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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Applications of)
)
Comcast Corp. and) MB Docket No. 14-57
Time Warner Cable Inc.)
)
For Consent To Transfer Control of)
Licenses and Authorizations)

APPLICATIONS AND PUBLIC INTEREST STATEMENT

**DESCRIPTION OF TRANSACTION, PUBLIC INTEREST SHOWING,
AND RELATED DEMONSTRATIONS**

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I. INTRODUCTION AND SUMMARY

The proposed merger of Comcast Corporation (“Comcast”) and Time Warner Cable Inc. (“TWC”) (together, “Applicants”) will provide unique benefits to both consumers and businesses throughout the combined company’s service area, and broadly advance the public interest in multiple concrete ways. This transaction will enhance consumer welfare and competition and deliver substantial public interest benefits, including through competitive entry in market segments neither company can meaningfully serve on its own today. Together, Comcast and TWC will bring to millions of households and businesses of all sizes the next generation of broadband Internet, video, voice, and related technologies and services, and will compete more effectively against communications, media, and technology providers with national and global scale.

The two companies, which serve distinct geographic areas, both began as cable operators offering television services to consumers. Today, each Applicant offers a diverse array of services and technologies to consumers, and increasingly competes in its respective footprint for business customers as well. Offering this broad suite of advanced services and a rich video experience is a capital-intensive, high-fixed-cost endeavor – in a space where competition is intense and continued investment and innovation are essential. And competition is increasing as this marketplace becomes more diverse and expansive.

To date, Comcast has been able to adapt to this changing marketplace through a commitment to network upgrades and substantial investment in research and development. TWC has made significant strides in video technology and business services, though its smaller scale and scope have limited some of those efforts. By combining these two companies’ technological developments and know-how, and their geographic reach, along with Comcast’s

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strong balance sheet, commitment to invest significantly in the TWC systems, and substantial expertise in efficiently upgrading cable systems, the post-transaction company will be well positioned to compete against its national and global competitors, to improve the customer experience today, and to forge ahead to meet future challenges and needs.

For **consumers**, this means expanded access to, and more rapid deployment of, the industry-leading technology, services, and programs that Comcast is dedicated to providing, including:

- High-speed broadband services available on bundled and standalone bases;
- A fully upgraded network that provides highly reliable and secure service;
- A nationally acclaimed and comprehensive low-income broadband adoption program;
- The most robust and advanced VOD and TV Everywhere experience;
- The best-in-class video technology and user interface;
- The most successful alternative to traditional voice services; and
- A commitment to diversity and inclusion, and to providing accessible solutions to people with disabilities.

Nowhere will these benefits be more important than in the broadband space. While TWC has upgraded its entire network to DOCSIS 3.0 and has plans to improve speeds and further digitize its network, Comcast has already transitioned to a fully digital network, stands ready to implement DOCSIS 3.1 (the next-generation broadband standard), and has rolled out some of the fastest Internet speeds and the largest Wi-Fi network in the nation. This transaction will accelerate network upgrades in the TWC markets and produce a more advanced broadband network. As the Commission has recognized, such network investment not only answers essential consumer needs in the short term, but also will spur demand for the applications and content of tomorrow. And substantial investment by one network provider provokes responsive

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investment and accelerated deployment by competitors – a dynamic richly borne out by the past two decades of spirited broadband competition.

Significant benefits will result for **business** customers, as well. Comcast and TWC have made some inroads into the business market, offering small- and medium-sized businesses innovative services and a better value proposition than was previously available to such customers from legacy providers – and provoking competitive responses by those incumbents. Each company has had some success, but its limited geographic scope has constrained its ability to offer truly meaningful competition to the established providers. The combined company's greater geographic reach and its combined expertise and services will allow it to become a stronger competitor, offering businesses of all sizes better options, lower prices, higher quality, and enhanced services.

Likewise, the transaction will result in new options for **advertisers**. The combined company will have the scale to market on a near-national basis and to invest in the development and deployment of dynamic ad insertion and addressable technologies for use in VOD and other cable and online programming that will bring added value to programmers and advertisers. This, in turn, should incentivize programmers to make additional popular content available on VOD and other platforms, to the benefit of consumers.

Finally, the transaction will extend a variety of other public interest benefits to the TWC markets, including conditions and commitments resulting from the NBCUniversal transaction. These include application of the Open Internet rules and Comcast's commitment to offer standalone broadband, among others. The TWC markets also will benefit from Comcast's deep dedication to broadband adoption, diversity, accessibility, and cybersecurity.

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The Commission can be confident in all the benefits described above, not only because many are essential to the transaction’s rationale, but also because of Comcast’s record of keeping its promises in prior transactions to bring new benefits to consumers and competition. Time and time again, Comcast has delivered – and over-delivered – on its promises to unleash more investment and innovation. Together with TWC, it is fully poised to do so again, including a commitment to add substantial incremental investments to TWC’s planned upgrades and enhancements over the next three years.

In contrast to these clear public interest benefits, there is no credible theory of harm arising from the transaction. After the transaction, customers in the Comcast and TWC markets will have as many providers to choose from – for Internet, video, or voice – as they have today. Said another way, there is no change in local market share – the only geographic market of any relevance to the core services at issue here – in *any* market Comcast or TWC serves, because Comcast and TWC do not compete today, and Comcast will simply replace TWC as the provider in the latter’s service areas. In contrast to certain proposed mergers of direct competitors that were met with skepticism because they would have reduced choice for consumers, there is no horizontal consolidation issue here.

Vertical effects similarly raise no concerns. In the past, there was concern about “buying power” in the video marketplace, on the theory that allowing a cable company to serve too many households would give that company too much influence over the viability of unaffiliated programming networks. That concern was tested in 2001, and again in 2009, in connection with a 30 percent cable ownership cap that had been put in place by the Commission. In both cases, the court concluded that this theoretical concern was not supported by the marketplace facts and decisively rejected a 30 percent standard. As the court said in 2009:

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[T]he record is replete with evidence of ever increasing competition among video providers. *Cable operators, therefore, no longer have the bottleneck power over programming that concerned the Congress in 1992.*

The court also noted that, “[b]ased upon the record before the [same] court [in 2001], the [FCC’s horizontal ownership] subscriber limit . . . could not have been lower than 60%,” and went on to conclude that, “[i]n light of the changed marketplace, the Government’s justification for the 30% cap is even weaker now than in 2001.”

Competition has only *increased* since this ruling. Notably, since 2009 when the court last rejected the 30 percent cap, the two nationwide DBS providers have added another 1.7 million subscribers and the telco video providers have added 6.2 million subscribers, while traditional cable operators have *lost* 7.3 million video subscribers. And this is just one dimension of the competition that Comcast and TWC face in a dynamic and increasingly mobile and global marketplace marked by innovation and consumer choice. Internet and device companies, with newfound global scale, also are competing aggressively in the video marketplace and in the larger broadband ecosystem. For example, Netflix now has over 33 million customers in the United States alone, with another 11 million international customers; Google’s video websites now attract over 157 million unique viewers each month who watch nearly 13 billion videos; Apple iTunes viewers purchase over 800,000 TV episodes and over 350,000 movies *per day*. Apple has launched Apple TV and seems poised to launch a more comprehensive set-top box product. Likewise, Amazon currently offers a streaming video service and just announced the planned release of Amazon Fire TV, an advanced video set-top device. And some of these companies have annual revenues and/or market capitalizations that are two or three times greater than Comcast’s. On top of this, there are potential new online entrants, and Verizon, Dish, and DirecTV have been making progress on this front just in the last month. In the evolving video

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marketplace in which these companies have thrived, there is no reason why a cable company should be limited in evolving as well, especially one that has time and again demonstrated its willingness to meet and enhance competition through innovation and investment. Added scale will make that innovation go faster and that investment go farther.

Notwithstanding the absence of plausible horizontal harms, however, Comcast is prepared to divest systems totaling approximately 3 million video subscribers, such that Comcast-managed subscribers will remain at a level that is below the now-vacated 30 percent horizontal limit.

Nor is there cause for concern in the broadband marketplace. Comcast and TWC provide broadband services in different geographic areas, so there is no reduction in consumer choice as a result of this transaction. Internet service providers (“ISPs”) like Comcast and TWC are not aggregators of content for their broadband customers, but instead serve as a means of access for any and all of the Internet content their customers want. And they do so against an increasingly competitive backdrop, in which traditional phone companies as well as new providers such as Google Fiber and others are actively pursuing market share. Indeed, the Commission’s own data demonstrate that consumers enjoy a high level of choice among providers. Furthermore, wireless broadband is increasingly emerging as a competitive alternative to wired broadband given the accelerating speed and reliability of advanced wireless networks, the growing value of mobility, and the fact that consumers increasingly use tablets and smartphones as “first screens.” In this highly competitive marketplace, there is simply no economic incentive for Comcast to use its broadband network to interfere with its customers’ access to edge providers’ content on the backbone or the last mile – Comcast customers place a high premium on being able to access any Internet content they want. In any event, Comcast’s Open Internet commitment removes all

doubts and provides an additional regulatory safeguard – one that is not present for any other ISP in the market.

In sum, an objective weighing of the significant public interest benefits that are inherent in this transaction against the speculative and ill-defined harms that are unlikely to arise should lead to ready approval.

II. DESCRIPTION OF THE TRANSACTION

A. The Proposed Transaction

Comcast has entered into an agreement with TWC whereby Comcast will acquire 100 percent of TWC’s equity in exchange for Comcast Class A shares (“CMCSA”). The proposed transaction is a straightforward acquisition of TWC, and Comcast plans to retain all of TWC’s existing assets, subject to divestitures of cable systems totaling approximately 3 million subscribers. As illustrated in the structure charts included in Exhibit 3, at the closing of the transaction, Tango Acquisition Sub, Inc. (“Merger Sub”), a new direct wholly owned subsidiary of Comcast, will merge with TWC under Delaware law. At that time, the separate corporate existence of Merger Sub will cease and, thereafter, TWC will be a wholly owned subsidiary of Comcast. Contemporaneously with the merger, each TWC share will be converted into the right to receive 2.875 shares of CMCSA.

