earnings Statement*, July 24, 2012, at 4. *See also* Comcast Comments at 31.

[785] Verizon Comments at 5, 24; WGAW Comments at 15

[786] ABC Affiliates Reply at 2. ABC Affiliates claim that if broadcast network affiliates do not pay license fees to their networks, the networks will migrate programs that would otherwise be on a free, over-the-air broadcast to a subscription-based platform such as an OVD. *Id*. at 3. The *Comcast-NBC U Order* includes a condition relating to the possible migration of major sporting events from broadcast to cable networks as set forth in Section Two of the NBC Affiliates Agreement, but the Commission declined to further restrict the migration of sports programming to OVDs, citing constitutional concerns. *Comcast-NBCU Order*, 26 FCC Rcd at 4305-06, ¶¶ 161-62.

[787] Sandvine, a provider of Internet network equipment and software, measured more than 42,000 unique websites that serve at least one streaming video and 28,000 sites streaming multiple videos online in the United States within one month during Fall 2011. Sandvine, *Global Internet Phenomena Report*, Fall 2011, at 15. We note that these sites may include user-generated video and short-form video.

[788] PC Magazine defines a "portal" as a web '"supersite' that provides a variety of services." It notes that television networks provide general purpose portals, but not e-mail. PC Magazine, *Encyclopedia*, *Definition of: Portal*, http://www.pcmag.com/encyclopedia/term/49528/portal (visited July 3, 2013). See, *e.g.*, ABC, http://watchabc.go.com/ (visited July 3, 2013) ("ABC Network Portal"); NBC, http://www.nbc.com/ (visited Dec. 2, 2012) ("NBC Network Portal"); CBS, http://www.cbs.com/ (visited Dec. 2, 2012) ("CBS Network Portal"). In addition, local television stations often act as OVDs by making video content available online. *See*, *e.g.*, KSTP-TV, *Twin Cities Live*, http://twincitieslive.com/ (visited July. 2, 2013); WPIX-TV, http://www.wpix.com/ (visited Dec 2, (continued….)

contain content unique to the Internet. Many studios, sports leagues, and programming networks also offer mobile applications ("apps").

225. Networks take different approaches to making content available online and have adopted a number of business strategies. For example, CBS places much of its content on its website with full commercial loads and disabled fast-forwarding.[789] FOX places content on its website eight days or longer after it airs on broadcast television.[790] Viacom's Comedy Central, on the other hand, makes episodes available the day they air.[791]

226. Hulu, which is owned by News Corporation, NBCUniversal, and the Walt Disney Company, offers videos from more than 410 content companies, including its joint venture participants as well as The CW, Univision, Lionsgate, Comedy Central, Sony Pictures, and Warner Brothers.[792] Throughout 2011, Hulu increased content on the free Hulu site by 40 percent and increased content on the subscription service Hulu Plus by 105 percent compared with what was available in 2010.[793] Until recently and in a departure from the other major broadcast networks, CBS declined to participate in Hulu, in part, so it could continue to utilize a platform in which it retained all the advertising revenue for its content.[794] In November 2012, however, CBS reached a non-exclusive multiyear licensing agreement with Hulu Plus for access to CBS's library content.[795]

227. In addition to the networks, several studios operate OVDs. Sony is, among other things, a producer and owner of video content as well as a manufacturer of consumer electronics equipment. Launched in 2007, Sony's Crackle OVD service offers a wide variety of free, streaming online content, including movies, television shows, and original programming, much of which comes from Sony's own

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2012). *See also* NAB Comments at 9-10 (noting that most local stations report that they have a three screen approach to news distribution: on-air, online, and mobile).

[789] Laura Martin and Dan Median, *The Future of TV: The Invisible Hand*, Needham & Company, June 22, 2012, at 4.

[790] FOX, http://www.fox.com/the-mindy-project/full-episodes/2710595960/ (visited Oct. 22, 2012). Some of FOX's programming is available earlier for authenticated MVPD subscribers.

[791] *See* Comedy Central, *The Daily Show*, http://www.thedailyshow.com/full-episodes/thu-october-18-2012-barack-obama/ (visited Oct. 12, 2012). Viacom provides access to *The Daily Show* and *The Colbert Report* online immediately after airing due to the topical nature of their content. Laura Martin and Dan Median, *The Future of TV: The Invisible Hand*, Needham & Company, LLC, June 22, 2012 at 4.

[792] Hulu, *About*, http://www.hulu.com/about (visited Oct. 22, 2012) ("More About Hulu"). In October 2012, Providence Equity Partners sold its stake in Hulu for a reported $200 million. Ryan Lawler, *It's Done: Early Hulu Investor Providence Equity Partners Has Sold Its Stake for $200M*, TECHCRUNCH, Oct. 12, 2012, http://techcrunch.com/2012/10/12/providence-equity-sells-its-stake-in-hulu/ (visited Nov. 5, 2012).

[793] Jason Kilar, CEO, Hulu, "2011, 2012 and Beyond," Hulu Blog, Jan. 12, 2012, http://blog.hulu.com/2012/01/12/2011-2012-and-beyond/ (visited Nov. 1, 2012). *See also* Comcast Comments at 27. For a description of Hulu's history, *see 14th Report*, 27 FCC Rcd at 8722, ¶ 246.

[794] Sarah Barry James, *Why CBS Likes Hulu Japan Over Hulu in the US*, SNL KAGAN, Sept. 20, 2011. Hulu's content partners typically keep 70 percent of revenues, with Hulu's owners splitting the remaining 30 percent. Deana Myers, *Hulu Continues on Quick Growth Path*, SNL KAGAN, Oct. 15, 2012.

[795] Hulu and CBS Corporation, *CBS and Hulu Announce Licensing Agreement for Library Content on the Hulu Plus Subscription Service* (press release), Nov. 5, 2012. *See also* Haseeb Ali, *Hulu Strikes Multiyear Content Deal with CBS*, SNL KAGAN, Nov. 5, 2012.

content library.[796] In January 2012, Paramount Pictures launched an UltraViolet streaming and download service which lets users rent or purchase films and store a copy in the cloud.[797] In 2011, Time Warner purchased the movie recommendation portal Flixster,[798] and has since added the ability to stream movies.[799]

228. Major U.S. professional sports leagues, such as MLB, the National Basketball Association ("NBA"), the National Hockey League ("NHL"), and Major League Soccer ("MLS"), participate in the OVD marketplace by offering subscription streaming services for live viewing of full-length games on their respective portals.[800] In contrast, the NFL only offers online access to games via DIRECTV[801] and wireless access via Verizon Wireless.[802]

229. *Affiliates of Online Services*. Yahoo! Inc. operates an Internet portal that aggregates news, entertainment, and other content, and primarily earns revenue from Internet display and search advertising. In October 2011, Yahoo! launched Yahoo! Screen, a revamped portal for its television shows and premium video content.[803] Yahoo!Screen content includes original shows as well as content secured through licensing deals with Hulu, CBS, ABC News, Ultimate Fighting Championship, and special interest video network Revision3.[804] Between June 2011 and June 2012, the total number of unique

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[796] *See* Crackle, *About Crackle*, http://www.crackle.com/about/ (visited Dec. 13, 2012) ("About Crackle"); Crackle, *Crackle FAQ: General Questions*, http://www.crackle.com/outreach/faq#general_questions (visited Dec. 14, 2012) ("Crackle FAQ"); Daniel Frankel, *Sony's Crackle Launches On Xbox Live*, PAIDCONTENT.ORG, Feb. 1, 2012, http://paidcontent.org/article/419-sonys-crackle-launches-on-xbox-live/ (visited Dec. 14, 2012) ("Crackle on Xbox").

[797] Viacom, Paramount Pictures, *Paramount Movies, What is Ultraviolet*, http://www.paramountmovies.com/index.html?pageId=195 (visited July 3, 2013). *See also* Jeff Cahbot, *Paramount Launches Online UltraViolet Streaming & Download Service*, HDREPORT, Jan. 26, 2012, http://hd-report.com/2012/01/26/paramount-launches online-ultraviolet-streaming-download-service/ (visited July 3, 2013). Cloud computing is a general term for delivering computer services over the Internet. For consumers, cloud competing has two major benefits: (1) a user does not need to invest in a computer and software to host data; and (2) the user does not need to maintain the systems. Amazon and Google are key players in cloud computing. Harry Newton and Steve Schoen, NEWTON'S TELECOM DICTIONARY 306 (Flatiron Publishing) (27th ed. 2013).

[798] Time Warner Inc., *Warner Bros. Home Entertainment Group to Acquire Flixster* (press release), May 4, 2011.

[799] Viacom, *Paramount Home Media Distribution and Warner Bros. Home Entertainment Announce Home Media Distribution Deal for the U.S. and Canada and a Joint Commitment to Flixster* (press release), Oct. 4, 2012.

[800] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 10-11. NBA, MLB, and NHL games are also available via Apple's digital media receiver, Apple TV. *See* Dan Frommer, *Apple TV Now Has MLB.TV And NBA Live Game Streaming*, BUSINESS INSIDER, Mar. 9, 2011, http://articles.businessinsider.com/2011-03-09/tech/30032181_1_boxee-roku-mlb-tv (visited Dec. 13, 2012); Jonathan Seff, *Apple TV 4.4 Update Adds Photo Stream, NHL, and More*, MACWORLD, Oct. 12, 2011, http://www.macworld.com/article/162974/2011/10/apple_tv_4_4_update_adds_photo_stream_nhl_and_more.html (visited Dec. 13, 2012).

[801] DIRECTV, *Sports: NFL Sunday Tic*ket, http://www.directv.com/DTVAPP/content/sports/nfl (visited Dec. 3, 2012).

[802] Verizon Wireless, *NFL Mobile Kicks Off With Verizon Wireless in April* (press release), March 9, 2010.

[803] Ben Parr, *Yahoo Launches Revamped Premium Video Portal*, MASHABLE, Oct. 4, 2011, http://mashable.com/2011/10/04/yahoo-screen/ (visited Dec. 12, 2012).

[804] *See id.*; Revision 3, *Our Company: Company* Overview, http://revision3.com/company (visited July 3, 2013). Revision3 is an Internet television network that produces original content, including lifestyle and technology video shows geared to 13-34 year old males. *See* Andy Plesser, *Revision3 Is "Biggest" Internet TV Network With 70* (continued….)

viewers watching Yahoo!'s online video advertisements grew 12.3 percent, compared to total industry growth of 9.3 percent.[805] In November 2012, Yahoo! extended its partnership with Samsung Electronics Company to integrate Yahoo!'s broadcast interactivity platform into Samsung's 2012 Smart TVs.[806] In December 2012 Yahoo! reached an agreement to distribute content from NBC Sports Group.[807]

230. Facebook, Inc. operates a social networking site, and primarily earns revenues from online advertising. In 2011, Facebook entered the OVD market and began offering online movie rentals for a fee, reaching deals with Warner Brothers, Miramax, and Universal Studios to distribute movies via apps. As of November 2011, the apps from Miramax and Warner Brothers had received 3,000 monthly users, earning about $9,000 per month.[808]

231. *Affiliates of Retailers, Manufacturers, and Other Businesses*. Prior to July 2011, Netflix combined its streaming and DVDs-by-mail operations and subscribers could receive both services under a single hybrid plan.[809] As a result of changes in its pricing and plan structure, Netflix no longer offers the hybrid plan. Consumers who wish to receive DVDs-by-mail and watch streaming content must elect two separate subscription plans.[810] Netflix indicates that it continually adds new movies and television series to its content offerings, and is particularly interested in adding popular television series.[811] In particular, in Summer and Fall 2011, it announced distribution agreements with DreamWorks Animation, Discovery Communications, AMC Networks, Disney, The CW, and NBCUniversal.[812] In December 2012, it reached a distribution agreement to become the exclusive U.S. subscription service for first-run movies from the Walt Disney Studios beginning in 2016.[813] On February 1, 2013, Netflix introduced its original

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Million Monthly Video Views, BUSINESS INSIDER, May 19, 2011, http://articles.businessinsider.com/2011-05-19/tech/30038978_1_revision3-video-views-network (visited Dec. 12, 2012). According to figures provided by Revision3's CEO in May 2011, the network had 17 million monthly unique viewers who watched 70 million video views. *See id.* GoodMorningAmerica.com, which was launched on Yahoo!, is the top morning news website. Will Richmond, *Yahoo Has Become a Magnet for Video Syndication by Big Media*, VIDEONUZE, Dec. 10, 2012, http://www.videonuze.com/article/yahoo-has-become-a-magnet-for-video-syndication-by-big-media (visited Dec. 12, 2012).

[805] Perkin di Grazia, *Yahoo! Remains Flat as Market Expands*, SNL KAGAN, Aug. 2, 2012.

[806] Yahoo!, *Yahoo! And Samsung Form Multi-Year Partnership to Deliver Interactive TV* (press release), Nov. 5, 2012. Television viewers see on-screen prompts from Yahoo! that run alongside television programs that provide access to trivia, additional show information, gaming, and commerce. Showtime Networks and the National Geographic Channel are two of the initial television programming partners.

[807] Yahoo!, *Yahoo! Sports, NBC Sports Group Team Up for News, Fantasy, and Video Coverage of Sporting Events* (press release), Dec. 9, 2012.

[808] Perkin di Grazia, *Facebook Not Delivering for Movie Studios*, SNL KAGAN, Nov. 23, 2011.

[809] Netflix, *SEC Form 10-Q/A* for the Quarter Ended Sept. 30, 2012, at 3.

[810] In July 2011, Netflix introduced DVD-only plans and separated the combined plans, resulting in a price increase for subscribers to the hybrid plan. In Fall 2011, the company announced the rebranding of its DVD service and the separation of its DVD-by-mail and streaming websites. Due to negative consumer reaction, subsequently, Netflix retracted its plans to rebrand and to separate the DVD-by-mail and streaming websites. Netflix *SEC Form 10-Q/A* for the Quarter Ended Sept. 30, 2012, at 3. *See also 14th Report*, 27 FCC Rcd at 8725, 8752, ¶¶ 252, 325.

[811] Netflix *3Q 2012 Earnings* Statement, Oct. 23, 2012, at 3.

[812] Comcast Comments at 26-27. *See also* Netflix, Inc., *NBCUniversal and Netflix Renew Multi-Year TV And Film Content Agreement* (press release), July 13, 2011.

[813] The Walt Disney Studios, *Netflix and The Walt Disney Studios Announce Multi-Year Premium Pay TV Window Agreement in the United States* (press release), Dec. 4, 2012.

series, *House of Cards*.[814] Netflix plans to release additional original content and it debuted season four of *Arrested Development* on May 26, 2013.[815]

232. Several technology companies, notably Amazon, Apple, Google, and Microsoft, also serve as OVDs. Each company takes a slightly different approach to integrating their online video services with storage services, apps, and devices to attract and retain customers.[816]

233. Amazon, primarily an online retailer, announced in 2011 that customers who pay an annual fee for the company's Amazon Prime service could receive commercial-free, instant streaming of thousands of movies and television shows at no extra charge.[817] To expand its Amazon Prime Instant Video service, Amazon entered distribution agreements with CBS, Disney, Viacom, Discovery, and NBCUniversal.[818] In August 2012, Amazon announced that its Prime Instant Video library had reached 22,000 titles, an increase from 5,000 titles at its 2005 launch and a 70 percent increase in titles in 2012, with 96.4 percent of its titles viewed each week.[819] In addition, Amazon offers more than 100,000 movies and television shows for rent or purchase.[820] In August 2012, Amazon introduced an Instant Video app for the iPad, enabling customers to stream or download Amazon Instant Video movies or television episodes from their video library directly on an iPad.[821] Amazon's OVD content is available on multiple devices,[822] but not as many as Hulu Plus or Netflix.[823] The Amazon Kindle carries Amazon's OVD

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[814] Netflix reportedly paid producer David Fincher $100 million to create two thirteen-episode seasons, releasing all thirteen episodes of the first season at once. Nancy Haas, *And the Award for the Next HBO Goes to . . .* , GQ, February 2013, http://www.gq.com/entertainment/movies-and-tv/201302/netflix-founder-reed-hastings-house-of-cards-arrested-development?currentPage=1 (visited April 19, 2013). *See also infra*, Sec. III.C.3.b.

[815] Todd Spangler, , *"House of Cards" Had only "Gentle" Impact on Netflix Subscription Growth*, VARIETY, April 22, 2013, http://variety.com/2013/digital/news/netflix-originals- have gentle-impact-on-sub-growth-1200407278/ (visited April 23, 2013). FOX originally aired the first three seasons of *Arrested Development*, but then canceled the series in 2006. Nancy Haas, *And the Award for the Next HBO Goes to . . .* , GQ, February 2013, http://www.gq.com/entertainment/movies-and-tv/201302/netflix-founder-reed-hastings-house-of-cards-arrested-development?currentPage=1 (visited April 19, 2013).

[816] Avinash Celestine, *Tech Wars Take Microsoft, Apple and Amazon Out of the Their Comfort Zones*, THE ECONOMIC TIMES, Nov. 4, 2012, http://articles.economictimes.indiatimes.com/2012-11-04/news/34893363_1_surface-tablet-windows-rt-kindle-fire, (visited Nov. 12, 2012).

[817] *See 14th Report*, 27 FCC Rcd at 8726, ¶ 254.

[818] Comcast Comments at 27-28.

[819] Amazon.com, Inc., *Amazon Prime Crosses Big Milestone: More Items Are Now Shipped with Prime Free Two-Day Shipping Than with Free Super Saver Shipping* (press release), Aug. 27, 2012.

[820] Amazon.com, Inc., *Amazon Instant Video*, *http://www.amazon.com/Instant-Video/b/ref=topnav_storetab_mov_aiv?ie=UTF8&node=2858778011* (visited Nov. 1, 2012).

[821] Amazon.com, Inc., *Amazon Instant Video App Now Available for iPad* (press release), Aug. 1, 2012.

[822] *See* Amazon.com, *Watch Anywhere*, http://www.amazon.com/gp/feature.html?ie=UTF8&docId=1000663511 (visited Dec. 14, 2012); Amazon.com, *Help, Watching Amazon Instant Video*, http://www.amazon.com/gp/help/customer/display.html/ref=hp_3757_watchfaq?nodeId=200238920 (visited Dec. 14, 2012); Amazon.com, *Help, Amazon Instant Video*, http://www.amazon.com/gp/help/customer/display.html/ref=hp_13819211_aiv?nodeId=3757 (visited Dec. 14, 2012).

[823] *See infra*, Sec. III.C.3.

offerings. Amazon sometimes earns a small margin on the Kindle but sometimes reports a loss.[824] In 2011, Amazon launched a cloud-based storage service, Cloud Drive, which enables users to store 5 gigabytes (GB) of video or music remotely for free, and store 20 GB of data in exchange for an album purchase from Amazon.com or $20 per year, with additional storage plans for an extra fee.[825]

234. Apple's primary business is selling devices. It also sells content via its integrated OVD service, iTunes,[826] including movies and television episodes.[827] In 2007, the company launched Apple TV, a set-top box that wirelessly connects Macs or PCs to television sets, enabling viewers to watch movies or TV programs purchased on iTunes.[828] In 2008, Apple introduced its iTunes Movie Rentals service, offering movie rentals from all major studios for viewing on computers, Apple mobile devices, and Apple TVs.[829] Using Apple TV and iTunes, consumers can view content from YouTube,[830] Netflix,[831] MLB, the NBA, the NHL, and Hulu Plus in HD.[832] Per the iTunes revenue sharing model, these OVDs give Apple a percentage of their monthly subscriber fees.[833] Apple TV has become the best-

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[824] *See* Avinash Celestine, *Tech Wars Take Microsoft, Apple and Amazon Out of the Their Comfort Zones*, THE ECONOMIC TIMES, Nov. 4, 2012, http://articles.economictimes.indiatimes.com/2012-11-04/news/34893363_1_surface-tablet-windows-rt-kindle-fire, (visited Nov. 12, 2012). One technology blogger writes "Amazon can give away the razor because they're already in the business of selling blades. The other guys don't even have blades to sell." John Gruber, *Amazon's New Kindles*, DARING FIREBALL, Sept. 28, 2011, http://daringfireball.net/2011/09/amazons_new_kindles (visited Nov. 12, 2012).

[825] Amazon.com, *Introducing Amazon Cloud Drive, Amazon Cloud Player for Web, and Amazon Cloud Player for Android* (press release), March 29, 2011, http://www.amazon.com/gp/dmusic/marketing/CloudPlayerLaunchPage; *see also* Amazon Cloud Player, http://amazon.com/gp/dmusic/marketing/CloudPlayerLaunchPage (visited July 5, 2013).

[826] *See 14th Report*, 27 FCC Rcd at 8725-6, ¶ 253. Avinash Celestine, *Tech Wars Take Microsoft, Apple and Amazon Out of the Their Comfort Zones*, THE ECONOMIC TIMES, Nov. 4, 2012, http://articles.economictimes.indiatimes.com/2012-11-04/news/34893363_1_surface-tablet-windows-rt-kindle-fire, (visited Nov. 12, 2012).

[827] Apple Inc., *Apple Announces iTunes 6 With 2,000 Music Videos, Pixar Short Films & Hit TV Shows* (press release), Oct. 12, 2005.

[828] Apple Inc., *Apple TV Coming to Your Living Room* (press release), Jan. 9, 2007. At the time, users could choose from over 250 feature-length movies and 350 television programs in near DVD quality.

[829] Apple Inc., *Apple Premieres iTunes Movie Rentals With All Major Film Studios* (press release), Jan. 15, 2008.

[830] Apple Inc., *YouTube Coming to Apple TV* (press release), May 30, 2007.

[831] Bill Holmes, Vice President of Business Development, Netflix, *Netflix Comes to Apple TV*, Netflix U.S. and Canada Blogs, Aug. 31, 2010, http://blog.netflix.com/2010/08/netflix-comes-to-apple-tv.html (visited Nov. 1, 2012).

[832] Apple Inc., *Apple TV: What's on Apple TV*, http://www.apple.com/appletv/whats-on/ (visited Nov. 1, 2012). Apple introduced the version of Apple TV that enables high definition viewing in March 2012. Apple Inc., *Apple Brings 1080p High Definition to New Apple TV* (press release), March 7, 2012. *See also* Comcast Comments at 28.

[833] Perkin di Grazia, *Hulu Gives in to Apple TV Demands*, SNL KAGAN, Aug. 13, 2012. Like Hulu, Apple retains 30 percent of revenues, with the rest going to its content partners. Laura Martin and Dan Medina, *The Future of TV: The Invisible Hand*, Needham & Company, LLC, June 22, 2012, at ii. In August 2012, Apple received a patent for an application that would enable Apple TVs to have the functionality of a cable set-top box, *i.e.*, an on-screen guide, the ability to record programs and the ability to watch cable networks live. Donna Tam, *Apple Gets a Patent for an Apple TV Cable Box*, CNET NEWS, Aug. 14, 2012, http://news.cnet.com/8301-13579_3-57493033-37/apple -gets-a-patent-for-an-apple-tv-cable-box/ (visited Nov. 2, 2012).

selling set-top connected device in the U.S. market, with 2.8 million units sold in 2011.[834] In March 2012, Apple announced that its iCloud service would enable consumers to store movies and television programs remotely, and wirelessly connect their Apple TVs to iPhones, iPads, Macs, or PCs, to facilitate viewing on any of these devices.[835]

235. Google, primarily an online search business, purchased Motorola Mobility, a manufacturer of mobile devices and MVPD set-top boxes in May 2012.[836] YouTube, which Google purchased in November 2006, has an extensive catalog of online movie rental content.[837] In October 2010, Google launched Google TV, an app for Internet-enabled television sets, Blu-ray players, and set-top boxes designed to facilitate viewers' access to online video.[838] In March 2012, Google introduced a cloud-based entertainment store, Google Play. Google Play is compatible with smartphones and tablets using Google's Android operating system.[839] In July 2012, Google announced that it was adding thousands of episodes of cable and broadcast television programs from major studios, including NBCUniversal, ABC Studios, and Sony Pictures to Google Play.[840] In September 2012, Google reached

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[834] Perkin di Grazia, *Hulu Gives in to Apple TV Demands*, SNL KAGAN, Aug. 13, 2012. Some reports indicate that Apple has been speaking with MVPDs to develop a set-top box for live television that would aggregate OVDs. Julia Boorstin, *Apple TV May Not Be So Revolutionary*, CNBC, Aug. 16, 2012, http://finance.yahoo.com/news/apple-tv-may-not-revolutionary-161848693.html (visited Nov. 1, 2012). WGAW and Public Knowledge contend that networks' and MVPDs' reluctance to enable Apple to distribute programming on an a la carte basis is delaying Apple's entry. WGAW Comments at 16-17; Public Knowledge White Paper at 9.

[835] Apple Inc., *Apple Brings 1080p High Definition to New Apple TV* (press release), March 7, 2012. Apple is reportedly purchasing cloud storage services from Microsoft and Amazon on a wholesale basis to avoid the cost and delay of building its own services that could run anywhere from $100 million to $1 billion. Gavin Clarke, *Apple's iCloud Runs on Microsoft and Amazon Services*, THE REGISTER, Sept. 2, 2011, http://www.theregister.co.uk/2011/09/02/icloud_runs_on_microsoft_azure_and_amazon/ (visited Dec. 12, 2012).

[836] Todd Spangler, *Google Wraps Up Motorola Mobility*, MULTICHANNEL NEWS, May 28, 2012. Google has stated that it was interested in acquiring Motorola's patent portfolio to protect the Android ecosystem. *Google, Inc. Acquisition of Motorola Mobility Holdings, Inc. by Google, Inc. Call*, Corrected Transcript, FACTSET CALLSTREET, LLC, Aug. 15, 2011. Subsequent reports suggested that Google planned to sell the Unit within Motorola Mobility that sells set-top boxes and other equipment to MVPDs. Matthew Campbell, Serena Saitto, and Brian Womack, *Google Said to Tap Barclay's to Sell Motorola's Home Business*, BLOOMBERG, Aug. 29, 2012, http://www.bloomberg.com/news/2012-08-29/google-said-to-hire-barclays-to-sell-motorola-s-home-business.html (visited Nov. 13, 2012).

[837] *See 14th Report*, 27 FCC Rcd at 8724, ¶ 249.

[838] Richard Lawler, *Sony Google TV HDTVs and Blu-Ray Player Launch Details Revealed*, ENGADGET, Oct. 12, 2010, http://www.engadget.com/2010/10/12/sony-google-tv-hdtvs-and-blu-ray-player-launch-details-revealed/ (visited Dec. 4, 2012). Since Google launched Google TV, it added a TV and Movies app to enable users to browse content from Netflix, YouTube, and Amazon.com among other sources. Kyle Daly, *Who Will Win TV Tech Wars*, SNL KAGAN, Nov. 4, 2011. It has nonetheless had difficulty securing cooperation from content aggregators such as the broadcast networks, and OVDs such as Hulu and MLB.tv. Andrew Wallenstein and Steve Clarke, *Google Revs TV Reboot*, DAILY VARIETY, June 27, 2012.

[839] Jamie Rosenberg, Director of Digital Content, Google, Inc., *Introducing Google Play: All Your Entertainment, Anywhere You Go*, Google Official Blog, March 6, 2012, *http://googleblog.blogspot.com/2012/03/introducing-google-play-all-your.html#!/2012/03/introducing-google-play-all-your.html* (visited Nov. 1, 2012).

[840] Andy Rubin, Senior Vice President of Mobile and Digital Content, Google, Inc., *Android @I/O: The Playground is Open*, Google Official Blog, June 27, 2012, http://googleblog.blogspot.com/2012/06/android-io-playground-is-open.html#!/2012/06/android-io-playground-is-open.html (visited Nov. 1, 2012). *See also* Comcast Comments at 29.

an agreement with Twentieth Century Fox to make television programs and movies available for rent or purchase on Google Play and YouTube.[841] In October 2012, Google announced that it would enable users to rent or purchase movies and television programs on Google TV.[842]

236. Microsoft, primarily a software company, introduced Zune in 2006, an integrated online music store and device which enabled customers to purchase and listen to music.[843] It introduced an HD version in 2009 that added video capabilities.[844] At that time, the Zune player accounted for two percent of the music-player market.[845] In June 2011, Microsoft discontinued manufacturing Zune players, concentrating instead on Windows Phones.[846] Xbox game consoles are another part of Microsoft's entertainment strategy.[847] As of October 2012, Microsoft had sold 67 million Xbox consoles worldwide.[848] It has more than 62 television and entertainment partners for the Xbox 360, including OVDs Netflix, Hulu Plus, and YouTube.[849]

237. Wal-Mart, primarily a retailer of consumer goods, owns Vudu, a service that provides consumers with a television set-top box enabling instant viewing of movies rentals and purchases.[850] As

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[841] Jonathan Zepp, Manager of TV & Film Content Partnerships, Google, Inc., *More Movies and TV Shows from Twentieth Century Fox Coming to Google Play and YouTube*, Google Official Blog, Sept. 18, 2012, http://googleblog.blogspot.com/2012/09/more-movies-and-tv-shows-from-twentieth.html (visited Nov. 12, 2012).

[842] Ambarish Kenghe, TV Product Manager, Google, Inc., *Google Play Movies, TV Shows, and Music Now on Google TV*, Google Official TV Blog, Oct. 8, 2012, http://googletv.blogspot.co.uk/2012/10/google-play-movies-tv-shows-and-music.html (visited Nov. 1, 2012).

[843] Microsoft News Center, *Welcome to the Social*, Nov. 13, 2006, http://www.microsoft.com/en-us/news/features/2006/nov06/11-13Zune.aspx (visited Nov 16, 2012).

[844] Nick Wingfield, *R.I.P. Zune*, N.Y. TIMES, June 4, 2012, http://bits.blogs.nytimes.com/2012/06/04/r-i-p-zune/ (visited Nov. 12, 2012).

[845] Farhad Manjoo, *The Flop That Saved Microsoft*, SLATE.COM, Oct. 26, 2012, http://www.slate.com/articles/technology/technology/2012/10/microsoft_zune_how_one_of_the_biggest_flops_in_tech_history_helped_revive.html (visited Nov. 12, 2012). The lack of market share meant that developers were less inclined to develop apps for Zune, making it less attractive for consumers. *Id.*

[846] Shawn Night, *Microsoft Discontinues Zune Media Player, Shifts Focus to Windows Phone*, TECHSPOT, Oct. 4, 2011, http://www.techspot.com/news/45728-microsoft-discontinues-zune-media-player-shifts-focus-to-windows-phone.html (visited Nov. 12, 2012).

[847] Nick Wingfield, *R.I.P. Zune*, N.Y. TIMES, June 4, 2012, http://bits.blogs.nytimes.com/2012/06/04/r-i-p-zune/ (visited Nov. 12, 2012).

[848] Todd Spangler, *The Incredible, Shrinking TV Screen: What the Tablet Revolution Means for the Pay TV Industry*, MULTICHANNEL NEWS, Oct. 29, 2012.

[849] Microsoft, *Xbox: Video*, http://www.xbox.com/en-US/entertainment/video?xr=shellnav (visited Nov. 12, 2012). In addition, MVPDs Comcast and FiOS and cable networks HBO and ESPN are offering access to video via Xbox as part of their TV Everywhere services. Todd Spangler, *The Incredible, Shrinking TV Screen: What The Tablet Revolution Means for the Pay TV Industry*, MULTICHANNEL NEWS, Oct. 29, 2012. *See also* George Winslow, *A Divide That's Not as Deep As You Think*, BROADCASTING & CABLE, Sept. 17, 2012.

[850] *See 14th Report*, 27 FCC Rcd at 8727, ¶ 256. *See also* Brad Stone, *Wal-Mart Adds Its Clout to Movie Streaming*, N.Y. TIMES, Feb. 22, 2010, http://www.nytimes.com/2010/02/23/technology/23video.html?partner=rss&emc=rss (visited Dec. 14, 2012) ("Wal-Mart Clout"); Azadeh Ensha, *Vudu, Roku, Boxee: What's the Difference?*, N.Y. TIMES, Mar. 24, 2009, http://gadgetwise.blogs.nytimes.com/2009/03/24/vudu-roku-boxee-whats-the-difference/ (visited Dec. 14, 2012); Brad Stone, *Vudu Casts Its Spell on Hollywood*, N.Y. TIMES, Apr. 29, 2007, http://www.nytimes.com/2007/04/29/business/yourmoney/29vudu.html (visited Dec. 14, 2012).

of 2012, Vudu offered its interactive movie store as a feature that electronics manufacturers could build into devices,[851] many available for sale at Wal-Mart stores. In March 2012, Wal-Mart and Vudu announced an in-store "disc-to-digital" service that allows customers to bring DVD and Blu-ray movies from participating studios, including Paramount, Sony, Fox, Universal, and Warner Brothers, to Wal-Mart stores and, for a fee, receive digital access to those same titles on any Internet-connected device through Vudu.com.[852] For an additional fee, customers could upgrade their DVD movies to HD digital copies. In October 2012, Wal-Mart announced that it would actively market Boxee Inc.'s set-top devices[853] and that Boxee would feature Wal-Mart's Vudu service on its home page.[854]

238. Best Buy, primarily an electronics retailer, offers the CinemaNow service, allowing users to rent or purchase movies and television programs.[855] Users can access CinemaNow content via a variety of devices, some of which can be purchased at Best Buy, including computers, Internet-enabled television sets, and Blu-ray players.[856] Once users begin to watch movie rentals, they have 24-48 hours to complete the process, depending on the movie.[857]

239. *MVPD-Affiliated OVDs.* Several MVPDs offer OVD services to non-subscribers.[858] In May 2011, DIRECTV announced that it would make its NFL Sunday Ticket games available to non-subscribers via Sony PlayStations and broadband, but only if they live in areas where DIRECTV service is unavailable, such as apartment buildings or in residences with poor sightlines to a satellite signal.[859] As of September 2012, this service for non-subscribers costs $300 per season.[860] In May 2012, DISH Network began offering DISHWorld, an online service that delivers a package of international channels to Roku devices.[861] In August 2012, it enabled subscribers to access the programming on their Macs or

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[851] *See* Vudu, *VUDU is Available on Virtually Every Internet-Connected Blu-ray Player and HDTV on the Market*, http://www.vudu.com/devices.html (visited Dec. 15, 2012) ("Vudu Devices"); Vudu, *VUDU Expands Distribution to HDTVs and Blu-ray Players from LG, Mitsubishi, Samsung, SANYO, Sharp, Toshiba and VIZIO* (press release), Jan. 8, 2010.

[852] Wal-Mart Stores, Inc., *Retailer Partners with Hollywood to Increase Value of Movie Ownership with Any Time Access to DVDs* (press release), March 13, 2012.

[853] James McQuivey, *Wal-Mart Uses Boxee TV to Accelerate Cord-Shaving*, Forrester Research, Nov. 1, 2012, http://blogs.forrester.com/james_mcquivey/12-11-01-wal_mart_uses_boxee_tv_to_accelerate_cord_shaving (visited Nov. 12, 2012). For additional information about, Boxee, *see infra*, ¶ 242.

[854] Boxee, *Home*, http://www.boxee.tv/ (visited on July 3, 2013).

[855] *See 14th Report*, 27 FCC Rcd at 8727, ¶ 257.

[856] *See id.*; Best Buy, *CinemaNow: About Us*, www.cinemanow.com/aboutUS (visited July 3, 2013).

[857] Best Buy, *CinemaNow: Terms of Service*, http://www.cinemanow.com/termsOfService (visited July 3, 2013).

[858] *See supra*, Sec. III.A.3.c (describing MVPDs' TV Everywhere offerings).

[859] DIRECTV, LLC, *NFL and DIRECTV Extend NFL Sunday Ticket Agreement Through 2014 Season*, March 24, 2009 (press release); DIRECTV, LLC, *DIRECTV's Playbook Includes New Options for Its Exclusive NFL Sunday Ticket Service* (press release), Aug. 17, 2011.