B. The Applicants

1. Comcast

Comcast Corporation is a global media and technology company with two primary businesses – Comcast Cable and NBCUniversal – with approximately 136,000 employees. As illustrated in the first map in Exhibit 7, Comcast’s network facilities cover portions of 39 states

and the District of Columbia, and Comcast faces strong competition in each of those areas for all of its services.

a. Comcast Cable

Comcast Cable is a leading provider of video, high-speed Internet, digital voice, and other next-generation services and technologies to millions of residential customers and small- and medium-sized businesses.

i. Cable Systems and Video Services

Comcast currently owns and operates cable systems serving approximately 21.7 million video customers, including residential and business customers.¹ Since 1996, Comcast and its predecessors-in-ownership have invested tens of billions of dollars to upgrade network infrastructure by installing fiber optics and other technological enhancements. Comcast led the industry in transitioning to digital and has already implemented an all-digital platform across its systems.

Comcast provides a variety of video services with access to tens of thousands of entertainment choices under the Xfinity brand. Customers enjoy a full array of both traditional and advanced video products, including hundreds of channels of linear video programming from local broadcast stations, premium cable programmers, and national, regional, and local cable networks; programming packages tailored for diverse audiences; pay-per-view services; an impressive range of high-definition (“HD”) programming; approximately 50,000 video-on-demand (“VOD”) choices on Xfinity On Demand, most of which are available to digital video customers at no additional charge; digital video recorder (“DVR”) services; and interactive

¹ Comcast Corp., Annual Report (Form 10-K), at 3 (2013) (“Comcast 10-K”).

programming guides. In addition, Comcast recently began to offer its customers the option to purchase and own digital copies of movies and television shows.

Through Xfinity.com/TV and the Xfinity TV Go App, Comcast customers can stream over the Internet to their PCs and mobile devices over 50 linear cable networks and thousands of hours of the latest TV shows and popular movies, and, with the Xfinity TV Go App, Comcast customers can even download movies and shows to their mobile device to take anywhere. The most striking example of Comcast's efforts to provide its customers with cutting-edge services is Comcast's next-generation entertainment operating system, the X1 platform, which is now available across Comcast's entire footprint. The X1 platform provides a state-of-the-art cloud-based user interface and, in select markets, the ability to stream to computers and mobile devices in the home practically the entire channel lineup (including PEG and must-carry channels). And with the launch of the new X1 DVR with cloud technology, Comcast customers will be able to record more shows; access them in their homes on multiple TVs, computers, and mobile devices; and download their recordings to mobile devices.

ii. Broadband Internet

Comcast owns and operates one of the most robust networks in the country. Comcast's high-speed Internet service currently has approximately 20.7 million customers, including residential and business customers.² Comcast has deployed DOCSIS 3.0 to almost its entire broadband footprint.³

Comcast's investments of tens of billions of dollars over the past 20 years to continually upgrade its network have led to clear benefits to customers. Comcast has increased broadband

² Comcast 10-K, at 3.

³ Comcast has deployed DOCSIS 3.0 to 99.8 percent of its footprint.

speeds 12 times in 12 years, and the vast majority of Comcast customers now subscribe to speed tiers with download speeds of 25 Mbps and upload speeds of 5 Mbps along with the fastest in-home Wi-Fi – in fact, over one-third of Comcast customers have download speeds of 50 Mbps or more and upload speeds of 10 Mbps or more. Comcast offers broadband options at multiple speed levels. For customers that want ultra high-speed Internet, Comcast now offers a speed tier of 105 Mbps downstream and 20 Mbps upstream throughout much of its service area, and has begun to offer a tier of 505 Mbps downstream and 100 Mbps upstream in an expanding number of markets by leveraging fiber deeper into its network. Soon, Comcast will be able to offer speeds of 250 Mbps downstream and 50 Mbps upstream to customers’ homes across its footprint using its existing Hybrid Fiber/Coax (“HFC”) network infrastructure.

iii. Voice Services

Delivering on its promise made in its acquisition of AT&T Broadband over ten years ago to bring new competition to the market for voice services,⁴ Comcast now provides voice services to approximately 10.7 million customers, including residential and business customers.⁵ Using Voice over Internet Protocol (“VoIP”) technology, Comcast provides competitive facilities-based voice services to deliver digital-quality phone service, plus enhanced features that are integrated with other Comcast services. Comcast has brought significant innovations to its voice service in the past several years and offers Xfinity Voice customers unlimited nationwide talk and text (including on their mobile devices over Wi-Fi using Voice 2go on the Xfinity Connect App), access to voicemail on the Xfinity Connect website, and Readable Voicemail that enables

⁴ See *Applications for Consent to the Transfer of Control of Licenses from Comcast Corp. and AT&T Corp., Transferors to AT&T Comcast Corp., Transferee*, Memorandum Opinion and Order, 17 FCC Rcd. 23246 ¶¶ 186-188 (2002) (noting that Comcast and AT&T asserted that the merger would “further accelerate the deployment of facilities-based local telephone competition, creating substantial public interest benefits”), *aff’d sub nom. Consumer Fed’n of Am v. FCC*, 348 F.3d 1009 (D.C. Cir. 2003) (“*Comcast-AT&T Broadband Order*”).

⁵ Comcast 10-K, at 3.

customers to read their voicemail messages over email. By integrating Xfinity Voice with other services, Comcast provides innovative features like Universal Caller ID, which identifies a caller on a customer's TV, computer, or mobile device.

iv. Business Services

Comcast is an aggressive new entrant in the business services market, currently focused on serving small- and medium-sized businesses. Comcast's services for business customers include broadband, voice, and video offerings; a website hosting service; an interactive tool that allows customers to share, coordinate, and store documents online; hosted voice services using cloud network servers; a business directory listing; "Be Anywhere" functionality that allows customers to make and receive calls from any device at any location with one phone number; and an integrated suite of cloud-based business solutions like data backup, security, and online storage. Comcast also provides advanced voice services and Ethernet network services to business customers that connect multiple locations. Moreover, Comcast is active in the wholesale business, particularly with respect to cellular backhaul services that help wireless carriers manage their network bandwidth more efficiently by leasing fiber facilities to transport wireless traffic from their cell towers.

v. Advertising

Comcast Spotlight is the advertising sales division of Comcast Cable and provides a variety of advertising solutions for local, regional, and national advertisers. Comcast Spotlight offers television, online, VOD, multi-screen, and addressable advertising services. Currently, Comcast Spotlight has a presence in almost 80 markets. Comcast, together with TWC and Cox Media, is also an owner of NCC Media, which represents national spot advertising sales for cable, satellite, and telco programming distributors across the country.

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vi. Cable Programming

Comcast directly owns interests in the following cable program networks and services: MLB Network (8.3 percent), NHL Network (15.6 percent), Midco Sports Network (50 percent), iN Demand (54 percent), and Streampix (100 percent), as well as the following local origination channels: Pittsburgh Cable News Network (30 percent), C2 (100 percent), Comcast Entertainment Television (100 percent), Comcast Hometown Network (100 percent), Comcast Television Network (100 percent), CN100 (100 percent), HoosierTV (100 percent), Utah Channel 6 (100 percent), and WNFM-TV (100 percent).⁶

b. NBCUniversal

NBCUniversal, which is owned and controlled by Comcast, is one of the world's leading media, news, and entertainment companies. NBCUniversal operates the NBC and Telemundo broadcast television networks. Ten local NBC stations are owned and operated by NBCUniversal. Telemundo's operations include 17 owned-and-operated local stations. NBCUniversal's national cable networks include the following (100 percent ownership unless otherwise noted): Bravo, Chiller (80 percent), Cloo (formerly Sleuth), CNBC, CNBC World, E!, Esquire Network (formerly Style), G4, Golf Channel, MSNBC, mun2, NBC Sports Network (formerly Versus), Oxygen, Sprout, SyFy, Universal HD, and USA Network. In addition, NBCUniversal owns non-controlling interests in RLTV (7.7 percent), Universal Sports (11 percent), ShopNBC (14.5 percent), FEARnet (31 percent), The Weather Channel Companies (25 percent), and TV One (47.2 percent). NBCUniversal also owns New England Cable News (100

⁶ Comcast also has interests in other, smaller local origination channels.

percent), a regional news network, and has minority interests in Television Korea 24 (1 and 2) (14 percent) and Saigon Broadcasting Television Network (50 percent).⁷

Several regional sports networks (“RSNs”) are also part of NBCUniversal’s cable programming portfolio. NBCUniversal owns interests (with percentage interests shown in parenthesis) in Comcast SportsNet Houston (22.5 percent),⁸ Comcast SportsNet Chicago (30 percent), Comcast SportsNet Bay Area (67 percent), Comcast SportsNet Philadelphia (75 percent), Comcast SportsNet New England (80 percent), Cable Sports Southeast (81 percent),⁹ Comcast Sports Southwest (100 percent), Comcast SportsNet California (100 percent), Comcast SportsNet Mid-Atlantic (100 percent), Comcast SportsNet Northwest (100 percent), and The Comcast Network (100 percent). In addition, NBCUniversal has a minority interest in SportsNet New York (8.2 percent).¹⁰

NBCUniversal has other businesses as well, including film and television production studios, theme parks, and online services.

2. Time Warner Cable

TWC is a leading provider of video, high-speed Internet, and voice services to residential and business customers. As illustrated in the map in Exhibit 7, TWC’s network facilities cover

⁷ NBCUniversal also has a 33 1/3 percent non-controlling interest in Hulu. Pursuant to the NBCUniversal Conditions, Comcast has no management rights in Hulu.

⁸ On February 4, 2014, a bankruptcy court entered an order for relief in connection with Comcast SportsNet Houston, thus making the network a debtor under Title 11 of the United States Code. The bankruptcy case is proceeding and it has yet to be determined whether the network will be reorganized, sold, or liquidated.

⁹ Cable Sports Southeast recently announced plans to cease operations on May 31, 2014.