[860] John Guadiosi, *Sony Discounts DirecTV NFL Sunday Ticket on PlayStation Network*, FORBES, Sept. 8, 2012, http://www.forbes.com/sites/johngaudiosi/2012/09/08/sony-discounts-directv-sunday-ticket-on-playstation-network/ (visited Dec. 4, 2012).

[861] DISH Network LLC, *DISH and Roku Ink Strategic Partnership for International Programming* (press release), May 23, 2012.

PCs.[862] DISHWorld subscribers can access 72 channels in seven languages and need not be subscribers of the DISH DBS service. Programming packages start at $14.99 per month; for an additional $10, consumers can watch content on up to three devices.[863]

240. In February 2012, Verizon announced a joint venture with Redbox operator Coinstar to launch an online streaming video service.[864] The joint venture, intended to challenge Netflix and Amazon's subscription services, offers subscription streaming, movie sales, and rentals, along with DVDs from Redbox's 36,800 kiosks nationwide.[865] Called Redbox Instant by Verizon ("Redbox Instant"), a beta test version was launched in December 2012 for $8 per month providing unlimited access to its subscription video catalog. For an additional $9 per month, a subscriber can add four Redbox credits that can be redeemed for Redbox DVD rentals.[866] The streaming service offers newly released movies from premium network EPIX.[867] The sale and rental services include movies from NBCUniversal, Paramount Pictures, Relativity, and Warner Brothers Home Entertainment.[868] When fully launched, Redbox Instant will be offered online and through the Google TV set-top box as well as Internet-enabled television sets, Blu-ray players, tablets, and mobile devices from Apple, Google, Samsung, and LG.[869]

241. *OVD Aggregators*. Several OVDs function as aggregators, offering apps, specialized set-top boxes, or other equipment that enable viewing of online content on television sets. For example, Roku manufactures set-top boxes designed to enable the streaming of television shows and movies to television sets.[870] It offers nearly 500 channels, with apps for content partners including Netflix, Hulu Plus, Amazon, Sony's Crackle, and Vudu.[871] Roku offers streaming content from OVD services, such as

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[862] DISH Network LLC, *DISH Enhances Its International IPTV Services* (press release), Aug. 28, 2012. *See also* Comcast Comments at 29-30.

[863] Haseeb Ali, *DISH Expands IPTV Services*, SNL KAGAN, Aug. 28, 2012.

[864] Verizon Comments at 24; Comcast Comments at 30. *See also* David Goldman, *Verizon and Redbox Team Up to Battle Netflix*, CNN MONEY, Feb. 6, 2012, http://money.cnn.com/2012/02/06/technology/verizon_redbox/index.htm (visited Oct. 22, 2012) ("Verizon and Redbox Team Up"); Verizon, *Verizon and Coinstar's Redbox Form Joint Venture to Create New Consumer Choice for Video Entertainment* (news release), Feb. 6, 2012, http://newscenter.verizon.com/press-releases/verizon/2012/verizon-and-coinstars-redbox.html (visited Oct. 22, 2012). Verizon and Redbox hold, respectively, 65 and 35 percent ownership shares of the joint venture. *Id.*

[865] Cliff Edwards and Michael White, *Redbox-Verizon Streaming to Challenge Netflix by Year-End*, BLOOMBERG NEWS, Sept. 22, 2012, http://www.bloomberg.com/news/2012-09-21/redbox-verizon-streaming-to-start-in-time-for-christmas.html (visited Oct. 22, 2012). *See also* Comcast Comments at 30.

[866] Redbox Instant by Verizon, *Redbox Instant by Verizon Unveils Details of Disc + Digital Movie Service* (press release), Dec. 12, 2012.

[867] *Id.*

[868] *Id.*

[869] *Id.*

[870] Roku, http://www.roku.com/, (visited Oct. 23, 2012); Roku, *Now Playing*, http://www.roku.com/channels#!now-playing, (visited July 3, 2013).

[871] Perkin di Grazia, *The Future According to Roku*, SNL KAGAN, March 28, 2012. In addition, HBO Go is available to select MVPD subscribers on an authenticated basis. For example, Time Warner Cable allows its customers who subscribe to HBO Go to access the HBO Go app on Roku. Jeff Simmermon, Time Warner Cable, Director, Digital Communications, *Our Customers Can Use HBO Go on Roku, Xbox, and Samsung Smart TVs*, Time Warner Cable Untangled Blog, May 17, 2012, http://www.twcableuntangled.com/2012/05/our-customers-can-use-hbo-go-on-roku-xbox-and-samsung-smart-tvs/ (visited Nov. 2, 2012).

Netflix and Hulu Plus, apps that offer content from individual cable or broadcast network portals, and new media brands such as Glenn Beck TV.[872] In Fall 2012, Roku introduced the streaming stick, which plugs into a select number of Internet-enabled television sets and has built-in WiFi that allows customers to control Roku with a television remote.[873]

242. Boxee manufactures set-top boxes designed to enable the streaming of television and movies to television sets.[874] In October 2012, Boxee launched Boxee TV that for $99 integrates apps from major OVDs, tuning to broadcast television channels, the ability to watch programs on phones, tablets, and computers, and unlimited DVR storage for an extra $9.99 per month.[875] The box is available in Wal-Mart stores as well as the Boxee website.[876] Boxee TV comes with its own dual tuner that only picks up signals which a viewer can receive via an antenna within his or her household.[877]

a. Horizontal Concentration and Vertical Integration

243. *Horizontal Concentration.* As we discussed in the *14th Report*, it is difficult to measure the horizontal concentration in the OVD marketplace.[878] Players continue to enter and exit and business models, including those for advertising-based, subscription, and rental OVDs, are diverse and evolving. Even if it were possible to define or categorize all of the players in the OVD marketplace, an analysis of horizontal concentration would still be difficult because ratings/viewing information is not standardized. Many OVDs are integrated with subsidiaries or divisions of companies with multiple non-OVD business lines, and several other OVDs, such as Hulu, are privately owned. Of the major players, only Netflix publicly reports subscriber and revenue figures for its online streaming service. Moreover, due to the lack of standardized metrics for measuring viewership,[879] measuring online video viewership raises unique challenges. In addition, services that measure online video viewership generally do not report professional and non-professional video content ratings separately on a systematic basis.

244. *Vertical Integration.* As discussed above, many OVDs are vertically integrated with studios, programmers, providers of infrastructure, and device manufacturers.[880] For example, Comcast, which is an MVPD and an ISP, has ownership interests in Universal Studios, NBC and Telemundo

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[872] Perkin di Grazia, *The Future According to Roku*, SNL KAGAN, March 28, 2012.

[873] Haseeb Ali, *Roku Secures $45M in Strategic Investment from News Corp., Other Investors*, SNL KAGAN, July 26, 2012; Roku, Inc., *Roku Products: Roku Streaming Stick*, http://www.roku.com/streamingstick#roku-ready (visited Nov. 2, 2012).

[874] Boxee, *About Boxee*, http://www.boxee.tv/#/company/about (visited Nov. 2, 2012).

[875] Boxee, *Features*, http://www.boxee.tv/#/features (visited Nov. 2, 2012); Sarah Barry James, *A More Broadcaster-Friendly Boxee*, SNL KAGAN, Oct. 18, 2012. As a result of Samsung's acquisition of Boxee, announced on July 3, 2013, Boxee informed its users that its Cloud DVR service would be terminated on July 10, 2103. *See* Joan E. Solsman, *Samsung Buys* Boxee, CNET News, July 3, 2013, http://news.cnet.com/8301-1023 3-57592174-93/samsung-buys-boxee/ (visited July 12, 2013); Boxee, http://www.boxee.tv/ (visited July 8, 2013).

[876] Sarah Barry James, *Boxee Going After "Mainstream Audience" with Wal-Mart*, SNL KAGAN, Nov. 1, 2012.

[877] Sarah Barry James, *A More Broadcaster-Friendly Boxee*, SNL KAGAN, Oct. 18, 2012.

[878] *See 14th Report*, 27 FCC Rcd at 8727-28, ¶¶ 258-60.

[879] *See also infra*, ¶ 293.

[880] Public Knowledge notes that a single company may control entities in multiple strategic groups. Public Knowledge Comments at 6. *See also 14th Report*, 27 FCC Rcd at 8728, ¶ 261.

broadcast television networks and stations, and the OVD Hulu.[881] Likewise, Verizon owns both the FiOS broadband and MVPD service and an OVD through its joint venture with Redbox. CBS owns and operates broadcast and cable networks as well as OVD TV.com and portals of CBS and The CW. In addition, Netflix has invested in its own content delivery network, while Amazon, Microsoft, and Google own and operate servers that enable them to provide online video storage services to consumers. Several OVDs, including Apple, Amazon, Google, Microsoft, and Sony, also manufacture devices such as game consoles, tablets, and online video set-top boxes.

b. Conditions Affecting Entry and Exit

245. Below, we discuss the regulatory conditions potentially affecting entry and competition in this market. Thereafter, we describe the market, or non-regulatory, conditions that may influence entry decisions and competition, including the need for OVDs to acquire rights to content and to secure sufficient, reasonably priced Internet access for transmission of OVD content. We then describe recent entry and exit from the market.

(i) Regulatory Conditions

246. *Definition of an MVPD*. In 2012, the Media Bureau issued a public notice seeking comment on the most appropriate interpretation of the terms "multichannel video programming distributor" and "channel" as defined in the Act in response to a program access complaint filed by Sky Angel, a provider of video programming.[882]

247. Verizon and Comcast assert that excluding OVDs from the definition of an MVPD is an appropriate policy to encourage the growth of OVDs and the deployment and adoption of broadband services.[883] They argue that defining OVDs as MVPDs, and thereby imposing traditional MVPD regulation on OVDs, could have unintended consequences and derail continued innovation in this developing industry.[884]

248. WGAW and Public Knowledge support a definition of MVPD that does not require programming distributors to own or operate their transmission paths.[885] WGAW argues including entities that make use of third-party facilities to provide video programming in the definition would be consistent with Congress' intent to enhance competition.[886] Public Knowledge argues that the Commission should allow OVDs to operate as MVPDs and doing so would enhance MVPD competition.[887] ABC Affiliates argue that the Commission should categorize certain OVDs as MVPDs and specifically apply the

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[881] As a condition of the Comcast-NBCUniversal transaction, the Commission required Comcast to hold its interest in Hulu solely as an economic interest; *i.e.* neither Comcast nor Comcast-NBCU shall exercise any right to influence the conduct or operation of Hulu, including that arising from agreements, arrangements or operation of its equity interests. *Comcast-NBCU Order*, 26 FCC Rcd at 4274, ¶ 90, Appendix A.

[882] *Media Bureau Seeks Comment on Interpretation of the Terms "Multichannel Video Programming Distributor" and "Channel" as Raised in Pending Program Access Complaint Proceeding*, MB Docket 12-83, Public Notice, 27 FCC Rcd 3079 (MB 2012). *See also VDC Corp. v. Turner Network Sales, Inc., et al*., Program Access Complaint (Jan. 18, 2007); *Sky Angel U.S., LLC v. Discovery Communications LLC, et al.*, Program Access Complaint, MB Docket No. 12-80, CSR-8605-P (Mar. 24, 2010).

[883] Verizon Comments at 23-24; Comcast Reply at 7.

[884] Verizon Comments at 23-24; Comcast Reply at 7.

[885] Public Knowledge Comments at 8; WGAW Comments at 13-14.

[886] WGAW Comments at 13-14.

[887] Public Knowledge Comments at 8-10. NATOA contends that a proper resolution on how to treat OVDs from a regulatory standpoint rests with Congress. NATOA Comments at 6.

Commission's retransmission consent regulations to them in order to prevent the migration of entertainment and sports programming to subscription-based video distribution platforms.[888]

249. *Open Internet*. OVDs require broadband Internet speeds and capacity to transmit video content to customers. In 2010, the Commission adopted an order seeking to maintain an open Internet.[889] The Commission's Open Internet rules require transparency from fixed and mobile broadband providers.[890] In addition, fixed broadband providers are prohibited from blocking access to lawful content, applications, and services. They must also allow access to non-harmful devices and cannot unreasonably discriminate in transmitting lawful network traffic.[891] Mobile broadband providers are prohibited from blocking access to lawful websites and applications competing with the providers' voice or video telephony services.[892] WGAW states that the Commission's Open Internet rules are a first step in protecting OVDs' ability to compete in the media marketplace.[893] Public Knowledge asserts that the Commission should continue to enforce the "Open Internet" rules and related policies.[894]

250. *Closed Captioning*. In January 2012, the Commission adopted rules placing closed captioning obligations on the owners, providers, and distributors of video programming delivered using Internet protocol (IP).[895] The rules were adopted pursuant to the Twenty-First Century Communications and Video Accessibility Act of 2010 ("CVAA"), which directed the Commission to require closed captioning of IP-delivered video programming that is published or exhibited on television.[896] OVDs must comply with these requirements.

(ii) Non-regulatory Conditions

251. An OVD entrant faces several non-regulatory costs and challenges that influence its decision to enter the market, including content acquisition and ability to access sufficient Internet capacity to provide customers with a high-quality OVD viewing experience.

252. *Access to Content*. The entry of new OVDs and the growth of the OVD marketplace are dependent on the ability of OVDs to acquire or create compelling programming that will attract viewers and subscribers.[897] One potential barrier to content acquisition is cost. For example, in December 2012,

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[888] ABC Affiliates Reply at 6, 10.

[889] *See Preserving the Open Internet; Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 FCC Rcd 17905, 17906, ¶ 1 (2010) ("*Open Internet Order*"). This order is currently on appeal in the D.C. Circuit. *See, e.g.*, Notice of Appeal, *Verizon v. FCC*, No. 11-1355 (filed Sept. 30, 2011, D.C. Cir.). In addition, Southern Company Services recently filed a petition for clarification or reconsideration with the Commission concerning one aspect of the *Open Internet Order*. *See* Southern Company Services, Petition for Clarification or Reconsideration, GN Docket No. 09-191, WC Docket No. 07-52 (filed Oct. 24, 2011).

[890] *See Open Internet Order*, 25 FCC Rcd at 17906, ¶ 1.

[891] *See id.*

[892] *See id.*

[893] WGAW Comments at 2.

[894] *See* Public Knowledge Comments at 11.

[895] *See Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-154, Report and Order, 27 FCC Rcd 787 (2012). Petitions for reconsideration are currently pending before the Commission.

[896] 47 U.S.C. § 613(c)(2).

[897] *See* Public Knowledge Comments at 2 (OVDs need to be able to reach distribution agreements for programming comparable to that of MVPDs).

Netflix and Disney reached an agreement that will give Netflix exclusive distribution rights for Disney movies for the premium cable network window, which typically is an 18-month period that begins nine to 16 months following the U.S. theatrical release.[898] Analysts estimate that Netflix's cost for this programming will be between $200 million and $350 million.[899] Netflix has stated that it will spend about $2.1 billion on content acquisitions in 2013.[900] Other companies' decisions to enter the OVD marketplace depend in part on whether they can obtain content distribution rights and at what cost.[901]

253. OVDs' content acquisition also may be affected by vertical integration and pre-existing business relationships. For example, vertical integration or exclusivity arrangements between content producers/owners and cable networks, broadcast networks, or MVPDs may impede unaffiliated OVDs.[902] OVD content acquisition also can be difficult when content owners are vertically integrated with, or enjoy exclusive relationships with, other OVDs.[903] To foster program acquisition, Public Knowledge argues the Commission should extend the program access rules to cover OVDs.[904]

254. *Internet Capacity, Usage, and Cost*. Access to high-speed data pipelines capable of delivering a high quality video signal is critical for OVD entrants.[905] OVDs require such Internet capacity to transmit their programming, and consumers need sufficient broadband service to access OVDs' content. Analysts' estimates of transmission speeds required for OVDs vary. For example, Bernstein Research estimates that compressed, high definition signals require about 4 million bits (or 4 megabits) per second (Mbps) of throughput, while SNL Kagan estimates that high definition video requires 8 Mbps and standard definition requires 2 Mbps.[906] As of June 30, 2011, the Commission estimates that for fixed

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[898] Sarah Barry James, *Starz Wars*, SNL KAGAN, Dec. 6, 2012.

[899] Jill Goldsmith, *Can Netflix Absorb the Cost of Content?*, DAILY VARIETY, Dec. 6, 2012.

[900] *Amazon "Losing Up to $1bn" a Year on Streaming*, INSIDE SATELLITE TV, Nov. 20, 2012.

[901] *See also* Andy Fixmer and Ian King, *Intel Seeking Media Rights to Start Online Pay-TV System*, BLOOMBERG , March 13, 2012, http://www.bloomberg.com/news/2012-03-13/intel-said-to-seek-programming-rights-to-start-online-television-service.html (visited Oct. 31, 2012) ("Intel Pay-TV"). WGAW Comments at 16-17.

[902] In this regard, Public Knowledge claims that as the largest buyers of video content, MVPDs can keep their programming suppliers from putting some content online. It also asserts that many large incumbent MVPDs use "most favored nation" (MFN) and other clauses in their contracts to prevent independent networks from making content available online. Public Knowledge White Paper at 7, 9. Comcast, however, states that it makes its NBCUniversal content available to OVDs through licensing agreements pursuant to the conditions of the Comcast-NBCU transaction. Comcast Comments at 31.

[903] *See, e.g.*, *The Economics of Online Video* (White Paper), ADVERTISING AGE, June 19, 2010, at 10 ("AD AGE 2010 White Paper"); Emma Barnett, *Joost ex-CEO Holds Broadcasters Responsible for Demise of Company*, THE TELEGRAPH, July 7, 2009, http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/digital-media/5771174/Joost-ex-CEO-blames-broadcasters-for-demise-of-company.html (visited Dec. 14, 2012) (discussing belief of former CEO of OVD Joost that broadcasters' decision to create their own online video services hindered Joost's ability to acquire the content rights necessary to be competitive).

[904] Public Knowledge White Paper at 7, 20-21. However, Public Knowledge does not support the extension of the program access rules to OVDs.

[905] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012.

[906] Craig Moffett and Carlos Kirjner, *Weekend Media Blast: What if Television HAD to Be Delivered Over the Internet?*, BERNSTEIN RESEARCH, Aug. 24, 2012, at 2; Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012. An SNL Kagan 2012 survey of cable operators indicates that typical broadband speeds in major markets range from 10 Mbps on the low end to 20 Mbps (continued….)

connections, 27 percent of reportable connections (or 23.2 million connections) were slower than 3 Mbps in the downstream direction, 16 percent (or 13.8 million connections) were at least 3 Mbps in the downstream direction but slower than 6 Mbps, and 57 percent (or 49.6 million connections) were at least 6 Mbps in the downstream direction.[907]

255. The total amount of data needed per month to watch an OVD service depends on the amount of time spent watching and the quality of the video. For example, SNL Kagan estimates that a household watching four hours of video per day would need 105 GB per month to watch all of the video in standard definition, or 422 GB per month to watch all of the video in high definition.[908]

256. Sandvine, a manufacturer of Internet networking equipment, has explored the traffic and adoption patterns of online video. It reports that between 2008 and 2011, users shifted from a "download now, use later" method of viewing video to on-demand viewing, requiring real-time delivery of data over the Internet.[909] According to Sandvine, this shift to on-demand consumption of online video has caused the peak period, generally 9:00 p.m. to 11:00 p.m., for wireline traffic to get busier and the off-hours to be less busy.[910] Moreover, the heaviest one percent of downstream users account for 21.3 percent of the overall amount of downstream capacity used.[911] Sandvine also reports real-time entertainment is gaining a four to five percent share of total Internet traffic on North American fixed access networks every six months, and as of Spring 2012 accounts for 58.0 percent of peak aggregate traffic, up from 53.6 percent in September 2011, and from 49.2 percent in Spring 2011.[912] Sandvine states that as of Spring 2012,

(Continued from previous page)
on the high end. Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012.

[907] *Internet Access Services: Status as of June 30, 2011* (IATD, WCB June 14, 2012), at 3, http://www.fcc.gov/document/fcc-releases-new-data-internet-access-services-5?__utma=25079213.1638407786.1357158398.1357158398.1357158398.1&__utmb=25079213.35.9.1357158980266&__utmc=25079213&__utmx=-&__utmz=25079213.1357158398.1.1.utmcsr=(direct)|utmccn=(direct)|utmcmd=(none)&__utmv=-&__utmk=80408148 . For mobile connections, 85 percent of reportable connections (or 102.1 million connections) were slower than 3 Mbps in the downstream direction, about 5 percent (or 6.6 million connections) were at least 3 Mbps in the downstream direction but slower than 6 Mbps, and 9 percent (or 10.9 million connections) were at least 6 Mbps in the downstream direction. *Id.* at 3-4. The Commission has benchmarked broadband as a transmission service that enables an end user actually to download Internet content at 4 Mbps and to upload Internet content at 1 Mbps over the service provider's network. *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report, 25 FCC Rcd 9556, 9563-64, ¶ 11 (2010) (*Sixth Broadband Deployment Report*).

[908] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012. One gigabyte is equal to two raised to the 30th power, *i.e.*, 1,073,741,824 bytes. Harry Newton and Steve Schoen, NEWTON'S TELECOM DICTIONARY 551 (Flatiron Publishing) (27th ed. 2013).

[909] Sandvine, *Adoption Trends of Over-the-Top Video from a Cable Network Perspective* (July 2011) ("Sandvine Over-the-Top Video White Paper"), at 3.

[910] Sandvine, *Global Internet Phenomena Report*, 1H 2012, at 7; *see also id.*, Figure 3 "Illustration of Peak Hour, Peak Period and Prime Time."

[911] Sandvine, *Global Internet Phenomena Report*, Fall 2011, at 11.

[912] Sandvine, *Global Internet Phenomena Report*, 1H 2012, at 19.

Netflix's share of peak hour downstream traffic was 32.9 percent, YouTube's share was 13.8 percent, and Hulu's share was 1.6 percent.[913]

257. Similarly, peak mobile network demand is concentrated between 7:00 pm and 9:00 pm.[914] Cisco reported that as of the end of 2011, mobile video traffic represented more than half of all wireless data traffic.[915] Between September 2011 and March 2012, real-time entertainment grew from 30.8 percent of peak traffic (upstream and downstream) to 50.2 percent, accounting for the majority of mobile network traffic.[916] During the first half of 2012, Netflix represented 2.1 percent of mobile data in North America, making it the eighth largest source of traffic.[917] Several reports indicate that WiFi carries the majority of U.S. mobile data traffic, with 64 percent of U.S. households WiFi enabled as of 2012.[918] Cisco estimates that about 84 percent of mobile video occurs in and around fixed locations and that on the iPad, WiFi traffic surpasses 90 percent.[919]

258. In their comments, several MVPDs described the relationship between OVD adoption and their own company's efforts to increase Internet speeds. Verizon asserts that the increase in traffic from online video has spurred MVPDs to invest in upgrades to their broadband facilities.[920] Comcast contends that its deployment of broadband networks has facilitated OVD growth.[921] Google,[922] NATOA,[923] and Verizon[924] note that they have built out ultra-high speed networks.

259. Some commenters, however, claim that that the fact that ISPs are also MVPDs causes problems for OVDs. Netflix, Public Knowledge, and WGAW claim that the market power of network operators threaten the success of OVDs because OVDs rely on ISPs to deliver their services and the ISPs are typically MVPDs.[925] Netflix and Public Knowledge argue that ISPs can favor their own traffic, either

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[913] *Id*.

[914] Sandvine, *Global Internet Phenomena Report*, Fall 2011, at 10.

[915] Comcast Comments at 26.

[916] Sandvine, *Global Internet Phenomena Report*, 1H 2012, at 8.

[917] *Id*. at 2.

[918] John Fletcher, *Wi-Fi Carrying Majority of Mobile Data Traffic*, SNL KAGAN, Oct. 25, 2012.

[919] Chris Osika, Senior Director, Global Lead, Cisco, *The Explosive Evolution of Online Media* , Cisco Blog, Oct. 15, 2012, http://blogs.cisco.com/sp/the-explosive-evolution-of-online-media/ (visited Nov. 9, 2012).

[920] Verizon Comments at 25.

[921] Comcast Comments at 3.

[922] Google states that in July 2012 it launched Google Fiber, a large-scale ultra-high-speed network, in Kansas City, Missouri, and Kansas City, Kansas. Google Reply at 3. Google contends that the Commission, state, and local governments can increase competition and innovation in video distribution by adopting public policies designed to encourage broadband deployment. Google Reply at 5.

[923] NATOA Reply at 2.

[924] Verizon states that it enables FiOS residential consumers to stream video, play online games, and download large files at speeds utilizing Verizon's new Quantum offerings that feature speeds of up to 300 Mbps downstream and 65 Mbps upstream. Verizon contends that these are the nation's fastest, mass scale residential Internet speeds available, and that the FiOS Quantum service likely will prompt competitors to increase the speeds of their broadband offerings. Verizon Comments at 9.

[925] Netflix Comments at 9-10; Public Knowledge Comments at 10; WGAW Comments at 15. Public Knowledge states that the Commission must take into account that a key input is controlled by a "supplier" that may have an incentive to withhold it. Public Knowledge Comments at 11.

by (1) prioritizing their own bits, or (2) not counting their own or affiliated bits toward ISP imposed data caps, or (3) imposing usage based billing or data caps, even though off-peak usage has zero marginal cost and does not impact network congestion.[926] Netflix urges the Commission to remain vigilant of such threats.[927] WGAW contends that the Commission should initiate an industry-wide investigation into the use of data caps and traffic prioritization as possible violations of "net neutrality" and protect consumers from these practices.[928] In this regard, Comcast comments that ISPs continue to invest in and improve the broadband platforms that enable consumers' access to online video and other services.[929]

260. Some ISPs, including MVPDs and wireless providers, have initiated bandwidth caps or usage-based price tiers, using a variety of business models.[930] During the first half of 2012, most major MSOs formalized bandwidth caps or usage-based/metered pricing.[931] They generally adopted thresholds that exceed typical traffic and chose either to cap usage or to implement overage charges for customers who exceed the limits. Exceptions include Time Warner Cable, which offers voluntary opt-in limits in exchange for a $5 discount on monthly charges across its Texas footprint, and Cablevision, which as of 2012 had not established formal limits. In May 2012, Comcast announced that it is experimenting with different approaches to data caps and usage pricing through trials in some markets but for all markets raised the existing data cap from 250 GB to 300 GB per month.[932] In the markets where Comcast is not experimenting with usage based pricing, it has suspended enforcement of its data caps. Cox Communications, Charter, and Suddenlink Communications offer data tiers, tying caps to the speed of

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[926] Netflix Comments at 9-10; Public Knowledge Comments at 10-11; Public Knowledge White Paper at 10-11.

[927] Netflix Comments at 10. Likewise, Public Knowledge argues that the Commission cannot hope for OVDs to become full competitors unless adequate broadband competition exists and the Commission should analyze last-mile broadband facilities as a key input to providing online video service. Public Knowledge Comments at 10-11, 13-14.

[928] WGAW Comments at 15.

[929] Comcast Reply at 4.

[930] *See* Stacy Higginbotham, *Which ISPs are Capping Your Broadband and Why?*, GIGAOM, Oct. 1, 2012, http://gigaom.com/2012/10/01/data-caps-chart/ (visited July 5, 2013).

[931] Ian Olgeirson and Mari Rondeli, *HSD Subs Tilt Toward Premium Tiers; Usage Constraints Gain Broader Foothold*, SNL KAGAN, July 19, 2012. *See also* Netflix Comments at 7-8. Public Knowledge states that by some estimates, more than half of the United States' 75 million fixed broadband subscribers are already subject to some kind of usage cap. Letter from Michael Weinberg, Vice President for Emerging Innovation, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, (Aug. 9, 2012) ("Public Knowledge Aug. 9, 2012 Ex Parte") at Attach. 1, Andrew Odlyzko et al., *Know Your Limits: Considering the Role of Data Caps and Usage Based Billing in Internet Access Service*, Public Knowledge, May 2012, at 4-5 ("Public Knowledge UPB White Paper"). Google states that in contrast to some broadband service plans criticized by Netflix in its comments, Google Fiber's service plans are not subject to data caps. Google Reply at 4, n.16.

[932] Cathy Avgiris, Executive Vice President and General Manager, Communications and Data Services, Comcast Cable, *Comcast to Replace Data Usage Cap with Improved Management Approaches*, Comcast Voices Blog, May 17, 2012, http://corporate.comcast.com/comcast-voices/comcast-to-replace-usage-cap-with-improved-data-usage-management-approaches (visited Dec. 21, 2012). One approach, which Comcast launched in Nashville, TN, and Phoenix, AZ, begins with a 300 GB data cap, with increasing data allotments for each successive tier of high-speed data service. Customers have the option of purchasing additional gigabytes in increments (*e.g.*, 50 GB for $10). The second approach increases the data cap to 300 GB for all tiers and also offers additional gigabytes in increments. *Id.* Customers who exceed the threshold will receive warnings from Comcast for up to three months in a twelve-month period, after which Comcast automatically bills them for the extra data they use. *Broadband Bonanza: Comcast Has New Caps, Tiers, In-Home WiFi*, CABLEFAX DAILY, Sept. 19, 2012.

Internet service that consumers purchase.[933] Among telcos, AT&T imposed a monthly broadband data cap in May 2011, limiting legacy DSL subscribers to 150 GB and U-Verse customers to 250 GB. Likewise, CenturyLink imposed tier-based usage caps. Verizon, which relies on fiber-to-the-home architecture, does not impose bandwidth caps or usage-based-pricing.[934]

261. Major wireless providers also have begun to impose data caps.[935] For example, in July 2012, both AT&T and Verizon Wireless announced plans to facilitate customers' sharing of data across smartphones, tablets, and other devices.[936] The new shared data plans charge a monthly fee for each device and then charge for a shared pool of monthly data transfer ranging from 1 GB to 20 GB.[937] Early evidence suggests that consumers materially increase their data consumption when upgrading to Long Term Evolution ("LTE") devices.[938]

262. WGAW claims that data caps allow MVPDs to discriminate against OVDs, undermining competition in the video marketplace.[939] Public Knowledge argues that data caps are increasingly having a negative impact on consumers and the growth of many OVDs.[940] It also contends that congestion issues can arise as much from a network operator's design decisions as from network traffic.[941] SNL Kagan reports that, so far, bandwidth caps have not emerged as a major hurdle to OVD substitution for MVPD services.[942] Nevertheless, both SNL Kagan and Bernstein Research estimate that, if the cost of watching OVDs (*i.e.*, the cost of the OVD plus the price of using broadband services to watch it) becomes comparable to that of an MVPD service, then substitution of OVDs for MVPDs may diminish.[943] Cable

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[933] Ian Olgeirson and Mari Rondeli, *HSD Subs Tilt Toward Premium Tiers; Usage Constraints Gain Broader Foothold*, SNL KAGAN, July 19, 2012.

[934] *Id*.

[935] *See, e.g.*, AT&T, *An Update for Our Smartphone Customers With Unlimited Data Plans* (press release), July 29, 2011 (announcing reduction in speeds for smartphone customers with unlimited data plans who exceed certain bandwidth thresholds) ("Smartphone Update"); Julianne Pepitone, *AT&T Raises Limit for Smartphone Data Slowdown*, CNNMONEY, Mar. 1, 2012, http://money.cnn.com/2012/03/01/technology/att_data_slowdown/index.htm?hpt=hp_t2 (visited Dec. 21, 2012) ("Smartphone Data Slowdown"); Trefis Team, *Crowded Pipes Prompt Verizon To Nix Unlimited Data Plans*, FORBES, May 31, 2011, http://www.forbes.com/sites/greatspeculations/2011/05/31/crowded-pipes-prompt-verizon-to-nix-unlimited-data-plans/ (visited Dec. 17, 2012).

[936] AT&T, *AT&T Gives Customers More Choice With New Shared Wireless Data Plans* (press release), July 18, 2012; Brenda Raney, Verizon Wireless Executive Director of Corporate Communications, *Updated Statement on Data Plans*, Verizon Wireless News Center Blog, May 17, 2012, http://news.verizonwireless.com/news/2012/05/data-pricing.html (visited Nov. 13, 2012).

[937] John Fletcher, *Bring on the Expensive Dumb Pipes*, SNL KAGAN, Aug. 14, 2012.

[938] William Densmore and Michael Weaver, *U.S. and Canada Second-Quarter 2012 Wireless Metrics: Data Strategies Diverge*, FitchRatings, Sept. 27, 2012, at 2.

[939] WGAW Comments at 12.

[940] Public Knowledge Aug. 9, 2012 *Ex Parte* at 1.

[941] Public Knowledge UBP White Paper at 24-25.

[942] Ian Olgeirson and Mari Rondeli, *HSD Subs Tilt Toward Premium Tiers; Usage Constraints Gain Broader Foothold*, SNL KAGAN, July 19, 2012.

[943] Craig Moffett and Carlos Kirjner, *Weekend Media Blast: What if Television HAD to Be Delivered Over the Internet?*, BERNSTEIN RESEARCH, Aug. 24, 2012, at 4. *See also* Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012. SNL Kagan modeled different scenarios to illustrate the potential impact of usage fees on the economic benefits of OVD substitution. SNL (continued….)

operators, on the other hand, contend that usage-based pricing allocates costs among customers more fairly, helps to promote network growth, and enables access to online video.[944]

c. Recent Entry and Exit

263. The OVD marketplace continues to expand and change. Entrants often use new technologies and experiment with a variety of business models.[945] OVDs are constantly entering and exiting the market and changing the services and programming they offer, in response to viewer demand as well as external factors, such as the ability to access content and reach consumers.[946]

264. *Entry*. Since the last report, Barnes & Noble joined Amazon and other retailers by offering a tablet for viewing OVD; Aereo began packaging broadcast signals for online viewing; and other companies have announced plans to offer cable networks on an a la carte basis.[947]

265. In October 2012 Barnes & Noble launched the NOOK Video service to enable customers to stream and download movies and television programs for rental or purchase.[948] Nook Video premiered concurrently with the Nook HD and Nook HD+ tablets. It distributes movies and television programs from Warner Brothers, Disney, Sony Pictures, Starz, HBO, and Viacom. Its service is cloud-based, and integrates consumers' compatible physical DVD and Blu-ray purchases and digital video collections across devices through UltraViolet. Both Target and Wal-Mart, which have ceased selling Amazon's Kindle, market the Nook HD tablets.[949]

266. In February 2012, Aereo, an Internet television service backed by Barry Diller and IAC/InterActiveCorp, launched a service in New York City that streams live and recorded broadcast television to smartphones, tablets, and Internet-connected TVs.[950] Aereo picks up over-the-air signals

(Continued from previous page)
Kagan's model included variables such as the mix of standard definition and high definition programming, the per GB overage fee ($.25 to $1.00), and the usage caps (GB allocated per month).

[944] *See* NCTA, http://www.ncta.com/sites/prod/files/Tiered-Pricing-a-winning-model-for-consumers.pdf.

[945] Comcast Comments at 3; Google Reply at 1.

[946] Public Knowledge Comments at 4.

[947] Also, since the last Report, DIRECTV, Dish, and Verizon began offering OVD services to non-subscribers, as described above. *See supra*, ¶¶ 239-40.

[948] Barnes & Noble, Inc., *NOOK Video to Premiere This Fall* (press release), Sept. 25, 2012; Barnes & Noble, Inc., *Barnes & Noble Announces Expanded NOOK Video Content to Come from NBCUniversal and 29th Century Fox Home Entertainment* (press release), Oct. 30, 2012.

[949] Stephanie Clifford and Julie Bosman, *Wal-Mart is Deleting the Kindle from Stores*, N.Y TIMES, Sept. 20, 1012, http://www.nytimes.com/2012/09/21/business/wal-mart-stores-dropping-amazon-kindle-tablets-and-e-readers.html (visited April 19, 2013).

[950] Jeff John Roberts, *Broadcasters Sue to Stop $12 Streaming Service Aereo*, GIGAOM, March 2, 2012, http://paidcontent.org/2012/03/02/419-broadcasters-sue-to-stop-12-streaming-service-aereo/ (visited Nov. 16, 2012). *See also* Comcast Comments at 30. Aereo launched its service in Boston on May 15, 2013, and plans to begin service in Atlanta on June 17, 2013. *See* Aereo, *Aereo Sets Launch Date for Boston* (press release), April 23, 2013; Aereo, *Aereo Sets Launch Date for Atlanta* (press release), May 14, 2013. It previously announced its intent to expand to a total of 22 cities in 2013. *See* Aereo, *Aereo Announces Expansion Plans for 22 New U.S. Cities* (press release), Jan. 8, 2013.

using a collection of dime-sized antennas. It charges viewers $12 per month.[951] Some commenters argue, however, that Aereo appropriates content without the consent of the content owner.[952]

267. Reports indicate that Intel is interested in entering the market.[953] It proposes to offer a web-connected set-top box capable of streaming TV and video-on-demand programming that would let consumers view programming on any Internet-connected device.[954] Intel's plans are in part dependent on whether the company can gain the programming rights needed for the proposed service.[955]

268. *Exit*. Since the last report, no major OVDs have exited. As described above, some OVDs have curtailed services. For example, Apple no longer rents television programs, and Microsoft ceased providing Zune service.

3. OVD Conduct

269. In addition to industry structure, a second key element of our analysis of OVD competition is an examination of the conduct of industry participants – in particular, the business models

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[951] Sarah Barry James, *A More Broadcaster-Friendly Boxee*, SNL KAGAN, Oct. 18, 2012. In May 2013, Aereo announced a new pricing structure that starts with a base plan of $8 a month, giving consumers access to its cloud-based antenna/DVR technology and 20 hours of DVR storage. For an additional $4 a month, consumers can receive 60 hours of DVR storage. *See* Aereo, *Aereo Unveils a New, Simpler Pricing Structure for Consumers* (press release), May 13, 2013.

[952] Comcast Reply at 7. The ABC Affiliates contend that local broadcast television stations would be unable to produce their current quality and quantity of local news without securing fees from competitive OVDs that retransmit and resell their signals. ABC Affiliates Reply at 10-11. In March 2012, ABC and WNET, both broadcast television station owners in New York City, as well as other content and broadcast operators sought an injunction barring Aereo from transmitting broadcast television programs to its subscribers while programs were airing on broadcast television. Complaint, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, No. 12 Civ. 1540 (filed Mar. 1, 2012, S.D.N.Y.); Complaint, *WNET v. Aereo, Inc.*, No. 12 Civ. 1543 (filed Mar. 1, 2012, S.D.N.Y.). On July 11, 2012, the United States District Court for the Southern District of New York denied the plaintiffs' motion for a preliminary injunction. *Am. Broad Cos. v. Aereo, Inc.*, 874 F. Supp. 2d 373 (S.D.N.Y. 2012). The plaintiffs appealed to the Second Circuit. On April 1, 2013, the Second Circuit upheld the district court's decision. *WNET v. Aereo, Inc.*, 712 F.3d 676 (2d Cir. 2013). On April 15, 2013, the plaintiffs responded by asking the Second Circuit for a rehearing *en banc*, and on July 16, 2013 the Second Circuit denied the plaintiffs' request for rehearing. *WNET v Aereo, Inc.*, Nos. 12-2786, 12-2807, 2013 WL 3657978 (2nd Cir. July 16, 2013). In contrast, in December 2012, Aereo reached an agreement with Bloomberg Television for carriage of its cable network, with Aereo paying Bloomberg TV for its program content. *See* Shalini Ramachandran, *Aereo Adds First Cable Channel: Bloomberg TV*, WALL ST. J., Dec. 13, 2012. In California, a company called Aereokiller was providing similar service as Aereo. Once again, the content owners, including FOX and NBCUniversal, among others, filed a complaint in the federal district court of California. Complaint, *Fox Television Stations, Inc. v. Aereokiller*, No. CV-12-6921 (filed Aug. 10, 2012, C.D. Cal); Complaint, *NBCUniversal Media v. Aereokiller*, No. CV-12-6950 (filed Aug. 13, 2012, C.D. Cal.). The district court granted the content providers a preliminary injunction. *Fox Television Stations, Inc. v. Barrydriller Content Sys., PLC*, No. CV 12-6921-GW JCX, 2012 WL 674498 (C.D. Cal. Dec. 27, 2012). Aereokiller appealed the decision to the Ninth Circuit and the case is still pending appeal. *See* Shalini Ramachandran, *New Threat to Aereo TV*, WALL ST. J., Apr. 8, 2013, http://online.wsj.com/article/SB10001424127887323820304578410622646281 76.html (visited July 15, 2013).

[953] WGAW Comments at 16; Comcast Comments at 31. *See also* Andy Fixmer and Ian King, *Intel Seeking Media Rights to Start Online Pay-TV System*, BLOOMBERG, March 13, 2012, http://www.bloomberg.com/news/2012-03-13/intel-said-to-seek-programming-rights-to-start-online-television-service.html (visited Oct. 31, 2012) ("Intel Pay-TV").

[954] Intel Pay-TV.

[955] *Id.*; WGAW Comments at 16-17.

and competitive strategies of these entities. The OVD industry is evolving, and no single business strategy has emerged as the dominant model.[956] In this section, we provide an overview of the current business models, and competitive strategies of a sample of OVDs, comparing prices and non-price product features of select OVDs. We then discuss OVD competition generally in terms of non-price rivalry.

a. Business Models and Competitive Strategies of Select OVDs

270. Unlike the broadcasting or MVPD industries, the OVD industry does not have a single revenue model. Also, unlike MVPDs, which generally compete to be the sole provider for a consumer, multiple OVDs are often used or subscribed to by a single customer based on the content offered and the prices charged. Depending on the OVD, consumers access programming in several ways, including: (1) for free, usually with advertising; (2) through a subscription service, with or without advertising; (3) through an on-demand rental service, similar to MVPDs' VOD services; or (4) via "electronic sell-through" ("EST") content downloading. Several OVDs offer multiple options.[957]

271. *Advertiser-Supported*. Hulu is the major player among advertiser-supported OVDs. Its major competitors are Sony's Crackle and CBS's TV.com. The free advertiser-supported Hulu and TV.com are only available on PCs. Crackle is available on several devices. Hulu generally allows access to the five most recent episodes of in-season television programs, with episodes appearing one day after the initial airing.[958] Portal sites from ABC, CBS, FOX, and NBC as well as Viacom's cable networks (*e.g.* Comedy Central and MTV) are also advertiser supported. CBS makes almost 90 percent of its prime time lineup available for streaming.[959]

Table 27: Advertiser-Supported OVD Services[960]

	Hulu	Crackle	TV.com
No. of TV Shows	1,575	100	115
No. of TV Episodes[961]	21,886	N/A	N/A
No. of Movies	1,750	250	0
Advertisements	yes	yes	yes
HD Service	no	no	no
Device Brands	PC only	11	PC only

272. *Subscription*. We categorize the subscription services into two types: general and sports. The major, subscription-based, general OVDs are Netflix, Amazon, and Hulu Plus.[962] Among these subscription services, only Hulu Plus includes advertising. Hulu Plus receives programming from more

[956] *See 14th Report*, 27 FCC Rcd at 8738-39, ¶¶ 286-89.

[957] Comcast states that OVDs continue to leverage innovative technologies and business models to offer consumers new ways to access their favorite programs. Comcast Reply at 3.

[958] News Corp., however, only makes episodes of FOX networks programs available on Hulu eight days after the initial airing.

[959] George Winslow, *A Divide That's Not as Deep as You Think*, BROADCASTING & CABLE, Sept. 17, 2012.

[960] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 10.

[961] The number of TV episodes equals the total number of television shows multiplied by the number of episodes per television series.

[962] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 6. *See also* Netflix *3Q 2012 Earnings Statement*, Oct. 23, 2012, at 6.

than 330 content partners.[963] When it entered the streaming market, Hulu Plus's vertical integration with News Corp., NBCUniversal, and Walt Disney Company gave it exclusive access to television programs the day after they air. Netflix pays an increasing amount to studios and networks each year to build its library.[964] Amazon, the last major entrant to the OVD subscription market, has an e-commerce business that can subsidize its OVD business. In addition, Amazon had a large cloud-computing infrastructure to facilitate its online streaming service. It signed several content licensing deals in 2012.[965]

[963] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 7.

[964] *Id*. *See also* Netflix *2Q 2012 Earnings Statement*, July 24, 2012, at 3.

[965] These partnerships include Viacom (February 2012 for two years), Discovery (March 2012 for two years), Warner Brothers (July 2012 for one year), and EPIX (September 2012 for three years). Deana Myers, *Amazon Making Its Move in SVOD Battle*, SNL KAGAN, Sept. 27, 2012.

Table 28: Subscription OVD Services: General[966]

	Netflix	Hulu Plus	Amazon Prime Instant Video
Price per Month	$7.99	$7.99	N/A[967]
Price Per Year	$95.88	$95.88	$79.00[968]
No. of TV Seasons[969]	4,083	N/A	1,411
No. of TV Episodes	N/A	48,588	N/A
No. of Movies	10,493	2,646	1,602
Advertisements	No	Yes	No
HD Service	Yes (1080p)	Yes (720p)	Yes (720p)
TV Content Window[970]	Past Seasons	Current Season (Available Day After Initial Airing) and Past Seasons	Past Seasons
No. of Device Brands on Which OVD Can Be Accessed	30	18	11

273. Several major professional sports leagues also offer subscription OVD services for live-viewing of full-length games outside of a game's local television market. The games are available for viewing on several devices at various prices. MLB.TV offers a regular service for $19.99 per month ($84.99 per baseball season), allowing PC-access to all regular-season games. For $24.99 per month ($99.00 per season), viewers can watch games on a variety of devices. For NHL games, subscribers can pay $9.99 a day or $169 to watch games throughout the hockey season. For NBA games, subscribers can pay $39.99 per season to watch games only on mobile devices, or $29.95 per month ($169 per season) to watch games on a variety of devices, including mobile devices, PCs, and Internet-enabled television sets. MLS Live offers access to soccer games for $14.99 per month ($59.99 per season) on mobile devices, PCs, and Roku boxes.

[966] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 7. Perkin di Grazia, *State of Online Subscription Video Services*, SNL KAGAN, April 13, 2012.

[967] In November 2012, Amazon began to offer Amazon Prime for $7.99 on a trial basis. Sarah Perez, *Amazon Offers $7.99 Monthly Subscription to Amazon Prime [Update: Amazon Confirms It's Only a Test]*, *TECHCRUNCH*, Nov. 6, 2012, http://techcrunch.com/2012/11/06/amazon-offers-7-99-monthly-subscription-to-amazon-prime/ (visited Dec. 3, 2012). Currently, Amazon only offers a yearly subscription for Amazon Prime.

[968] Amazon Prime Instant Video service is included with the Amazon Prime yearly membership. Amazon. Com, *Amazon* Prime, http://www.amazon.com/dp/B00DBYBNEE?_encoding=UTF8&ref_=footer_prime (visited July 15, 2013). Student memberships cost $39 per year, or $3.25 per month. Amazon.com, *Help: Payment, Pricing & Promotions: Membership Programs: Amazon Student*, http://www.amazon.com/gp/help/customer/display.html?nodeId=200500380 (visited Nov. 12, 2012).

[969] The number of TV seasons equals the total number of television shows multiplied by the number of seasons per television series offered.

[970] Excludes OVD original series.

Table 29: Subscription OVD Services: Sports[971]

	MLB.TV	NHL GameCenterLive	NBA League Pass	MLS Live
Price	$19.99/month - $24.99/month or $84.99/year - $99.99/year	$9.99/day or $169/season	$39.99/season (mobile only); $29.95/month or $169/season (TV, PC, mobile)	$14.99/month or $59.99/season
Content	Out of market games	Out of market games	Out of market games	Out of market games
HD Service	Yes	No	No	Yes
No. of Device Brands on Which OVD Can Be Accessed	9	10	4	4

274. *Rental*. Rental, or online VOD services, allow consumers to stream or download content from a central source to a PC, set-top box, or other device. Viewers can then view the content as often as they wish within a defined period, for instance 24 hours. The most recent releases are generally the most popular. People tend to watch less content on a rental basis than on a subscription basis, given the requirement to pay for each title. Prices for rentals are generally consistent among OVDs, ranging from free for promotional videos or older titles to $6.00 for new releases. Services therefore generally compete on non-price factors, such as the library size and the number of devices that can be used to view the programming. As of 2012, no major OVD offered television programs for rent but instead focused exclusively on movies.[972]

[971] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 11.

[972] In August 2011, Apple suspended rentals of television episodes. Brian Stelter, *Apple Ends Its TV Episode Rental Service*, N.Y. TIMES, Aug. 26, 2011, http://www.nytimes.com/2011/08/27/technology/apple-ends-its-tv-episode-rental-service.html (visited Nov. 8, 2012).

Table 30: Rental OVD Services[973]

	Amazon Instant Video	iTunes	Vudu	Cinema Now	YouTube	PlayStation Network	Xbox Live Market-place
Price per Movie Purchase	$0.99-$3.99	$1.99-$4.99	$2.00-$5.99	$2.99-$3.99	Free-$3.99	$0.99-$5.99	$3.00-$6.00
No. of Movies	42,375	15,000	13,556	4,414	9,000	4,096	7,692
HD Service	Yes (720p)	Yes (720p)	Yes (1080p)	Yes (720p)	Yes (720p)	Yes (1080p)	Yes (1080p)
No. of Device Brands on Which OVD Can Be Accessed	11	1	22	12	10	1	1

275. *Electronic Sell-Through*. Electronic sell through ("EST") is a digital distribution model for content owners to generate revenue from downloads of content over the Internet that mimics the physical sale model of a traditional retail store.[974] Consumers pay a one-time fee to download a television show, movie, or other media to be stored locally on a hard drive or remotely via a cloud storage service.[975] With the exception of YouTube, the main players in the OVD rental market also are EST distributors.[976] Generally EST movie library sizes are comparable to rental library sizes. Some services, including Amazon and CinemaNow, offer more selections for sale than for rent. The prices of movies range from $4.99 to $20.00 and the prices for television programs range from $0.99 to $3.99.[977]

[973] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 8. *See also supra*, Sec. III.C.2.

[974] Anytime Pte Ltd, *Media Centre: Glossary of Terms*, http://www.anytimeondemand.com/glossary_of_terms.html#electronic (visited Nov. 8, 2012).

[975] Home Media Magazine, *Digital Glossary*, http://www.homemediamagazine.com/electronic-delivery/digital-glossary (visited Nov. 27, 2012) ("Digital Glossary"). When discussing EST, this particular Report focuses on situations where video content "is made available to consumers on a download-to-own basis, as opposed to . . . where content is 'rented' for a specific period of time." Anytime Pte Ltd, *Media Centre: Glossary of Terms*, http://www.anytimeondemand.com/glossary_of_terms.html#electronic (visited Nov. 27, 2012).

[976] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 9.

[977] *Id*.

Table 31: OVD EST Services[978]

	Amazon Instant Video	iTunes	Vudu	CinemaNow	PlayStation Network	Xbox Live Market-place
Price per Movie Purchase	$4.99-$14.99	$4.99-$19.99	$9.99-$14.99	$9.95-$19.99	$9.99-$17.99	$17.00-$20.00
Price Per TV Purchase	$0.99-$2.99	$1.99-$2.99	$1.99-$3.99	$1.99	$1.99-$2.99	$2.00-$3.00
No. of TV Seasons	8,766	N/A	1,448	293*	262	2,446*
No of TV Episodes	N/A	90,000	N/A	N/A	N/A	N/A
No. of Movies	46,547	15,000	13,556	7,010	5,196	7,692
HD Service	Yes (720p)	Yes (720p)	Yes (1080p)	Yes (720p)	Yes (1080p)	Yes (1080p)
No. of Device Brands on Which OVD Can Be Accessed	11	1	22	12	1	1

*CinemaNow and Xbox only give data on the number of shows, not individual season or episodes.

b. Non-Price Rivalry

276. OVDs compete with, and differentiate themselves from one another based on several non-price factors. For consumers, key points of non-price rivalry include picture quality, the extent of the content library and release dates of content, availability of original programming, the ability to discover available content, and the ability to watch OVDs on a variety of devices. For advertisers, key aspects of non-price rivalry include the ability to measure viewership, the size of OVDs' audiences, and the ability to target audiences with relevant advertising.

277. *Consumers*. OVDs vary in their picture quality. For example, none of the major advertiser-supported OVDs offers HD service. Among subscription OVDs, Netflix offers HD service in 1080p, while Hulu Plus and Amazon Prime offer it in 720p. Most major EST and rental OVD services offer HD service, several in 1080p.

278. The on-demand libraries of Netflix, Amazon, Hulu, and other OVDs that license content from studios and networks offer consumers a range of choices from the latest hits to older movies and television programs.[979] In February 2012, Netflix's agreement with Starz ended[980] and, in September

[978] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 9.

[979] Netflix Comments at 5. Comcast Reply at 3. *See also supra*, Tables 27 & 28.

[980] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012. Netflix states that the movies from EPIX only represented 5 percent of its viewing, and the (continued….)

2012, Netflix lost exclusive OVD access to EPIX when EPIX signed a licensing agreement with Amazon Prime. Netflix reports that two thirds of its viewing hours consists of television series, with the other third of its viewing hours consisting of movies.[981] In December 2012, Netflix and the Walt Disney Company announced a new multi-year agreement making Netflix the exclusive U.S. subscription television service for first-run live-action and animated movies from the Walt Disney Studios.[982] Netflix is the exclusive distributor of such movies for several months after they are available on DVD.[983] This represents the first time that a major studio has selected an OVD over a premium television network for this distribution window.[984] While several subscription OVDs offer access to an increasing library of titles, few deals with studios are exclusive, making product differentiation a challenge.[985]

279. A number of OVDs are investing in original programming to distinguish themselves from their competition.[986] Analysts suggest this strategy is a response to the increasing scarcity of exclusive content and an attempt to build OVDs' brands, similar to cable networks' strategies.[987] Comcast contends that OVDs' distribution of original programming demonstrates that content owners and producers see OVDs as a new way of reaching consumers,[988] and Verizon states that such original programming offers true alternatives to traditional cable networks.[989]

280. In particular, in 2013 Netflix introduced its original series *House of Cards*, and plans to develop additional original series.[990] Netflix says that it tries to build audiences for its programs over time and is less concerned with a program's immediate success.[991] In the summer of 2012, Hulu

(Continued from previous page)
two parties could not reach a contractual agreement providing for exclusivity that made sense to both parties. Netflix *3Q 2012 Earnings Statement*, Oct. 23, 2012, at 3.

[981] Netflix *3Q 2012 Earnings Statement*, Oct. 23, 2012, at 2-3. *See also Netflix, Inc. UBS Global Media and Communications Conference*, Corrected Transcript, FACTSET CALLSTREET, LLC, Dec. 5, 2012, at 21-22.

[982] Netflix Inc., *Netflix and the Walt Disney Studios Announce Multi-Year Premium Pay TV Window Agreement in the United States* (press release), Dec. 4, 2012. The new releases will be available beginning 2016, when Disney's agreement with Starz ends. In addition, Netflix can stream Disney's library titles immediately, and direct-to-video new releases starting in 2013.

[983] Brooks Barnes, *Netflix Reaches Deal to Show New Disney Films in 2016*, N.Y. TIMES, Dec. 4, 2012, http://mediadecoder.blogs.nytimes.com/2012/12/04/netflix-bests-starz-in-bid-for-disney-movies/?ref=media (visited Dec. 5, 2012).

[984] Ben Fritz and Joe Flint, *Netflix Buys Exclusive Rights to Disney Movies*, L.A. TIMES, Dec. 4, 2012, http://www.latimes.com/entertainment/envelope/cotown/la-fi-ct-disney-netflix-20121205,0,1100223,full.story (visited Dec. 5, 2012).

[985] Perkin di Grazia, *Amazon Needs More than Content Deals to Compete*, SNL KAGAN, Feb. 17, 2012.

[986] *Id*. *See also* Netflix Comments at 5; Comcast Comments at 27, 29; Verizon Comments at 24-25.

[987] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 4.

[988] Comcast Reply at 7.

[989] Verizon Comments at 15, 24-25.

[990] Netflix Comments at 5. Nancy Haas, *And the Award for the Next HBO Goes to . . . ,* GQ, February 2013, http://www.gq.com/entertainment/movies-and-tv/2013/netflix-founder-reed-hastings-house-of-cards-arrested-development?currentPage=1 (visited April 19, 2013).

[991] *Netflix, Inc. UBS Global Media and Communications Conference*, Corrected Transcript, FACTSET CALLSTREET, LLC, Dec. 5, 2012, at 24-27, 29.

presented ten original series commissioned from independent writers, directors, and producers.[992] It also licensed 13 television programs that will appear exclusively on Hulu.[993] While the original series may not draw the same size audiences as series from broadcast and cable networks, Hulu says it is seeking original shows that appeal to specifically targeted viewers rather than broad audiences.[994] Likewise, YouTube has partnered with entities such as the London Symphony Orchestra and other institutions to produce unique content.[995] Similarly, Sony's Crackle offered 43 original video series as of November 2012.[996] In May 2012, Amazon also announced its plans to develop original video content for distribution through its Instant Video service.[997]

281. The term "discovery" refers to an OVD's ability to identify and highlight content that might be of interest to a consumer in a convenient manner.[998] Ericsson, a provider of communications technology and services, reports that consumers are substituting recommendation-based navigation for search engines and program guides.[999] OVDs' discovery screens vary.[1000] For example, Netflix's recommendation engine, search capabilities, and social media features aim to match subscribers with content choices that a specific subscriber might enjoy.[1001] Netflix's suggestions do not distinguish among the preferences of multiple users within an individual household. Suggestions include a significant number of options, up to 18 on a single screen and 72 across multiple screens. Hulu has a "featured" and

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[992] Andy Forsesell, Senior Vice President, Content, Hulu, Hulu Blog, *Summertime . . . and the Viewing is Easy*, May 20, 2012, http://blog.hulu.com/2012/05/20/summertime%e2%80%a6and-the-viewing-is-easy/ (visited Nov. 1, 2012).

[993] Amy Chozick and Brian Stelter, *An Online TV Site Grows Up*, N.Y. TIMES, April 16, 2012, http://www.nytimes.com/2012/04/17/business/media/hulu-the-online-tv-site-adds-original-programming.html?pagewanted=print (visited Nov. 1, 2012). *See also* Comcast Comments at 27.

[994] Amy Chozick and Brian Stelter, *An Online TV Site Grows Up*, N.Y. TIMES, April 16, 2012, http://www.nytimes.com/2012/04/17/business/media/hulu-the-online-tv-site-adds-original-programming.html?pagewanted=print (visited Nov. 1, 2012). A Hulu executive states that developing original series enables Hulu to minimize the risk of cannibalizing viewers from its own partners. *Id.*

[995] Google Reply at 3.

[996] Sony, *Crackle: Shows: TV & Originals*, http://www.crackle.com/c/shows (visited Nov. 12, 2012) (including *Comedians in Cars Getting Coffee* starring Jerry Seinfeld).

[997] Dan Graziano, *Amazon to Develop Original Programming*, BGR MEDIA, LLC, May 2, 2012, http://bgr.com/2012/05/02/amazon-studios/ (visited July 15, 2013).

[998] Chuck Parker, *Why Discovery is So Hard to Implement; Enabling Technology*, THE ONLINE REPORTER, May 4, 2012.

[999] Ericsson Consumerlab, *TV and Video: An Analysis of Evolving Consumer Spending Habits*, August 2012, at 9 ("Ericsson 2012 TV and Video White Paper"). A search involves a user looking for something specific and trying to find it. A recommendation involves a service suggesting a movie or television program based on genres, actors, or other features of content a user has viewed in the past. Chuck Parker, *Why Discovery is So Hard to Implement; Enabling Technology*, THE ONLINE REPORTER, May 4, 2012. For example, for each movie or television program, Amazon's site notes "Customers Who Viewed This Item Also Viewed . . ." and suggests a list of similar programs. Amazon.com, *Amazon Instant Video: Mad Men*, http://www.amazon.com/Dark-Shadows/dp/B008359JXI/ref=sr_1_1?ie=UTF8&qid=1352906710&sr=8-1&keywords=mad+men (visited Nov. 14, 2012).

[1000] Chuck Parker, *Why Discovery is So Hard to Implement; Enabling Technology*, THE ONLINE REPORTER, May 4, 2012.

[1001] Netflix Comments at 3-4.

"most popular" category that is not user or household specific. Hulu presents nine choices on a screen, but requires users to scroll through hundreds of options. Amazon and Vudu's guides vary depending on whether a user is accessing content on an iPad, in which case discovery is limited, or a Sony Play Station 3 console, where popular content is highlighted.

282. Some analysts contend that discovering content online is generally difficult. They suggest that consumers must already know what they want to watch, and often are not introduced to another program or movie as they are when watching cable or broadcast television.[1002] In this regard, one industry observer suggests that for discovery to improve, OVDs will need to (1) simplify the user interface, and (2) make algorithms more sophisticated in order to incorporate nuances of movies and programs people enjoy watching.[1003] Netflix and Comcast contend that OVDs and device manufacturers are driving MVPDs to improve television user interfaces, including programming guides.[1004]

283. The ability to view content on multiple devices is another key form of non-price rivalry. Consumers increasingly want to view video programming when they want, where they want, and on a variety of devices.[1005] SNL Kagan estimates that, as of 2012, more than 25 million U.S. households have at least one Internet-connected video device, such as a game console, set-top box, television set, or Blu-ray player.[1006] SNL Kagan contends that the pervasiveness of connected devices eliminates a barrier for OVD market entry and represents new opportunities for OVD expansion.[1007]

284. Netflix reports that consumers can access its service on more than 900 individual Internet-connected devices.[1008] Verizon comments that OVDs such as Netflix and Amazon are available through apps on television sets and Blu-ray/DVD players that deliver high quality video over the Internet to a consumer's television screen.[1009] YouTube users may view paid content from any smartphone, tablet,

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[1002] Laura Martin and Dan Medina, *The Future of TV: The Invisible Hand*, Needham & Company, LLC, June 22, 2012, at 15. Psychological studies indicate that people are more likely to make a purchase when offered a limited array of six choices rather than a more extensive array of 24 or 30 choices. Moreover, participants actually reported greater subsequent satisfaction with their selections when their original set of options had been limited. Sheena S. Iyengar and Mark R. Lepper, *When Choice is Demotivating: Can One Desire Too Much of a Good Thing?*, 79 J. PERSONALITY & SOC. PSYCHOL. 995 (2000).

[1003] Chuck Parker, *Why Discovery is So Hard to Implement; Enabling Technology*, THE ONLINE REPORTER, May 4, 2012.

[1004] Netflix Comments at 1-2; Comcast Reply at 4. In a survey conducted by DigitalSmiths, a manufacturer of video search and navigation technology, 62 percent of respondents said that they would like to find television programs and movies, either on an OVD or MVPD, based on their mood. DigitalSmiths, *Q4 2012 Video Discovery Trends Report: Consumer Behavior Across Pay-TV, VOD, OTT and Next Gen Features*, October 2012, at 11, http://www.digitalsmiths.com/digitalsmiths-q4-2012-video-discovery-trends-report-consumer-behavior-across-pay-tv-vod-ott-and-next-gen-features/ (visited Nov. 14, 2012) ("DigitalSmiths *Q4 2012 Trends Report*"). *See also* DigitalSmiths, *About Us*, http://www.digitalsmiths.com/about/ (visited Nov. 18, 2012).

[1005] Comcast Reply at 3-4 (noting that OVDs are working to make their content available to the widest audience possible on as many devices as possible). Commenters observe that OVDs and device manufacturers are spurring MVPDs to make more programming available to consumers in more ways and over more devices. Comcast Reply at 4; Netflix Comments at 1-2.

[1006] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 4.

[1007] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012. *See also* Table 31 above listing examples of number of devices.

[1008] Netflix Comments at 3. *See also* Tables 26-29, estimating the number of companies, *i.e.* brands, that manufacture these devices.

[1009] Verizon Comments at 5.

or Internet-connected television set, as well as from their personal computers.[1010] Hulu Plus users are able to stream content on devices, including smart TVs, Apple's iPads, iPhones and iPod Touch, Microsoft's Xbox 360, Amazon's Kindle Fire, Barnes & Noble's Nook Tablet, multiple Android tablets, and Wii game consoles.[1011]

285. Movies purchased from one OVD, however, are not necessarily viewable on another OVD's devices. For example, movies purchased on Apple's iTunes will not play on non-Apple devices, and movies purchased on Amazon or CinemaNow will not play on Apple devices.[1012] YouTube's movie rentals are only available on PCs, Google TV, and Android devices.[1013] On the other hand, Apple's vertical integration of its iTunes service, its iOS operating system, and Apple devices enable users to seamlessly share videos with iPhones, iPads, and Apple TVs.[1014]

286. To address the lack of interoperability, in 2010, OVDs, studios, retailers, and other entities formed the Digital Entertainment Content Ecosystem ("DECE") to develop a cloud-based storage system, called UltraViolet, to enable consumers to watch movies and television programs across multiple devices.[1015] Warner Brothers' Flixster, and Sony Picture's and Universal's dedicated UltraViolet websites allow UltraViolet users to access titles on a range of Android/iOS devices, as well as PCs and Macs.[1016] Moreover, the "disc to digital" features on Samsung Blu-ray devices enable consumers to add existing DVDs and Blu-ray discs from participating studios to their UltraViolet digital libraries, making them accessible via download and streaming on a wide range of devices.[1017]

287. *Advertisers*. Some OVDs rely on advertising revenues. Online video ads enable advertisers to gather information and details about the extent to which customers interact with their brands that are not always readily available with traditional media.[1018] Because online advertising and traditional television advertising use different ratings metrics, calculating an advertising campaign's total

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[1010] Google Reply at 2.

[1011] Hulu, *Hulu Plus: Devices*, http://www.hulu.com/plus/devices (visited Nov. 1, 2012); Rajiv Makhijani and Zachary Pinter, Software Developers, Hulu, *Hulu Plus Arrives on Seven Android Tablets. With a Brand New Style*, Hulu Blog, March 29, 2012, http://blog.hulu.com/2012/03/29/hulu-plus-arrives-on-seven-android-tablets-with-a-brand-new-style-2/ (visited Nov. 1, 2012); Dallas Mahrt, Senior Software Developer, Hulu, *Hulu Plus Arrives on Apple TV*, Hulu Blog, July 31, 2012, http://blog.hulu.com/2012/07/31/hulu-plus-arrives-on-apple-tv/ (visited Nov. 1, 2012). *See also* Comcast Comments at 27.

[1012] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 9.

[1013] *Id*. at 8.

[1014] *Id*. at 9.

[1015] Digital Entertainment Content Ecosystem LLC, *Digital Entertainment Content Ecosystem Unveils UltraViolet Brand* (press release), July 20, 2010.

[1016] Digital Entertainment Content Ecosystem LLC, *UltraViolet Attracts More Than 750,000 Households in First Three Months* (press release), Jan. 10, 2012.

[1017] Disney is the only major studio not participating in UltraViolet. Both Disney and Apple have alternative services, KeyChest and iCloud, respectively. Deana Myers, *Subscription Dominates Online Video Market*, SNL KAGAN, Nov. 30, 2011. *See also* Wade Holden, *Retail Disc Business Drops 10% in 2011*, SNL KAGAN, March 29, 2011; Sarah Barry James, *UPDATE: Disney on UltraViolet: "We're Taking a Wait-and-See Approach"*, SNL KAGAN, Feb. 7, 2012.

[1018] *See, e.g.*, Nicole Rawski, *How to Really Measure Engagement*, iMEDIA CONNECTION, June 15, 2012, http://www.imediaconnection.com/content/32065.asp (visited Nov. 19, 2012).

reach and frequency across different platforms is difficult.[1019] The key television ratings metric for advertisers is the "C3 rating," a measurement of network television commercials watched live and on DVRs within three days of their original airing.[1020] For online viewing to be included in a program's C3 television viewing, a network must include the same set of commercials in the program online that it includes on air.[1021]

288. Debate remains whether advertising viewed on OVD sites should be measured in the same manner as for that aired on traditional television, particularly if OVDs seek a larger share of total advertising budgets.[1022] One advertising executive suggests that a metric that includes both television and online video viewing would be a major factor in spurring the growth of online video since networks and studios may be more willing to make programming available online if they can market the value of online audiences to advertisers.[1023]

289. As discussed above, television advertising prices are based on the cost of delivering 1,000 impressions (cost per thousand, or CPM) nationally, and cost per point locally.[1024] While online advertising also uses pricing based on CPM, prices also may be based on an advertisement's performance.[1025] With this pricing model, advertisers pay based on a set of agreed upon performance criteria, such as a percentage of online revenues or delivery of new sales leads.[1026] The Interactive Advertising Bureau ("IAB") reports that performance-based pricing has grown increasingly popular, representing 62 percent of Internet advertising revenue in 2010, 64 percent in 2011, and 67 percent during the first six months of 2012.[1027] CPM-based pricing declined from 33 percent of Internet advertising revenues in 2010 to 32 percent in 2011 and 31 percent during the first half of 2012.[1028]

290. Online video advertisements, which offer a combination of sight, sound, and motion, earn higher CPMs than other forms of Internet display advertising.[1029] The common industry practice is for sellers of online advertising to charge from the moment their video advertisement starts to play, even if a

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[1019] Jeanine Poggi, *Nielsen Marries TV, Online Ratings*, ADVERTISING AGE, Oct. 1, 2012, http://adage.com/article/media/nielsen-marries-tv-online-ratings/237516/ (visited Nov. 7, 2012).

[1020] Claire Atkinson, *Commercial-Ratings White Paper*: *How Commercial Ratings Changed the $70B TV Market*, ADVERTISING AGE, Oct. 13, 2008, at 2 ("Ad Age Commercial Ratings White Paper"). *See also* TVB, *Local Broadcast TV Markets Surpass National Time-Shifted Viewing* (press release), Nov. 26, 2012.

[1021] Paige Albiniak, *Nielsen Now Counting All Runs*, BROADCASTING & CABLE, April 25, 2011, http://www.broadcastingcable.com/article/467188-Nielsen_Now_Counting_All_Runs.php (visited Nov. 7, 2012).

[1022] *The Economics of Online Video 2011* (White Paper), ADVERTISING AGE, Feb. 14, 2011, at 13 ("AD AGE 2011 White Paper").

[1023] AD AGE 2011 White Paper at 17.

[1024] *See also supra*, Sec. III.B.2.a.

[1025] Online advertisers may also use a hybrid of impression- and performance-based pricing models.

[1026] Interactive Advertising Bureau, *Wiki, Main Glossary, Performance Pricing Model*, http://www.iab.net/wiki/index.php/Performance_pricing_model (visitedJuly 9, 2013).

[1027] Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2012 First Six Months' Results*, October 2012, at 18.

[1028] *Id*.

[1029] comScore, *2012 U.S. Digital Future in Focus*, February 2011, at 15. Generally, online video advertising includes any advertisement in video format, including those that appear with OVD programming.

viewer only watches it for a few seconds.[1030] In April 2012, Hulu became the first OVD to announce that it would only charge advertisers when a viewer watches the entire advertisement.[1031] This metric is known as the "completion rate" of an online video advertisement. Analysts believe Hulu will be able to charge higher rates as a result of stimulating demand among advertisers for its limited commercial inventory. Hulu states its completion rate for online video advertisements is 96 percent, compared to an industry average of 88 percent for online video commercials airing in long-form programs.[1032] Hulu is viewed by some as the leader among advertiser-supported OVDs and charges some of the highest CPMs in the industry.[1033] Advertisers also seek to protect their brands, generally preferring professional content to unpredictable, user-generated content. Hulu maintains that its presentation of advertising is a source of value to advertisers because it uses patented technology to present relevant ads that generate higher recall, purchasing, and completion rates than others.[1034] In addition, Hulu viewers can sometimes choose from a selection of advertisements, and determine if an advertisement is not relevant to them, in which case a new advertisement will play at no cost to the original advertiser.[1035] According to Nielsen, Hulu's commercials have two times the recall rate of advertisements found elsewhere.[1036]

291. In traditional television, Nielsen ratings are the sole currency for advertisers.[1037] For online video, Nielsen and comScore are the major ratings services. Because they use different methodologies, their results differ.[1038] In February 2011, three advertising trade groups launched an initiative called "Making Measurement Make Sense" to standardize online measurement metrics.[1039] In August 2011, Nielsen launched its Online Campaign Ratings service, which subsequently became the first Internet measurement service to provide demographic ratings for online advertising campaigns with

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[1030] Perkin di Grazia, *Hulu Innovating Video Advertising*, SNL KAGAN, April 25, 2012.