¹⁰ NBCUniversal’s ownership of cable program networks has actually *decreased* since the Comcast-NBCUniversal transaction. In particular, NBCUniversal is no longer affiliated with 11 A&E national video programming services (i.e., A&E, Bio, Crime & Investigation Network, Current, History, History En Espanol, History International, Lifetime, Lifetime Movie Network, Lifetime Real Women, Military History). See Michael J. de la Merced, *Comcast to Sell Back Its Stake in A&E for \$3 Billion*, N.Y. Times, July 10, 2012, available at http://dealbook.nytimes.com/2012/07/10/comcast-to-sell-back-its-stake-in-ae-for-3-billion/?_php=true&_type=blogs&_r=0.

portions of 31 states, and TWC faces strong competition in each of those areas for all of its services.

a. Cable Systems and Video Services

TWC is the fourth-largest multichannel video programming distributor (“MVPD”) in the United States, with cable systems serving approximately 11.4 million residential and business customers. TWC has developed and deployed switched digital video technology, and its cable systems typically provide access to hundreds of linear channels and 18,000 hours of VOD programming. TWC services include features like StartOver, which allows customers to restart a live program in progress, and LookBack, which allows customers to watch programs up to three days after they air live, all without a DVR. TWC offers various tiers and packages of video programming, as well as specialty programming tiers tailored to particular interests. TWC’s all-digital migration is complete in about 17 percent of its footprint, and TWC plans to be all-digital in 75 percent of its footprint by the end of 2016.

Like Comcast, TWC offers live streaming service and access to on-demand services to its customers on a range of devices in the home using TWC’s TV apps. TWC’s customers also can access some video programming on computers outside the home via www.twctv.com.

b. Broadband Internet

TWC serves approximately 11.6 million high-speed Internet customers, including residential and business customers. TWC offers a range of speeds at different price points – from up to 2 Mbps downstream and up to 1 Mbps upstream to up to 50 Mbps downstream and up to 5 Mbps upstream – in most markets. And, in certain select markets (such as New York City and Los Angeles), TWC recently began offering speed tiers of up to 75-100 Mbps downstream and up to 5 Mbps upstream.

c. Voice Services

TWC serves approximately 5.3 million residential and business voice customers. TWC's broadband infrastructure has enabled it to deploy interconnected VoIP services throughout its geographic footprint. Indeed, TWC was the first multi-system cable operator – and one of the first service providers – to introduce a mass-market, facilities-based VoIP service, Digital Phone, bringing a reliable, feature-rich, competitive voice alternative to millions of residential consumers. TWC's voice services offer customers unlimited local and long-distance calling throughout the United States and to Canada, Puerto Rico, and Mexico, together with a variety of calling features including call waiting, call forwarding, distinctive ring tones, and caller ID on the customer's telephone, computer, or television. TWC also provides a free web portal, VoiceZone, which allows voice customers to customize their service features, set up caller ID on personal computers, block unwanted calls, and access voicemail, all using the Internet.

d. Business Services

TWC offers a wide variety of products and services to business customers, including high-capacity transmission services (such as Metro Ethernet), video, high-speed Internet, and voice services, as well as hosting and cloud computing services (through its NaviSite subsidiary), all in competition with the incumbent local exchange carriers ("ILECs") and other service providers. TWC offers these services on a retail and wholesale basis using its own network infrastructure and third-party infrastructure. TWC's retail customers consist primarily of small- and medium-sized businesses, and TWC also has made some initial strides in serving enterprise businesses with multiple locations, as well as government, education, and non-profit institutions. In addition, TWC offers wholesale transport services to wireless providers for cell tower backhaul and to other service providers. In December 2013, TWC acquired DukeNet

Communications LLC, adding new fiber capacity to serve its business customers.

e. Advertising

TWC sells video and online advertising to local, regional, and national customers. As noted above, TWC, together with Comcast and Cox, is an owner of NCC Media.

f. Cable Programming

TWC owns and manages a number of local news channels (including Time Warner Cable News NY1), local sports channels, and local lifestyle channels.¹¹ In October 2012, TWC launched two RSNs, one in English and one in Spanish, that carry Los Angeles Lakers basketball games, as well as other regional sports programming. Some of TWC's local channels also include qualifying RSN content, including two that carry professional sports programming in Spanish and 12 others that carry local or regional college sports programming. In addition, TWC has a minority interest in SportsNet New York (26.8 percent), and provides affiliate sales, ad sales, and certain other production and technical services to (but has no ownership interest in) SportsNet LA, an RSN that carries the Los Angeles Dodgers' baseball games and other sports programming and that is owned and was recently launched by American Media Productions, LLC. TWC also has attributable interests in a national network, MLB Network (6.35 percent), and in the iN Demand programming service (29.3 percent).

III. STANDARD OF REVIEW

The Commission has stated that it will approve a transfer of control of authorizations and licenses connected with a proposed transaction under Sections 214(a) and 310(d) of the Act if the proposed transaction does not violate a statute or rule, and if, after weighing “the potential public interest harms of the merger against any potential public interest benefits,” it concludes that, “on

¹¹ A list of TWC's programming interests is attached as Exhibit 8.

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balance,” the transfer “serves the public interest, convenience and necessity.”¹² This standard involves balancing potential public interest benefits from the transfer against potential harms,¹³ and the applicants must show “by a preponderance of the evidence, that the proposed transaction, on balance, will serve the public interest.”¹⁴ In assessing the potential public interest benefits of a proposed transaction, the Commission “focuses on demonstrable and verifiable public interest

¹² *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor, to AT&T Corp., Transferee*, Memorandum Opinion and Order, 15 FCC Rcd. 9816 ¶ 8 (2000) (“AT&T-MediaOne Order”); *see also Applications of AT&T Inc. and Atlantic Tele-Network, Inc.*, Memorandum Opinion and Order, 28 FCC Rcd. 13670 ¶ 12 (2013) (“AT&T-ATN Order”); *Applications Filed for Transfer of Control of Insight Commc’ns Co. to Time Warner Cable Inc.*, Memorandum Opinion and Order, 27 FCC Rcd. 497 ¶ 7 (2012) (“Insight-TWC Order”); *Applications filed by Qwest Commc’ns Int’l Inc. and CenturyTel, Inc. d/b/a CenturyLink for Consent to Transfer of Control*, Memorandum Opinion and Order, 26 FCC Rcd. 4194 ¶ 7 (2011) (“CenturyLink-Qwest Order”); *Applications for Consent to the Assignment and/or Transfer of Control of Licenses from Adelphia Commc’ns Corp. (and Subsidiaries, Debtors-In-Possession), Assignors, to Time Warner Cable Inc. (Subsidiaries), Assignees, Adelphia Commc’ns Corp. (and Subsidiaries, Debtors-In-Possession), Assignors and Transferors, to Comcast Corp. (Subsidiaries), Assignees and Transferees*, Memorandum Opinion and Order, 21 FCC Rcd. 8203 ¶ 23 (2006) (“Adelphia Order”); *AT&T Inc. and BellSouth Corp. Application for Transfer of Control*, Memorandum Opinion and Order, 22 FCC Rcd. 5662 ¶ 19 (2007) (“AT&T-BellSouth Order”).

¹³ *See General Motors Corp. & Hughes Elec. Corp., Transferors, and News Corp., Transferee, for Authority to Transfer Control*, Memorandum Opinion and Order, 19 FCC Rcd. 473 ¶ 15 (2004) (“News Corp.-Hughes Order”); *see also AT&T-ATN Order* ¶ 12; *CenturyLink-Qwest Order* ¶ 7; *AT&T-BellSouth Order* ¶ 19; *Applications for Consent to the Transfer of Control of Licenses from Comcast Corp. and AT&T Corp., Transferors, to AT&T Comcast Corp., Transferee*, Memorandum Opinion and Order, 17 FCC Rcd. 23246 ¶ 26 (2002) (“Comcast-AT&T Broadband Order”).

¹⁴ *AT&T-ATN Order* ¶ 12; *Applications of SOFTBANK CORP., Starburst II, Inc., Sprint Nextel Corp., and Clearwire Corp. for Consent to Transfer Control of Licenses and Authorizations; Petitions for Reconsideration of Applications of Clearwire Corp. for Pro Forma Transfer of Control*, Memorandum Opinion and Order, Declaratory Ruling, and Order on Reconsideration, 28 FCC Rcd. 9642 ¶ 23 (2013) (“Softbank-Sprint Order”); *SkyTerra Commc’ns, Inc. Transferor, & Harbinger Capital Partners Funds, Transferee, Applications for Consent to Transfer of Control of SkyTerra Subsidiary, LLC*, Memorandum Opinion and Order and Declaratory Ruling, 25 FCC Rcd. 3059 ¶ 10 (2010) (“SkyTerra-Harbinger Order”); *Applications of AT&T Inc. and Centennial Commc’ns Corp. for Consent to the Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements*, Memorandum Opinion and Order, 24 FCC Rcd. 13915 ¶ 27 (2009) (“AT&T-Centennial Order”); *Applications for Consent to Transfer of Control of Licenses; XM Satellite Radio Holdings Inc., Transferor, to Sirius Satellite Radio Inc., Transferee*, Memorandum Opinion and Order and Report and Order, 23 FCC Rcd. 12348 ¶ 30 (2008); *News Corp. & DIRECTV Group, Inc., Transferors, and Liberty Media Corp., Transferee, Applications for Authority to Transfer Control*, Memorandum Opinion and Order, 23 FCC Rcd. 3265 ¶ 22 (2008); *AT&T-BellSouth Order* ¶ 19; *Verizon Commc’ns Inc. & MCI, Inc. Applications for Approval of Transfer of Control*, Memorandum Opinion and Order, 20 FCC Rcd. 18433 ¶ 16 (2005) (“Verizon-MCI Order”); *SBC Commc’ns Inc. & AT&T Corp. Applications for Approval of Transfer of Control*, Memorandum Opinion and Order, 20 FCC Rcd. 18290 ¶ 16 (2005) (“SBC-AT&T Order”).