[1031] *Id*. TubeMogul, an online video marketing company, reports that based on a survey it conducted, a positive relationship exists between advertisement completion rates and recollection of the advertisement's message. TubeMogul, Research Reports, *Is A Completed Ad a Remembered Ad?*, Dec. 5, 2012, http://www.tubemogul.com/research/report/46-Is-a-Completed-Video-Ad-a-Remembered-Ad- (visited Dec. 5, 2012).

[1032] Perkin di Grazia, *Hulu Innovating Video Advertising*, SNL KAGAN, April 25, 2012.

[1033] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 10. AD AGE 2011 White Paper at 16. Despite its large audience, YouTube's carriage of advertising has developed slowly, in part because of its reliance on user-generated content. *The Economics of Online Video 2011* (White Paper), ADVERTISING AGE, Feb. 14, 2011, at 16 ("AD AGE 2011 White Paper).

[1034] AD AGE 2011 White Paper at 16.

[1035] Perkin di Grazia, *Hulu Innovating Video Advertising*, SNL KAGAN, April 25, 2012.

[1036] *Id*.

[1037] *Watching the TV Watchers*, DAILY VARIETY, Jan. 12, 2011, at 8.

[1038] Cotton Delo, *Your Guide to Who Measures What in the Online* Space, ADVERTISING AGE, Sept. 19, 2011, http://adage.com/article/media/guide-measures-online-space/229858/ (visited Nov. 7, 2012). Nielsen and comScore have traditionally measured online viewing using large panels of consumers who participate voluntarily, and then project the behavior to the entire population based on demographic variables. Michael Depp, *Online Metrics Inch Closer to Standardization*, NETNEWSCHECK, Dec. 4, 2011, http://www.netnewscheck.com/article/15811/online-metrics-inch-closer-to-standardization (visited Nov. 7, 2012).

[1039] The trade groups are the Interactive Advertising Bureau (IAB), The Association of National Advertisers (ANA), and the American Association of Advertising Agencies (4A's). IAB, ANA, 4A's, *IAB, ANA, & 4A's Join Forces to "Make Measurement Make Sense" – Leading Trade Groups Take on Top Industry Challenge* (press release), Feb. 28, 2011.

certain metrics comparable to those used for television advertising.[1040] In September 2012, The CW became the first television network to sign on with Nielsen Online Campaign Ratings, guaranteeing advertisers that they will reach a minimum number of targeted viewers during the 2012-2013 television season.[1041] Microsoft has worked with Nielsen to measure viewing on its Xbox game consoles, spurring Viacom and other cable network owners to enter agreements with Microsoft.[1042] Nielsen reportedly will include tablets in its television ratings by the end of 2013.[1043]

4. OVD Performance

292. Due to data limitations, our analysis of OVD performance is limited to that of a few of the most widely recognized industry players and is not intended to be a comprehensive assessment of the entire OVD industry. With these limitations, we describe OVD viewership, subscribership, revenue, investment, and profitability.[1044]

a. OVD Viewership and Subscribership

293. *Audience*. The online video industry uses several metrics to measure audience size and usage of online video content, including the number of videos per viewer and the amount of time viewers spend watching.[1045] As we noted above, different ratings services use different methodologies to measure viewership, leading to different rankings.[1046] The chart below, based on comScore information from June

[1040] Nielsen, *The CW to Use Nielsen Online Campaign Ratings for All Online Audience Guarantees* (press release), Sept. 27, 2012.

[1041] *Id*. If the guarantees fall short, The CW will include inventory on its website along with inventory on its linear network in its make-goods. Jeanine Poggi, *Nielsen Marries TV, Online Ratings*, ADVERTISING AGE, Oct. 1, 2012, http://adage.com/article/media/nielsen-marries-tv-online-ratings/237516/ (visited Nov. 7, 2012). A make-good is an offer by television network to rerun a commercial, at no additional charge. The second airing of the commercial is generally of value equal to or greater than the original placement and used to compensate advertisers for unanticipated ratings that fall short of the rating which the network originally guaranteed. Occasionally a television network will return cash to the advertiser instead. Vogel at 577.

[1042] George Winslow, *A Divide That's Not as Deep as You Think*, BROADCASTING & CABLE, Sept. 17, 2012.

[1043] Jon Lafayette, *Comcast Rx Helps Nielsen Swallow Tablets: After Long Wait, Mobile Viewing to be Added to C3 and C7 Ratings*, BROADCASTING & CABLE, March 25, 2013. Nielsen worked with Comcast to develop the technical capabilities to track programs viewed on tablets.

[1044] In addition, due to the limitations of available data, our performance analysis includes data regarding OVDs that distribute professionally produced as well as user-generated video content, both short-form and long-form.

[1045] comScore, *Surviving the Upfronts in a Cross-Media World: An Actionable Guide for Success*, June 6, 2012, at 7, http://www.comscore.com/Insights/Presentations_and_Whitepapers/2012/Surviving_the_Upfronts_in_a_Cross-Media_World (visited April 22, 2013) ("comScore, *Surviving the Upfronts in a Cross-Media World*").

[1046] For example, although Amazon does not make Nielsen's top ten rankings in December 2011 or August 2012, comScore ranked it number nine in December 2011 and number ten in August 2012. *See* comScore, Inc., *comScore Releases December 2011 U.S. Online Video Rankings* (press release), Jan. 17, 2012; comScore, Inc., *comScore Releases August 2012 U.S. Online Video Rankings* (press release), Sept. 19, 2012. *See also* The Nielsen Company, Nielsen Wire, *December 2011: Top U.S. Online Video Destinations*, Jan. 25, 2012; The Nielsen Company, Nielsen Wire, *August 2012 Top Online Video Sites*, Sept. 27, 2012, http://www.nielsen.com/us/en/newswire/2012/august-2012-top-u-s-video-sites.html (visited July 10, 2013).

2012,[1047] illustrates, among other things, that more than 180 million U.S. Internet users watched online video content for an average of 20.6 hours per viewer (*i.e.*, 1238.1 minutes/60 minutes) in June 2012.[1048]

[1047] Nielsen does not publicly report the most popular online video sites on a regular basis; thus June 2012 data are not available. *See* Nielsen, *Search Result for "Online Destinations for Video,"* http://blog.nielsen.com/nielsenwire/?s=online+destinations+for+video (visited Nov. 8, 2012). Due to July 2011 changes in the methodology of its Video Census product, Nielsen's results from the second quarter of 2011 are not comparable to those from the second quarter of 2012. Nielsen, *The Cross-Platform Report*, Quarter 1, 2012, at 12.

[1048] comScore, Inc., *comScore Releases June 2012 U.S. Online Video Rankings* (press release), July 18, 2012 ("comScore Video Metrix") *See also 14th Report*, 27 FCC Rcd at 8751, Table 23 (June 2011 data). The list of top ten properties remained relatively stable since the last report. The only change reflects a decline in the number of unique viewers of the Hulu site. Vimeo replaced Hulu on the list. While sources differ on the number of Hulu viewers, Nielsen, for example, reports that the unique viewers of Hulu, excluding Hulu Plus, declined from 19 million in December 2011 to 12 million in August 2012. The Nielsen Company, Nielsen Wire, *December 2011: The Top Online Video Destinations*, Jan. 25, 2012,; The Nielsen Company, Nielsen Wire, *August 2012 Top Online Video Sites*, Sept. 27, 2012, http://www.nielsen.com/us/en/newswire/2012/august-2012-top-u-s-video-sites.html (visited July 10, 2013).. We note that many of the parent companies of the websites listed in the table (*e.g.*, Google, Yahoo!, AOL, Facebook, and Vevo) specialize in short-form, rather than long-form content. Will Richmond, *Cloud-Based Startup Portico Aims to Package Online Video Into TV Experiences*, VIDEONUZE, Dec. 6, 2012, http://www.videonuze.com/article/cloud-based-startup-portico-aims-to-package-online-video-into-tv-experiences (visited Dec. 6, 2012).

Table 32: Top U.S. Online Video Properties Ranked by Unique Views (June 2012)[1049]

Property	Total Unique Viewers (in thousands)	Videos[1050] (in thousands)	Minutes per Viewer
Google Sites[1051]	154,507	18,274,297	484.4
Yahoo! Sites	51,453	717,806	75.5
Facebook.com	49,003	287,798	20.6
VEVO	46,202	594,806	51.8
Viacom Digital	38,921	433,381	54.2
Microsoft Sites	38,122	433,514	41.8
AOL, Inc.	38,117	544,932	63.7
Amazon Sites	29,826	97,697	17.5
Turner Digital	23,425	215,229	39.7
Vimeo[1052]	21,425	71,241	28.3
Total Internet[1053]	**180,373**	**32,997,209**	**1,238.1**

294. *Subscribership*. As of June 30, 2012, Netflix had 22.7 million subscribers to its domestic streaming service, up from 20.2 million subscribers at the end of December 2011, when Netflix first began to report streaming subscriber figures.[1054] Netflix notes that seven out of its nine million DVD subscribers at the end of June 2012 also subscribed to its streaming service.[1055] The mix of Netflix's

[1049] comScore Video Metrix. These data reflect total U.S. home/work/university locations.

[1050] comScore defines a video as any streamed segment of audiovisual content, including both progressive downloads and live streams. For long-form, segmented content (*e.g.*, television episodes with advertising in the middle) each segment of the content is counted as a distinct video segment.

[1051] As reflected in this table, "Google Sites" includes the website YouTube which hosts user-generated video, as well as professionally-produced video. In terms of unique viewers, YouTube is the leader, attracting more than 140 million viewers each month. YouTube offers hundreds of channels of professionally-produced, themed programming, such as music videos and games. YouTube: *YouTube Partner Program*, http://www.youtube.com/yt/partners/ (visited July 3, 2013). Vevo, a distributor of music videos jointly owned by Sony Music Entertainment, Universal Music Group, and Abu Dhabi Media Company, operates both its own website and a channel within YouTube. Vevo, *Vevo Partners with Abu Dhabi Media Company* (press release), Oct. 19, 2009. *See also* Vevo, *About Us: Company Profile*, http://www.vevo.com/About#/About (visited Nov. 6, 2012). Among YouTube's partner channels, Vevo was the most popular. comScore Video Metrix; comScore, *Surviving the Upfronts in a Cross-Media World* at 5.

[1052] Vimeo, owned by IAC, offers videos by independent producers without advertising. at 27. *See also*, Vimeo, LLC, *About Us*, http://vimeo.com/about (visited Nov. 8, 2012); Sam Gutelle, *Vimeo Seeks Profit for Itself and Its Creators with Tip Jars, Paywalls*, TUBEFILTER, Sept. 20, 2012, http://www.tubefilter.com/2012/09/20/vimeo-tip-jar-pay-to-view/ (visited Dec. 6, 2012).

[1053] Total Internet includes totals for all sites, not just the top ten sites reported separately here.

[1054] We use the term "subscribers" to refer to paid subscribers only. Netflix and other OVD services offer free trial memberships to new and certain rejoining members. Therefore, the total number of subscribers is slightly higher than the total number of paid subscribers. For purposes of determining the number of unique subscribers, Netflix counts a domestic subscriber who has elected both a DVD and streaming subscription plan to be a single unique subscriber. Netflix, Inc., *SEC Form 10-Q/A for the Quarterly Period Ended Sept. 30, 2012*, at 3-4.

[1055] Netflix Comments at 3.

subscribers continues to shift. At the end of the third quarter of 2012, domestic streaming subscribers grew to 23.8 million, and domestic DVD subscribers fell to 8.5 million.[1056] Netflix notes that its subscriber growth is seasonal, reflecting when consumers most frequently buy Internet-connected devices (October through March), and when they tend to increase video watching (July through September).[1057]

295. Hulu reported that by the end of 2011 Hulu Plus had more than 1.5 million subscribers compared with fewer than 300,000 at the end of 2010, making it the fastest-growing video subscription service in U.S. history.[1058] As of June 30, 2012, Hulu Plus had more than two million subscribers.[1059]

296. Amazon does not disclose the number of subscribers to its Prime service or the number of members who take advantage of the video streaming service.[1060] As of October 2011, one report estimated that Amazon had between three million and five million subscribers, with it aiming for seven million to ten million Prime subscribers in 2013.[1061]

b. Revenue

297. OVDs earn revenues from advertisers as well as directly from consumers through subscriptions, EST, and rentals. We examine the available revenue data below.[1062] Overall, SNL Kagan estimates that OVDs earned about $1.9 billion in total revenues in 2010, about $3.1 billion in 2011, and projects that data will reflect they earned about $3.9 billion in 2012.[1063]

[1056] Netflix *3Q 2012 Earnings Statement*, Oct. 23, 2012, at 1. Comcast and Verizon note that while Comcast is the largest MVPD service, Netflix has more subscribers. Comcast Comments at 25; Verizon Comments at 24. Comcast had 22.3 million video subscribers at the end of 2011 and 22.1 million subscribers as of June 30, 2012. *See* Comcast Comments at 4.

[1057] Netflix, Inc., *SEC Form 10-K for the Year Ended December 31, 2011*, at 2.

[1058] Jason Kilar, CEO, Hulu, 2011, 2012 and Beyond, Hulu Blog, Jan. 12, 2012, http://blog.hulu.com/2012/01/12/2011-2012-and-beyond/ (visited Nov. 5, 2012).

[1059] JP Colaco, Senior Vice President of Advertising, Hulu, 100% Completion Rate, Hulu Blog, April 17, 2012, http://blog.hulu.com/2012/04/17/100/ (visited Nov. 5, 2012). Because Hulu is a privately-held company, it does not report subscriber or other performance metrics on a regular basis.

[1060] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 7.

[1061] Edmond Lee and Danielle Kucera, *Amazon Is Said to Have Fewer Prime Members Than Estimated*, BLOOMBERG, Feb. 12, 2012, http://www.bloomberg.com/news/2012-02-14/amazon-said-to-have-fewer-prime-subscribers-than-estimated-shares-decline.html (visited Nov. 5, 2012).

[1062] Estimates of advertising revenues for OVDs, as defined in this Report, are not readily available.

[1063] SNL Kagan, *Internet Video-on-Demand Revenue Projections, 2009-2022*, Nov. 2012; SNL Kagan, *U.S. Internet Advertising Revenue Model, 2011-2021*, Sept. 2011; SNL Kagan, *Internet Video-on-Demand Revenue Projections, 2008-2021*, Nov. 2011; Deana Myers, *Subscription Video Dominates Online Video Market*, SNL KAGAN, Nov. 30, 2011.

Table 33: OVD Revenue Streams[1064]
(Revenue in millions)

	2010	2011	2012
Revenue Source			
Subscription	**$969.8**	**$2,076.0**	**$2,564.7**
Movie Purchases	$296.8	$327.0	$413.6
TV Purchases	$233.5	$263.7	$318.3
Total EST	**$530.3**	**$590.7**	**$731.9**
Movie Rentals	$353.7	$455.9	$637.1
TV Rentals	$.5	$.7	$.2
Total Rentals	**$354.3**	**$456.6**	**$637.3**
Total Paid/ Subscription	**$1,854.4**	**$3,123.3**	**$3,933.9**

298. *Advertising.* OVDs, like other companies that utilize the Internet platform, may obtain advertising fees from variety of advertising formats: (1) search, (2) display, (3) classifieds, (4) lead generation, (5) mobile, and (6) e-mail.[1065] Search advertising accounted for about 46-47 percent of all Internet advertising from 2010 through the second quarter of 2012.[1066] IAB reports total Internet

[1064] SNL Kagan, *Advertising Forecasts: U.S. Market Trends & Data for All Major Media*, 2010 Edition, at 92, U.S. Internet Advertising Gross Billings Revenue Model, 2007-2019; SNL Kagan, *Internet Video-on-Demand Revenue Projections, 2009-2022*, Nov. 2012; Deana Myers, *Subscription Dominates Online Video Market*, SNL KAGAN, Nov. 30, 2011; Wade Holden and Deana Myers, *Online Movie Spending to Hit $1B in 2012*, SNL KAGAN, Nov. 30, 2012. Estimates of revenues vary. For example, IHS estimates that EST movie revenues were $236 million in 2011, and rental movie revenues were $273 million. IHS iSuppli, *Netflix Surpasses Apple to Take Lead in U.S. Online Movie Business in 2011* (press release), June 1, 2012.

[1065] *See* eMarketer.com, *US Digital Ad Spending to Top $37 Billion in 2012 as Market Consolidates*, Sept. 20, 2012, http://www.emarketer.com/newsroom/index.php/digital-ad-spending-top-37-billion-2012-market-consolidates/ (visited Nov. 6, 2012); SNL Kagan, *U.S. Internet Advertising Revenue Model,2012-2022*, July 2012. Search advertising is a format where advertisers pay a fee to an Internet company to list and/or link the advertiser's site to a specific search word or phrase. Display advertising refers to a format whereby an advertiser pays an Internet company for space to display a static or hyperlinked banner or logo on one or more of the Internet company's pages. For classified advertising, advertisers pay fees to Internet companies to list specific products or services. Lead generation refers to fees advertisers pay to Internet advertising companies that refer qualified purchase inquiries or provide consumer information where the consumer opts into being contacted by a marketer. Mobile advertising is advertising tailored to and delivered through wireless mobile devices. E-mail advertising refers to banner ads, links, or advertiser sponsorships that appear in commercial email communications. Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2012 First Six Months' Results*, October 2012, at 20, 20, http://www.iab.net/insights_research/industry_data_and_landscape/adrevenuereport (visited Nov. 6, 2012)..

[1066] eMarketer.com, *US Digital Ad Spending to Top $37 Billion in 2012 as Market Consolidates*, Sept. 20, 2012, http://www.emarketer.com/newsroom/index.php/digital-ad-spending-top-37-billion-2012-market-consolidates/ (visited Nov. 6, 2012); Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2012 First Six Months' Results*, October 2012, at 12, 20, http://www.iab.net/insights_research/industry_data_and_landscape/adrevenuereport (visited Nov. 6, 2012).

advertising reached $31.7 billion in 2011, compared with $26.0 billion in 2010.[1067] During the first six months of 2012, it estimates total Internet advertising spending was $17 billion.[1068] IAB estimates that video represented about five percent of total Internet advertising in 2010 and 5.7 percent in 2011.[1069] IAB also estimates that video accounted for six percent of Internet advertising during the first half of 2012.[1070] Similarly, eMarketer estimates that video represented 5.4 percent of total Internet advertising in 2010, 6.3 percent in 2011, and projects that it will account for 7.9 percent of Internet advertising in 2012.[1071] eMarketer also reports that total U.S. online ad spending was almost $32 billion in 2011, compared with $26.29 billion in 2010, and that it expects online ad spending to grow to $37.31 billion in 2012.[1072]

299. As shown in Table 34, comScore estimates that, in June 2012, U.S. Internet users watched 11.0 billion video advertisements, and a total of 4.6 billion advertising minutes, with the online video advertisements reaching 53.0 percent of the U.S. population.[1073] The comScore data also includes several video advertising networks, such as BrightRoll Video Network, TubeMogul Video Ad Platform, Tremor Media Video Network, Specific Media, and Auditude, Inc., as well as Adap.tv and SpotXchange Video Ad Marketplace video advertising exchange.[1074] The five leading properties for video ads viewed during June 2012 were: (1) Google Sites, 1.41 billion ads viewed; (2) BrightRoll Video Network, 1.39 billion ads viewed; (3) Hulu, 1.33 billion ads viewed; (4) Adap.tv, 1.1 billion ads viewed; and (5) TubeMogul Video Ad Platform, 1.0 billion ads viewed.[1075]

[1067] Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2011 Full Year Results*, April 2012, at 5, http://www.iab.net/insights_research/industry_data_and_landscape/adrevenuereport (visited Nov. 6, 2012).

[1068] Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2012 First Six Months' Results*, October 2012, at 12.

[1069] Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2011 Full Year Results*, April 2012, at 12, http://www.iab.net/insights_research/industry_data_and_landscape/adrevenuereport (visited Nov. 6, 2012).

[1070] Interactive Advertising Bureau, *IAB Internet Advertising Revenue Report, 2012 First Six Months' Results*, October 2012, at 10, 12.

[1071] eMarketer.com, *US Digital Ad Spending to Top $37 Billion in 2012 as Market Consolidates*, Sept. 20, 2012, http://www.emarketer.com/newsroom/index.php/digital-ad-spending-top-37-billion-2012-market-consolidates/ (visited Nov. 6, 2012).

[1072] eMarketer.com, *US Digital Ad Spending to Top $37 Billion in 2012 as Market Consolidates*, Sept. 20, 2012, http://www.emarketer.com/newsroom/index.php/digital-ad-spending-top-37-billion-2012-market-consolidates/ (visited Nov. 6, 2012). eMarketer revised its 2012 projections downward based on IAB data for the first quarter, and because it appears that the Internet advertising market is maturing faster than expected.

[1073] comScore Video Metrix.

[1074] *Id*. An advertising network is an aggregator or broker of advertising inventory for many sites that offers a single advertiser the opportunity to buy inventory from a single source. Ad networks are the sales representatives for the websites within the network. An advertising exchange is a sales channel between publishers and ad networks that can also provide aggregated inventory to advertisers. They provide a technology platform that facilitates automated auction based pricing and buying in real-time. Interactive Advertising Bureau, *Wiki, Main Glossary, Ad Network and Ad Exchange*, http://www.iab.net/wiki/index.php/Category:Glossary (visited Nov. 6, 2012). Advertising exchanges first entered the online video advertising market in early 2010. AD AGE 2011 White Paper at 17.

[1075] comScore Video Metrix. Four properties, Google Sites, TubeMogul, ESPN, and Auditude, Inc., are new to the top ten. *See also 14th Report*, 27 FCC Rcd at 8754, Table 24 (June 2011 data).

Table 34: Top U.S. Online Video Properties by Video Ads Viewed (June 2012)[1076]

Property	Video Ads (in thousands)	Total Ad Minutes (millions/month)	Frequency (Ads per Viewer)	Reach of Total U.S. Population (%)
Google Sites	1,412,882	147	18.7	24.7%
BrightRoll Video Network	1,387,252	805	12.7	35.7%
Hulu	1,328,224	583	51.8	8.4%
Adap.tv	1,146,957	649	14.9	25.1
TubeMogul Video Ad Platform	1,041,279	330	17.2	19.8
Tremor Video	836,352	447	17.6	15.5%
SpotXchange Video Ad Marketplace	732,171	404	14.2	16.8%
Specific Media	694,406	332	7.8	29.1%
ESPN	611,875	191	33.7	5.9%
Auditude, Inc.	611,733	208	12.0	16.7%
Total:	**11,005,355**	**4,613**	**67.7**	**53.0%**

300. SNL Kagan estimates that in 2010 Hulu generated $256 million in advertising revenues, $336 million in 2011, and $441 million in 2012. Because content owners retain 70 percent of advertising revenue generated on the site, Hulu earned about $55 million in 2010, $70 million in 2011, and it earned $92 million in 2012.[1077] SNL Kagan estimates that advertising represented 96.5 percent of Hulu's revenues in 2010, 74.5 percent of its revenues in 2011, and 61.3 percent of its revenues in 2012, with the remaining revenues generated from Hulu Plus subscriptions (of which Hulu's content partners also retain 70 percent).[1078]

301. *Subscription, EST, and Rental*. Research firm IHS iSuppli ("IHS") estimates the total revenues for online subscription services surpassed rental and EST movie revenues in 2011, growing from $4.3 million in 2010 to $454 million in 2011.[1079] According to IHS, consumers may view subscription OVDs as relatively inexpensive means of watching movies online on an unlimited basis, especially older titles, in comparison with purchasing individual movies. While EST is more profitable than rentals for movie studios on a per-transaction basis, IHS estimates that EST revenue growth between 2010 and 2011 was relatively flat, growing 2.4 percent to reach $236 million in 2011. According to IHS, new releases account for 70 to 80 percent of EST movies titles purchased, whereas consumers rely overwhelmingly on subscription services for older releases. IHS estimates that revenues for online movie rentals grew 75 percent between 2010 and 2011, from $155 million to $273 million.

302. Table 35 below shows OVDs ranked in terms of the subscription, EST, and rental revenues they generate from distributing movies.[1080] In 2011, Netflix overtook Apple to become the

[1076] comScore Video Metrix.

[1077] Perkin di Grazia, *Profile: Hulu LLC*, SNL KAGAN, Dec. 20, 2012.

[1078] *Id*.

[1079] IHS iSuppli, *Netflix Surpasses Apple to Take Lead in U.S. Online Movie Business in 2011* (press release), June 1, 2012.

[1080] IHS iSuppli, *Netflix Surpasses Apple to Take Lead in U.S. Online Movie Business in 2011* (press release), June 1, 2012.

largest U.S. online movie service, according to IHS.[1081] It attributes this in part to Netflix's decision to charge consumers directly for its online streaming service in 2011, as well as the growth in the number of consumers relying on subscription OVD services to watch movies. For EST movie revenues, IHS estimates that iTunes earned 63 percent of such revenue in 2011, down slightly from 64.6 percent of EST movie revenues in 2010. Vudu's share of EST movie revenues grew from 2.7 percent in 2010 to 4.2 percent in 2011, in part due to its availability on a wide range of devices.

Table 35: Online Movie Market Share Rankings (Share of Revenue in U.S. Dollars)[1082]

2011 Rank	Company	2009	2010	2011
1	Netflix	0.0%	0.5%	44.0%
2	Apple (iTunes)	71.5%	60.8%	32.3%
3	Microsoft	11.2%	16.7%	7.6%
4	Wal-Mart (Vudu)	0.5%	2.7%	4.2%
5	Sony	5.4%	6.8%	2.4%
	Others	11.4%	12.6%	9.5%
	Total of Top 5	**89%**	**87%**	**90%**

c. Investment

303. As emerging and evolving businesses, OVDs are investing in programming, proprietary Internet-enabled devices, infrastructure, and technology. Many of these initiatives are described above in the company-specific business models.[1083] We summarize investment-specific information here.

304. OVDs must invest in programming to attract viewers. For OVDs, the acquisition of programming may represent a fixed or variable cost.[1084] For example, Netflix typically pays a flat fee for multi-year licensing agreements with studios.[1085] As noted above, Netflix reached a distribution agreement with the Walt Disney Company to be the exclusive U.S. subscription service for first-run movies, beginning in 2016.[1086] While the financial terms of the agreement were not disclosed, analysts estimate that Netflix paid between $200 million and $350 million for these rights.[1087] The Verizon-Redbox joint venture will pay networks and studios based on the number of subscribers, similar to

[1081] *Id*. Netflix states that movies are responsible for one-third of its viewing traffic, with the remaining traffic attributable to television programs. Netflix *3Q 2012 Earnings Statement*, Oct. 23, 2012, at 2-3.

[1082] IHS iSuppli, *Netflix Surpasses Apple to Take Lead in U.S. Online Movie Business in 2011* (press release), June 1, 2012.

[1083] *See supra*, Sec. III.C.3.a.

[1084] For broadcast and cable networks, programming from studios generally represents a fixed cost. For MVPDs programming from cable and broadcast networks generally represents a variable cost based on the number of subscribers able to view the network.

[1085] Netflix, Inc., *SEC Form 10-K for the Year Ended December 31, 2011*, at 6.

[1086] *See supra*, ¶ 230.

[1087] Jill Goldsmith, *Can Netflix Absorb the Cost of Content?*, DAILY VARIETY, Dec. 6, 2012. Pay cable networks typically pay studios 10 percent to 12 percent of the U.S. box office receipts of each movie, up to $200 million. Ben Fritz and Joe Flint, *Netflix Buys Exclusive Rights to Disney Movies*, L.A. TIMES, Dec. 4, 2012, http://www.latimes.com/entertainment/envelope/cotown/la-fi-ct-disney-netflix-20121205,0,1100223,full.story (visited Dec. 5, 2012).

MVPDs.[1088] Both Hulu and Apple split revenues from each of its revenue streams (*i.e.*, advertising and subscription for Hulu, and EST and rental for Apple) with their content partners, with studios and networks receiving 70 percent and the OVDs retaining the remaining 30 percent.[1089]

305. Several OVDs have invested in manufacturing proprietary devices to facilitate OVD viewing. These include Amazon (Kindle Fire), Apple, Google (acquisition of Motorola), Sony (Play Station), Microsoft (Xbox), BestBuy (Insignia Flex), Roku, and Boxee. For example, Apple's vertical integration of its OVD service, its iOS operating system, and Apple devices enable users to seamlessly share videos with iPhones, iPads, and Apple TVs.[1090] In addition, several OVDs are investing in the UltraViolet alliance or their own technology to facilitate viewing on multiple third party devices.[1091]

306. OVDs also are investing in infrastructure and technology to facilitate delivery of their content to consumers, including cloud computing.[1092] Google, Microsoft, Apple, and Amazon have invested in their operating systems and/or cloud services so computers and mobile devices will seamlessly upload files to one master remote location.[1093] Cloud syncing uses data when uploading a video as well as downloading a video to each device connected to the cloud, and therefore, while making online video viewing more convenient for consumers, can increase Internet traffic.[1094]

307. As described above, Netflix reports that it continues to invest in technology and user interface design to enable its subscribers to easily find and discover movies and television programs.[1095] Also as described above, Hulu has invested patented technology designed to offer advertising that is relevant to users in a manner that generates higher recall and purchasing intent among, and higher completion rates, from users than other forms of advertising.[1096]

308. Finally, OVDs are developing content delivery networks ("CDNs"). A CDN is a system of computers that stores copies of popular Internet content and bypasses transit links by inserting this content into the service provider's network closer to the consumer.[1097] According to Netflix and Public

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[1088] Cliff Edwards and Michael White, *Redbox-Verizon Streaming to Challenge Netflix by Year-End*, BLOOMBERG, Sept. 22, 2012, http://www.bloomberg.com/news/2012-09-21/redbox-verizon-streaming-to-start-in-time-for-christmas.html (visited Nov. 13, 2012).

[1089] Deana Myers, *Hulu Continues on Quick Growth Path*, SNL KAGAN, Oct. 15, 2012; Laura Martin and Dan Medina, *The Future of TV: The Invisible Hand*, Needham & Company, LLC, June 22, 2012, at ii.

[1090] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 9.

[1091] *See supra*, ¶ 227.

[1092] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 6.

[1093] Sandvine, *Global Internet Phenomena Report*, Fall 2011, at 13. Netflix is a customer of Amazon's cloud computing services. SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 6.

[1094] Sandvine, *Global Internet Phenomena Report*, Fall 2011, at 13.

[1095] Netflix Comments at 3-4.

[1096] AD AGE 2011 White Paper at 16.

[1097] Sandvine, *Global Internet Phenomena Report*, 1H 2012, at 28; Craig Moffett and Carlos Kirjner, *Weekend Media Blast: What if Television HAD to Be Delivered Over the Internet?*, BERNSTEIN RESEARCH, Aug. 24, 2012, at 4. *See also* Public Knowledge UBP White Paper at 23, 26-27. For example, as of 2012, Akamai Technologies, the largest CDN in terms of revenues, overlays its network of 105,000 servers in 1,080 networks in 78 countries, so end users are interacting with an Akamai server at the edge of the network. Informa Telecoms & Media, *CDN Future Scenarios: Extract*, 2012, at 2. *See also* Linda Hardesty and Jonathan Tombes, *CDNs Bridge First and Last Miles*, COMMC'NS TECH., Oct. 15, 2009; Public Knowledge UBP White Paper at 27. For online video, the user's quality of experience ("QoE") depends on two major factors: display quality (how good the picture looks) and transport (continued….)

Knowledge, the use of CDNs eases Internet traffic congestion and improves the viewing experience.[1098] Third party CDNs save OVDs the cost of hosting multiple copies of the content themselves.[1099] CDNs deliver a large portion of total Internet content, estimated to be greater than 60 percent.[1100] In June 2012, Netflix introduced its own CDN, called Open Connect. ISPs can also choose to receive Netflix data at common Internet exchanges.[1101] To assist ISPs, Netflix has shared its hardware design and the open source software components of the Open Connect server.[1102] Other OVDs that have their own CDNs include Amazon, Microsoft, and Google.[1103] In addition, Microsoft and Amazon offer CDN services to other OVDs.

d. Profitability

309. As noted, many of the prominent OVDs are subsidiaries or operations within a larger business. Because the assets, liabilities, revenues and expenses of the parent company and the subsidiaries are often presented in consolidated financial statements that reflect the total resources of the combined entity rather than any of its specific component parts, assessing the profitability of a subsidiary of a larger enterprise can be difficult.[1104] Of the companies that are the focus of our OVD analysis, only Nexflix, which is a standalone OVD, breaks out operating income from streaming services in publicly available reports.[1105] Due to the diverse nature of OVD business models and strategies, we do not believe that Netflix alone is sufficiently representative of the entire OVD segment. Thus, for this Report, we are unable to conduct an analysis of the profitability of OVDs. As OVDs continue to mature and evolve, we anticipate that future public reporting of more entities may include data on profitability and other metrics to assess the financial viability of this segment of the delivered video market.

(Continued from previous page)
quality (how often the picture stalls and rebuffers). Sandvine, *Global Internet Phenomena Report*, 1H 2012, at 24. Because CDNs enable content to be closer to the access edge of the Internet, consumers benefit from lower round-trip time (latency) of online video. *Id.*

[1098] Netflix and Public Knowledge state that CDNs represent an alternative to tiered ISP pricing and data caps for addressing the growth in Internet traffic. Netflix Comments at 8; Public Knowledge UPB White Paper at 23.

[1099] Sandvine, *Global Internet Phenomena Report*, 1H 2012, at 28. Public Knowledge argues that CDNs relieve ISPs of some of the necessary capital investments in broadband networks to facilitate online video viewing. Public Knowledge UBP White Paper at 23-24.

[1100] Craig Moffett and Carlos Kirjner, *Weekend Media Blast: What if Television HAD to Be Delivered Over the Internet?*, BERNSTEIN RESEARCH, Aug. 24, 2012, at 4. While CDNs can mitigate some video traffic, they are not well suited to popular live events such as sports, news, and specials. *Id.*

[1101] Netflix Comments at 8. *See also* Wade Holden, *Netflix Aiming to Cut Costs With Its Own Content Delivery Network*, SNL KAGAN, June 21, 2012.

[1102] Netflix Comments at 8.

[1103] Informa Telecoms & Media, *CDN Future Scenarios: Extract*, 2012, at 3.

[1104] For example, during Amazon's third-quarter earnings conference call, analysts asked executives questions related to the returns on Amazon's investments in acquiring content and developing Kindle Fire tablets. Amazon declined to provide specifics. Sarah Barry James, *Update: Analysts Tell Amazon, "Show Us the Money!"*, SNL KAGAN, Oct. 25, 2012.

[1105] For 2012, Netflix had revenues of approximately $3.6 billion, operating income of almost $50 million and net income of approximately $17.2 million. Netflix, Inc., *SEC Form 10-K for the Year Ended December 31, 2012*, at 19. Sources of OVD revenue are discussed further, *supra*, III.C.4.b.

5. Consumer Behavior

310. In this section of the Report, we consider trends in consumer behavior related to OVDs. We also consider whether and the extent to which consumers substitute OVDs for MVPDs.