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benefits that could not be achieved if there were no merger.”¹⁵ Its evaluation also includes, among other things, a “deeply rooted preference for preserving and enhancing competition in relevant markets [and] accelerating private sector deployment of advanced services”¹⁶ In particular, consistent with the Commission’s broader public interest mandate, such analysis may also entail assessing whether the transaction will affect the quality of communications services or will result in the provision of new or additional services.¹⁷

The Commission’s analysis of potential harms entails both an examination of potential anticompetitive effects and an inquiry into whether the transaction would violate the Act or the Commission’s implementing rules, or otherwise substantially frustrate the Commission’s implementation or enforcement of the Act.¹⁸ The Commission has repeatedly stressed that a

¹⁵ *AT&T-MediaOne Order* ¶ 154; *see also Applications of Nextel Commcn’s, Inc. & Sprint Corp. for Consent to Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, 20 FCC Rcd. 13967 ¶ 129 (2005) (“*Sprint-Nextel Order*”) (“We examine whether operation of the combined entity could yield consumer benefits unattainable absent a merger.”). In particular, the Commission’s review is confined to the transaction before it rather than the relative merit of any hypothetical alternative transactions. *See, e.g., Citadel Commc’ns Co., Ltd. and Act III Broad. of Buffalo, Inc.*, Memorandum Opinion and Order, 5 FCC Rcd. 3842 ¶ 16 (1990) (“Section 310(d) of the Act limits our consideration to the buyer proposed in an assignment application, and we cannot consider whether some other proposal might comparatively better serve the public interest.”).

¹⁶ *See AT&T-ATN Order* ¶ 13; *Softbank-Sprint Order* ¶ 24; *AT&T-Centennial Order* ¶ 28; *CenturyLink-Qwest Order* ¶ 8.

¹⁷ *See Applications of Comcast Corp., General Elec. & NBCUniversal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses*, Memorandum Opinion and Order, 26 FCC Rcd. 4238 ¶ 23 (2011) (“*Comcast-NBCUniversal Order*” or “*NBCUniversal Order*”); *Comcast-AT&T Broadband Order* ¶ 27; *Wavecom Solutions Corp., Transferor, & Hawaiian Telcom Inc., Transferee, Applications for Consent to Transfer of Control*, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd. 16081 ¶ 8 (2012); *Applications filed by Global Crossing Ltd. & Level 3 Commc’ns, Inc. for Consent to Transfer Control*, Memorandum Opinion and Order and Declaratory Ruling, 26 FCC Rcd. 14056 ¶ 11 (2011) (“*Level 3-Global Crossing Order*”); *CenturyLink-Qwest Order* ¶ 8; *see also* Remarks of Jonathan Sallet, Acting General Counsel, FCC, Conference on Competition and IP Policy in High-Technology Industries, Stanford, CA (Jan. 22, 2014), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0124/DOC-325267A1.pdf.

¹⁸ *See News Corp.-Hughes Order* ¶ 16; *AT&T-MediaOne Order* ¶ 9; *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Commc’ns, Inc., Transferor, to AT&T Corp., Transferee*, Memorandum Opinion and Order, 14 FCC Rcd. 3160 ¶ 14 (1998) (“*AT&T-Tele-Communications Order*”) (“To apply our public interest test, then, we must determine whether the merger violates our rules, or would otherwise frustrate our implementation or enforcement of the Communications Act and federal communications policy. That policy is, of course, shaped by Congress and deeply rooted in a preference for competitive processes and outcomes.”).

license transfer proceeding must focus on *transaction-specific* harms (and benefits) and is not an open forum for airing pre-existing disputes or industry-wide policy debates, which are better addressed, as appropriate, in separate adjudicatory or industry-wide rulemaking proceedings.¹⁹

As set forth in Section VI below, the transaction complies fully with the Communications Act and the Commission’s rules. Thus, the Commission’s task in reviewing this transaction is to weigh the potential public interest benefits against the potential public interest harms. As demonstrated in Sections IV and V, the proposed transaction will generate substantial public interest benefits and no public interest harms.²⁰ Accordingly, the Applicants respectfully request that the Commission approve the transaction and grant its consent to the transfer of control of TWC’s licenses and authorizations to Comcast.

¹⁹ See, e.g., *Applications of Cellco P’ship d/b/a/ Verizon Wireless & SpectrumCo LLC and Cox TMI, LLC for Consent to Assign AWS-1 Licenses*, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd. 10698 ¶ 89 (2012) (“We also find that any issues of interoperability in the Lower 700 MHz band raised by commenters are not transaction-related. The interoperability issues in the Lower 700 MHz band long predate these transactions. Further, the Commission has already initiated a rulemaking proceeding earlier this year to address these issues on an industry-wide basis.”); *AT&T-Centennial Order* ¶ 141 (“We find that the proposed conditions prohibiting exclusive handset arrangements are not narrowly tailored to prevent a transaction-specific harm, but apply broadly across the industry and are more appropriate for a Commission proceeding where all interested industry parties have an opportunity to file comments. RCA filed a petition asking the Commission to review exclusive handset agreements on an industry-wide basis, and the Commission will be able to develop a comprehensive approach on handset exclusivity based on a full record in that proceeding.”) (internal citations omitted); *AT&T-BellSouth Order* ¶ 56 n.154 (“To the extent commenters allege that . . . contracts of the type used by AT&T and BellSouth are anticompetitive in general, this is not a merger-specific harm, but rather is an issue that has been raised, and is better addressed, in the Commission’s pending special access rulemaking.”); *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner Inc., Transferee*, Memorandum Opinion and Order, 16 FCC Rcd. 6547 ¶ 6 (2001) (“*AOL-Time Warner Order*”) (“It is important to emphasize that the Commission’s review focuses on the potential for harms and benefits to the policies and objectives of the Communications Act that flow from the proposed transaction – i.e., harms and benefits that are ‘merger-specific.’ The Commission recognizes and discourages the temptation and tendency for parties to use the license transfer review proceeding as a forum to address or influence various disputes with one or the other of the applicants that have little if any relationship to the transaction or to the policies and objectives of the Communications Act.”).

²⁰ Applicants recognize that the Commission must conduct its own evaluation and make its own judgment, after hearing from interested parties. Applicants will cooperate in that process and invite a constructive dialogue that addresses any legitimate issues. At the same time, merger proceedings too often are used by various parties as a forum to advance imagined and even contrived grievances, and such tactics must not be permitted to obstruct or delay the Commission’s processes.

IV. THE TRANSACTION IS PRO-CONSUMER, PRO-COMPETITIVE, AND WILL GENERATE SUBSTANTIAL PUBLIC INTEREST BENEFITS.

A. Overview

1. Applicants Compete in a Dynamic, Expanding, and Highly Competitive Marketplace.

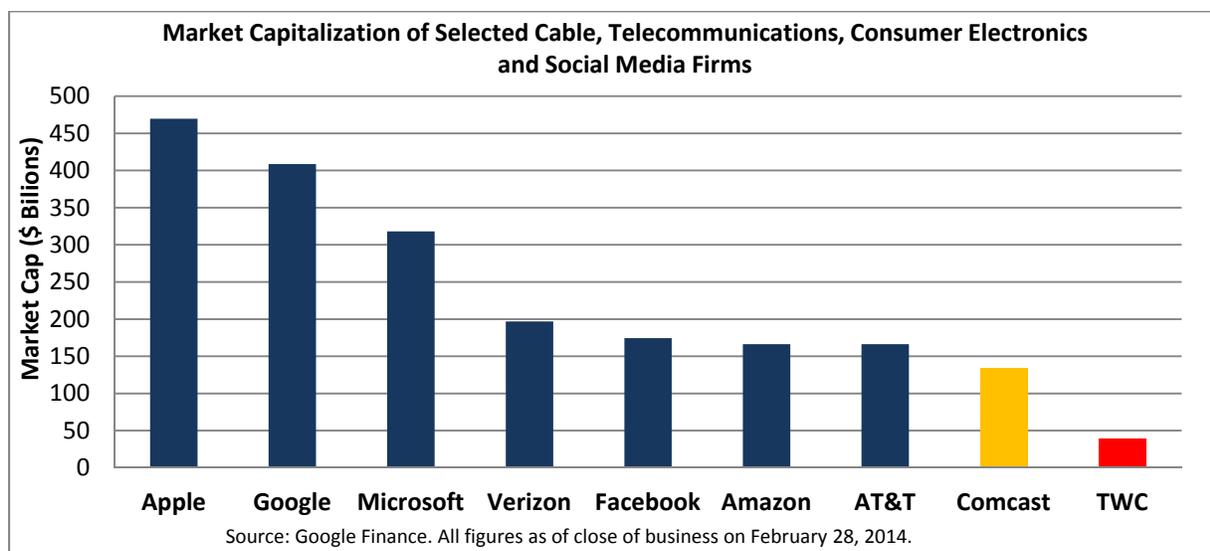
The combination of Comcast and TWC will create a world-class communications, media, and technology company significantly better positioned than either company alone to bring consumers the advanced services they want now and will need in the future and to keep America at the forefront of technology and innovation.

This is no longer the media and communications industry of the 1992 Cable Act or the 1996 Telecommunications Act, or even the industry that the FCC and antitrust agencies analyzed in the Comcast-AT&T Broadband and Adelphia merger proceedings or in the Comcast-NBCUniversal transaction four years ago. Rather, it is a larger, more complex, and multifaceted ecosystem, in which an array of sophisticated companies with national or even global footprints offer stiff competition for all or key components of Comcast's and TWC's businesses. Established satellite providers are evolving, as are the major telco companies, which have the benefit not only of robust wireline footprints, but also of national wireless platforms. As Verizon's CFO recently noted, "I'm the fifth largest cable company now. I also have something that cable doesn't have, which is 100 million eyeballs on wireless devices."²¹ Indeed, Verizon has indicated that it intends to add a wireless video product that can bring "24-hour linear

²¹ Fran Shammo, EVP & CFO, Verizon, Deutsche Bank Media, Internet and Telecom Conference, Tr. at 15 (Mar. 10, 2014). AT&T's CFO similarly stated: "[T]he advantage for us is that opportunity for over-the-top for the whole 65 million broadband connections we have may be so attractive that it allows us to shift gears or take risks with regard to our traditional subscription model on our 5.4 million customers. We're committed to our U-verse video that's gone well, but we do have flexibility in our space just because of the amount of broadband customers and connections we have that don't have a subscription on it today." John Stephens, CFO, AT&T, Inc., Deutsche Bank Media, Internet & Telecom Conference, Tr. at 11 (Mar. 12, 2014).