311. Access to broadband plays a key role in the ability of consumers to access online video. SNL Kagan estimates that at the end of 2010, there were 79.2 million high-speed data households, with cable operators serving 44.4 million and telephone companies serving 34.8 million.[1106] At the end of 2011, this number increased to 82.9 million, with cable operators serving 47.3 million and telephone companies serving 35.7 million.[1107] As of August 2012, there were 85.1 million high-speed data households, with cable operators serving 49.0 million and telephone companies serving 36.0 million.[1108]

312. In the last Report, based on findings from Nielsen's *Cross-Platform Report*, we noted that the amount of time consumers spend watching online video varies by age, gender, ethnicity, life-stage and lifestyle.[1109] For the second quarter of 2012, Nielsen data indicate similar viewing patterns. Among different age groups, adults aged 65 years or older spend the most time watching traditional television – more than 45 hours per week, compared with an average of 31 hours and 45 minutes per week for all Americans.[1110] Likewise, among different age groups, adults aged 18-24 spent the most time watching online video – more than one hour per week, compared with an average of 44 minutes per week for all Americans.[1111] ComScore estimates that during March 2012, 84 percent of Americans (including people without Internet access) aged 25-34 watched online video, compared with 81 percent of adults aged 34-44, and 25 percent of adults aged 65 or older.[1112]

313. Among the general U.S. population, traditional television viewing dwarfs viewing of online video. According to Nielsen, during the second quarter of 2012, Americans watched on average 31 hours and 45 minutes per week of traditional television and two hours and 32 minutes per week of time-shifted television, compared with four hours and 34 minutes per week using the Internet, 44 minutes per week watching video on the Internet, and only ten minutes per week of video on a mobile phone.[1113] Nielsen also reports that Americans spent an average of one hour and nine minutes per week using a

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[1106] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 5. For its estimates, SNL Kagan includes commercial customers using DOCSIS cable modem and DSL services. Its estimates of subscribers to telephone companies' high-speed data services include subscribers served by DSL and fiber-to-the-home connections. SNL Kagan, *Broadband Cable Financial Databook*, 2012 Edition, at 46, U.S. Cable and Telco HSD Market Share Trends Table.

[1107] SNL Kagan, *The State of Online Video Delivery*, 2012 Edition, at 5.

[1108] Ian Olgierson and Mari Rondeli, *HSD Subscriber Growth Widens Cable's Lead Over Slumping Telcos in Q2*, SNL KAGAN, Aug. 17, 2012.

[1109] *See 14th Report*, 27 FCC Rcd at 8756, ¶ 337.

[1110] Nielsen, *The Cross-Platform Report*, Quarter 2, 2012, at 4, Table 1.

[1111] *Id*. The estimates are based on the total population of the United States, including those who do not have access to online video.

[1112] comScore, *Surviving the Upfronts in a Cross-Media World* at 6.

[1113] Nielsen, *The Cross-Platform Report*, Quarter 2, at 4, Table 1.. This estimate is based on the total U.S. population over the age of two, whether or not they have the technology (*i.e*., DVRs, games consoles, etc.) in their households. Because Nielsen changed the methodology of how it tracks online video viewing in July 2011, data between our previous report, which covered the second quarter of 2011, and this Report, which covers the second quarter of 2012, are not comparable for the purpose of analyzing trends. Year over year trends are available beginning the third quarter of 2011. Nielsen, *The Cross-Platform Report*, Quarter 2, at 10.

DVD/Blu-ray device and one hour and 25 minutes per week using a game console.[1114] Online viewing remains concentrated compared with traditional television viewing. Ranked by in-home streaming behavior of people living in Internet households, the top 20 percent watches an average of 19.4 minutes per day, compared with an average of 2.9 minutes per day for all people who live in households with Internet connections.[1115] In contrast, ranked by in-home television viewing behavior of people living in Internet households, the top 20 percent watch an average of 10 hours and seven minutes per day of television, compared with an average of four hours and 14 minutes per day for all persons living in Internet households.

314. SNL Kagan estimates that there were 26.6 million Internet-connected television households (*i.e.*, an Internet-enabled game console, OVD set-top box, television set, or Blu-ray player), representing 22.8 percent of all television households, at the end of 2011, and estimates that by the end of 2012, the number will grow to 41.6 million, or 35.4 percent of households.[1116] On average, households viewing online video have 2.8 Internet-enabled devices (*i.e.*, a game console, standalone OVD set-top box, television set, Blu-ray player, tablet, desktop computer, or laptop computer).[1117]

315. A 2012 study commissioned by Discovery Communications on the usage of Internet-connected devices found: 79 percent of 18-49 year old consumers who own both a television set and an Internet-enabled device watch television through an MVPD set-top box; 56 percent stream television on a computer; 48 percent watch through a device such as a game console, Blu-ray player, OVD set-top box, or OVD app on their television set; and 29 percent view via a mobile device such as tablet or smartphone.[1118] Nielsen reports that as of the second quarter of 2012, Americans who could stream video content on gaming devices spent an average of six hours and 26 minutes per month doing so.[1119] During that same period, Nielsen reported that a large majority of Hulu users watched video directly on their computers, while more than half of Netflix users watched via other devices such as game consoles, Blu-ray players, Roku boxes, or IPTV apps.[1120]

316. Observers differ with respect to the degree to which consumers are replacing MVPD services with OVD services. Several reports indicate that some OVD substitution for MVPD services exists. Consumers can cancel their MVPD service ("cord cutting") or reduce their MVPD spending ("cord shaving"). SNL Kagan estimates that nearly 2.7 percent of occupied U.S. households replaced their MVPD service with OVDs in 2011, and projects that 3.7 percent will do so in 2012.[1121] Ericsson indicates that between 2011 and 2012, seven percent of U.S. consumers it surveyed indicated that they

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[1114] Nielsen, *The Cross-Platform Report*, Quarter 2, at 4, Table 1.

[1115] Nielsen, *The Cross-Platform Report*, Quarter 2, at 7, Table 8a.

[1116] SNL Kagan, *The Future of 3-D and Internet TV*, 2012 Edition, at 15.

[1117] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution,but Challenges Persist*, SNL KAGAN, Sept. 11, 2012.

[1118] The study was conducted by Discovery Communications and research firm Interpret. Discovery Communications, *Viewers LIKE (Love) TV . . . Everywhere!*, *Discovery Blog*, Oct. 3, 2012, http://corporate.discovery.com/blog/tag/interpret-llc/ (visited Nov. 10, 2012). Consumers may rely on more than once device to watch video; thus, these percentages add up to more than 100 percent.

[1119] Nielsen, *The Cross-Platform Report*, Quarter 2, at 4, Table 3.

[1120] Nielsen, *The Cross-Platform Report*, Quarter 2, at "A Snapshot of Simultaneous Usage."

[1121] *See* Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution*, SNL KAGAN, Sept. 11, 2012.

had dropped their MVPD service, while 14 percent reported that they had reduced it.[1122] A survey by DigitalSmiths reports similar findings, observing that cord shavers dropped premium networks, *e.g.*, HBO or Showtime.[1123] A Forrester Research analyst contends that while cord-cutting requires technological sophistication, cord-shaving is about price.[1124] Ericsson states that the availability of OVDs allows consumers to reduce MVPD spending.[1125]

317. Additional reports indicate that as new households form, U.S. consumers are deciding to forgo an MVPD subscription altogether; that is, they are "cord nevers." SNL Kagan finds that collectively cable, telco, and DBS MVPDs are experiencing slower subscriber growth, and that the gains are not keeping pace with the increases in household formations.[1126] It estimates that MVPD penetration of households, including for households that have multiple subscriptions, declined from 84.2 percent in 2010 to 84.1 percent in 2011, and estimates the penetration to be 83.7 percent in 2012.

318. The Diffusion Group ("TDG"), a research firm, which has tracked OVD substitution in surveys since 2010, contends that cord cutters and cord nevers have different demographic profiles. Its findings suggest that cord cutters are older, have higher incomes, and are more likely to have children under 18 years old living inside the home.[1127] Nearly one third of cord nevers are between the ages of 18 and 24, more than half have annual incomes under $30,000, and only one-fifth have children under 18 living at home. TDG contends that young consumers may view a combination of over-the-air broadcasting with OVD service as an imperfect but sufficient substitute for MVPD service. Another analyst maintains that the technical aspects of cord-cutting require too much effort for most people.[1128]

319. SNL Kagan reports that the availability of large libraries of archival content and the availability of new content, coupled with the availability of broadband and an increasing number of Internet-connected devices, has enabled OVD substitution.[1129] In a TVGuide.com survey, among those who streamed video, 73 percent indicated that they did so to catch up on missed television episodes, 56 percent did so to catch up on programs discovered mid-season or between seasons, while eight percent

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[1122] Ericsson 2012 TV and Video White Paper at 8. In addition, 12 percent said that they increased spending on MVPD services. *Id.*

[1123] DigitalSmiths *Q4 2012 Trends Report* at 4-5. DigitalSmiths, a company that develops software to enable consumers to discover television programs and movies, indicates that those who increased spending on MVPD services added premium networks such as HBO or Showtime. The report concludes that while cord-cutting is still mostly "hype," it advises MVPDs to improve the customer experience to retain subscribers who are considering dropping the service and to stay ahead of competition from OVDs.

[1124] James McQuivey, *Wal-Mart Uses Boxee TV to Accelerate Cord-Shaving*, Forrester Research, Nov. 1, 2012, http://blogs.forrester.com/james_mcquivey/12-11-01-wal_mart_uses_boxee_tv_to_accelerate_cord_shaving (visited Nov. 12, 2012). McQuivey predicts that Boxee's offering of unlimited DVR storage for $10 per month, combined with its bundle of OVD services, may prompt some consumers to cut back on their MVPD subscriptions.

[1125] Ericsson 2012 TV and Video White Paper at 8.

[1126] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012.

[1127] The Diffusion Group, *Pay TV Refugees Now Account for 13 percent of U.S. Broadband Households* (press release), Nov. 27, 2012.

[1128] James McQuivey, *Wal-Mart Uses Boxee TV to Accelerate Cord-Shaving*, Forrester Research, Nov. 1, 2012, http://blogs.forrester.com/james_mcquivey/12-11-01-wal_mart_uses_boxee_tv_to_accelerate_cord_shaving (visited Nov. 12, 2012).

[1129] Ian Olgeirson and Deana Myers, *Service Providers Lessen OTT Substitution, but Challenges Persist*, SNL KAGAN, Sept. 11, 2012.

streamed because they had cut back on MVPD services, and ten percent because they had cancelled their MVPD subscription.[1130]

IV. COMPARISON OF COMPETITION: RURAL VERSUS URBAN AREAS

320. In this portion of the Report, we compare video programming competition in rural and urban areas.[1131] We discuss this issue for each of the three categories of video programming discussed above – MVPD, broadcast, and OVD.

321. Increasing the availability of satellite-delivered video programming in rural and underserved areas is a goal of Section 628(a) of the Act.[1132] In the *14th Report*, the Commission adopted a "baseline" definition of the term "rural" to mean a county with a population density of 100 persons or fewer per square mile.[1133] Under this definition, roughly 61 million people, or 21 percent of the U.S. population, live in rural counties. These counties comprise 3.1 million square miles, or 86 percent of the geographic area of the United States.[1134] Data on the delivery of video programming are not generally available in a manner that enables us to aggregate county data by population density. Thus we rely on available evidence provided in the record or from other sources to compare alternatives for the delivery of video programming between rural and urban areas.

A. MVPDs

322. MVPDs serving rural and smaller markets provide a range of services to millions of households, including video via coaxial cable, IPTV, digital telephony, and broadband Internet access.[1135] As stated above, ACA reports that its membership of nearly 850 small and medium sized cable operators provide services to about 7.4 million subscribers, with more than half of its members serving fewer than 1,000 subscribers.[1136] NTCA, a trade association representing more than 580 rural telecommunications providers, states that the number of its members providing video service rose from approximately 417 in

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[1130] eMarketer, *TV Viewers Stream Content to Play Catch-up*, Nov. 5, 2012, http://www.emarketer.com/%28S%280j0sa345o5y2wwjklat1te45%29%29/Article.aspx?R=1009461 (visited Nov. 10, 2012). A DigitalSmiths survey found that more than 50 percent of respondents who planned to drop or switch MVPD services stated that they would consider keeping their MVPD service if they offered better ways to find programming. DigitalSmiths *Q4 2012 Trends Report* at 4.

[1131] *See Notice*, 27 FCC Rcd at 8602-8603, ¶¶ 72-74.

[1132] 47 U.S.C. § 548(a) ("The purpose of this section is . . . to increase the availability of satellite cable programming and satellite broadcast programming to persons in rural and other areas not currently able to receive such programming").

[1133] *14th Report*, 27 FCC Rcd at, 8759 ¶ 344. This definition also was used in the *16th Mobile Wireless Report*. *See 16th Mobile Wireless Report*, ¶ 385.

[1134] United States Census Bureau, *2010 Census Urban and Rural Classification and Urban Area Criteria* , http://www.census.gov/geo/www/ua/2010urbanruralclass.html (visited Nov. 5, 2012). The National Association of Telecommunications Officers and Advisors ("NATOA") claims that a definition of "rural" that is based on population per square mile will not include all areas that have rural characteristics. It states that urban, rural, and suburban areas exist in a continuum and the lines between each are not distinct. NATOA contends that rural areas exist within counties of various population densities and that these areas interact with each other and urban centers in their region. *See* NATOA Comments at 5. We recognize the points raised by NATOA, but note that it does not offer an administratively feasible definition to capture this issue.

[1135] *See* ACA Comments at 1. *See also supra*, ¶¶ 104-9.

[1136] *See* ACA Comments at 3.

2010 to roughly 447 in 2011.[1137] In 2011, 35 of its members sold DBS service, down from 106 in 2007.[1138] NTCA, on the other hand, reports a rise in the number of its members delivering IPTV, from 159 systems in 2010 and to 202 in 2011.[1139] Of the NTCA member companies offering IPTV in 2011, an estimated 47 did so via fiber-to-the-home, fiber-to-the curb, or Ethernet technologies with the balance using DSL technology. Of those offering video in 2011, 104 did so using more than one platform, *i.e.*, coaxial cable, IPTV (whether over DSL or fiber) and/or DBS.[1140] Overall, NTCA reports that its members face inherent disadvantages because they serve high-cost, sparsely populated areas, in addition to their lack of scale and scope compared to larger MVPDs.[1141]

323. Nielsen finds that rural counties tend to rely on DBS more than urban counties for MVPD services. Nielsen categorizes counties as rural or urban based on Census household counts and proximity to metropolitan areas and reports no change since the last report. Thus, Nielsen's estimates that as of the end of 2012, the distribution of television households was as follows: 40 percent in highly urbanized counties belonging to the 21 largest Metropolitan Statistical Areas (A Counties); 31 percent in counties with more than 85,000 households that are not defined as A Counties (B Counties); and 29 percent in counties with fewer than 85,000 households (C and D Counties).[1142] According to Nielsen's 2012 estimates, in A Counties, 68 percent of television households relied on cable service and 23 percent of television households relied on DBS. Sixty-two percent of television households in B Counties subscribed to cable and 27 percent subscribed to DBS. In C and D counties, 46 percent of television households relied on cable service, compared with 44 percent who subscribed to DBS.[1143]

324. Small and rural MVPDs report that the one of the biggest challenges they face, much like that facing other MVPDs, is access to video content at competitive rates, although they assert they have less leverage in negotiating.[1144] These MVPDs indicate that a variety of programmer and broadcaster strategies make it difficult for rural MVPDs to offer content in competitive retail packages that reflect

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[1137] *See* OPASTCO-NTCA Comments at 1-2. The Organization for the Promotion and Advancement of Small Telecommunications Companies ("OPASTCO") and NTCA filed joint comments. OPASTCO is a trade association representing 520 small incumbent rural exchange carriers ("RLECs") serving rural America. *See* OPASTCO-NTCA Comments at 1, n.2. On March 1, 2013, OPASTCO and NTCA merged with the new organization named NTCA, The Rural Broadband Association. *See* Sean Buckley, *NTCA, OPASTCO Merge into One Common Organizations*, FIERCETELECOM, Feb. 7, 2013, http://www.fiercetelecom.com/story/ncta-opastco-merge-into-one-common-organization (visited July 15, 2013).

[1138] *See* OPASTCO-NTCA Comments at 2. These results are based on a 2011 survey of NTCA's membership.

[1139] *See id.*

[1140] *See* OPASTCO- NTCA Comments at 2. These companies may serve customers in more sparsely populated areas using DBS or coaxial cable, while providing IPTV via fiber or DSL to the more densely populated segments of their market.

[1141] *See* NTCA Comments at 3.

[1142] *See* Nielsen 2012 Television Audience Report at 6. Nielsen classifies C Counties as counties not defined as A or B counties that have more than 20,000 households or are in Consolidated Metropolitan Statistical Areas or Metropolitan Statistical Areas with more than 20,000 households. Nielsen classifies D counties as all counties not classified as A, B, or C counties; they are very rural. *See* Nielsen Media Research, *Glossary of Media Terms* (defining Nielsen's classifications of A, B, C, and D counties), http://www.nielsenmedia.com/glossary/ (visited June 18, 2013).

[1143] *Id*.

[1144] *See* OPASTCO-NTCA Comments at 4.

what their subscribers want and can afford.[1145] OPASTCO-NTCA assert that difficulty obtaining access to "must have" programming at affordable rates and under reasonable terms and conditions is the most significant obstacle that they face when attempting to provide or expand video services.[1146] For example, several small and rural MVPDs contend that the only viable way rural MVPDs gain access to "must have" programming is to agree to purchase unwanted programming, which drives up the retail price of their service offerings (*i.e.*, "forced tying"). OPASTCO-NTCA asserts that rural MVPDs have found that, in order to provide customers with access to the 10 most requested channels, they must pay for and distribute as many as 120 to 125 additional programming channels.[1147]

325. OPASTCO-NTCA indicate that program venders also require that certain channels be placed in specific service tiers or that a certain percentage of subscribers receive the channels, forcing rural MVPDs to include these channels in the most popular tiers of service they offer (i.e. "forced tiering"). They state that this practice makes it impossible for rural MVPDs to offer truly basic, stripped down service tiers at affordable rates that their subscribers actually desire. It also prevents rural MVPDs from offering service packages that help to distinguish themselves from their competitors.[1148] According to OPASTCO-NTCA, to obtain "must have" video content, some programmers also require rural MVPDs to pay additional fees based on the number of broadband subscribers they serve for access to online content, regardless of whether or not those customers subscribe to video services. Further, OPASTCO-NTCA reports that rural MVPDs have no way to assess whether the programming price offered to them is in line with what larger MVPDs pay for the same content, compromising their ability to negotiate fair and reasonable rates. OPASTCO-NTCA thus encourages a prohibition on mandatory non-disclosure provisions.[1149]

326. Small and rural carriers also argue that they pay disproportionately higher prices for retransmission consent.[1150] CenturyLink states retransmission consent fees have increased in the last few years, and customers have lost access to content due to stalled retransmission consent negotiations.[1151] ACA states, where broadcasters had previously relied primarily on advertising revenues to fund their operations, today affiliates of the four major television networks are increasingly relying on a dual revenue model that includes carriage fees.[1152] CenturyLink suggests that to ensure competition, the Commission should allow temporary access to duplicate programming during negotiations, define what "competitive marketplace considerations" are, and adjust good faith standards to end broadcasters' control of retransmission consent negotiations.[1153]

[1145] *See id*. at 3.

[1146] *See id.* at 4- 5.

[1147] *See id.* at 8. In response, Comcast contends that NBCUniversal does not require the purchase of programming in bundles (*i.e.*, forced tying). *See* Comcast Comments at 6.

[1148] *See* OPASTCO-NTCA Comments at 9-10.

[1149] *See id.* at 7.

[1150] As indicated previously, the Commission has initiated a proceeding to examine certain concerns related to retransmission consent. *See Retransmission Consent NPRM*, *supra*, n.144. *See also supra*, ¶¶ 51-55.

[1151] *See* CenturyLink Comments at 45.

[1152] *See* ACA Comments at 11.

[1153] *See* CenturyLink Comments at 5.

B. Broadcast Television Stations

327. Television markets containing rural populations tend to have fewer local full-power stations than those comprised of urban areas. Consumers in smaller markets may also rely more on multicasting than those in large markets for the delivery of major network programming such as that of ABC, CBS, FOX, and NBC. As of November 2012, 49 of the 210 television markets had three or fewer full-power commercial broadcast stations assigned to them. All of these markets are ranked below 100.[1154] Combined, all 49 markets with three or fewer stations represent about 4.57 million television households, or four percent of the estimated 114.2 television households nationwide as of the 2012-13 television season.[1155] Of the 49 markets, 31 receive at least one of the four major networks via a digital multicast signal.[1156] Yet Nielsen estimates for 2012 that the percentages of households relying on over-the-air distribution of broadcast stations are about the same in the four different categories of counties – 9.3 percent in A Counties, or 4.19 million television households; 11.1 percent in B Counties, representing 3.97 million television households; and 9.4 percent, or 1.62 million in C Counties; and 9.6 percent, or 1.54 million in D Counties.[1157]

C. OVDs

328. As noted above, consumers need high-speed Internet access in order to have access to OVDs' video content.[1158] Unfortunately, many consumers in rural America lack access to this important resource. The Commission's 2012 Rural Broadband Report found that 76.2 percent of the 19 million Americans that still lack access to 3 Mbps/768 kbps or faster of fixed broadband service live in rural areas, even though only 24 percent of all Americans reside in rural areas.[1159] The Report also found that close to three out of ten rural Americans – 28.2 percent – are without access to fixed broadband at 3 Mbps/768 kbps or faster, which is nine times larger than the three percent of Americans without access in non-rural areas.[1160] Additional data further indicates that rural consumers have fewer options with respect to broadband technologies and providers than other consumers.[1161]

V. KEY INDUSTRY INPUTS

A. Content Creation and Aggregation of Video Programming

1. Overview

329. Major studios often develop and license television programs and movies. These studios are typically subsidiaries of entertainment companies that also operate broadcast and/or cable networks.[1162] As noted in the *14th Report*, the broadcast and cable networks of seven companies – Disney,

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[1154] BIA, television station by market data, November 2012. DMA ranks and number of stations within each DMA are not directly correlated.

[1155] Nielsen Company, *Local Television Market Universe Estimates*, used throughout the 2012-2013 television season.

[1156] BIA, televisions station by market data, November 2012.

[1157] Nielsen Company, *Media Related TV Households and Penetrations by County Within DMA, 2012-2013 Universe Estimates*, November 2012. *See also supra*, n.138.

[1158] *See supra*, ¶ 220.

[1159] *See* FCC, *EIGHTH BROADBAND PROGRESS REPORT*, GN Docket No. 11-121, 27 FCC Rcd 10342 (2012).

[1160] *See id.*

[1161] *See id.*

[1162] *14th Report*, 27 FCC Rcd at 8765, ¶ 360.

News Corp., NBC Universal, Time Warner Inc., CBS, Viacom, and Discovery – account for roughly 95 percent of all television viewing hours in the United States.[1163] Of these, only Discovery does not operate a major television or movie studio, though it does produce its own programming.[1164] In addition, these companies may produce programs for competing networks.[1165] Independent studios, such as The Weinstein Company, also produce television programming and movies for distribution.[1166] Movie and television studios generally retain the distribution rights for the programming they produce and distribute.[1167] Yet in some cases studios may distribute programs and movies on behalf of third parties for a fee.[1168]

330. Companies producing and distributing television programming and films face significant risk. Studios must invest significant amounts of money prior to distributing the video programming for public consumption. And revenues are dependent on public acceptance, which is difficult to predict.[1169] Given this risk, individual networks increasingly produce more of their content in-house. The percentage of series produced by an in-house production entity for the 2011 broadcast network fall lineup was: ABC,

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[1163] Craig Moffett *et al*., *Weekend Media Blast: Why We Haven't Seen a Virtual MSO Yet*, Bernstein Research, Jan. 27, 2012, at 2. *See also 14th Report*, 27 FCC Rcd at 8765, ¶ 360. News Corp. recently restructured and placed its former media and entertainment assets in the publicly traded company 21st Century Fox. *See* Nathalie Tadena, *News Corp. Completes Split of Publishing, Entertainment Businesses*, WALL ST. J., June 28, 2013, at http://online.wsj.com/article/BT-CO-20130628-713636.html?mod=googlenews_wsj (visited July 1, 2013). In this section, News Corp. refers to the company as it was structured prior to the split on June 28, 2013.

[1164] In contrast, Sony Corporation ("Sony") operates a television and movie studio, but does not operate cable or broadcast networks.

[1165] For example, in 2012, News Corp.'s Twentieth Century Fox Television produced *Modern Family* for Disney's ABC, *The New Normal* for Comcast's NBC, *How I Met Your Mother* for CBS, and *Futurama* for Viacom's Comedy Central. News Corp., *SEC Form 10-K for the Year Ended June 30, 2012*, at 10 ("News 2012 Form 10-K").

[1166] The Weinstein Co., *About The Weinstein Company*, http://weinsteinco.com/about-us/ (visited Oct. 1, 2012).

[1167] For example, Warner Brothers Television Group ("WBTVG"), a subsidiary of Time Warner, develops and produces television series (*e.g.*, *The Big Bang Theory, Mike & Molly* and *The Mentalist)*, reality-based entertainment shows, and animation programs for Time Warner's cable networks and third parties. Time Warner Inc., *SEC Form 10-K for the Year Ended December 31, 2012*, at 10 ("Time Warner 2012 Form 10-K"). In 2012, Warner Brothers Entertainment Inc. ("Warner Bros."), another subsidiary of Time Warner, wholly financed the production, marketing, advertising and distribution of eight films, while distributing nine films financed in whole or in part by other parties. In most cases, Warner Bros. substantially retains the worldwide distribution rights for the movies. *Id*. at 9.

[1168] For example, in August 2012, DreamWorks Animation and News Corp.'s Twentieth Century Fox entered into a five-year distribution deal. Under the deal, Twentieth Century Fox will receive an eight percent fee for the theatrical, DVD, and international television distribution of DreamWorks Animation's movies. Twentieth Century Fox will also receive a six percent fee for executing digital rentals. Brooks Barnes, *DreamWorks Animation Leaves Paramount for 20th Century Fox as Distributor*, N.Y. TIMES, Aug. 20, 2012, http://mediadecoder.blogs.nytimes.com/2012/08/20/dreamworks-animation-leaves-paramount-for-20th-century-fox-as-distributor/ (visited Oct. 1, 2012).

[1169] *See, e.g.*, Time Warner 2012 Form 10-K at 24; News 2012 Form 10-K at 31; Walt Disney Co., *SEC Form 10-K for the Year Ended September 29, 2012*, at 17 ("Disney 2012 Form 10-K"). According to Time Warner, the public acceptance of the studios' content depends on many factors, including the availability of competing content, the availability of alternative forms of leisure and entertainment time activities, studios' ability to develop strong brand awareness and target key audience demographics, the amount and success of third-party retail promotional partnerships, and studios' ability to anticipate and adapt to changes in consumer tastes and behavior on a timely basis. Time Warner 2012 Form 10-K at 24.

52 percent; CBS, 63 percent; The CW, 90 percent; FOX, 72 percent; and NBC, 74 percent. For 2012, the respective figures were: ABC, 56 percent; CBS, 67 percent; The CW, 90 percent; FOX, 74 percent; and NBC, 86 percent.[1170] Industry observers and participants anticipate networks relying more on in-house productions in order to retain control over their content, including OVD and VOD distribution.[1171]

331. *Broadcast Programming.* Procuring television programming represents the primary expense of broadcast networks.[1172] Broadcast networks obtain their programming from several sources, including in-house production studios, third-party studios, and sports leagues.[1173] Premium sports programming is the most expensive type of programming with reality and non-fiction programming being the least expensive.[1174] As indicated in the *14th Report*, broadcast networks' programming expenses also include the production of non-entertainment programming, such as news and public affairs.[1175] SNL Kagan estimates that programming costs for 12 nationally distributed English and Spanish-language broadcast networks increased from approximately $12.7 billion in 2010 to $13.5 billion in 2012.[1176]

332. Broadcast network programming is typically chosen several months ahead of any scheduled air date. Every year major broadcast television networks begin the process by selecting multiple television scripts for development into a pilot or sample episodes.[1177] For the 2012 pilot season,

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[1170] WGAW Comments at 5. In order to increase competition and diversity in the media marketplace, WGAW asks the Commission to require broadcast networks to devote at least 25 percent of their prime time schedules to programming that is owned and produced by independent sources. WGAW Comments at 13. WGAW defines independent producers as studios or production companies that are not owned or affiliated with a major broadcast or cable network or an MVPD provider. *Id.*

[1171] *See, e.g.*, Spencer Wang, Shub Mukherjee, and Michael Senno, *Entertainment Industry: Not All Cable Networks Are Created Equal*, Credit Suisse, Jan. 31, 2012, at 34 ("Wang") ("[W]e believe that cable networks that own more of their programming will have more control over their destiny. . . [E]ven if the total [number of MVPD subscribers] declines, networks that own the programming that they air will be able to [earn revenue from] their content by selling these rights to [OVDs]."); Time Warner 2012 Form 10-K at 31 ("[V]ertically integrated networks could elect to buy more shows from their in-house production studios, driven in part by their desire to have more control over digital rights."); Sony Kabushiki Kaisha (Sony Corporation), *SEC Form 20-F for the Fiscal Year Ended March 31, 2012*, at 33 ("[B]roadcast networks in the U.S. continue to produce their own shows internally."). Sony remains the largest independent producer without a network connection. *See* SNL Kagan, *Media Trends*, 2012 Edition, at 258 ("SNL Kagan 2012 Media Trends"). AT&T claims in its comments that "[n]ow, more than ever, content is king. And the entities that control popular content have greater leverage over content distributors than ever before . . . . [C]ontent producers and owners have far greater ability to move markets and affect new video distribution models (such as [OTT] video distribution) than do video distribution providers and broadband providers." AT&T Comments at 2-3.

[1172] *14th Report*, 27 FCC Rcd at 8767, ¶ 362.

[1173] *Id.*

[1174] Wang at 31.

[1175] *14th Report*, 27 FCC Rcd at 8767, ¶ 362.

[1176] SNL Kagan, *TV Network Industry Benchmarks: Broadcast (2010-12)* ("SNL Kagan Broadcast Benchmarks"). SNL Kagan defines programming expenses as the direct cost of creating, acquiring, and distributing content and services. For the years 2010-12, SNL Kagan included financial data from CBS, ABC, NBC, FOX, The CW, Univision, UniMás, Telemundo, ION, MyNetwork TV, Azteca America, and Estrella TV. *See e.g.*, SNL Kagan, *TV Network Summary: Broadcast Networks by Programming Expenses ($000) (2010-12)*. *See also* SNL Kagan, *Media Trends*, 2011 Edition, at 20-21 ("SNL Kagan 2011 Media Trends"). NBC has higher costs in even years due to the Olympics. *Id.* at 21.

[1177] *14th Report*, 27 FCC Rcd at 8768, ¶ 363.

studios produced approximately 88 pilots for the major broadcast networks. Of this amount, about half were selected for the 2012-13 television season.[1178] The networks usually buy 13 episodes of a weekly series. If the show attracts a certain number of viewers, the networks maintain an option to complete the television season by ordering an additional nine to 11 episodes.[1179] Pilot costs have risen over time with a drama pilot now costing $5.5 million on average and a comedy pilot costing $2 million on average.[1180] Broadcast networks may also pay studios around $1.5 million to license a television show.[1181]

333. As discussed in the *14th Report*, broadcast networks' net operating revenues[1182] are primarily from selling advertising time during their network programming.[1183] The amount of commercial time and the rates advertisers pay are primarily dependent on the size of, and appeal to, the 18 to 49-year old adult audience – the demographic group advertisers most covet.[1184] Therefore, a decrease in audience ratings may adversely affect a broadcast network's financial performance.[1185] Between 2010 and 2011, net operating revenues for the broadcast television network industry declined slightly from $15.4 billion to $15.3 billion. In 2012, net operating revenues increased to $17.3 billion.[1186]

[1178] Deana Myers, *CBS Ups Pilot Ordering*, SNL KAGAN, Mar. 19, 2013; Anthony Ocasio, *Complete Guide to 2012 Fall TV Shows – What Will You Watch?*, SCREENRANT, June 2012, at http://screenrant.com/2012-fall-tv-show-guide-aco-171944/ (visited Oct. 2, 2012). *See also* Lesley Goldberg, *TV Pilots 2012: The Complete Guide*, HOLLYWOOD REP., Feb. 6, 2012, at http://www.hollywoodreporter.com/live-feed/tv-pilots-2012-complete-guide-287221 (visited Oct. 2, 2012).

[1179] *14th Report*, 27 FCC Rcd at 8768, ¶ 363.

[1180] FilmL.A., *Television Pilot Production Report* (2012), at http://www.filmla.com/uploads/2012%20FilmL.A.%20Television%20Pilot%20Production%20Report_1339527959.pdf (visited Oct. 2, 2012).

[1181] *14th Report*, 27 FCC Rcd at 8768, ¶ 363.

[1182] Net advertising revenue is the total amount networks charge advertisers to carry their commercials net of commissions charged to client companies by ad agencies to buy time on the networks, *i.e.*, the revenues that broadcast networks actually receive. Net operating revenue includes net advertising revenue plus all other sources of revenues. *See* Table 36 (broadcast television network industry financial performance).

[1183] *14th Report*, 27 FCC Rcd at 8768, ¶ 364.

[1184] *See* News 2012 Form 10-K at 13.

[1185] *14th Report*, 27 FCC Rcd at 8768-69, ¶ 364. Nevertheless, ABC increased its advertising rates between 2010 and 2011 for prime time programming despite a decline in prime time ratings. Walt Disney Co., *SEC Form 10-K for the Year Ended October 1, 2011*, at 30.

[1186] SNL Kagan Broadcast Benchmarks. Increased total revenues for broadcast networks in even years are in part due to NBC's airing of the Olympics. Political advertising tends to impact broadcast stations more than broadcast networks because most political advertising is purchased on a regional basis (*e.g.*, on a statewide basis for gubernatorial and senatorial elections as well as presidential campaigns targeting swing states). In some cases though, presidential campaigns will purchase advertising on broadcast networks. *See 14th Report*, 27 FCC Rcd at 8769, ¶ 364 n.1177.

Table 36: Broadcast Television Network Industry Financial Performance[1187]

Revenue (in thousands)

	2010	2011	2012
Gross Advertising	$17,686,894	$17,177,287	$18,865,666
Net Advertising	$15,033,860	$14,600,694	$16,035,816
Other Operating Revenue	$397,453	$683,268	$1,246,136
Net Operating Revenue	**$15,431,313**	**$15,283,962**	**$17,281,952**

Expenses (in thousands)

	2010	2011	2012
Operating SG &A	$2,362,948	$2,371,282	$2,386,526
Programming	$12,696,697	$12,281,262	$13,514,140
Network Compensation	$48,126	$25,098	$0
Total Operating Expenses	**$15,107,771**	**$14,677,642**	**$15,900,953**

Cash Flow (in thousands)

	2010	2011	2012
Cash Flow	$323,542	$606,320	$1,381,499
Cash Flow Margin (%)	2.10%	3.97%	7.99%

334. A studio may not profit from a television series during its initial airing on a broadcast network. The network license fee for an episode is typically lower than the production costs.[1188] Studios therefore hope to earn a profit in subsequent distribution windows for the episodes. To achieve this objective, studios distribute their programming via syndication to broadcast television stations and/or cable networks, DVD and Blu-ray release, international distribution, and online distribution.[1189] The *14th Report* indicates the performance of a television series in later distribution windows is highly correlated with the ratings of its initial broadcast.[1190] But a television series must usually air for at least three to four years on a broadcast network before it is suitable for domestic syndication.[1191] The most popular network

[1187] SNL Kagan Broadcast Benchmarks. The financial metrics contained in the tables for this section represent the year-end estimates of SNL Kagan.

[1188] CBS Corp., *SEC Form 10-K for the Year Ended December 31, 2012*, at I-3.

[1189] *14th Report*, 27 FCC Rcd at 8769, ¶ 365.

[1190] *Id.* at 8769-70, ¶ 365.

[1191] *Id.* at 8770, ¶ 365. *See also* SNL Kagan 2012 Media Trends at 252 ("A broadcast network series generally needs to have aired at least 100 episodes to be profitable in syndication, a point typically reached in season five."). Yet in June 2012, Warner Bros. Television Group ("WBTVG") sold both the broadcast station and cable network syndication rights of its show *Two Broke Girls* after the show's first season. TBS agreed to pay a record-breaking $1.6 million per episode for the show (all-time high for a sitcom selling to a cable network), which will begin airing on the network in 2015. CBS bought the broadcast station rights for the show and will also begin airing it in 2015. *See* SNL Kagan 2012 Media Trends at 251; Cynthia Littleton, *'2 Broke Girls' Pact Makes CBS an Off-Net Player*, VARIETY, June 20, 2012, at http://www.variety.com/article/VR1118055763/?refcatid=4076 (visited Jan. 9, 2013). While trade publications may refer to Warner Brothers Television Group as "WBTV," Time Warner, Inc. uses the acronym "WBTVG."

television series are sold to both broadcast television stations and cable networks.[1192] Not all television series though are appropriate for every type of subsequent distribution.[1193] With respect to the syndication market, broadcast stations and cable networks prefer television series with episodes having self-contained storylines; this gives them the flexibility to schedule episodes out of sequence.[1194] In the past, studios primarily sold television comedies to broadcast television stations. But as cable networks have earned higher programming fees from MVPDs, their programming budgets have increasingly enabled them to bid for both broadcast network comedies and dramas.[1195]

Table 37: Television Studio Revenue Streams[1196]
(Revenue in millions)

	2010	2011	2012
Broadcast Network	$12,693	$12,441	$13,958
Syndication (Cash)	$3,227	$3,090	$3,018
Syndication (Gross Barter)	$2,813	$2,756	$2,640
Basic Cable Networks/RSNs (Cash)	$22,460	$24,766	$26,744
Premium Cable TV Domestic	$2,989	$3,210	$3,356
Total Domestic	**$44,182**	**$46,264**	**$49,716**
Total International	**$10,555**	**$10,951**	**$11,370**
Total TV Programming	**$54,737**	**$57,215**	**$61,086**

335. *Cable Programming.* Cable networks operate similarly to broadcast networks. Like broadcast networks, programming costs also represent a significant expense for cable networks; and cable networks license programming from in-house production studios, third-party studios, and sports leagues.[1197] SNL Kagan estimates that basic cable networks' programming expenses were approximately $22 billion in 2011, representing 44.4 percent of the total $49.6 billion in net operating revenues for cable networks. Programming expenses rose to $24 billion in 2012, representing 45.7 percent of the $52.5 billion in net operating revenues for cable networks.[1198] As explained in the *14th Report*, on average, an

[1192] Deana Myers, *Off-Network Deals Continue to Break Records*, SNL KAGAN, July 9, 2012.

[1193] Generally, reality television programming maintains little syndication value. Rights holders therefore provide entire seasons online for consumer viewing. *14th Report*, 27 FCC Rcd at 8770, ¶ 365 & n.1185.

[1194] *Id.* at 8770, ¶ 365.

[1195] *Id.* For instance, WBTVG announced in July 2012 that News Corp.'s FX Network had agreed to pay $750,000 per episode for its show *Mike & Molly*. Episodes of *Mike & Molly* will begin airing on FX in September 2014. *See* SNL Kagan 2012 Media Trends at 251; Michael O'Connell, *'Mike & Molly' Heads to Syndication on FX in 2014*, HOLLYWOOD REP., July 3, 2012, at http://www.hollywoodreporter.com/live-feed/mike-molly-syndication-fx-2-broke-girls-344620 (visited Jan. 9, 2013).

[1196] *See* SNL Kagan 2011 Media Trends at 196 (data for 2010-12).

[1197] *14th Report*, 27 FCC Rcd at 8771, ¶ 366.

[1198] SNL Kagan, *TV Network Industry Benchmarks: Basic Cable Networks (2010-12)* ("SNL Kagan Basic Cable Benchmarks"). Sales, general, and administrative expenses ("SGA") represent the other major expense for broadcast and cable networks. *14th Report*, 27 FCC Rcd at 8771, ¶ 366 n.1188.

hour-long, scripted cable drama is produced at a lower cost compared to a broadcast drama – approximately $2 million per episode. Cable networks also tend to pay lower licensing fees than broadcast networks – about $1 million per episode.[1199] A studio's return on investment though may be less for a popular cable network program compared to a broadcast network program because the former is likely to receive a smaller audience viewership during its original airing.[1200] In addition, cable network series consist of 10 to 13 episodes per season compared with 22 to 24 episodes for a broadcast network programs.[1201]

336. Basic cable networks remain the primary source of profit for entertainment conglomerates.[1202] The *14th Report* notes that basic cable networks earn revenues primarily from two sources – advertising and MVPD license fees paid on a per subscriber basis. Subscriber fees though continue to be more lucrative for basic cable networks.[1203] In 2011, basic cable networks earned about

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[1199] *14th Report*, 27 FCC Rcd at 8771, ¶ 366. Yet in September 2012, Fox 21, a division of News Corp.'s Fox Entertainment Group, reached an agreement to pay $6 million to produce actress Renee Zellweger's "Cinnamon Girl" television pilot for Lifetime Networks. Lifetime licensed the U.S. television rights and plans to pay half the production costs. This deal is described as the highest cost ever for a basic cable network pilot. Liza Foreman, *Fox 21 Pays $6M for Renee Zellweger 'Cinnamon Girl' Pilot for Lifetime*, THE WRAP, Sept. 21, 2012, at http://www.thewrap.com/tv/column-post/fox-21-lifetime-pay-6m-renee-zellweger-cinnamon-girl-pilot-exclusive-57616 (visited Oct. 9, 2012).

[1200] *14th Report*, 27 FCC Rcd at 8771, ¶ 366. Yet the third season premiere of AMC's *The Walking Dead* in October 2012 delivered close to 11 million total viewers. AMC's CEO Joshua Sapan explained, "[t]he premiere was the most-watched drama in basic cable history . . ., and with the exception of Sunday Night Football, outperformed all of broadcast TV for the week in [the] key adult 18 to 49 [demographic]." Sarah Barry James, *Part 2: The Cable Effect and Broadcast Ratings*, SNL KAGAN, Nov. 14, 2012.

[1201] Bill Carter, *Embracing Cable's Concept of Opening Night*, N.Y. TIMES, Jan. 15, 2012, at http://www.nytimes.com/2012/01/16/business/media/networks-embrace-cables-way-of-introducing-new-shows.html (visited Oct. 31, 2012). Cable networks generally air a television show's episodes consecutively with no pre-emptions or repeats, while broadcast networks spread the episodes out over a period of nine months. *Id*. Broadcast network executives have indicated an interest in shifting more broadcast television shows to the 10 to 13 episode model. *Id*. For the 2012-13 television season, NBC has taken this approach with respect to its *30 Rock* and *Parenthood* televisions shows; *30 Rock* will only air for 13 episodes and *Parenthood* for 15. The 13 episodes of *30 Rock* will guarantee that it continues to make a profit for NBC in syndication. Bill Carter, *'30 Rock' Will Return, but Only for 13 Episodes, NBC Says*, N.Y. TIMES, May 10, 2012, at http://mediadecoder.blogs.nytimes.com/2012/05/10/30-rock-will-return-but-only-for-13-episodes-nbc-says/ (visited Oct. 9, 2012). Fox has also taken this approach with respect to its television show *Fringe*. Bill Carter, *Fox Renews 'Fringe', Defining Ratings Success Down*, N.Y. TIMES, Apr. 27, 2012, at http://mediadecoder.blogs.nytimes.com/2012/04/27/fox-renews-fringe-defining-ratings-success-down/ (visited Oct. 9, 2012).

[1202] *14th Report*, 27 FCC Rcd at 8771, ¶ 367. Unlike basic cable networks, premium cable networks are typically only available to subscribers for an additional fee, are commercial-free, and offer specialized programs including unedited movies, original series, and sporting events. *Id.*

[1203] *Id*. In some instances, entertainment conglomerates tie their less popular or newer basic cable networks with their more popular broadcast and cable networks when negotiating programming agreements with MVPDs, which impacts the fees MVPDs must pay for all the networks. In February 2013, Cablevision Systems Corp. filed a complaint against Viacom International Inc. regarding a programming agreement the two companies signed in December 2012. Specifically, Cablevision's complaint alleges that Viacom violated antitrust law by coercing it to sign the agreement. According to the complaint, Viacom required Cablevision to either distribute fourteen lesser known channels as a condition for access to Viacom's most popular channels, which include Comedy Central, MTV, BET, and Nickelodeon, or pay a one billion dollar penalty. The case is currently pending in a New York federal district court. *See* Complaint at 1-2, *Cablevision Systems Corp. v. Viacom International Inc.*, No. 13 Civ. (continued….)

$21 billion in net advertising revenues and approximately $22 billion in net advertising revenues in 2012.[1204] With respect to subscriber fees, basic cable networks earned about $27 billion in 2011 and almost $29 billion in 2012.[1205] While established cable networks require MVPDs to pay subscriber fees, newer networks typically pay MVPDs for carriage.[1206] The top networks enjoy relatively high per subscriber license fees. Yet less viewed cable networks, even those that are well-established, might receive only a few pennies per month per subscriber. For example, in 2012 ESPN charged $5.04 per month per subscriber (up from $4.77 in 2011). Comparatively, 3net[1207] – the most expensive non-sports network – charged $1.29 in 2012 (up from $1.25 in 2011); MTV charged $0.40 in 2012 (up from $0.37 in 2011).[1208]

(Continued from previous page)
01278 (S.D.N.Y. Feb. 26, 2013); *see also* Jonathan Stempel, *Cablevision: Viacom Made $1 Billion Threat Over Bundling*, REUTERS, Mar. 7, 2013, at http://www.reuters.com/article/2013/03/08/us-viacom-cablevision-idUSBRE9261DR20130308 (visited June 26, 2013).

[1204] SNL Kagan Basic Cable Benchmarks.

[1205] *Id.* Basic cable networks earned approximately $1.9 billion in additional operating revenue in both 2011 and 2012. *Id.* This revenue may include ancillary revenues from consumer product licensing, brand licensing, home entertainment sales of programming, and syndication or international distribution. *14th Report*, 27 FCC Rcd at 8771-72, ¶ 367 n.1194.

[1206] *14th Report*, 27 FCC Rcd at 8771-72, ¶ 367.

[1207] 3net is a 24/7 3D network that is jointly owned by Sony, Discovery, and IMAX Corporation. The network was launched on February 13, 2011. *See* 3D NETCO LLC, http://www.3net.com/about (visited Oct. 10, 2012).

[1208] SNL Kagan, *TV Network Summary: Basic Cable Network by Affiliate Revenue Per Avg Sub/Month (2010-12)*. Other networks (*e.g.*, FamilyNet and ReelzChannel) do not charge MVPDs subscriber fees. *Id.*

Table 38: Basic Cable Network Financial Performance[1209]

Revenue (in thousands)

	2010	2011	2012
Gross Advertising	$22,500,242	$24,556,746	$25,741,814
Net Advertising	$19,167,706	$20,875,178	$21,879,906
Subscriber Fees	$24,896,827	$26,894,388	$28,755,095
Other Operating Revenue	$1,379,891	$1,879,877	$1,876,770
Net Operating Revenue	**$45,444,424**	**$49,649,443**	**$52,511,771**

Expenses (in thousands)

	2010	2011	2012
Operating SG&A	$6,751,451	$7,040,544	$7,235,007
Programming	$20,059,977	$21,957,461	$24,176,248
Total Expenses	**$26,811,428**	**$28,998,004**	**$31,411,256**

Cash Flow (in thousands)

	2010	2011	2012
Cash Flow	$18,633,068	$20,650,211	$21,100,724
Cash Flow Margin (%)	41.0%	41.6%	40.2%

337. *Movies.* As detailed in the *14th Report*, the production, distribution, and marketing of movies require significant expenditures over an extended period of time.[1210] The production process for a movie involves several components, including securing financing for the film, development of a screenplay, assembling the artistic and technical staff, and the post-filming editing/post-production process.[1211] Studios will often distribute their own movie productions, but may acquire movies from content creators for theatrical release and/or other distribution outlets.[1212] Feature films typically are produced for initial distribution in theaters, followed by distribution in ancillary windows, such as home entertainment distribution (*e.g.*, DVDs and Blu-ray discs), digital downloads, and pay television distribution.[1213]

338. Studios do not typically profit on a movie until well after its theatrical run. The cost of producing and marketing films has significantly increased in recent years, outpacing domestic theater revenues.[1214] The *14th Report* explains that on average, six or seven out of ten major theatrical movies are

[1209] *See* SNL Kagan Basic Cable Benchmarks.

[1210] *14th Report*, 27 FCC Rcd at 8773, ¶ 368.

[1211] *Id.*

[1212] *Id.*

[1213] *Id. See also* Lions Gate Entertainment Corp., *SEC Form 10-K for the Year Ended March 31, 2012*, at 19-23.

[1214] *14th Report*, 27 FCC Rcd at 8773, ¶ 369. Viacom and Disney, for instance, base estimates on a movie's ultimate revenue from all distribution windows within ten years of the movie's initial release. *See* Viacom Inc., *SEC Form 10-K for the Year Ended September 30, 2012*, at 65; Disney 2012 Form 10-K at 49.

unprofitable, with one potentially breaking even.[1215] Studios mitigate this risk by partnering with premium cable networks; these networks spend hundreds of millions of dollars in advance to license a specified number of airings of a studio's movie catalog (in some cases exclusively) for up to nine years.[1216] In turn, the premium networks retain the allegiance of MVPDs – their primary customers. Studios negotiate license fees based on the theatrical performance of the movies in the catalog. SNL Kagan estimates that in 2012 premium networks spent 61.7 percent ($1.95 billion) of their programming budgets on movies, compared with 38.3 percent ($1.21 billion) on original programming.[1217] In 2011, premium networks spent 62.3 percent ($1.89 billion) of their programming budgets on movies, compared with 37.7 percent ($1.14 billion) on original programming.[1218] On average, approximately 25 percent of the retail price MVPDs charge consumers for premium networks goes to the movie studios.[1219]

339. The largest source of domestic revenue for studios is the home entertainment distribution of movies, although the proportion of such revenue has declined in the last couple of years.[1220] In 2012, SNL Kagan estimates that the home video window accounted for 29 percent ($6.4 billion) of movie studios' domestic revenue. In 2011, it accounted for 32 percent ($7.0 billion).[1221] This type of distribution includes the sale and/or lease of DVDs and Blu-ray discs to wholesalers and retailers who in turn sell or rent them to consumers. Studios also continue to distribute their content for individual rental through such companies as Redbox or via subscription services such as Netflix.[1222] Given the decline in home distribution sales, large retailers of DVDs and Blu-rays must now contend with movies being released in all distribution windows at the same time. In 2011, on average, movies appeared on pay-per-view/VOD 16 days before debuting on DVDs/Blu-rays; in 2010 movies were released on pay-per-view/VOD an average of four days after they were available on disc.[1223]

340. Despite the decline in home distribution sales, studios are receiving increasing revenues from pay-per-view/VOD services. For 2012, SNL Kagan estimates studios earned $1.3 billion in revenues from pay-per-view/VOD transactions, representing six percent of movie studios' total domestic revenues. In 2011, studios received $1.2 billion from these transactions, accounting for 5.6 percent of movie studios' total domestic revenues that year.[1224] In general, a pay-per-view/VOD transaction is about

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[1215] *14th Report*, 27 FCC Rcd at 8773, ¶ 369.

[1216] *Id.*

[1217] SNL Kagan 2012 Media Trends at 205.

[1218] *Id.*

[1219] *14th Report*, 27 FCC Rcd at 8774, ¶ 369.

[1220] Studios attribute the decline in DVD sales to several factors, including the general economic downturn, the availability of subscription services and discount kiosks, the maturation of the standard definition DVD format, piracy, and the declining popularity of catalog titles. *Id.* at 8782, ¶ 384.

[1221] *See* Table 39 (movie picture studio revenue stream).

[1222] *14th Report*, 27 FCC Rcd at 8774-75, ¶ 370.

[1223] Wade Holden, *Video-to-PPV/VOD Window a Thing of the Past*, SNL KAGAN, Mar. 29, 2012. Movies that grossed $9.9 million or less at the box office were on VOD an average of 34 days before they were released on disc. Yet movies that grossed more than $100 million maintained a four-day pay-per-view/VOD window in 2011 compared to a nine-day window in 2010. SNL Kagan 2012 Media Trends at 215.

[1224] *See* Table 39 (movie picture studio revenue stream).

seven times more profitable for a studio than a DVD rental transaction at a discount kiosk such as Redbox or from a subscription service such as Netflix.[1225]

341. Movie studios have experimented with releasing movies in theaters and on VOD simultaneously, a "premium VOD" window, but their strategies vary.[1226] While some independent studios, such as IFC Films and Magnolia, make simultaneous VOD and theater a part of their standard distribution plans, studios releasing major movies have hesitated, in part because of the concern about cannibalizing revenues from the theatrical release window as well as resistance from theater owners.[1227] Theater owners have threatened to pull movies if studios choose to release a movie in VOD too close to the theatrical release.[1228] Several major theater chains also have refused to book movies that are released simultaneously on VOD.[1229]

[1225] Time Warner, Inc., *Presentation to Morgan Stanley Technology, Media & Telecom Conference*, Corrected Transcript, Feb. 29, 2012, at 4. An electronic sell-through transaction (*i.e.*, an iTunes movie purchase) is 20 to 30 times more profitable than a discount kiosk or subscription transaction. *Id.*

[1226] In the fall of 2011, Lionsgate distributed the movie *Margin Call* in theaters and VOD for the price of $6.99, theorizing that audiences in smaller markets might be less inclined or able to watch it in theaters, earning almost $6 million in theatrical revenues and more than $4 million in VOD revenues. Sarah Barry James, *Lionsgate Exec Opens Up About New Windows, Summit Deal*, SNL KAGAN, Jan. 30, 2012. *See also* Pat Saperstein, *'Margin Call' Changes VOD Picture*, VARIETY, Dec. 18, 2011, http://www.variety.com/article/VR1118047677 (visited Nov. 15, 2012) ("Saperstein"). Some industry executives consider the results of Lionsgate's experiment with *Margin Call* to be a "game changer." *Id.*

[1227] Saperstein.

[1228] Deana Myers, *Premium VOD Draws Healthy Results for 'Margin Call'*, SNL KAGAN, Nov. 30, 2011. For example, Universal Studios halted its plan to make the movie *Tower Heist* available via VOD three weeks after its theater debut due to resistance from theater owners. David Lieberman, *Universal Halts 'Tower Heist' VOD Plan as Exhibitors Agree to Further Talks*, DEADLINE, Oct. 12, 2011, http://www.deadline.com/2011/10/universal-halts-tower-heist-vod-plan/ (visited Nov. 27, 2012).

[1229] Saperstein.

Table 39: Motion Picture Studio Revenue Streams[1230]
(Revenue in millions)

	2010	2011	2012
Domestic:			
Theatrical Rentals	$5,612	$5,574	$5,613
Home Video	$7,879	$6,986	$6,365
PPV/VOD	$1,152	$1,231	$1,323
Premium Cable TV	$1,866	$1,889	$1,950
Digital	$957	$1,617	$2,013
Basic Cable	$2,769	$2,857	$2,960
Broadcast Networks	$292	$246	$227
TV Syndication	$173	$178	$183
Other[1231]	$1,226	$1,253	$1,305
Total Domestic:	**$21,927**	**$21,830**	**$21,939**
Total International:	**$25,076**	**$24,867**	**$24,886**
Total:	**$47,003**	**$46,696**	**$46,805**

342. *Sports.* As explained in the *14th Report*, professional and collegiate leagues license the rights of major sporting events to broadcast networks or stations as well as to cable networks such as ESPN. In some cases, sports leagues or teams operate their own regional or national cable networks (*e.g.*, the NFL Network, the MLB Network, and the Mid-Atlantic Sports Network (owned by the Baltimore Orioles and Washington Nationals MLB teams)).[1232] There also are many RSNs that are affiliated with entertainment conglomerates, such as Fox or Comcast.[1233] We estimate that there are 119 RSNs in operation today.[1234] Broadcast networks and stations typically use their own equipment and facilities to produce sports programming and then earn revenue by selling advertising and sponsorships. In some instances, broadcast networks negotiate with independent production companies for "time buys" – an

[1230] Wade Holden, *Digital Delivery Closing Gap in Distributor Revenue*, SNL KAGAN, Sept. 25, 2012, at 3-4. *See also* SNL Kagan 2012 Media Trends at 173-74.

[1231] "Other" includes hotel, airline and merchandise licensing.

[1232] *14th Report*, 27 FCC Rcd at 8775, ¶ 371.

[1233] *Id. See also infra*, App. C, Table C-1. News Corp. announced in November 2012 that it had entered an agreement with Yankee Global Enterprises to acquire a 49 percent equity stake in the YES Network. The YES Network is an RSN delivering live local coverage of the New York Yankees MLB baseball team and the Brooklyn Nets NBA basketball team. After three years, News Corp. may acquire an additional stake in the YES Network to raise its ownership interest to 80 percent. *See* News Corp., *News Corporation and Yankee Global Enterprises Announce News Corporation's Acquisition of An Equity Stake in the YES Network* (press release), Nov. 20, 2012, at http://www.newscorp.com/news/news_548.html (visited Nov. 20, 2012) ("News Corp.-Yankees Press Release"). On December 28, 2012, News Corp. also purchased SportsTime Ohio, an RSN that airs various professional, collegiate, and high school sports games to more than 5 million homes in Ohio and parts of Kentucky, Indiana, West Virginia, and western Pennsylvania and New York. Derek Baine, *New Corp. Expands Its Ohio RSN Franchise*, SNL KAGAN, Jan. 2, 2013.

[1234] *See infra*, App. D. *See also 2012 Program Access Order*, 27 FCC Rcd at 12698, App. G, Table 1 (this figure includes terrestrially and satellite-delivered RSN networks as well as the HD feeds of the networks).

agreement in which an independent producer pays the production costs and acquires the advertisers, while the network supplies the on-air talent.[1235]

343. Sports programming continues to be a distinct form of programming in comparison to movies and other types of television programming. First, it is easier to predict audience and advertiser interest with sports programming, especially for marquis events. Major sporting events – including the championship games for professional football, baseball, and basketball, the Olympics, and championship games for certain NCAA sports – consistently generate among the highest ratings of any programming, especially among those in the demographics most desirable to advertisers, including the 18-to-35 male demographic.[1236] Nielsen has also found that sports programming is the least time-shifted genre of television programming. According to Nielsen, in 2012, the 18-49 demographic watched nearly all of sports television programming live or within the same day if airing.[1237] Therefore, major sporting events are typically viewed as "premium" programming. This has led broadcast and cable networks to pay increasingly large amounts to sports teams for television rights.[1238] Second, sporting events tend to have little value beyond their initial telecast because there is very little interest in an event once the results are known. Ancillary markets for sports programming are thus limited with the exception of websites providing fans with additional opportunities for interaction.[1239]

344. Professional sports leagues continue to license their programming for video distribution in a variety of manners. For instance, the NFL only negotiates media rights with national networks.[1240] This strategy remains lucrative for the NFL as its programming is believed to be the most valuable on air.[1241] In 2011, CBS, FOX, NBC, and ESPN paid nearly $40 billion for the right to air NFL games

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[1235] *14th Report*, 27 FCC Rcd at 8775-76, ¶ 371.

[1236] *Id.* at 8776, ¶ 372. *See also* SNL Kagan 2012 Media Trends at 108; Hina Nawaz, *Sports Coverage Builds Rating Strength for NBC Sports Network, FUEL TV*, SNL KAGAN, Oct. 19, 2012 (explaining that the NBC Sports Network and FUEL TV experienced ratings growth due to the Olympics and the Ultimate Fighting Championship, respectively). The Olympics are also credited for increasing the ratings for NBC's 2012 fall broadcast television shows. *See* James M. Ratcliffe *et al.*, *U.S. Cable & Satellite Communications – 3Q Preview: Steady As She Goes*, Barclays, Oct. 23, 2012, at 11 ("NBC leveraged the momentum during the Olympics to heavily promote its new shows this fall. . . .") ("Ratcliffe Report").

[1237] Nielsen, *State of the Media: 2012 Year in Sports*, at 3, http://www.nielsen.com/us/en/reports/2013/state-of-the-media--2012-year-in-sports.html (visited May 8, 2013).

[1238] *14th Report*, 27 FCC Rcd at 8776, 8777, ¶¶ 372, 375. Broadcast and cable networks often pay for the television rights and production costs using subscriber fees charged to MVPDs and/or contributions from broadcast affiliates. *Id.* at 8777, ¶ 375. While some sports rights moved from broadcast to cable in recent years, broadcast retains select sports leagues, such as the NFL, and major sporting events. Deana Myers, *Sports Rights: Paying Off for Broadcast?*, SNL KAGAN, Feb. 7, 2012. News Corp.'s President and COO, Chase Carey stated, "in a world that has more and more choices and more and more technologies, we think sports become ever increasingly valuable." Sarah Barry James, *Sports Becoming Even More Important for News Corp.*, SNL KAGAN, Nov. 6, 2012.

[1239] *14th Report*, 27 FCC Rcd at 8776, ¶ 372. According to Nielsen, the mobile web audience among sports sites increased by 22 percent from November 2010 to November 2011. Nielsen, *State of the Media: 2011 Year in Sports* at 2, http://www.nielsen.com/us/en/insights/reports-downloads/2012/state-of-the-media--2011-year-in-sports.html (visited Oct. 22, 2012). In September 2011, 25 percent of mobile web users 18 and over visited a sports site with 27.8 percent of those visiting NFL.com. NFL.com therefore received approximately seven percent of all mobile web traffic for those 18 and over. *Id.* at 5.

[1240] Each team in the NFL receives an equal share of the broadcast and licensing revenues and 40 percent of gate receipts from away games. Thus, the most profitable NFL team generally earns only 20 percent more gross revenues than the least. *14th Report*, 27 FCC Rcd at 8776-77, ¶ 373.

[1241] Anthony J. DiClemente & Chris Merwin, *Who Bears the Burden of Higher Sports Rights Costs*, Barclays (continued….)

through the 2021 season. For the broadcast networks, these deals represent a price increase of just below 60 percent over the previous agreements expiring at the end of the 2013 season. With respect to ESPN, its deal represents a 70 percent increase in price from the previous agreement. Under the new agreement though, ESPN has the right to air 500 new hours of NFL-branded programs and air games in 144 countries. The new agreement also retains ESPN's right to allow its subscribers to view NFL programming online.[1242]

345. In the *14th Report* we explained that unlike the NFL's licensing fees, licensing fees for MLB and the NBA are closely associated with the size of the team's market and individual team performance.[1243] Historically, the NBA and MLB have not depended on national television revenue as much as the NFL, partially because NBA and MLB teams play significantly more games in their home markets. In addition, while some NBA and MLB games are carried by national networks, professional basketball and baseball games are more likely to be carried on RSNs because the NBA and MLB allow individual teams to negotiate contracts for local broadcast rights.[1244] In 2012, the MLB reached an eight-year deal with FOX, TBS, and ESPN that allows MLB games to air on these respective networks through the 2021 season; the three deals have a total value of $12.4 billion. Under the agreement, FOX will retain the World Series and All-Star Game. While the terms of ESPN's agreement remain similar to its previous agreement, ESPN received some additional rights, including a wild-card game during the postseason.[1245]

346. MLB and NBA teams also continue to receive major contracts for their television rights.[1246] In the spring of 2012, the San Diego Padres – playing in the 26th-largest baseball market – signed a 30-year television agreement with FOX Sports San Diego valued at $1.2 billion.[1247] Similarly, the New York Yankees and the YES Network announced an agreement in November 2012 that provides the network with the television rights to the Yankees through 2042; the Yankees will reportedly receive about $350 million a year for its rights.[1248] With respect to the NBA, in February 2011, Time Warner Cable signed a 20-year, $3 billion agreement with the Los Angeles Lakers to launch two RSNs – one in

(Continued from previous page)
Capital, Jan. 27, 2012, at 1 ("DiClemente Report").

[1242] *Id.* at 2-3.

[1243] *14th Report*, 27 FCC Rcd at 8777, ¶ 374.

[1244] *Id.*

[1245] Mark Newman, *MLB Reaches Eight-Year Agreement with FOX, Turner*, MLB.COM, Oct. 2, 2012, at http://mlb.mlb.com/news/article.jsp?ymd=20121002&content_id=39362362&vkey=news_mlb&c_id=mlb (visited Nov. 13, 2012); Deana Myers, *ESPN Doubles Fees Paid for MLB*, SNL KAGAN, Aug. 29, 2012.; Mark Newman, *MLB, ESPN Agree on Record Eight-Year Deal*, MLB.COM, Aug. 28, 2012, at http://mlb.mlb.com/news/article.jsp?ymd=20120828&content_id=37476712&c_id=mlb&vkey=news_mlb (visited Nov. 13, 2012).

[1246] *See 14th Report*, 27 FCC Rcd at 8777, ¶ 374. *See also* Bob Nightengale, *Cash Flows Through MLB Cable Outlets*, USA TODAY, Feb. 10, 2012, at http://usatoday30.usatoday.com/SPORTS/usaedition/2012-02-10-MLB-TV-cover-0210_CV_U.htm (visited Nov. 15, 2012) ("Nightengale").

[1247] Nightengale; *Padres Sale Agreement in Place, Needs MLB Approval*, CBSSPORTS.COM, Aug. 7, 2012, at http://www.cbssports.com/mlb/story/19743586/padres-sale-agreement-in-place-needs-mlb-approval (visited Oct. 24, 2012). MLB believes these TV deals will help provide greater parity in the sport. *See* Nightengale.

[1248] Andy Fixmer & Scott Soshnick, *YES Network Said to Extend Yankees Rights Through 2042*, BLOOMBERG, Nov, 20, 2012, at http://www.bloomberg.com/news/2012-11-20/yes-network-said-to-extend-yankees-rights-through-2042.html (visited Nov. 20, 2012). *See also* News Corp.-Yankees Press Release.

English and the other in Spanish – built around the team; other teams have also signed major contracts with RSNs in recent years.[1249]

347. MVPDs maintain that increases in programming costs are attributable in part to the rising fees for sports programming.[1250] Analysts remain uncertain about the ability of RSNs, ESPN, and other networks to place the increasing costs of sports programming on MVPDs and their subscribers.[1251] To combat this trend, some MVPDs have begun to place sports programming on a separate tier given the growing potential for subscribers to terminate or scale back on their MPVD subscriptions.[1252] And in the fall of 2012, DIRECTV began requiring new subscribers who live in areas with more than one RSN, such as New York or Los Angeles, to pay a $3 monthly sports surcharge if they want access to the RSNs.[1253]

2. Distribution Strategies

348. As previously discussed, technology continues to evolve and provide alternative methods for the distribution, storage, and consumption of video content. Alternative distribution of video content

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[1249] Mike Reynolds, *TWC's Lakers Deal Changes Game*, MULTICHANNEL NEWS, Feb. 21, 2011. The agreement made the Los Angeles Lakers the most valuable team within the league. Kurt Badenhausen, *L.A. Lakers Top 2012 List of the NBA's Most Valuable* Teams, FORBES, Jan. 25, 2012, http://www.forbes.com/sites/kurtbadenhausen/2012/01/25/the-nbas-most-valuable-teams/ (visited Nov. 27, 2012). TWC launched these two RSNs on October 1, 2012. These networks are respectively named Time Warner Cable SportsNet and Time Warner Cable Deportes. *See* Ratcliffe Report at 14.

[1250] *See, e.g.*, Comcast Corp., *SEC Form 10-K for the Year Ended December 31, 2012*, at 31; Time Warner Cable Inc., *SEC Form 10-K for the Year Ended December 31, 2012*, at 20; DIRECTV, *SEC Form 10-K for the Year Ended December 31, 2012*, at 21; DISH Network Corp., *SEC Form 10-K for the Year Ended December 31, 2012*, at 56. *See also* Sarah Barry James, *Sports Rights: How Much Higher Can They Go?*, SNL KAGAN, Dec. 17, 2012 (identifying the concerns of Matthew Polka, CEO of ACA, whose "primary complaint is that every pay TV subscriber – regardless of whether they watch sports – is forced to shoulder the costs of these deals.").

[1251] DiClemente Report at 7 ("[W]e expect the distributors will attempt to pass increasing sports rights costs onto the consumer, a successful strategy in the past but one that may be met with more stringent resistance this time around . . ."). *See also* Craig Moffett *et al.*, *U.S. Telecom, Cable & Satellite – Monday Chart: The "Something's Gotta Give" Chart of Programming Expense*, Bernstein Research, Oct. 1, 2012, at 1-2; Adam Swanson, *Sports Content Continues to Bolster License Fees in 2011*, SNL KAGAN, Sept. 10, 2012 (explaining that sports rights are one of the biggest factors to increase the license fees for cable networks).

[1252] Cox Communications offers an economy package for $35 a month that includes several basic cable networks, but excludes ESPN and RSNs. Comcast and Time Warner Cable have also tested and offered similar tiers. Deborah Yao, *Cox Rolling Out Economy Cable TV Tier*, SNL KAGAN, Jan. 24, 2012. DISH Network – in contrast to DIRECTV – has reportedly considered dropping ESPN if it does not agree to be distributed on a separate sports tier in order to reduce the cost for subscribers who are non-sports fans. In New York, DISH Network dropped three RSNs – SportsNet New York, YES, and MSG Plus. Derek Baine, *Dish to Dump ESPN?*, SNL KAGAN, Sept. 13, 2011. In 2012, Dish Network let its agreement with the Big Ten Network expire. Adam Rittenberg, *Agreement Expires Between BTN, Dish*, ESPN.COM, Sept. 15, 2012, at http://espn.go.com/blog/bigten/post/_/id/58512/agreement-expires-between-btn-dish (visited Oct. 24, 2012).

[1253] Joe Flint, *DirecTV Adds Local Sports Surcharge for Some New Subscribers*, L.A. TIMES, Dec. 10, 2012, at http://articles.latimes.com/2012/dec/10/entertainment/la-et-ct-directv-sports-surcharge-20121210 (visited May 13, 2013). *See also* Adam Swanson & Derek Baine, *Multichannel Operators Put Their Own Spin on Sports Rights Costs*, SNL KAGAN, Dec. 21, 2012. In early 2013, Cablevision and Verizon's FiOS TV announced they would also begin adding a monthly sports surcharge to several of their customers' bills. Alex Sherman, *Cablevision to Charge Customers Sports Fee in Cable Packages*, BLOOMBERG, Feb. 21, 2013, at http://www.bloomberg.com/news/2013-02-21/cablevision-to-charge-customers-sports-fee-in-cable-packages.html; Todd Spangler, *Verizon to Tack on RSN Fee to FiOS TV*, MULTICHANNEL NEWS, Jan. 25, 2013, at http://www.multichannel.com/telco-tv/verizon-tack-rsn-fee-fios-tv/141384.

entails an evolution of rights and strategic business decisions among the networks, their affiliates, and the studios, which we discussed extensively in the *14th Report* and update here.[1254]

349. In January 2012, for example, Disney reached an agreement with Comcast that enables Comcast's Xfinity customers to watch ABC shows live, on demand, and across multiple devices.[1255] The agreement covers Disney's cable networks, ABC, and ABC's O&Os.[1256] In November 2012, Cablevision and NBCUniversal signed a long-term affiliation agreement that covers NBCUniversal's portfolio of broadcast and cable network programming. The agreement provides Cablevision subscribers with rights to on-demand content and access to live channels across multiple platforms.[1257]

350. Premium networks, such as HBO, Starz and Showtime, also offer their MVPD subscribers unlimited access to their network programming through their own branded web sites and mobile applications.[1258] Some networks though have taken a more cautious approach. Discovery Communications, for instance, has chosen not to give any MVPD TV Everywhere rights for its networks.[1259] In 2011, Time Warner Cable withdrew live streams of Viacom and News Corp. content from its iPad app after the companies objected.[1260]

[1254] *See 14th Report*, 27 FCC Rcd at 8779-84, ¶¶ 377-87.