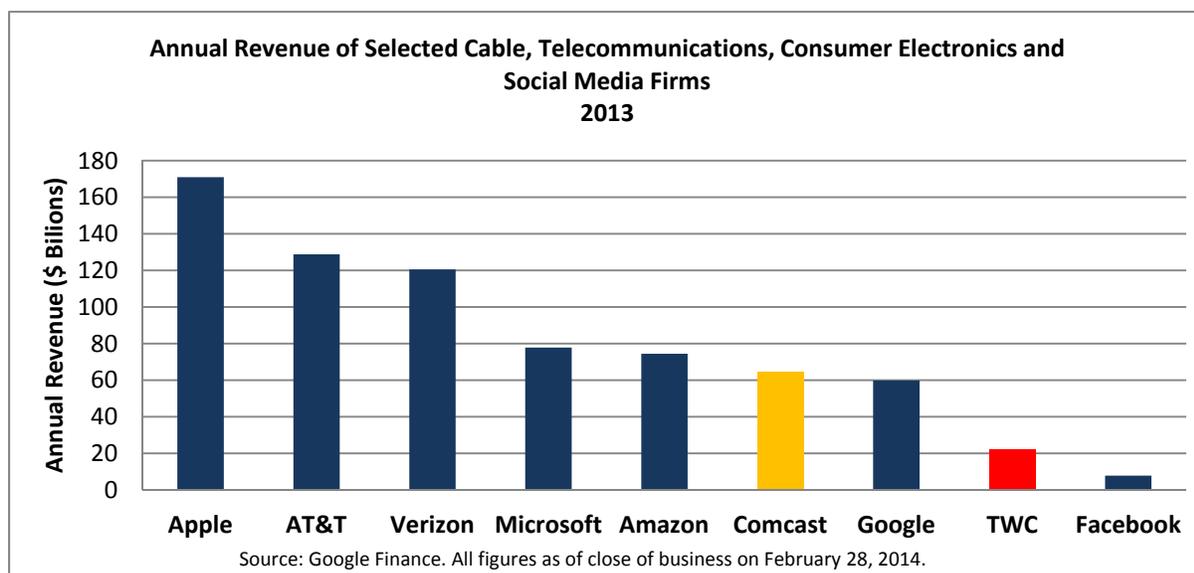
programming” to wireless devices.²² Today, Google increasingly competes as a network, video, and technology provider; Apple tablets now serve as a viewing platform for IP cable services even while Apple offers an online video service, Apple TV, and explores development of an Apple set-top box; Microsoft just announced that it will feature ads on the Xbox One, creating a new video advertising platform; and Amazon continues to leverage its unequalled sales platform and family of competitive tablets to promote its burgeoning Prime Instant Video business, and just last week announced the rollout of its own advanced video set-top box.²³

In contrast to all of these companies, both Comcast and TWC have a more limited scale and scope, as reflected in their relative market capitalizations and revenues.



²² Fran Shammo, EVP & CFO, Verizon, Deutsche Bank Media, Internet and Telecom Conference, Tr. at 15 (Mar. 10, 2014).

²³ See Greg Bensinger & Shalini Ramachandran, *Amazon Unveils Video-Streaming Device Fire TV*, Wall St. J., Apr. 2, 2014, <http://online.wsj.com/news/articles/SB10001424052702304441304579477283348851844>.



To meet these challenges, Comcast has fundamentally transformed itself over the last decade from a regional cable company to a leading communications, media, and technology company. By investing heavily in talent, research and development, and in the infrastructure needed to facilitate creativity and invention, Comcast has created a culture of innovation. Comcast now employs over 1,000 engineers and developers, and vigorously competes for new engineering talent with the likes of Google, Apple, Facebook, Netflix, Microsoft, and Twitter.²⁴ Its single-minded focus on enhancing its services and pursuing innovation have earned it first place among cable and satellite providers on Fortune Magazine’s list of World’s Most Admired Companies – up from third place.²⁵ The transaction will enable the company to continue to meet the challenges ahead in this increasingly dynamic, expanding, and competitive marketplace, and to ensure that customers enjoy all the benefits that Comcast and TWC have offered to date and stand ready to deploy in the future.

²⁴ Comcast’s research and development efforts involve highly-talented individuals at its technology centers around the country, including in Seattle, Silicon Valley, Denver, Washington, DC, and Philadelphia.

²⁵ See Comcast – Most Admired Companies, Fortune, <http://money.cnn.com/magazines/fortune/most-admired/2014/snapshots/5035.html> (last visited Apr. 4, 2014).

2. The Key Economic Drivers of the Transaction Will Produce Substantial Benefits.

As the attached economic analyses of Drs. Rosston and Topper and Dr. Israel make clear, a few powerful economic mechanisms will drive the core competitive benefits from the transaction: (a) economies of scale, (b) expanded geographic reach, and (c) sharing of technologies and services.

Scale efficiencies are key. As Drs. Rosston and Topper explain: “Scale can make the difference between investing in a new product or service and not investing, and it can accelerate the introduction of products, services, and network and equipment enhancements.”²⁶ Dr. Israel echoes this analysis and conclusion, noting that “[w]hen investments have the character that some or all of the costs are ‘fixed’ – meaning costs that do not grow as the investment is extended to a larger scale (or at least do not grow proportionally to the increase in scale) – then greater scale will lead to greater revenue without proportionally greater costs. As a result, more investments will meet the hurdle rate and thus more investments can profitably be undertaken, increasing the firm’s incentive to invest in innovative new services.”²⁷ Dr. Israel also explains why scale is an even more effective driver of efficiencies and benefits in this transaction in light of Comcast’s business model:

Specific features of Comcast’s business model heighten the investment and innovation benefits from greater scale. In particular, Comcast generally deploys products in a relatively homogeneous manner throughout a region and often throughout its entire footprint. Therefore, it is relatively easy for Comcast to serve potential new customers in a consistent manner, and there are substantial scale economies in serving an area where Comcast has an existing plant.²⁸

²⁶ Declaration of Dr. Gregory L. Rosston and Dr. Michael D. Topper (“Rosston/Topper Decl.”) ¶ 10, attached as Exhibit 5.

²⁷ Declaration of Dr. Mark A. Israel (“Israel Decl.”) ¶ 107, attached as Exhibit 6.

²⁸ *Id.* ¶ 108.

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As shown above, communications technologies and services have rapidly advanced, and the cable industry has built out and matured. In the current environment, fixed cost investments in developing new and compelling digital technologies have become more important. As Drs. Rosston and Topper state, “since cable operators now pass the vast majority of homes in their respective franchise areas, they increasingly need to compete for customers with satellite companies, telcos, and other distributors by making investments in the development of new platforms and services and upgrading their networks, all of which have large fixed costs.”²⁹ Moreover, even though some technologies would still be developed gradually even by companies without the benefit of larger scale, “having a larger scale can accelerate investment in development and deployment of new technology [and] . . . may make it profitable to hire more developers and engineers and thereby achieve the same technological improvement in less time.”³⁰

Second, the expanded geographic reach and additional geographic clustering made possible by a combination of firms will also increase the economic efficiencies by enhancing the ability of the combined entity to serve customers whose needs span the existing geographic footprints of the two firms. “In addition, geographic agglomeration can lead to operating efficiencies and the ability to provide higher quality services to customers in certain geographic areas.”³¹

Third, by combining their portfolios of products and services, the companies will be able to provide more products and services at lower cost than they would be able to do on their own. It will be more efficient for Comcast and TWC to provide these services as a combined company

²⁹ Rosston/Topper Decl. ¶ 45.

³⁰ *Id.* ¶ 48.

³¹ *Id.* ¶ 58.

because the two firms use similar inputs in creating these services. In addition, each company brings proprietary technology and specialized knowledge about providing its unique mix of products and services.³²

Each of the foregoing economic bases for efficiencies and synergies is strongly present in this transaction. For example, by adding TWC’s customers and markets, Comcast will expand its video subscriber base by 8 million customers (after divesting 3 million customers), for a total of approximately 30 million video subscribers in the systems it manages. The incremental scale will promote continued innovation by providing a broader base of customers across which to spread the high fixed costs of research and development.

Moreover, this increased presence will provide equipment manufacturers, app developers, programmers, and other companies with increased incentive to take chances on new technology projects with the combined company, and to do so on reasonable terms. For example, it is far easier to attract developers to build applications for national or global platforms such as Apple TV, Google, Microsoft, and Sony, than to create an app for a limited regional platform – or to convince a manufacturer to embed a tailored feature that has nationwide appeal, than one that has localized, geographically constrained appeal.³³ In short, larger scale and scope will help the combined company attract more collaborators and partners more easily throughout the ecosystem.

The Commission has previously recognized that scale can be an important driver of increased innovation and consumer benefits:

³² See *id.* ¶¶ 65-68.

³³ See *id.* ¶ 56 (“In addition, the larger scale enabled by the transaction should make the combined company a more attractive partner for device manufacturers seeking to provide apps to deliver video services on a wider range of third-party devices and technology firms seeking to deliver video to consumers in new, innovative ways. Having a larger potential customer base makes developing these apps and services more feasible for Comcast and more appealing for the partnering company.”).

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We also agree with the Applicants that the greater scale and scope of the merged entity is likely to spur new investment. The development and deployment of new technologies often entails a significant up-front, fixed investment. The merged company should have a greater ability to spread those fixed costs across a larger customer base, which should in turn foster incentives for investment by the merged entity, as well as other businesses that seek to sell equipment, technology, and services to the merged entity.³⁴

One need look no further than what Comcast has been able to accomplish with the scale it gained from the AT&T Broadband and Adelphia transactions, which contributed significantly to the technological innovation Comcast has already introduced. With greater scale in a far more demanding and capital-intensive marketplace, a combined Comcast-TWC will be able to drive even more innovation and consumer benefits over the next decade – and beyond.