[1255] Comcast Corp., *The Walt Disney Company and Comcast Corporation Announce a Long-Term, Comprehensive Distribution Agreement that Advances the Successful Multichannel Business Model* (press release), Jan. 4, 2012 ("Disney-Comcast Press Release"). In October 2012, Disney announced a similar agreement with Cablevision. The financial terms of the deal were not disclosed. Cablevision customers will be able to watch Disney content on multiple platforms, including mobile, under the multiyear distribution deal. The companies said the deal covers 70 services including retransmission consent for ABC O&O stations in New York and Philadelphia. Melodie Warner, *Cablevision, Disney Reach Distribution Pact*, WALL ST. J., Oct. 4, 2012, at http://www.marketwatch.com/story/cablevision-disney-reach-distribution-pact-2012-10-04 (visited Nov. 1, 2012); Jon Lafayette, *Disney Signs Distribution Agreement with Cablevision*, BROADCASTING & CABLE, Oct. 4, 2012, at http://www.broadcastingcable.com/article/489719-Disney_Signs_Distribution_Agreement_With_Cablevision.php (visited Nov. 1, 2012). In December 2012, Disney reached comparable comprehensive agreements with Cox Communications and Charter Communications. *See* Somaditya Roy, *Disney, Charter Ink Distribution Agreement*, SNL KAGAN, Dec. 31, 2012; Cox Communications & The Walt Disney Co., *Disney, Cox Announce Comprehensive Distribution Agreement* (press release), Dec. 13, 2012.

[1256] Disney-Comcast Press Release.

[1257] Somaditya Roy, *NBCU, Cablevision Sign Affiliation Deal*, SNL KAGAN, Nov. 5, 2012. Also in November 2012, NBCU struck a similar agreement with Verizon that begins in early 2013 for FiOS TV customers. *See* NBCUniversal, *NBCUniversal and Verizon Offer TV Everywhere Rights for Top Sports, News and Entertainment Programming to Verizon FiOS TV Customers Beginning Early Next Year* (press release), Nov. 26, 2012.

[1258] *See* CBS Corp., *Showtime – Apps*, http://www.sho.com/sho/apps (visited Oct. 26, 2012); Time Warner Inc., *HBO Go*, http://www.hbogo.com/#home/ (visited Oct. 26, 2012). *See also, e.g.*, Bright House Networks, *HBO and Cinemax Now Available "On the Go" to Bright House Networks Customers* (press release), Jan. 10, 2012. Starz Entertainment LLC recently made its Starz Play, Encore Play, and MoviePlex Play apps available to AT&T's U-verse subscribers. Haseeb Ali, *U-verse TV Subs Get Starz Authenticated Online Services*, SNL KAGAN, Dec. 17, 2012.

[1259] Jeanine Poggi, *Cable Execs Root for TV Everywhere, but No Timeline on Mass Adoption*, ADVERTISING AGE, May 23, 2012, at http://adage.com/article/media/cable-executives-root-tv/234951/ (visited Oct. 26, 2012). Discovery's CEO, David Zaslav, has indicated that the company will not strike TV Everywhere deals until audience measurement improves. *See* Mikolo Ilas, *Discovery Cautious on TV Everywhere until Measurement Improves, CEO Says*, SNL KAGAN, Dec. 5, 2012.

[1260] Brian McNeill, *Time Warner Cable Removes Programming from iPad App Following Cable Network Complaints*, SNL KAGAN, Mar. 31, 2011.

351. As noted in the *14th Report*, in November 2011, WBTVG and ABC struck a notable distribution agreement.[1261] Under the agreement, WBTVG will syndicate its first-run shows on the ABC network after three years instead of the traditional four years. WBTVG also can sell the distribution rights for its ABC-aired shows to subscription services, such as Netflix and Hulu, after the completion of each season. In exchange, ABC has the right to simulcast the network feeds of its WBTVG programming to any device, as well as the right to distribute up to five of the most recently aired episodes of a show via an MVPD's VOD service or an OVD for a 30-day period. With respect to revenues, ABC retains all the revenue from advertising-supported OVDs; WBTVG keeps revenues from in-season electronic sell-through platforms, such as iTunes, and out-of-season DVD and Blu-ray disc sales. Finally, ABC retains revenues from any OVD subscription service in which it has an ownership interest, namely Hulu Plus. [1262]

352. Over the last two years, CBS has entered into agreements with select OVDs that permit the online streaming of some of its content. Specifically, in February 2011, CBS announced that it would allow Netflix to begin streaming certain programs from its content library starting in April 2011, including *Cheers* and *Frasier*, which were unavailable on any other platform prior to this deal.[1263] In November 2012, CBS announced a similar agreement with Hulu Plus. Beginning in January 2013, Hulu Plus subscribers have access to more than 2,600 episodes from CBS's library series, such as *Medium*, *Numb3rs*, *CSI: Miami*, *Star Trek*, and *I Love Lucy*. In addition, a selection of CBS's library shows will rotate through the free Hulu.com service.[1264]

353. As we discuss above, Netflix has struck a deal to become the exclusive U.S. subscription television service for Walt Disney Studios' first-run live-action and animated feature films, entering into a multiyear licensing agreement that begins in 2016 for theatrically released films from Disney, Walt Disney Animation Studios, Pixar Animation Studios, Marvel Studios and Disneynature. Disney direct-to-video releases will be available on Netflix beginning in 2013. Disney and Netflix also signed a multiyear catalog agreement that immediately made accessible older Disney titles such as *Dumbo*, *Pocahontas* and *Alice in Wonderland*.[1265]

B. Consumer Premises Equipment

354. Changes in consumer premises equipment ("CPE") and user equipment technology continue to have an important impact on competition in the video programming market. CPE is the necessary means by which consumers access the services that broadcasters, MVPDs, and OVDs provide. Because CPE is an integral part of viewing video programming, CPE features such as recording, home networking, mobile access, and user interface are factors to consumers when choosing their programming provider and which services to purchase. Further, interoperability of CPE can impact the ability to consumers to seamlessly switch providers. Today the CPE marketplace is more dynamic than it has ever been, offering consumers an unprecedented and growing list of choices to access video content.

355. In this section, we report on a number of developments in this area that affect the manner and state of competition in the video marketplace. Specifically, we update developments since the last

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[1261] *14th Report*, 27 FCC Rcd at 8784, ¶ 387.

[1262] *Id.*

[1263] Liz Shannon Miller, *CBS Picks Netflix Over Hulu to Stream Classic Shows*, GIGAOM, Feb. 22, 2011, at http://gigaom.com/video/cbs-netflix/ (visited Nov. 27, 2012).

[1264] CBS Corp., *CBS and Hulu Announce Licensing Agreement for Library Content on the Hulu Plus Subscription Service* (press release), Nov. 5, 2012 (visited Nov. 27, 2012).

[1265] Kyle Daly, *Netflix, Disney Ink Deals Brining Exclusive New Releases, Catalog Titles to Streaming Platform*, SNL KAGAN, Dec. 4, 2012.

report, and examine the technological, regulatory and market developments that have had an effect on, or are likely in coming years to affect, competition in the video market. First we consider MVPD and non-affiliated vendors' development of navigation devices. Then we review developments in devices used to access online and mobile video services.

1. CPE Used to Access MVPD Services

a. Leased CPE

356. MVPDs are deploying set-top boxes that allow consumers to move content among other MVPD-provided set-top boxes in the home and incorporate IP connectivity, allowing set-top boxes to perform more like gateways. DIRECTV states that its average monthly subscriber acquisition costs have increased from $712 to $853 due to investment into new CPE technology.[1266] MVPDs continue to expand their video distribution to portable screens, such as Internet-connected smart phones and tablet computers. Cable companies continue to support CableCARD and, as described in more detail below, are working to implement an IP-based recordable output.[1267]

357. MVPDs have now widely implemented multi-room DVR and home networking solutions. Also known as "Whole-Home DVR," consumers have the ability to move recorded video content from a central DVR to other TVs or MVPD-provided set-top boxes in the home. DIRECTV's "Genie" allows consumers to experience HD DVR functionality through a central DVR to a C31 Client[1268] or RVU[1269]-enabled TV within the home, thus eliminating the need for additional set-top boxes.[1270] "Genie" works in up to four rooms at the same time and allows five programs to be concurrently recorded on a one terabyte storage drive. It also makes programming available on a variety of remote devices.[1271] Similarly, DISH Network's "Hopper" multi-room DVR can record up to six shows at a time on a two terabyte drive.[1272] The DVR networks up to three additional TVs using MoCA

[1266] DIRECTV Comments at 9.

[1267] *See infra*, ¶ 364. In 2004, the Commission adopted a requirement that cable operators provide an IEEE 1394 interface on all HD set-top boxes as a means of enabling a market for devices that interact with the operator supplied set-top box. In 2010, the Commission relaxed this requirement to permit operators to provide the same functionality over IP. IP has overwhelming marketplace support and serves the same purpose that our IEEE 1394 connection requirement was intended to serve. *See Navigation Devices Third Report and Order*, 25 FCC Rcd 14677-79, ¶¶ 39-44; *TiVo Inc.'s Request for Clarification and Waiver of the Audiovisual Output Requirement of Section 76.640(b)(4)(iii)*, MB Docket No. 12-230, Memorandum Opinion and Order, 27 FCC Rcd 14875 (MB 2012) (clarifying the rule and waiving the rule until June 2, 2014); *but see EchoStar Satellite L.L.C. v. FCC*, 704 F.3d 992 (D.C. Cir. 2013).

[1268] The C31 Client is a small DIRECTV RVU (pronounced "R-view") set-top box used to extend DVR functionality to additional TVs within the home from DIRECTV's "Genie" (HR34) DVR (Media Server). The C31 contains no hard drive or tuner. *See DirecTV University: C31 RVU Client Spec Sheet*, http://www.perfect-10.tv/webstore/spec-sheets/RVU-C31.pdf (visited Nov. 19, 2012).

[1269] RVU, pronounced "R-View," is a protocol combining open standards (including Digital Living Network Alliance (DLNA) and Universal Plug and Play (UPnP)) and a Remote User Interface (RUI) protocol allowing RVU client devices, such as TVs, to display content from an RVU server (DVR) through connections in the home such as WiFi, Ethernet, or Multimedia Over Coax (MoCA). *See* RVU Protocol: Networked Home Entertainment With Pixel Accurate Remote Graphics (whitepaper), http://www.rvualliance.org/files/static_page_files/RVU_White_Paper.pdf (visited Nov. 21, 2012).

[1270] DIRECTV Comments at 6.

[1271] DIRECTV Genie, http://www.directv.com/technology/genie (visited Nov. 8, 2012); Comcast Comments at 20-21.

[1272] Frequently Asked Questions About Hopper, http://godish.com/hopper/hopper-faqs.aspx (visited Nov 8, 2012).

(MultiMedia over Coax)[1273] connectivity to multi-room extender boxes called "Joeys."[1274] The "Hopper" also has a feature called "PrimeTime Anytime" whereby commercials can be automatically skipped for the four major broadcast networks' primetime programming.[1275] In November 2012, the U.S. District Court of Los Angeles, in a decision that remains under seal, denied Fox Broadcasting's request for a preliminary injunction to shut down DISH Network's ad-skipping DVR feature.[1276] FOX appealed the district court's decision denying the preliminary injunction.[1277] In addition, certain MVPDs now stream video content to video game consoles, tablet computers, and other IP-enabled devices.[1278]

358. Some MVPDs are deploying cloud-based user interfaces that take advantage of IP connectivity in leased set-top boxes. Cloud-based solutions allow MVPDs more flexibility to innovate and deploy features faster without having to swap out a customer's set-top box. The cloud is essentially transforming video products from a hardware experience to a software experience. Comcast is working with partners, such as Disney, to deliver a robust content experience through a cloud-enabled seamless, multi-platform interface known as "X1" (formally Xcalibur). Customers will experience a unified search and instant play of live TV, DVR recordings, and VOD. Comcast has launched "X1" in Boston and Atlanta and plans to add five additional markets by the end of 2012.[1279] "X1" currently runs on a QAM/IP hybrid video gateway with a DOCSIS 3.0 modem.[1280] Comcast is expected to deploy an all IP set-top box called the "XI3" in 2013.[1281] This new gateway will use the cloud based interface to get linear video that will be transcoded from QAM video to IP streams that can be delivered to the home.[1282] Cablevision expected to offer its network based "DVR Plus" service with a new cloud-based set-top navigation system in all its East Coast systems by the end of 2012.[1283] Time Warner Cable's Syracuse,

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[1273] Multimedia over Coax Alliance (MoCA), http://www.mocalliance.org/ (visited Nov. 9, 2012).

[1274] Richard Lawler, *Dish Network Starts Rolling Out Hopper/Joey Multi-room DVR Setup Today*, http://www.engadget.com/2012/03/15/dish-network-starts-rolling-out-hopper-joey-multiroom-dvr-setu/ (visited Nov 8, 2012).

[1275] *There's a Whole New Animal in Whole-Home Entertainment*, http://godish.com/hopper (visited Nov. 8, 2012).

[1276] CED Magazine, *Judge Rejects Injunction Against Dish DVR*, ASSOCIATED PRESS, Nov. 8, 2012, http://www.cedmagazine.com/news/2012/11/judge-rejects-injunction-against-dish-dvr?et_cid=2938296&et_rid=216334141&linkid=http%3a%2f%2fwww.cedmagazine.com%2fnews%2f2012%2f11%2fjudge-rejects-injunction-against-dish-dvr (visited Nov. 8, 2012). Edvard Pettersson, *Fox Loses Bid to Block Dish's AutoHop Ad-Skipping Service*, BLOOMBERG NEWS, Nov. 8, 2012, http://www.businessweek.com/news/2012-11-07/dish-says-it-wins-ruling-im-news-corp-dot-suit-over-autohop (visited Nov 8, 2012).

[1277] Edvard Pettersson, *Fox Broadcasting on Appeal Seeks to Stop Dish's Autohop*, BLOOMBERG NEWS, June 4, 2013, http://www.bloomberg.com/news/2013/2013-06-04/fox-broadcasting-on-appeal-seeks-to-stop-dish-s-autohop.html (visited July 17, 2013).

[1278] Verizon Comments at 23; NCTA Comments at 6; DIRECTV Comments at 4-6; Comcast Comments at 7-8.

[1279] Comcast Comments at 5-6, 9-10.

[1280] Jeff Baumgartner, Philly Next for Comcast's X1, Light Reading Cable, November 16, 2013, http://www.lightreading.com/video-services/philly-next-for-comcasts-x1/240143374 (visited Jan. 11, 2013).

[1281] Richard Lawler, *Humax's take on an IP-connected TV box for Comcast passes through the FCC*, Engadget, http://www.engadget.com/2012/11/28/comcast-humax-xi3-h-ip-cable-box/ (visited Jan. 11, 2013).

[1282] *Meet Comcast's IP-Only Set-Top, Heavy Reading* , http://www.heavyreading.com/document.asp?doc_id=225519&site=lr_cable (visited Jan. 11, 2013).

[1283] Jeff Baumgartner, *Cablevision Packs More Video Into the Cloud*, Light Reading Cable, Aug. 7, 2012, http://www.lightreading.com/document.asp?doc_id=223653&site=lr_cable (visited Nov. 14, 2012).

New York system launched graphically richer VOD capabilities through cloud-based box art,[1284] metadata servers, and sign up and search functions.[1285]

359. Additionally, MVPDs continue to work on ways to expand new services through their CPE and access to their services by retail products. Verizon's new "My FiOS" mobile application provides consumers with a feature-rich single point of remote access to not only their FiOS services but also Verizon's Home Monitoring and Control Service.[1286] Time Warner's "IntelligentHome," Comcast's "XFINITY Home," and Cox's "Home Security Services" are new home monitoring and security systems operating as extensions of cable MVPD networks. Portable media players, gaming consoles, and Internet-connected smart phones and tablet computers continue to grow as popular ways to interact with video. Consumers can access Netflix on more than 900 different Internet-connected devices.[1287]

b. CableCARDs and Section 629 of the Communications Act

360. Pursuant to Section 629 of the Act,[1288] the Commission adopted regulations to assure the commercial availability of consumer electronics equipment that can access MVPD services.[1289] In enacting the section, Congress pointed to the vigorous retail market for CPE used with the telephone network and sought to create a similarly vigorous market for devices used with MVPD services.[1290] The Commission has made regulatory efforts to develop this market and continues to analyze marketplace developments.

361. To carry out the directives of Section 629, in 1998, the Commission required MVPDs to make available a security element separate from the other elements of a navigation device or set-top box.[1291] The separation of security from the navigation device was designed to let unaffiliated consumer electronics companies offer retail video navigation devices and let MVPDs retain control over system security; in this vein, the Commission required the separate security to "be designed to connect to and function with other navigation devices . . . through the use of a commonly used interface or an interface that conforms to appropriate technical standards."[1292] The Commission also required MVPDs to rely on this separated security in their own devices, a requirement that many refer to as "common reliance" or the

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[1284] The term "box art" refers to cover artwork on game or movie packaging intended to catch viewer's attention similar in purpose to that of movie posters.

[1285] Mike Robuck, *TWC Launches 1st Cloud-based VOD Search Application in Syracuse*, CED, June 6, 2012, http://www.cedmagazine.com/news/2012/06/twc-launches-1st-cloud-based-vod-search-application-in-syracuse (visited Nov. 14, 2012).

[1286] *See* Verizon Comments at 11.

[1287] *See* Netflix Comments at 3.

[1288] *See* 47 U.S.C. § 549 ("The Commission shall, in consultation with appropriate industry standard-setting organizations, adopt regulations to assure the commercial availability, to consumers of multichannel video programming and other services offered over multichannel video programming systems, of converter boxes, interactive communications equipment, and other equipment used by consumers to access multichannel video programming and other services offered over multichannel video programming systems, from manufacturers, retailers, and other vendors not affiliated with any multichannel video programming distributor.").

[1289] 47 U.S.C. § 549(a).

[1290] H.R. REP. NO. 104-204, at 112-3 (1995).

[1291] *Implementation of Section 304 of the Telecommunications Act of 1996*,13 FCC Rcd 14775 (1998); 47 C.F.R. § 76.1204(a)(1).

[1292] *Implementation of Section 304 of the Telecommunications Act of 1996*,13 FCC Rcd 14775 (1998); 47 C.F.R. § 76.1204(b).

"integration ban."[1293] In 2003, the Commission specified a standard (the "CableCARD" standard) that cable operators shall rely on to meet these rules.[1294] On January 15, 2013, the D.C. Circuit vacated the Order adopting the CableCARD standard, but not the Order that requires cable operators to separate security and base that separate security on a commonly used interface or technical standards.[1295] Because CableCARD is the *de facto* standard that cable operators use to meet these rules, we expect that most will continue to rely on CableCARDs despite the D.C. Circuit's ruling.

362. Despite the CableCARD standards, consumer adoption of retail CableCARD-compatible devices has not matched the Commission's expectations.[1296] The following table shows the reported number of CableCARD deployments for use in retail CableCARD-enabled devices since 2006[1297] and the deployment of operator-supplied set-top boxes with CableCARDs since the integration ban went into effect on July 1, 2007.[1298]

[1293] *Implementation of Section 304 of the Telecommunications Act of 1996*,13 FCC Rcd 14775 (1998); 47 C.F.R. § 76.1204(a)(1).

[1294] *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices; Compatibility Between Cable Systems and Consumer Electronics Equipment*, CS Docket No. 97-80, PP Docket No. 00-67, Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 20885 (2003).

[1295] *Echostar Satellite, LLC v. FCC*, 704 F.3d 992 (D.C. Cir. 2013).

[1296] *Navigation Devices Third Report and Order*, 25 FCC Rcd at 14660, ¶ 4.

[1297] The Commission directed certain cable operators to file reports with the Commission detailing CableCARD deployments. *See Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, CS Docket No. 97-80, Second Report and Order, 20 FCC Rcd 6794, 6814-15, ¶ 39 (2005) ("*2005 Deferral Order*").

[1298] Effective July 1, 2007, cable operators were required to separate security in their leased devices and rely on the same conditional access mechanism that consumer electronics manufacturers use in their commercially available devices. 47 C.F.R. § 76.1204(a)(1). *See Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, CS Docket No. 97-80, Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 7924, 7926 ¶ 4 (2003); *2005 Deferral Order*, 20 FCC Rcd at 6802-03 ¶ 13.

Table 40: Deployment of CableCARDS (Cumulative)[1299]

Year (as of June)	CableCARD Deployment for Use in Retail Devices – Top 10 Cable Operators	Operator-supplied Set-top Boxes With CableCARDS
2006	170, 000	
2007	271,000	
2008	372,000	6,232,800
2009	437,800	14,085,000
2010	520,000	21,000,000
2011	582,000	29,300,000
2012	618,000	36,000,000

363. While the Commission's CableCARD rules have allowed vendors like TiVo and Hauppauge to build retail devices that connect to cable systems, the cable industry criticizes the CableCARD regime as expensive and ineffective.[1300] MVPDs insist that device regulation is unnecessary to drive innovation of navigation devices.[1301] According to certain public interest and local government entities, disagreement in the industry about the best mechanism to achieve a competitive retail market for CPE devices has limited the choices available to consumers.[1302]

364. In October 2010, the Commission adopted rules to eliminate four impediments to consumer adoption of CableCARDs, including rules that: (1) ensure that retail devices can access all video programming that is prescheduled by the programming provider; (2) increase transparency in CableCARD pricing and billing; (3) streamline CableCARD installation; and (4) streamline requirements for manufacturers who build CableCARD devices.[1303] In the same order the Commission replaced the requirement for an IEEE 1394 connector that was meant to be a recordable digital output from MVPD leased set-top boxes with a requirement for an IP based open-standard connection with certain requirements in service discovery, video transport, and remote command pass-through for home networking.[1304] The order required cable operators to deploy set-top boxes that meet the IP-based output requirement beginning on December 1, 2012, but the Media Bureau has waived that rule until June 2,

[1299] *See* Letters from Neal M. Goldberg, Vice President and General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, CS Docket No. 97-80 (filed June 29, 2006, June 25, 2007, June 23, 2008, June 26, 2009, June 23, 2011, June 30, 2011, July 30, 2012).

[1300] *See* Comcast Comments at 33.

[1301] Verizon Comments at 22-23.

[1302] Public Knowledge Comments at 12; Montgomery County, MD Reply at 25-34.

[1303] *Navigation Devices Third Report and Order*, 25 FCC Rcd at 14662-14676, ¶¶ 8-38.

[1304] As discussed above, on January 15, 2013, the D.C. Circuit vacated the *Navigation Devices Second Report and Order*. *Echostar Satellite, LLC v. FCC*, 704 F.3d 992 (D.C. Cir. 2013). We do not opine on the scope of the court's decision in the instant proceeding.

2014.[1305] Once that requirement takes effect, retail-purchased CPE will be able more effectively to network with and view content from MVPD-provided devices.

c. CableCARD Successors

365. The Commission and industry have undertaken several efforts to update, extend, or replace the CableCARD regime.[1306] In 2010, the Commission began to explore a replacement concept referred to as "AllVid." The *AllVid NOI* introduced the concept of an adapter that could act either as a small "set-back" device for connection to a single smart video device or as a gateway allowing all consumer electronics devices in the home to access multichannel video programming services in addition to any other services the devices might have access to.[1307] Unlike CableCARD technology, this adapter could support the development and marketing of retail smart video devices that attach to any MVPD service anywhere in the United States. Such an approach could greatly enhance the incentives for manufacturers to enter the retail market. As conceived, an MVPD would supply an adapter that would communicate with the MVPD service, perform the tuning and security decryption functions that may be specific to that particular MVPD, and deliver video to retail devices using a common home networking protocol. In this manner, a retail smart video device would be able to integrate MVPD and non-MVPD services, as well as perform navigation functions, including the presentation of programming guides and search functionality. More recently, the Media Bureau granted Charter Communications, Inc. a waiver of the integration ban to "increase the chance of an industry-wide standard developing" and to "accelerate Charter's deployment of downloadable security."[1308] The Commission is continuing to monitor and evaluate the market for devices that can access MVPD services.

2. CPE Used to Access OVD Services

366. Broadband allows consumers to receive IP-delivered video content within the home across multiple broadband-capable devices, game consoles, and standalone devices like those provided by Apple, Roku, Boxee, Google, Xbox, and Playstation. These devices allow users to navigate and receive video delivered via broadband Internet and display it on a television monitor or wireless device such as a laptop or tablet. In December 2012 Netflix announced that Sony's Playstation 3 (PS3) was the world's most popular platform for viewing Netflix content.[1309] Also, it is becoming more common to include IP

[1305] *TiVo Inc.'s Request for Clarification and Waiver of the Audiovisual Output Requirement of Section 76.640(b)(4)(iii)*, MB Docket No. 12-230, Memorandum Opinion and Order, 27 FCC Rcd 14875 (MB 2012).

[1306] One such industry effort is called tru2way, previously called the Open Cable Applications Platform. It is an update to the CableCARD regime that supports two-way services like video-on-demand and interactive program guides. While consumer electronics manufacturers have been reluctant to implement tru2way in retail devices, cable operators may continue to support tru2way for their own internal purposes. *See* Todd Spangler, *Comcast New Way on Tru2way*, MULTICHANNEL NEWS, June 14, 2010, http://www.multichannel.com/article/453729-Comcast_New_Way_on_Tru2way.php (visited Nov. 26, 2012).

[1307] *Video Device Competition; Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices; Compatibility between Cable Systems and Consumer Electronics Equipment*, MB Docket No. 10-91, Notice of Inquiry, 25 FCC Rcd 4275, 4281-3, ¶¶ 17-23 (2010).

[1308] *Charter Communications, Inc. Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, MB Docket No. 12-238, Memorandum Opinion and Order, 28 FCC Rcd 5212, 5217-8, ¶ 9 (MB 2013). TiVo, Inc. has filed a petition for reconsideration of this decision, and the Consumer Electronics Association has filed an application for review of this decision.

[1309] Netflix, *Playstation becomes Top Platform in the World for Netflix Development and Living Room Viewing* (news release), Dec. 4, 2012.

capabilities in television sets.[1310] Today most high-end TVs are already IP-enabled through built-in Ethernet and/or WiFi connections.[1311] In the OVD section of this Report, we note that many of the leading OVDs make their services available via a wide variety of consumer electronics products.[1312] The converse is also true – many consumer electronics products give consumers access to a variety of OVD services.

367. Vendors have also begun to integrate and blend linear television service from MVPDs and broadcasters with OVD services. For example, Boxee's LiveTV is a digital television tuner peripheral that connects to Boxee's media player, where the over-the-air broadcast television signals are presented to consumers alongside OVD services. In addition, Apple is in talks with some of the largest cable operators about letting consumers use an Apple device as a set-top box for live television and other content.[1313]

3. Handheld and Mobile Video Devices

a. Mobile IP Devices

368. The proliferation of portable media devices with broadband IP capability has opened up new video distribution opportunities for MVPDs and OVDs alike. Devices such as laptops, netbooks, smartphones and media tablets all have IP connections and high resolution screens for consumers to watch video. Forecasts by International Data Corporation (IDC) for tablet sales in 2012 were revised upward as the year progressed, from 107 million to 117 million, and forecasts for 2013 project that over 165 million tablets will be sold.[1314] The number of smartphones with 4G connectivity continues to rise as well, which enables video providers to potentially deliver high quality video to viewers.[1315] To access the mobile IP market, MVPDs have begun making their video content accessible over a host of portable devices. For example, Comcast's Xfinity TV service provides on-demand video to laptops, smartphones, and tablets.[1316] DIRECTV's "nomad" service allows consumers to copy recordings from their HD DVR to their phones, laptops, or tablets for viewing without an active network connection. Consumers who have a TiVo brand DVR in their home can use a Tivo Stream to stream or to copy recordings from their DVR to Apple devices for off-line viewing.[1317] To facilitate these services, MVPDs and programmers are

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[1310] Bismarck Lepe, *Making Sense of the Connected TV Craze*, Jan. 28, 2012, http://venturebeat.com/2012/01/28/making-sense-of-the-connected-tv-craze/ (visited Nov. 15, 2012).

[1311] Bradley Mitchell, *Home Networking for Internet TV (Television)*, About.com Guide, http://compnetworking.about.com/od/consumerelectronicsnetworks/a/home-nnetworking-for-internet-tv.htm (visited Nov. 15, 2012).

[1312] *See supra*, Sec. III.C.2 & 3 (information regarding devices for access to OVD video programming).

[1313] Jessica E. Vascellaro and Shalini Ramachandran, *Apple's New Front in Battle for TV*, WALL ST. J., Aug. 15, 2012, http://online.wsj.com/article/SB10000872396390444233104577591713616924328.html (visited Nov. 15, 2012).

[1314] IDC, *IDC Raises Its Worldwide Tablet Forecast on Continued Strong Demand and Forthcoming New Product Launches* (press release), Sept. 19, 2012, https://www.idc.com/getdoc.jsp?containerId=prUS23696912 (visited Nov. 15, 2012).

[1315] Zach Epstein, *NPD: One in Five Smartphones Sold in Q2 Was 4G Capable, HTC Leads Market*, BGR Media, LLC, Oct. 14, 2011, http://www.bgr.com/2011/10/14/npd-one-in-five-smartphones-sold-in-q2-was-4g-capable-htc-leads-market/ (visited Nov. 26, 2012).

[1316] Letter from Michael Powell, NCTA President and CEO, to Julius Genachowski, Chairman, FCC, MB Docket No. 07-269 (July 7, 2011) at 4 ("Letter from Michael Powell").

[1317] *See* Introducing TiVo Stream, http://www.tivo.com/products/tivo-stream/index.html (visited Nov. 21, 2012).

looking to cloud-delivery mechanisms for IP connected devices including, tablets, smartphones, televisions, laptops, and other mobile devices.[1318]

b. Specialty Mobile Devices

369. For the purposes of this Report, specialty mobile devices are those that include specialized hardware to receive mobile video services from the mobile provider's network, as opposed to those that receive mobile video via the Internet. Such devices often have the advantage of being served by a broadcast or point-to-multipoint system, so they do not consume data from a data plan, and many devices can receive content simultaneously in a crowded location such as a stadium or arena. However, the specialized hardware needed to access the mobile video services requires vendors to design devices for a specific service, potentially restricting the number of services that can be accessed by a device, and diminishing the willingness of vendors to build devices that support the service.

370. Since the last report, the trend in mobile video CPE has been to focus on IP delivery, but some advances have been made using ATSC Mobile/Handheld ("ATSC M/H"). ATSC M/H receivers have appeared in the market, mostly in the form of USB tuner peripherals that connect to personal computers.[1319] These USB receivers allow consumers to view ATSC M/H broadcasts on their laptops.[1320] ATSC M/H also is used by Dyle. Dyle, and thus ATSC M/H, is now being built into a Samsung 4G smartphone, and an accessory that can be attached to an Apple mobile device.[1321] The resulting increase in specialty receiver penetration could allow mobile broadcast video services that rely on ATSC M/H specialty receivers to succeed where the previous attempts have been unsuccessful.

371. In order to compete in the mobile video marketplace by delivering video over their own networks, satellite-based providers face technical challenges such as antenna size, weight, and ability to track satellites while in motion. Because they must be larger than what is typically found in a handheld device, mobile satellite-based devices are more often integrated into passenger vehicles. Several companies have attempted to introduce mobile video services targeted toward family-sized passenger vehicles, with little success. CruiseCast, a joint service of AT&T Inc. and RaySat Broadcasting Corp., began operation in June 2009, but in November 2009 ceased activating new customers and refunded existing customers for equipment purchased.[1322] ICO mim (mobile interactive media) launched its North American geosynchronous satellite in 2007. ICO had planned to provide interactive mobile video, navigation, and emergency assistance, but does not appear to have expanded beyond trials begun in

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[1318] Letter from Michael Powell at 2.

[1319] *See* WinTV Aero-m product description, Hauppauge Computer Works, Inc., http://www.hauppauge.com/site/products/data_aero-m.html (visited Nov. 26, 2012).

[1320] Universal Serial Bus ("USB") is a set of connectivity specifications that allows easy, high-speed connections of peripherals to PCs that, once plugged in, configure automatically. USB is found in over ten billion PCs, consumer electronics, and mobile devices. *See* USB (Universal Serial Bus), http://www.intel.com/content/www/us/en/io/universal-serial-bus/universal-serial-bus.html (visited Nov. 26, 2012).

[1321] *See* Dyle, *Samsung Galaxy S Lightray 4G From MetroPCS*, http://www.dyle.tv/devices/samsung-galaxy-s-lightray-4g-from-metropcs/ (visited Nov. 21, 2012).

[1322] Amy Gilroy, *AT&T CruiseCast Ceases Activations*, TWICE, Nov 2, 2009, http://www.twice.com/article/367231-AT_T_CruiseCast_Ceases_Activations.php?nid=2402&source=title&rid=6258981 (visited Nov. 26, 2012).

2009.[1323] SiriusXM's Backseat TV was dropped in 2012 by the largest auto manufacturer that had still supported it.[1324]

VI. PROCEDURAL MATTERS

372. This *15th Report* is issued pursuant to authority contained in sections 4(i), 4(j), 403, and 628(g) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 403, and 548(g).

373. It is ORDERED that the Office of Legislative Affairs shall send copies of the *15th Report* to the appropriate committees and subcommittees of the United States House of Representatives and the United States Senate.

374. It is FURTHER ORDERED that the proceeding in MB Docket No. 12-203 IS TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

[1323] *See* ICO mim website, http://investor.ico.com/releasedetail.cfm?releaseid=557027 and http://investor.ico.com/releasedetail.cfm?releaseid=585678 (visited Nov. 26, 2012).

[1324] Suzanne Kane, *Chrysler Drops Sirius Backseat TV*, The Car Connection, Mar 2, 2012, http://www.thecarconnection.com/news/1073619_chrysler-drops-sirius-backseat-tv (visited Nov. 21, 2012).