The transaction will also provide the geographic efficiencies that Drs. Rosston, Topper, and Israel describe. Post-transaction, Comcast will reach additional markets in which it previously had limited or no presence (e.g., New York City, Los Angeles, Dallas/Fort Worth). And the transaction will provide Comcast with access to several markets that are clustered near its existing markets (e.g., Georgia, South Carolina, North Carolina, and Virginia). This will allow Comcast to more efficiently deploy and upgrade its broadband facilities, by potentially investing, for example, in new Converged Regional Access Networks (“CRANs”) supported by

³⁴ *Comcast-AT&T Broadband Order* ¶ 184; *see also GM-News Corp. Order* ¶ 344 (“Based on the evidence presented by Applicants, we believe that the transaction is likely to enable the merged entity to achieve certain economies of scale and scope, particularly in R&D, that absent the transaction the parties individually could not have achieved.”); *AT&T-BellSouth Order* ¶ 214 n.594 (“We find . . . that the increase in scale and scope arising from the merger will help the merged entity to better spread the costs of, and internalize the benefits of, its R&D, thus increasing its incentives to invest.”). The benefits from scale in the development of broadband Internet access have also been recognized by the Antitrust Division of the Department of Justice. *See Ex Parte* Submission of the U.S. Dep’t of Justice, GN Docket No. 09-51, at 29-30 (Jan. 4, 2010) (“These broad goals are best served by promoting competition in broadband markets. In practice, this does not mean striving for broadband markets that look like textbook markets of perfect competition, with many price-taking firms. That market structure is unsuitable for the provision of broadband services, which involve very substantial fixed and sunk costs. Rather, promoting competition is likely to take the form of enabling additional entry and expansion by wireless broadband providers, applying other appropriate policy levers, and spurring competition among broadband providers by improving the information available to consumers about the service offerings in their areas.”).

additional regional data centers – an expense that might not have been justified by either company’s individual network assets (or customers) in a particular area.

As set forth in the Declaration of Michael J. Angelakis, Comcast Vice Chairman and Chief Financial Officer, these economic drivers will provide the combined company with a greater ability to invest and innovate, not only to serve its existing customers better, but also to respond effectively to new competitive dynamics.³⁵ In addition, the transaction should result in cost savings and other synergies worth approximately \$1.5 billion in increased earnings before interest, taxes, depreciation, and amortization, within three years, and recurring every year thereafter.³⁶ This is a conservative estimate and does not take into account future revenue-generating opportunities.³⁷

These savings will provide the combined company additional wherewithal to invest across its diverse products and services, including in video, business services, and voice. But nowhere else will these savings translate into more renewed investment than in the capital-intensive area of broadband.³⁸ As economist Ev Ehrlich has aptly observed, “Comcast’s offerings will not only improve service to TWC’s customers, but it will make the combined company a better competitor and innovator in the competitive cage match in which providers of connectivity, devices, apps, services and content fight for a share of the value the broadband world creates.”³⁹

³⁵ Declaration of Michael J. Angelakis (“Angelakis Decl.”) ¶¶ 12-13.

³⁶ *Id.* ¶ 6. The transaction is also expected to result in approximately \$400 million in capital expense efficiencies. *See id.* 8.

³⁷ *Id.* ¶ 9.

³⁸ *Id.* ¶¶ 21-25 .

³⁹ Ev Ehrlich, *Who Holds the Cards Online*, San Jose Mercury News, Mar. 7, 2014, available at http://www.mercurynews.com/opinion/ci_25291788/ev-ehrich-who-holds-cards-online (calculating that “[t]he (average weighted) rate of profit on sales for ‘providers’ is 3.7 percent, versus 24.4 percent for ‘residers’”).

While TWC announced earlier this year a multi-year plan to upgrade its network and enhance its services,⁴⁰ Comcast's stronger balance sheet, together with efficiencies generated by the transaction, and Comcast's experience in converting its own plant to all-digital over a compressed time frame, will ensure that the combined company is better positioned to efficiently and expeditiously upgrade the TWC systems, and with minimum disruption to the customer experience. And Comcast is committed to adding substantial incremental investments to what TWC had planned for broadband upgrades and enhancements over the next three years.

As detailed below, the above-described efficiencies and synergies of this transaction are not just theoretical. Rather, Comcast is committed to putting them to work to forge a faster path to all-digital systems, higher broadband speeds, more advanced video and voice services, a more secure network, better system reliability, and other benefits to consumers, businesses, and the public interest generally. The transaction will also extend a variety of other public interest benefits to the TWC markets, including conditions and commitments resulting from the NBCUniversal transaction, as well as Comcast's deep commitment to broadband adoption, diversity, accessibility, and cybersecurity. This array of benefits would not be achieved as expansively or as quickly without the transaction.

- B. Consumers Will Benefit Directly from Advances in Broadband, Video Technologies, Digital Voice, and Other Innovations to Residential Services.**
 - 1. The Transaction Will Accelerate Broadband Deployment, Increase Broadband Competition and Innovation, and Expand Broadband Adoption.**

President Obama has described broadband as “essential to the Nation’s global competitiveness in the 21st century, driving job creation, promoting innovation, and expanding

⁴⁰ Mike Farrell, *TWC Unveils Three-Year Ops Plan*, Multichannel News, Jan. 30, 2014, available at <http://www.multichannel.com/cable-operators/twc-unveils-three-year-ops-plan/147999>.

markets for American businesses.”⁴¹ FCC Chairman Wheeler similarly has said that “[b]roadband networks are essential to our national well-being” – a view embraced by his fellow commissioners.⁴² And both the President and Chairman have emphasized the benefits that the protections of the Open Internet rules provide for broadband deployment, adoption, investment, and innovation. Comcast and TWC have invested billions of dollars to build broadband networks that are “essential to our national well-being” and “the Nation’s global competitiveness in the 21st century.” But the additional investments and innovations that are needed now to deliver the services consumers demand and need will be more rapidly, effectively, and efficiently achieved by the combined company than either company could achieve alone.

a. The Transaction Will Help Fulfill the Goal of Greater Deployment of Even Better Broadband Service for More Americans.

In 1996, Congress instructed the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability [i.e., broadband] to all Americans.”⁴³ Congress authorized the Commission to “accelerate deployment of such

⁴¹ Exec. Order No. 13616 (June 14, 2012), *available at* <http://www.whitehouse.gov/the-press-office/2012/06/14/executive-order-accelerating-broadband-infrastructure-deployment>; *see also* Office of the Press Secretary, Statement from the President on the National Broadband Plan (Mar. 16, 2010), *available at* <http://www.whitehouse.gov/the-press-office/statement-president-national-broadband-plan> (“America today is on the verge of a broadband-driven Internet era that will unleash innovation, create new jobs and industries, provide consumers with new powerful sources of information, enhance American safety and security, and connect communities in ways that strengthen our democracy. . . . Expanding broadband across the nation will build a foundation of sustained economic growth and the widely shared prosperity we all seek.”).

⁴² Prepared Remarks of Tom Wheeler, Chairman, FCC, at the Computer History Museum, Mountain View, CA (Jan. 9, 2014), *available at* <http://www.fcc.gov/document/fcc-chairman-tom-wheeler-remarks-computer-history-museum>. Commissioner Jessica Rosenworcel observed that “[n]o matter who you are or where you live, prosperity in the twenty-first century will require access to broadband.” Statement of Commissioner Jessica Rosenworcel, Subcommittee on Communications and Technology, Oversight of the Federal Communications Commission (July 10, 2012), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-315077A1.pdf. Recognizing the “transformative impact of broadband,” Commissioner Ajit Pai has similarly observed that, “[n]ext-generation networks could revolutionize everything from health care to education” and “will also allow our businesses to become more productive, and our country to become more competitive in the global economy.” Remarks of FCC Commissioner Ajit Pai, Looking Back and Looking Ahead: The FCC and the Path to the Digital Economy (July 25, 2013), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-322384A1.pdf.

⁴³ 47 U.S.C. § 1302(a).

capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.”⁴⁴ Thanks to private investment and government policies, a staggering amount of progress toward achieving these goals has occurred, but more remains to be done, and can be done, on an accelerated basis over the next several years.

Approval of this transaction would accelerate the deployment of advanced telecommunications capabilities and promote more infrastructure investment in very concrete ways, as described below. The Commission need not rely here on what some have called a “triple cushion shot” chain of reasoning to link its actions to the Congressional objective.⁴⁵ Rather, this transaction provides the Commission an opportunity for a direct strike into the corner pocket – unleashing the combined company’s deployment of advanced broadband services and broadband infrastructure investments.

Faster Broadband Speeds. Comcast has invested substantially in advanced broadband technology, system upgrades, and innovative services to meet consumer demand and increased use of broadband. Those investments exceed {{ }} since 1996 alone. For example, Comcast invested over a billion dollars to deploy DOCSIS 3.0 and migrate its systems to all-digital. As a result of its commitment to a full network upgrade, Comcast has deployed some of the industry’s fastest speeds⁴⁶ – both upstream and downstream. As the graph below shows, Comcast has increased Internet speeds 12 times in the past 12 years, with Comcast’s top

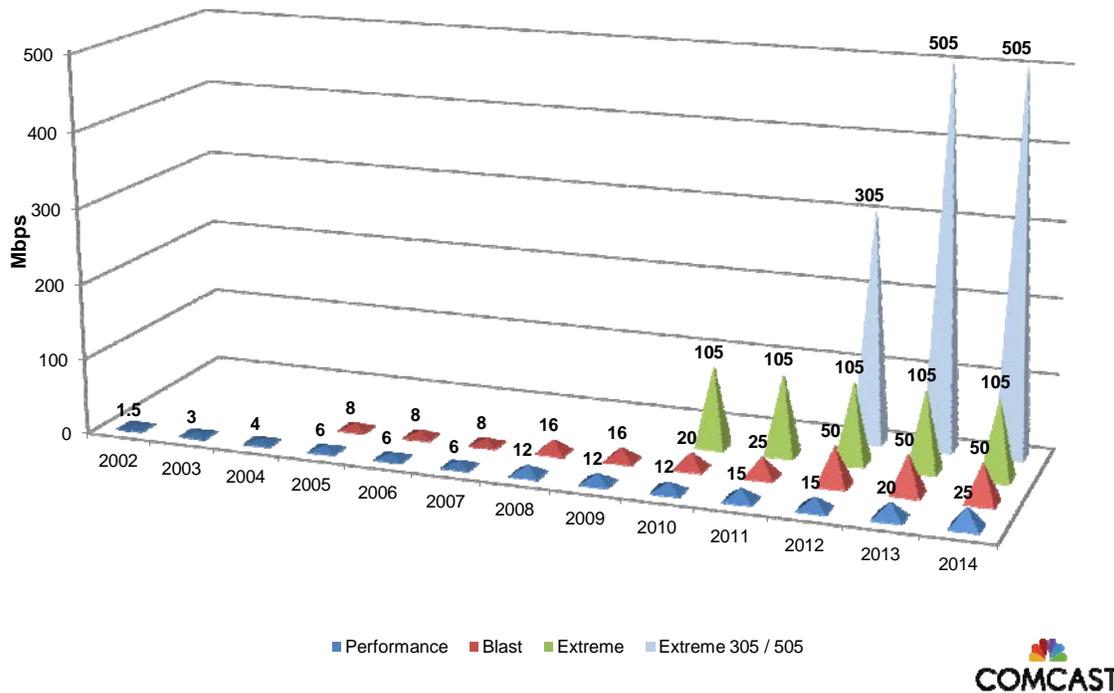
⁴⁴ *Id.* § 1302(b).

⁴⁵ *See Verizon v. FCC*, 740 F.3d 623, 659-60 (D.C. Cir. 2014).

⁴⁶ *See* FCC, Office of Eng’g & Tech. & Consumer & Governmental Affairs Bureau, *A Report on Consumer Wireline Broadband Performance in the U.S.* (Feb. 2013), available at <http://www.fcc.gov/measuring-broadband-america/2013/February#Chart1>; Ookla, *Comcast Broadband Performance*, <http://www.speedtest.net/isp/comcast> (last visited Mar. 30, 2014).

residential broadband speed increasing more than 30-fold since just five years ago.⁴⁷ Due to its past and ongoing investments in network infrastructure, Comcast will have the network capacity to continue to increase speeds over time.

XFINITY Internet Speeds 2002 – 2014: Increased Speeds 12 Times in 12 Years



This is no accident: The company is philosophically committed to making the investments necessary to ensure that its network is not only robust for today’s needs but capable of evolving to meet tomorrow’s consumer and business demand. Over one-third of Comcast customers are on speed tiers with speeds of 50 Mbps/10 Mbps or more. More generally,

⁴⁷ As broadband speeds have increased again and again and again, Comcast has consistently reduced the average price Comcast’s customers pay on a per-Megabit basis.

Comcast historically has doubled the size of its broadband network capacity every 18 months.⁴⁸ In 2013 alone, Comcast added over {{ }} optical nodes, effectively doubling the capacity to customers in neighborhoods served by these nodes.

Comcast’s commitment to providing cutting-edge broadband services recently earned it a 2013 Best Practice Award from Frost and Sullivan, which ranked Comcast first among all North American broadband providers in “Technology Innovation.”

TWC too has invested significantly in advanced broadband technologies like DOCSIS 3.0, and has upgraded its network to bring faster speeds. Nevertheless, its transition to all-digital technology, which is necessary to free up the additional bandwidth needed to provision higher speeds, is complete in only approximately 17 percent of its footprint.⁴⁹ In contrast, Comcast undertook a five-year effort to transition to all-digital, which it completed ahead of schedule in 2012. As a result of this transition, Comcast typically bonds 8 QAM channels together in its systems, and its most popular speed tier is 25 Mbps downstream and 5 Mbps upstream across its footprint. TWC, meanwhile, bonds only 4 QAM channels in nearly half its systems (only a little over a third of the TWC systems bond 8 QAM channels), and its most popular speed tier is 15 Mbps downstream and 1 Mbps upstream in most areas.

Put differently, both companies ensure that customers have access to basic broadband service: [[]] percent of Comcast customers and [[]] percent of TWC customers enjoy downstream speeds of at least 3 Mbps, based on December 2013 data.⁵⁰ The companies diverge

⁴⁸ See David L. Cohen, *White House Reports on U.S. Broadband Successes and Challenges*, Comcast Voices (June 17, 2013), <http://corporate.comcast.com/comcast-voices/white-house-reports-on-u-s-broadband-success-and-challenges>.

⁴⁹ See Ian Olgeirson, *Charter, Time Warner Cable Lag in All-Digital Push To Convert CapEx into Capacity*, SNL Kagan (Jan. 17, 2014).

⁵⁰ Israel Decl. ¶ 168 n.225. These and other speed calculations are based on Applicants’ December 2013 Form 477 data.

at the higher downstream speeds, however: [] [] percent of Comcast customers have downstream speeds of 25 Mbps or above, while only [] [] percent of TWC customers enjoy those speeds.⁵¹ A similar differential in upstream speeds is also notable: As of December 2013, [] [] percent of Comcast’s broadband customers and only [] [] percent of TWC’s customers had upstream connection of at least 3 Mbps.⁵² Comcast also has deployed significantly more DOCSIS 3.0 modems than TWC – [] [] (approximately [] [] percent of Comcast customers) compared to TWC’s [] [] (approximately [] [] percent of TWC customers).

Broadband Speed Summary		
Speed Category	Comcast	TWC
≥ 3 Mbps <i>downstream</i>	[] []	
≥ 25 Mbps <i>downstream</i>		
≥ 3 Mbps <i>upstream</i>		
Percentage of Customers with DOCSIS 3.0 Modems		[] []

In these and other respects, there is no doubt that customers in the TWC markets will benefit directly from the substantial upgrades that Comcast intends to make (and has the expertise and resources to make) to the TWC broadband service. While TWC recently announced plans to upgrade its broadband speeds to 75 percent of its footprint over three years,

⁵¹ *Id.* ¶ 168 tbl. 2.

⁵² *Id.* ¶ 169 tbl. 3. While TWC’s upstream speeds are more than adequate for current uses, the applications of tomorrow may require even more upstream capacity. For example, today Skype recommends 1.5 Mbps upstream speed for HD-quality video calls. *See How Much Bandwidth Does Skype Need*, Skype, <https://support.skype.com/en/faq/FA1417/how-much-bandwidth-does-skype-need> (last visited Mar. 30, 2014). The upstream speed differential between Comcast and TWC is even more pronounced at the highest end tiers, with Comcast’s fastest widely available residential broadband tier offering upstream speeds up to 100 Mbps while TWC’s fastest tiers offer 5 Mbps upstream.

Comcast intends to extend its higher speeds and related consumer benefits to the TWC systems on an accelerated and more cost-efficient basis than TWC could accomplish on its own. The goal would be to bring the TWC services up to Comcast levels. Thus, for example, TWC customers currently on the 15 Mbps/1 Mbps tier would see their speeds increase to 25 Mbps/5 Mbps.⁵³

And none of this accounts for the next generation of upgrades the combined company would bring to consumers across its footprint in the next few years. Comcast is actively pursuing next-generation technologies that will provide additional significant speed benefits to its broadband customers. It already has plans to invest significantly in capacity and network-related initiatives over the next three years; post-transaction, TWC's systems will be part of those plans (at appropriate incremental levels of investment), and the company as a whole will be able to scale these investments more efficiently.⁵⁴

CCAP. Converged Cable Access Platform ("CCAP") is a new technology that will enable Comcast to bond 16 or more downstream QAM channels and 8 upstream QAM channels to deliver downstream speeds in excess of 250 Mbps and upstream speeds in excess of 50 Mbps over Comcast's existing HFC network plant. Comcast has begun deployment of CCAP technology and will have it deployed to about [] percent of its footprint by the end of this year, [] percent by the end of 2015, and 100 percent in 2016. TWC currently is deploying CCAP technology to several markets (including New York and Los Angeles), and has announced plans to do so to 75 percent of its footprint in the coming years. This transaction will

⁵³ Angelakis Decl. ¶ 23

⁵⁴ *Id.* ¶¶ 22-23.

enable Comcast to bring CCAP-enabled Cable Modem Termination Systems (“CMTSes”) to all of TWC’s customers, and more quickly than TWC could alone.

DOCSIS 3.1. The CCAP technology upgrades, in turn, will facilitate the deployment of the next generation of cable modem technology – DOCSIS 3.1 – which Comcast expects to start deploying soon after the expected finalization of the specifications in 2015 (assuming equipment availability), ahead of any other broadband provider. DOCSIS 3.1 technology will be capable of delivering speeds of several Gigabits per second. This is the most economically scalable broadband architecture in the marketplace, and it will take advantage of Comcast’s (and, with this transaction, TWC’s) substantial infrastructure investments over the past decade. The broader scale afforded by the larger combined company will mean that ultra-fast broadband capability made possible by DOCSIS 3.1 will be deployed not only more quickly to the acquired TWC systems than it would be otherwise, but also on a more cost-efficient basis across the combined company’s footprint.⁵⁵

As it plans for the DOCSIS 3.1 rollout, Comcast continues to innovate. Last year, for example, Comcast demonstrated that its network is capable of delivering 3 Gbps downstream.⁵⁶ It also successfully trialed the first *1 Terabit* connection on a portion of its network from Ashburn, VA to Charlotte, NC.⁵⁷ This is believed to be the first trial in which live data traffic was carried at this speed on an existing, commercial network.⁵⁸ Approval of the transaction will

⁵⁵ *Id.* ¶¶ 23-24.

⁵⁶ See Press Release, Comcast Corp., The Future of Broadband Speed and 4K Ultra HD Video (June 11, 2013), <http://corporate.comcast.com/news-information/news-feed/comcast-demonstrates-the-future-of-broadband-speed-and-4k-ultra-hd-video>.

⁵⁷ See Press Release, Ciena Corp., Comcast Conducts Industry’s First Live 1 Terabit Network Trial with Ciena’s 6500 Converged Packet Optical Solution (Oct. 22, 2013), <http://www.ciena.com/about/newsroom/press-releases/Comcast-Conducts-Industrys-First-Live-1Terabit-Network-Trial-with-Cienas-6500-Converged-Packet-Optical-Solution.html>.

⁵⁸ *Id.*

allow TWC customers to benefit from Comcast’s investments and culture of innovation and experimentation.

Backbone Investments. The scale and geographic efficiencies created by the transaction will facilitate Comcast’s continued investment in and deployment of its backbone and dark fiber network, and may even accelerate these efforts. Comcast and TWC have independently developed their own national core backbone infrastructure. By combining the companies’ core networks, the transaction will lead to additional innovations around capacity and architecture that will allow Comcast to reach more commercial customers on a single network with potentially reduced latency for national enterprise customers.⁵⁹ The additional scale facilitated by the merger may accelerate Comcast’s contemplated upgrades to its national backbone infrastructure. Moreover, where Comcast has systems in geographic proximity to those of TWC systems, the transaction should make it profitable for Comcast to invest in new CRANs supported by new regional data centers.⁶⁰ Such investments would improve the quality of the network to the benefit of residential and business customers, as well as edge providers, through, among other things, improved scalability and resiliency of the network, lower latency through the deployment of more fiber, and increased points of interconnection.⁶¹

Broadband Promises Made, Promises Kept. In its prior transactions with AT&T Broadband and Adelphia, Comcast explained how the increased scale and synergies made possible by those mergers would lead to substantial consumer benefits in terms of accelerated deployment of advanced digital services and increased network investment, among other things.