APPENDIX A

List of Commenters

Comments

Access Fort Wayne
Access Tucson Community Media
Alliance for Community Media
American Cable Association
American Community Television, Inc.
Amherst Community Television, Inc. (AmherstMedia.org)
Andrea Price, Public Access of Indianapolis, Inc.
AT&T Inc.
Athol-Orange Community TV
Austin Community College Television
Belmont Community Media Center, Inc. (Belmont Media Center)
Billerica Access Television, Inc.
Boston Community Access and Programming Foundation (Boston Neighborhood Network)
Cape Cod Community Media Center
Capital Community Television (CCTV) of Salem, Oregon
CCTV Center for Media & Democracy, Chittenden County, Vermont
CenturyLink
Charter Township of Springfield
Chicago Access Corporation (CAN TV)
Chelmsford TeleMedia Corporation, Chelmsford, Massachusetts
City of Austin, Texas
City of Battle Creek, Michigan
City of Boston, Massachusetts
City of Connersville, Indiana
City of Erie Cable TV Access Corporation
City of Midland, Michigan
City of Missouri City, Texas
City of Pasco, Washington
City of Tacoma, Washington
College Access Television at Indiana University-Purdue University Fort Wayne (IPFW)
Comcast Corporation
Community Access Partners of San Buenaventura (CAPS)
Community Access Television Services, Bloomington, Indiana
Community Media Access Partnership (CMAP TV)
Community Media Center of Marin, Marin County, California (CMCM)
Community Media Network (CMN TV, Troy, MI)
Community Television of Santa Cruz County (CTV)
Cox Communications, Inc.
CreaTV San Jose (filed by Pam Kelly
CreaTV San Jose (filed by Juan Serna)
CreaTV San Jose (filed by Suzanne St. John-Crane)
Dakota Media Access
Davis Media Access
Denver Open Media/Open Media Foundation
DIRECTV, LLC

East Longmeadow Community Access Television
Easton Community Access Television (ECAT)
Education Resource Channel @ Middle Tennessee
Fairfax Cable Access Corporation, Fairfax, Virginia
FAIR TV, Fairfield, Connecticut
Falmouth Community Television Corporation, Falmouth, Massachusetts
Foxboro Cable Access, Inc.
GCPS TV, Gwinnett County Public Schools, Gwinnett County, Georgia
Grand Rapids Cable Access Center, Inc. d/b/a Grand Rapids Community Media Center (GRCMC)
Greater Metro Telecommunications Consortium
Hingham Community Access & Media
Itasca Community Television, Inc. (dba ICTV)
Lincoln County Television
Louisville/Jefferson County Metro Government
Manhattan Community Access Corporation (Manhattan Neighborhood Network "MNN")
Marin Telecommunications Agency, Marin County, California
Media Bridges Cincinnati, Inc.
MetroEast Community Media
Metropolitan Area Communications Commission
Michael McDonald, Village of Leonard, Michigan
Midpeninsula Community Media Center
Mountain View Community Television d.b.a. KMVT Community Television 15
National Association of Broadcasters
National Association of Telecommunications Officers and Advisors
National Cable & Telecommunications Association
Netflix, Inc.
Newton Communications Access Center (Newtv)
North Andover Community Access and Media, Inc.
Northampton Community Television
Organization for the Promotion and Advancement of small Telecommunications Companies and the National Telecommunications Cooperative Association
Pasadena Community Access Corporation (PCAC)
Peabody Access Telecommunications, Inc.
People TV, Inc.
Philadelphia Public Access Corporation of Philadelphia, Pennsylvania
Pittsburgh Community Television Corporation
Princeton Community TV
Public Knowledge
Rainier Communications Commission
Sacramento Community Cable Foundation d.b.a. Access Sacramento
Saint Paul Neighborhood Network
Salem Community Television – Town of Salem, New Hampshire
Scott Counsell, Zion Church Ministries/RGB Ministries of Everett, Massachusetts
Somerville Community Access Television, Somerville, Massachusetts
South Coast Community Media Access Center (dba TV Santa Barbara)
Suburban Community Channels – White Bear Lake, Minnesota
Telecommunications Board of Northern Kentucky
Thurston Community Television
Trumbull Community Television Committee
Verizon
Village of Elk Grove Village, Illinois

WACA TV, Ashland Cable Access
Waycross Community Media
White Plains Community Media, White Plains, New York
Wilbraham Public Access
Winchester Community Access & Media, Winchester, Massachusetts
Wisconsin Community Media
WKTV, Community Television, Wyoming, Michigan
Writers Guild of America, West, Inc.
Woodbridge (CT) Government Access Television
Worcester Community Cable Access, Inc. (WCCA TV)

Reply Comments

ABC Television Affiliates Association
Access Fort Wayne
Adam Lynn
Alleghany Community Television Inc.
Alliance for Community Media
AT&T Inc.
Bedford Community Access Television of Bedford, Massachusetts
Birmingham Area Cable Board, Birmingham, Michigan
Caledonia Community Cable Corporation, Kent County, Michigan
City of Boston, Massachusetts
City of Lakewood, California
City of Philadelphia, Pennsylvania
City of Saint Paul, Minnesota
Comcast Corporation
Community Media Access Collaborative – Fresno/Clovis, California (CMAC)
Community Television Association of Maine
Content Interests (CBS Corporation, NBCUniversal, News Corporation, Time Warner Inc., The Walt Disney Company, and Viacom Inc.)
District of Columbia Office of Cable Television
Frontier Community Access Television, Inc. (FCAT)
Google Inc.
JCTV, Jefferson City, Missouri
Lowell Telecommunications Corporation
Michael Bodine of the City of Tybee Island, Georgia
Montgomery County, Maryland
Mt. Hood Cable Regulatory Commission
Na Leo O Hawaii, Inc. d/b/a Na Leo O Hawaii Community Television
National Association of Broadcasters
National Association of Telecommunications Officers and Advisors
Portland Community Media, Portland, Oregon
SJCCTV, Smithfield, North Carolina
Telecommunications Board of Northern Kentucky

APPENDIX B

National Video Programming Services

Table B-1

National Video Programming Services Affiliated with One or More MVPDs

Network Owner	Networks Wholly Owned or Owned in Part
Bright House Networks	3net, 3net HD, Animal Planet, Animal Planet HD, Discovery Channel, Discovery Channel HD, Discovery Español, Discovery Familia, Discovery Fit & Health, Discovery Fit & Health HD, Destination America, Destination America HD, HD Theater, iN Demand, iN Demand HD, Investigation Discovery, Investigation Discovery HD, Military Channel, Military Channel HD, OWN, OWN HD, Science Channel, Science Channel HD, The HUB, The HUB HD, TLC, TLC HD, Turbo, Velocity HD
Cablevision (AMC Networks Inc.)	AMC, AMC HD, FUSE, FUSE HD, IFC, IFC HD, Sundance Channel, Sundance Channel HD, WE tv, WE tv HD
Comcast/NBCU[(1)]	Bravo, Bravo HD, Chiller, Chiller HD, Cloo, CNBC, CNBC HD, CNBC World, CNBC World HD, E! Entertainment TV, E! Entertainment TV HD, FEARnet, FEARnet HD, G4, G4 HD, Golf Channel, Golf Channel HD, iN Demand, iN Demand HD, MLB Network, MLB Network HD, MSNBC, MSNBC HD, mun2, NBC Sports Network, NBC Sports Network HD, NHL Network, NHL Network HD, Oxygen Network, Oxygen Network HD, PBS Kids Sprout, PBS Kids Sprout HD, Retirement Living TV, ShopNBC, SYFY, SYFY HD, Telemundo, Telemundo HD, TV One, TV One HD, The Style Network, The Style Network HD, The Weather Channel, The Weather Channel HD, Weatherscan, Universal HD, Universal Sports, Universal Sports HD, USA Network, USA Network HD
Cox Enterprises	iN Demand, iN Demand HD, MLB Network, MLB Network HD, Travel Channel, Travel Channel HD
DIRECTV	Game Show Network, GSN HD, MLB Network, MLB Network HD, Audience Network, Audience Network HD
Liberty Media Corporation[(2)] (Starz, LLC) [(3)]	3net, 3net HD, Animal Planet, Animal Planet HD, Destination America, Destination America HD, Discovery, Discovery HD, Discovery Español, Discovery Familia, Discovery Fit & Health, Discovery Fit & Health HD, Encore, Encore HD, Encore Action, Encore Action HD, Encore Drama, Encore Drama HD, Encore Español, Encore Family, Encore Love, Encore Suspense, Encore Westerns, GAC, HD Theater, HSN, HSN HD, HSN2, Indieplex, Investigation Discovery, Military Channel, Military Channel HD, MoviePlex, OWN, OWN HD, QVC, QVC HD, RetroPlex, Starz, Starz HD, Starz Cinema, Starz Cinema HD, Starz Comedy, Starz Comedy HD, Starz Edge, Starz Edge HD, Starz in Black, Starz in Black HD, Starz Family, Starz Family HD, Science Channel, Science Channel HD, TLC, TLC HD, The Hub, The HUB HD
Time Warner Cable	iN Demand, iN Demand HD, MLB Network, MLB Network HD

Notes:

(1) On August 22, 2012, Comcast sold its interest in A&E to the other owners Disney and Hearst. As a result of this transaction, the 17 A & E Networks changed from cable-affiliated to non-cable affiliated, but broadcast-affiliated, networks. *See* NBCUniversal Media, LLC, SEC Form 8-K (Aug. 22, 2012).

(2) On February 21, 2008, the Commission approved the transfer of license and authorization that resulted in Liberty Media Corporation ("Liberty") acquiring a de facto controlling interest in DIRECTV. On November 19, 2009, Liberty through a series of transferred its interest in DIRECTV, three RSN's and GSN to a wholly owned subsidiary called DIRECTV Group, Inc. We list these as affiliated with this media company since Liberty and DIRECTV share common ownership, officers, and directors.

(3) On January 11, 2013, Liberty Media Corporation separated its Starz assets. The separate entity, Starz, LLC, offers 16 movie channels including the flagship networks Starz, Encore and MoviePlex. We include Liberty/Starz here since Liberty and DIRECTV share of common ownership, officers, and directors.

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DIRECTV, *About Us*, http://www.directv.com/DTVAPP/content/about_us/our_company (visited Dec. 5, 2012).

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Table B-2

National Networks Affiliated with a Television Network, Broadcast Television Licensee, or Other Media Company

Network Owners:	Networks Wholly Owned or Owned in Part
CBS Corporation	CBS Sports Network, CBS Sports Network HD, FLIX, FLIX HD, Showtime, Showtime HD, Showtime Beyond, Showtime Beyond HD, Showtime Extreme, Showtime Extreme HD, Showtime Family Zone, Showtime Family Zone HD, Showtime Next, Showtime Next HD, Showtime Showcase, Showtime Showcase HD, Showtime 2, Showtime 2 HD, Showtime Women, Showtime Women HD, Smithsonian Channel, Smithsonian Channel HD, TMC, TMC HD, TMC Xtra, TMC Xtra HD, TV Guide Network, TVGN HD
Crown Media Holdings	Hallmark Channel, Hallmark Channel HD, Hallmark Movie Channel, Hallmark Movie Channel HD
Daystar Television Network	Daystar TV
Discovery Communications	3net, 3net HD, A&E, A&E HD, Animal Planet, Animal Planet HD, Destination America, Destination America HD, Discovery, Discovery HD, Discovery Español, Discovery Familia, Discovery Fit & Health, Discovery Fit & Health HD, HD Theater, Investigation Discovery, Military Channel, Military Channel HD, OWN, OWN HD, Science Channel, Science Channel HD, TLC, TLC HD, The Hub, Velocity HD
Hearst Corporation	3net, 3net HD, A&E, A&E HD, Bio, Bio HD, Crime & Investigation, Crime & Investigation HD, ESPN 3D HD,[(1)] ESPN Classic, ESPN Deportes, ESPN, ESPN HD, ESPN2, EPSN2 HD, ESPNEWS, ESPNEWS HD, ESPNU, EPSNU HD, H2, H2 HD, History, History HD, History en Español, History International, Lifetime, Lifetime HD, Lifetime Real Women, Lifetime Real Women HD, LMN, LMN HD, Military History Channel
Hubbard Broadcasting Corporation	Reelz Channel, Reelz Channel HD, Ovation TV, Ovation TV HD
InterMedia Partners	Gospel Music Channel, Gospel Music Channel HD, The Sportsman Channel, The Sportsman Channel HD, WAPA-America
News Corporation	Big Ten Network, BTN HD, FOX Business Network, FOX Business Network HD, FOX College Sports, FOX College Sports HD, FOX Deportes, FOX Movie Channel, FOX News Channel, FOX News Channel HD, FOX Soccer Channel, FOX Soccer Channel HD, FOX Soccer Plus, FOX Sports Net, FOX Sports Net HD, FUEL TV, FUEL TV HD, FX Network, FX Network HD, Nat Geo Mundo, Nat Geo WILD, Nat Geo WILD HD, National Geographic Channel, National Geographic Channel HD, SPEED Channel, SPEED HD, TV Guide Network, Ultilisima, Ultilisima HD
Scripps Networks Interactive	Cooking Channel, Cooking Channel HD, DIY Network, DIY Network HD, Food Network, Food Network HD, Great American Country, HGTV, HGTV HD, Travel Channel, Travel Channel HD

Network Owners:	Networks Wholly Owned or Owned in Part
The Walt Disney Company	3net, 3 net HD, A&E, A&E HD, ABC Family, ABC Family HD, Bio, Bio HD, Crime & Investigation Network, Crime & Investigation HD, Disney Channel, Disney Channel HD, Disney Junior, Disney XD, Disney XD HD, ESPN 3D HD,[(1)] ESPN Classic, ESPN Deportes, ESPN, ESPN HD, ESPN2, ESPN2 HD, ESPNews, ESPNews HD, ESPNU, ESPNU HD, H2, H2 HD, History Channel, History Channel HD, History International, History International HD, LMN, LMN HD, Lifetime Real Women, Lifetime TV, Lifetime TV HD, Military History Channel, SOAPnet
Time Warner Inc.	@Max, @Max HD, 5 Star Max, 5 Star Max HD, Action Max, Action Max HD, Boomerang, Cartoon Network/Adult Swim, Adult Swim HD, Cinemax, Cinemax HD, CNN, CNN HD, CNN Airport, CNN Headline News, CNN Español, CNN International, HBO, HBO HD, HBO2, HBO2 HD, HBO Comedy, HBO Comedy HD, HBO Family, HBO Family HD, HBO Signature, HBO Signature HD, HBO Zone, HBO Zone HD, Max Latino, Max Latino HD, More Max, More Max HD, NBA, NBA HD, NuvoTV, Outer Max, Outer Max HD, TBS, TBS HD, TMC, TMC HD, Thriller Max, Thriller Max HD, TNT, TNT HD, Tru TV, Tru TV HD, WMAX, WMAX HD
Tribune Company	WGN America, WGN America HD, Cooking Channel, Cooking Channel HD, Food Network, Food Network HD
Viacom Inc.	BET, BET HD, BET Gospel, BET Hip Hop, CENTIC, CMT, CMT HD, CMT Pure Country, CMT Pure Country HD, Comedy Central, Comedy Central HD, LOGO, MTV, MTV HD, MTV Hits, MTV Jams, MTV2, Nick 2, Nickelodeon/Nick at Nite, Nickelodeon/Nick at Nite HD, Nicktoons Network, Nick Jr, Palladia HD, Spike TV. Spike TV HD, TeenNick, EPIX HD, Tr3s, TV Land, TV Land HD, VH1, VH1 HD, VH1 Classic, VH1 Soul
Trinity Broadcasting Network	JCTV, Smile of a Child, TBN, TBN HD, TBN Enclave, The Church Channel
Univision Communications	Bandamax, De Pelicula, De Pelicula Classico, Galavision, Ritmoson Latino, Telehit, Univision Deportes, Univision Noticias, Univision TInovelas

Note:

[(1)] On June 13, 2013, Disney announced that it will shut down ESPD 3-D by the end of 2013. *See* Ryan Nakashima, *3-D TV Falling Flat: ESPN to Pull Plug on 3-D Broadcasts by Year's End, Saying Too Few Viewers*, WASH. POST, June 13, 2013.

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Viacom Inc., *About Viacom*, http://www.viacom.com/aboutviacom/Pages/default.aspx. (visited Dec. 3, 2012).

Walt Disney Corporation, *Company Overview*, http://corporate.disney.go.com/corporate/overview.html (visited Dec. 3, 2012).

APPENDIX C

Regional Video Programming Services

Table C-1

Regional Video Programming Services Affiliated with One or More MVPDs

Network Owners	Networks Wholly or Owned in Part
Bright House Networks	**Regional News Networks:** Bay News 9, Bay News 9 HD, Bay News 9 en Español, CFN 13 (Central FL News) **Regional Sports Networks:** Bright House Sports Network, Bright House Sports Network HD
Cablevision Systems Corporation[(1)] (Madison Square Garden)[(2)]	**Regional News Networks:** News 12 CT, News 12 Bronx, News 12 Brooklyn, News 12 Hudson Valley, News 12 Long Island, News 12 NJ, News 12 Traffic & Weather – CT, News 12 Traffic & Weather – Long Island, News 12 Traffic & Weather – Hudson Valley, News 12 Traffic & Weather – NJ, News 12 Traffic & Weather – NY, News 12 Westchester **Regional Sports Networks:** MSG, MSG HD, MSG Plus, MSG Plus HD
Charter Communications	**Regional Sports Networks:** Comcast/Charter SportsNet Southeast
Comcast/NBCU	**Regional News Networks:** CN8, New England Cable News, New England Cable News HD **Regional Sports Networks:** Comcast Entertainment TV (CET), Comcast SportsNet Bay Area, Comcast SportsNet Bay Area HD, Comcast SportsNet California, Comcast SportsNet California HD, Comcast SportsNet Chicago, Comcast SportsNet Chicago HD, Comcast SportsNet Mid-Atlantic, Comcast SportsNet Mid-Atlantic HD, Comcast SportsNet New England, Comcast SportsNet New England HD, Comcast SportsNet Philadelphia, Comcast SportsNet Philadelphia HD, Comcast SportsNet Northwest, Comcast SportsNet Northwest HD, Comcast SportsNet Washington, Comcast SportsNet Washington HD, Comcast SportsNet West, Comcast SportsNet West HD, Comcast SportsNet Southwest, SportsNet New York, SportsNet New York HD
Cox Communications, Inc.	**Regional News Networks:** 24/7 News Channel, Arizona News Channel, Kansas 22 Now, Las Vegas One News, Local News on Cable (Hampton), News Now 53 (Oklahoma City), News Now 53 (Tulsa), NewsWatch 15 (Louisiana), Pittsburgh Cable News Channel, Rhode Island News Channel, San Diego's News Channel 15 **Regional Sports Networks:** Channel 4 San Diego, Channel 4 San Diego HD, Cox Sports Television
DIRECTV	**Regional Sports Networks:** Roots Sports Northwest, Roots Sports Northwest HD, Roots Sports Pittsburgh, Roots Sports Pittsburgh HD, Roots Sports Rocky Mountain, Roots Sports Rocky Mountain HD

Network Owners	Networks Wholly or Owned in Part
Time Warner Cable	**Regional News Networks:** Antelope Valley Channel 3 (Southern CA), Bay News 9, Bay News 9 HD ,BEVOD (TX), Capital News 9 (Albany, NY), Channel 858 (Southern CA), Desert Cities TV (Southern CA), The Green Channel (HI), K-Life(HI), Metro Weather (Kansas City), NEON (OH), News 8 Austin (TX), News 8 Radar Now (TX), News 8 Traffic Now (TX), News 8 Non-Stop Weather (TX), News 10 Now (TX), News 14 Carolina (Charlotte, NC), News 14 Carolina (Raleigh, NC), News 14 Carolina (Greensboro, NC), News 14 Carolina (Wilmington, Jacksonville, Morehead city, NC), Nippon Golden Network (HI), NY1 News (NY), NY1 Road and Rail Report (NY), OC 16 (HI), Oiwi (HI), Rhode Island News Channel, SoCal1 (Southern CA), Texas Channel (Austin, Waco, San Antonio, Corpus Christi, TX), Texas Chanel (Dallas), Texas Channel (El Paso), TWC-TV (New England), YNN (Austin, TX), YNN Austin, YNN Austin Radar Now, YNN Austin Traffic Now, YNN Austin Weather, YNN Buffalo (NY), YNN Capital Region (Albany, NY), YNN Central NY, YNN Hudson Valley (NY), YNN Rochester (NY), Wichita Falls TV (TX) **Regional Sports Networks:** Bright House Sports Network, Bright House Sports Network HD, Comcast/Charter SportsNet Southwest Metro Sports (Kansas City), Metro Sports HD, Metro Sports (NE), Metro sports (NE) HD, Metro Sports 2 (Kansas City, MO), News 8 Non-Stop Sports (TX), SportsNet New York, SportsNet New York HD, SunSports, SunSports HD, TWC Connection/Sports (Mid-Ohio), TWC Connections/Sports (Southwest Ohio), TWC Sports (Albany, NY), TWC Sports (Albany) HD, TWC Sports Central New York, TWC Sports (WI), TWC SportsNet (Buffalo), TWC Sports (Rochester), TWC SportsNet (Southern California), TWC SportsNet HD, TWC SportsNet Deportes, TWC SportsNet Deporters HD, YNN Non-Stop Sports

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Table C-2

Regional Networks Affiliated with a National Broadcast Television Network, Broadcast Television Licensee, or Other Media Company

Network Owners	Networks Wholly or Owned in Part
Allbritton Communications	**Regional News Networks:** NewsChannel 8, NewsChannel 8 HD
Belo Corporation	**Regional News Networks:** 24/7 News Channel (Boise, ID), 3TV 24/7 News, Local News on Cable (Hampton), NewsWatch 15 (Louisiana), Northwest Cable News (Washington, Oregon, Idaho), TXCN (Texas)
News Corporation	**Regional Sports Networks**: FOX Sports Arizona, FOX Sports Arizona HD, FOX Sports Carolinas, FOX Sports Carolinas HD, FOX Sports Detroit, FOX Sports Detroit HD, FOX Sports Florida, FOX Sports Florida HD, FOX Sports Houston, FOX Sports Houston HD, FOX Sports Indiana, FOX Sports Indiana HD, FOX Sports Kansas City, FOX Sports Kansas City HD, FOX Sports Midwest, FOX Sports Midwest HD, FOX Sports New Orleans, FOX Sports New Orleans HD, FOX Sports North, FOX Sports North HD, FOX Sports Ohio, FOX Sports Ohio HD, FOX Sports Oklahoma, FOX Sports Oklahoma HD, FOX Sports San Diego, FOX Sports San Diego HD, FOX Sports South, FOX Sports South HD, FOX Sports Southwest, FOX Sports Southwest HD, FOX Sports Tennessee, FOX Sports Tennessee HD, FOX Sports Utah, FOX Sports Utah HD, FOX Sports West, FOX Sports West HD, FOX Sports Wisconsin, FOX Sports Wisconsin HD, SportSouth, SportSouth HD, SportsTime Ohio, SportsTime Ohio HD, Sun Sports, Sun Sports HD, Yankee Entertainment & Sports (YES) Network, Yankee Entertainment & Sports (YES) Network HD
Scripps Networks Interactive	**Regional Sports Networks:** FOX Sports South, FOX Sports South HD, SportsSouth, SportsSouth HD

Sources:

Belo Corporation, *Belo Companies, Cable News*, http://www.belo.com/companies/cable-news (visited Dec. 5, 2012).

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APPENDIX D

Regional Sports Networks

Regional Network Name[1]	MVPD Owner	Other Owners
Altitude Sports Network		Stan Kroenke (owner of the Denver Nuggets and the Colorado Avalanche)
Altitude Sports Network HD		Stan Kroenke (owner of the Denver Nuggets and the Colorado Avalanche)
Bright House Sports Network	Time Warner Cable	
Bright House Sports Network HD	Time Warner Cable	
Big Ten Network		Big Ten Conference, News Corporation
Big Ten Network HD		Big Ten Conference, News Corporation
Channel 4 San Diego[2]	Cox Enterprises	
Channel 4 San Diego HD	Cox Enterprises	
Comcast/Charter Sports Southeast	Comcast, Charter	
Comcast/Charter Sports Southeast HD	Comcast, Charter	
Comcast SportsNet Bay Area	Comcast/NBCU	San Francisco Giants
Comcast SportsNet Bay Area HD	Comcast/NBCU	San Francisco Giants
Comcast Sports Net California	Comcast/NBCU	
Comcast SportsNet California HD	Comcast/NBCU	
Comcast SportsNet Chicago	Comcast/NBCU	J. Joseph Ricketts (owner of the Cubs), Jerry Reinsdorf (owner of the Bulls and the White Sox), Rocky Wirtz (owner of the Blackhawks)
Comcast SportsNet Chicago HD	Comcast/NBCU	J. Joseph Ricketts (owner of the Cubs), Jerry Reinsdorf (owner of the Bulls and the White Sox), Rocky Wirtz (owner of the Blackhawks)
Comcast SportsNet Houston[3]	Comcast/NBCU	Houston Astros, Houston Rockets
Comcast SportsNet Houston HD	Comcast/NBCU	Houston Astros, Houston Rockets
Comcast SportsNet Mid-Atlantic	Comcast/NBCU	
Comcast SportsNet Mid-Atlantic HD	Comcast/NBCU	
Comcast SportsNet New England	Comcast/NBCU	
Comcast SportsNet New England HD	Comcast/NBCU	

Regional Network Name[1]	MVPD Owner	Other Owners
Comcast SportsNet Northwest	Comcast/NBCU	
Comcast SportsNet Northwest HD	Comcast/NBCU	
Comcast SportsNet Philadelphia	Comcast/NBCU	Philadelphia Phillies
Comcast SportsNet Philadelphia HD	Comcast/NBCU	Philadelphia Phillies
Comcast SportsNet Washington	Comcast/NBCU	
Comcast SportsNet Washington HD	Comcast/NBCU	
Comcast Sports Southwest	Comcast/NBCU	
Comcast Sports Southwest HD	Comcast/NBCU	
Cox Sports Television (New Orleans)	Cox Enterprises	
Cox Sports Television HD (New Orleans)	Cox Enterprises	
Fox Sports Arizona		News Corporation
Fox Sports Arizona HD		News Corporation
Fox Sports Carolinas		News Corporation
Fox Sports Carolinas HD		News Corporation
Fox Sports Detroit		News Corporation
Fox Sports Detroit HD		News Corporation
Fox Sports Florida		News Corporation
Fox Sports Florida HD		News Corporation
Fox Sports Houston		News Corporation
Fox Sports Houston HD		News Corporation
Fox Sports Indiana		News Corporation
Fox Sports Indiana HD		News Corporation
Fox Sports Kansas City		News Corporation
Fox Sports Kansas City		News Corporation
Fox Sports Midwest		News Corporation
Fox Sports Midwest HD		News Corporation
Fox Sports New Orleans		News Corporation
Fox Sports New Orleans HD		News Corporation
Fox Sports North		News Corporation
Fox Sports North HD		News Corporation
Fox Sports Ohio		News Corporation
Fox Sports Ohio HD		News Corporation

Regional Network Name[1]	MVPD Owner	Other Owners
Fox Sports Oklahoma		News Corporation
Fox Sports Okalahoma HD		News Corporation
Fox Sports San Diego		News Corporation
Fox Sports San Diego HD		News Corporation
Fox Sports South		News Corporation
Fox Sports South HD		News Corporation
Fox Sports Southwest		News Corporation
Fox Sports Southwest HD		News Corporation
Fox Sports Tennessee		News Corporation
Fox Sports Tennessee HD		News Corporation
Fox Sports Utah		News Corporation
Fox Sports Utah HD		News Corporation
Fox Sports West		News Corporation
Fox Sports West HD		News Corporation
Fox Sports Wisconsin		News Corporation
Fox Sports Wisconsin HD		News Corporation
Lakers RSN[4]	Time Warner Cable	
Lakers RSN HD	Time Warner Cable	
Lakers RSN (Spanish language)	Time Warner Cable	
Lakers RSN HD (Spanish language)	Time Warner Cable	
Longhorn Network		University of Texas at Austin, Walt Disney
Longhorn Network HD		University of Texas at Austin, Walt Disney
MASN		Baltimore Orioles and the Washington Nationals
MASN HD		Baltimore Orioles and the Washington Nationals
Metro Sports (Kansas City)	Time Warner Cable	
Metro Sports HD (Kansas City)	Time Warner Cable	
Metro Sports (Nebraska)	Time Warner Cable	
MSG	Cablevision	
MSG HD	Cablevision	
MSG Plus	Cablevision	
MSG Plus HD	Cablevision	

Regional Network Name[1]	MVPD Owner	Other Owners
NESN		Boston Red Sox and Boston Bruins
NESN HD		Boston Red Sox and Boston Bruins
OC Sports (Hawaii)	Time Warner Cable	
OC Sports HD (Hawaii)	Time Warner Cable	
PAC-12 Network		PAC-12 Conference
PAC-12 Network HD		PAC-12 Conference
ROOT Sports: Northwest [4]	DIRECTV Sports Networks	
ROOT Sports: Northwest HD	DIRECTV Sports Networks	
ROOT Sports: Pittsburgh	DIRECTV Sports Networks	
ROOT Sports: Pittsburgh HD	DIRECTV Sports Networks	
ROOT Sports: Rocky Mountain	DIRECTV Sports Networks	
ROOT Sports: Rocky Mountain HD	DIRECTV Sports Networks	
SportsNet New York	Comcast, TWC	
SportsNet New York HD	Comcast, TWC	
SportsSouth		News Corporation
SportsSouth HD		News Corporation
SportsTime Ohio[5]		News Corporation
SportsTime Ohio HD		News Corporation
Sun Sports		News Corporation
Sun Sports HD		News Corporation
TWC Sports (Central NY)	Time Warner Cable	
TWC Sports HD (Central NY)	Time Warner Cable	
TWC SportsNet (Buffalo)	Time Warner Cable	
TWC SportsNet HD (Buffalo)	Time Warner Cable	
TWC SportsNet (Rochester)	Time Warner Cable	
TWC SportsNet HD (Rochester)	Time Warner Cable	
TWC Connection/Sports (Mid-Ohio)	Time Warner Cable	
TWC Connection/Sports (SW Ohio)	Time Warner Cable	
TWC Sports 32 (Wisconsin)	Time Warner Cable	

Regional Network Name[1]	MVPD Owner	Other Owners
TWC Sports 32 HD (Wisconsin)	Time Warner Cable	
Texas Channel (Texas)	Time Warner Cable	
Yankee Entertainment & Sports (YES) Network (New York)[6]		Yankee Global Enterprises, News Corporation
Yankee Entertainment & Sports (YES) Network HD (New York)		Yankee Global Enterprises, News Corporation
YNN Non-Stop Sports (Texas)	Time Warner Cable	

Notes:

[1] This list is provided for illustrative purposes only. Inclusion or exclusion of a network should not be read to state or imply any position as to whether the network qualifies as an "RSN" as defined by the Commission.

[2] While press reports indicate that Channel 4 San Diego will no longer hold the rights for the Major League Baseball games of the San Diego Padres in 2012, these reports also indicate that Channel 4 San Diego carries NCAA Division I basketball games. *See Cox to Layoff Baseball Programming Employees*, Aug. 30, 2011, available at http://www.10news.com/news/29032885/detail.html; *SDSU Men's Hoops at Arizona to be Simulcast on 4SD*, Nov. 22, 2011, available at http://goaztecs.cstv.com/sports/m-baskbl/spec-rel/112211aab.html.

[3] On October 1, 2012, Comcast SportsNet Houston launched a new regional sports network featuring the games of the Houston Astros (of MLB) and the Houston Rockets (of the NBA), available at http://www.comcastsportsnet.com/houston.

[4] On April 1, 2011, FSN Northwest, FSN Pittsburgh, and FSN Rocky Mountain changed their names to ROOTS Sports, which is wholly owned by DIRECTV Sports Networks.

[5] On December 28, 2012, News Corporation announced it has purchased the regional sports network SportsTime Ohio featuring the games of the Cleveland Indians baseball team and the Cleveland Cavaliers (of the NBA), available at http://msn.foxsports.com/mlb/story/cleveland-indians-sell-tv-network-to-fox-sports-media-group-122812.

[6] On November 20, 2012, News Corporation and Yankee Global Enterprises announce News Corporation's acquisition of a 49 percent equity interest in the Yes Network, available at http://www.newscorp.com/news/news_548.html.

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STATEMENT OF
ACTING CHAIRWOMAN MIGNON CLYBURN

Re: *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 12-203.

I commend the staff for this comprehensive and timely report, which provides a useful snapshot of the video programming marketplace. I am encouraged by some of the pro-consumer trends it reveals.

Options for accessing video programming are swelling. Nearly all consumers now have a choice among three multichannel video program distributors – or MVPDs, and today more than a one-third of all households can choose from four or more providers. Consumers can increasingly access content on a variety of devices that they own, such as tablets, video game systems, set-top boxes, and computers. Online video distribution is also thriving. In addition to allowing consumers to view video anywhere and anytime, these developments may also save consumers monthly on lease rates for equipment, as they are freed from renting set-top boxes. Indeed, all of these trends are leading to more choices in terms of programming packages and prices, and that's great for consumers.

However, I am concerned, because not all of our citizens are realizing the promise of these competitive benefits. Nearly 3 out of 10 rural Americans do not have access to high-speed Internet that is sufficient to receive online video distributors' services, and I sincerely hope that these consumers are not forgotten as these services become more popular and offer more extensive programming.

In this regard, I note that broadcast TV remains one of the most affordable sources of entertainment and news. As the Report shows, 11 million Americans still rely on free, over-the-air broadcast signals as their exclusive source for TV viewing. And multicasting is bringing additional programming to consumers, including networks and programming targeting minorities and niche audiences.

Special thanks are due to everyone in the Media Bureau who worked on this exhaustive report, but I would like to single out Marcia Glauberman today, because she has worked on every competition report since 1995. I know that this report, like the previous ones that Marcia worked on, will be a valuable public resource for information about the video marketplace.

STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL

Re: *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 12-203.

Yesterday the Academy of Television Arts & Sciences announced the nominees for the 65th annual primetime television awards. To be fair, the Emmy Award nominations have a bit more razzle-dazzle than the report before us. The Federal Communications Commission's 15th annual video competition report may have a lot going for it—but star power it lacks.

Still, I think there is something instructive in the list of this year's Emmy Award nominees. It says something about the state of video, platforms for creativity, and content choices for viewers. The nominees spanned from programming on traditional commercial broadcast networks to public television to cable channels to new platforms like Netflix. What used to be a field limited to linear programming has now expanded. What was once an award featuring content only viewable in primetime now includes programming viewable at any time.

Our report today tells a parallel tale. Traditional video models are still strong, but new ways of watching are gaining a toehold.

As our data demonstrates, linear television still leads the pack, with the average American watching 34 hours and seven minutes of programming every week. But the times are a changing. We now typically watch two hours and 40 minutes of time-shifted television every week. On top of that, we view 40 minutes of Internet video each week. This last category is only bound to grow, now that more than a third of all households have a television connected to the Internet—often through a gaming console.

What do we make of these trends? The ways we create, distribute, and consume content are changing. We are no longer limited to what is on, we look for video content when we want it, where we want it—on any screen handy. It is an exciting time, with enhanced possibilities for consumers—and creators.

So thank you to the Media Bureau for this compendium of data on the state of video markets. Were there an award for best regulatory report, I would nominate you for it now. What you have produced is smart, useful, and compelling—and that, I think, is something we should honor.

STATEMENT OF
COMMISSIONER AJIT PAI

Re: *Annual Assessment of the Status in Competition in the Market for the Delivery of Video Programming*, MB Docket No. 12-203.

I'm pleased to support the Commission's 15th Video Competition Report. This report is quite comprehensive—without appendices, it stands at 185 pages—and it contains a wide range of useful and interesting statistics. But when you take a step back from the blizzard of facts and figures, the report's principal lesson is simple—and profound. Today, more Americans have more choices when it comes to video programming than ever before. They can watch a greater variety of programming than ever before. They can view that programming on a wider array of devices than ever before. And they have a greater ability than ever before to watch that programming when they want to watch it.

All of this means that American consumers are reaping the benefits of competition and innovation in the video marketplace. While many fondly refer to the period between 1948 and 1959 as the Golden Age of Television, there is no time like the present for those who savor quality content. For instance, it used to be that the road from television to feature films was a one-way street for a successful actor. Today, however, it is increasingly common for film stars to move to television to find creatively challenging work. To give just a few examples, Kevin Spacey now stars in the Emmy-nominated Netflix drama *House of Cards*, Jessica Lange is featured in FX's Emmy-nominated *American Horror Story*, and Robin Williams will return to broadcast television this fall in CBS's *The Crazy Ones*.

This report signals good news beyond the state of video competition. In July 2012, we released the 14th iteration of this Report. Almost exactly one year later, we are adopting its successor. This means that we are fulfilling our statutory mandate to "annually report to Congress on the status of competition in the market for the delivery of video programming."[1325] After a bit of a rough patch, it is great to see that we are back on track.

I commend Chairwoman Clyburn for her leadership in making that happen. And I thank all of the Media Bureau staff who worked tirelessly to produce this report: Hillary DeNigro, Marcia Glauberman, Dan Bring, Johanna Thomas, Jake Riehm, Erica Porter, Emily Burke, Dana Scherer, Ali Zayas, John Kiefer, John Gabrysch, Sean Mirzadegan, Sean Yun, and Brendan Murray. The care and effort that you put into this report will be obvious to all who read it.

[1325] 47 U.S.C. § 548(g).