⁵⁹ Israel Decl. ¶ 187.

⁶⁰ *Id.* ¶ 188; Rosston/Topper Decl. ¶ 60.

⁶¹ Israel Decl. ¶ 189; Rosston/Topper Decl. ¶ 101 n.98.

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The Commission recognized those benefits and approved both transactions,⁶² and Comcast followed through on each of its investment and deployment commitments, often exceeding them.

For example, after the Commission approved its acquisition of AT&T Broadband at the end of 2002, Comcast invested over \$8 billion in capital improvements to upgrade its cable systems and build out a record 53,000 miles of fiber during 2004. Not only did Comcast meet every upgrade target, but it also exceeded its already aggressive construction plans by over 15 percent, thus ensuring that 99 percent of its customers had access to a two-way broadband network.⁶³ After its acquisition of customers from Adelphia, Comcast invested billions to bring the systems it acquired up to Comcast's standards, and did so in record time. Since then, Comcast has continued to transform its network again and again. This is its *modus operandi* and its reputation, and it will do the same in TWC areas.

⁶² See, e.g., *Comcast-AT&T Broadband Order* ¶ 183 (“We agree with Applicants that the merged entity is likely to accelerate the deployment of broadband services in AT&T service areas. . . . Comcast appears to have a greater ‘ability to manage an accelerated program for upgrading its plant while maintaining its operating margins.’ We believe that applying this expertise to the AT&T cable systems is likely to have a positive impact on the deployment of broadband to AT&T subscribers that currently do not have access to those services.”) (citation omitted). Comcast and TWC each demonstrated this to the Commission in 2006. See *Adelphia Order* ¶ 256 (“[W]e find it more likely than not that the proposed transactions will have a positive impact on the deployment of certain advanced services to Adelphia subscribers.”); *id.* ¶ 257 (“We also find it likely that Comcast and Time Warner will improve the quality and availability of advanced services on Adelphia’s systems and that Adelphia subscribers will benefit from the transactions in this regard. Comcast’s and Time Warner’s timely deployment of advanced services on their own systems, especially those systems that Comcast acquired from AT&T Broadband, suggests that they will further deploy advanced video services, facilities-based telephony service, and high-speed Internet service on Adelphia’s systems. We also find that the Applicants have provided sufficient information to conclude that the upgrades likely will occur in the near future.”).

⁶³ See *Applications for Consent to the Assignment and/or Transfer of Control of Licenses from Adelphia Commc’ns Corp. (and Subsidiaries, Debtors-In-Possession), Assignors, to Time Warner Cable Inc. (Subsidiaries), Assignees, Adelphia Commc’ns Corp., (and Subsidiaries, Debtors-In-Possession), Assignors and Transferors, to Comcast Corp. (Subsidiaries), Assignees and Transferees*, Applications and Public Interest Statement of Adelphia Commc’ns Corp., Comcast Corp., and Time Warner Inc., MB Docket No. 05-192, at 33 (May 18, 2005). In recognition of these and other achievements, Comcast was named Operator of the Year by Multichannel News in 2003. Mike Farrell, *Bigger. Better.* Multichannel News, Sept. 28, 2003, available at <http://bit.ly/110rqC6> (noting that, with respect to the upgrade of the former AT&T systems, Comcast “outperformed even its own stated expectations”).

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More recently, Comcast has met or exceeded the broadband-related commitments it made in the NBCUniversal transaction.⁶⁴ In particular:

- Comcast surpassed the NBCUniversal Conditions’ three-year build-out milestones by (i) expanding its broadband network by approximately 6,300 miles (the Conditions required 4,500 miles over three years),⁶⁵ and (ii) extending its broadband plant to over 715,000 additional homes (the Conditions required 400,000). Comcast extended its broadband infrastructure to 33 communities in 2011, exceeding its six-community commitment.
- Comcast has also exceeded the requirement to offer a broadband tier of at least 12 Mbps downstream speed (and 5 Mbps upstream) in all Comcast DOCSIS 3.0 markets. The “Performance” tier in all markets is 25/5 Mbps speed, and a 105 /20 Mbps tier is available in almost the entire footprint.
- Comcast added courtesy broadband and video accounts to over 650 schools, libraries, or other community institutions in underserved areas (the Conditions required 600).⁶⁶

Now in a more dynamic, competitive, and far more resource-intensive marketplace, Comcast is poised – through the proposed acquisition of TWC – to revamp existing networks yet again, and to bring even greater benefits to millions of consumers. Comcast’s proven track record means that the Commission can be assured that Comcast will deliver on the broadband-related and other benefits it has described in connection with this transaction.

Better and More Convenient Wi-Fi In and Outside the Home. The transaction will also drive benefits through deployment of advanced Wi-Fi equipment and networks – both within and outside consumers’ homes. The quality of broadband service depends not only on the “last mile” infrastructure but also the delivery of the signal through the last few yards, so the availability of high-speed Wi-Fi gateways has a significant impact on the consumer’s experience.

⁶⁴ Moreover, as described further in Section IV.E.1 below and detailed in Exhibit 9, Comcast has delivered on all of its commitments made in the NBCUniversal transaction.

⁶⁵ Third Annual Report of Compliance with Transaction Conditions, MB Docket No. 10-56, at 19 (filed Feb. 28, 2014), <http://corporate.comcast.com/images/MB-10-56-C-NBCU-Annual-Compliance-Report-2013-2014-02-28.pdf> (“*Third Annual Compliance Report*”).

⁶⁶ *Third Annual Compliance Report* at 20.

Comcast has led the industry – not just the cable industry, but all broadband providers – in rolling out in-home Wi-Fi gateways that give customers the nation’s fastest wireless speeds and excellent performance over their home wireless network (these gateways are capable of speeds of up to 270 Mbps as compared to speeds of 85 Mbps from the prior generation devices).⁶⁷ Comcast has already deployed these gateways to approximately eight million households, where consumers now enjoy faster speeds and better performance over their home wireless network.⁶⁸ In contrast, TWC only recently announced plans to begin deploying advanced in-home Wi-Fi gateways. This, in part, reflects the fact that scale is important in purchasing and deploying such equipment – and even more so for investing in the next generation of the technology. So the transaction will not only ensure that TWC customers enjoy access to today’s best gateway devices, but will help position the company to offer *all* its customers tomorrow’s upgrades.⁶⁹

The substantial broadband infrastructure investment made possible by this transaction will also lead to greater access to many more *public* Wi-Fi hotspots to qualified Xfinity customers – a substantial consumer benefit.⁷⁰ A Wi-Fi network becomes much more valuable as its coverage becomes more ubiquitous.⁷¹ Comcast has made Wi-Fi deployment a central focus of its investment and service strategy and is in the process of building one of the largest and most

⁶⁷ See Rob Slinkard, *Newest Xfinity Wireless Gateway Powers Connected Home with the Fastest WiFi in the Nation*, Comcast Voices (Apr. 26, 2013), <http://corporate.comcast.com/comcast-voices/newest-xfinity-wireless-gateway-powers-connected-home-with-fastest-wifi-in-the-nation>.

⁶⁸ See *id.*

⁶⁹ As Drs. Rosston and Topper explain, one such example of innovation arising from scale economies is whole home, cloud-based management tools, like parental controls and antivirus software, that can be implemented across all devices in the home, rather than on a per-device basis. Because the development of this technology requires significant fixed cost investments, the additional scale afforded by the transaction will allow the combined company to develop these whole home tools more efficiently. See Rosston/Topper Decl. ¶ 94.

⁷⁰ See Israel Decl. ¶¶ 191-92.

⁷¹ Rosston/Topper Decl. ¶ 96.

robust Wi-Fi networks in the nation to give its broadband customers more flexibility and mobility, including Wi-Fi access at public venues like sports arenas. Customers are making full use of this service. For example, in February alone, there were over [] unique users with approximately [] unique devices on the Xfinity WiFi network. Xfinity WiFi hotspots come in three different categories: (1) Outdoor (e.g., hanging off a cable wire); (2) as part of the service provided to small- and medium-sized businesses (“SMBs”); and (3) Neighborhood Hotspots (Wi-Fi residential gateways that offer a supplemental public pathway for other Xfinity users, without affecting the host customer’s service and without needing the host’s Wi-Fi password). In less than three years, Comcast has deployed approximately 870,000 Xfinity WiFi access points in its footprint (about [] of which are Neighborhood Hotspots in customers’ homes).⁷²

Public awareness of the benefits of this early-stage initiative is increasing,⁷³ and usage is steadily growing. In fact, users connecting to Neighborhood Hotspots utilize them for longer periods of time, with their sessions lasting three times as long as sessions on Outdoor hotspots and with users consuming almost three times as much data.⁷⁴

TWC has built out its own Wi-Fi network in certain of its markets (primarily in New York and Los Angeles), although to a lesser degree than Comcast, having thus far deployed only

⁷² See Jeff Baumgartner, *Comcast Marches Towards 1 Million Wi-Fi Hotspots*, Multichannel News, Mar. 5, 2014, available at <http://www.multichannel.com/distribution/comcast-marches-toward-1-million-wi-fi-hotspots/148678>. The fact that Comcast’s current Wi-Fi hotspot total has increased to this level from just 43,000 hotspots one year ago underscores the substantial investments and commitment Comcast has made to its Wi-Fi initiatives.

⁷³ Robert Channick, *Comcast Turning Chicago Homes into Public Wi-Fi Hotspots*, Chi. Trib., Mar. 5, 2014, available at http://articles.chicagotribune.com/2014-03-05/business/chi-chicago-public-wifi-comcast-20140304_1_xfinity-wi-fi-moffettnathanson-public-wi-fi-hot-spots/2.

⁷⁴ Overall Xfinity WiFi usage is growing. See Israel Decl. ¶ 192 (“[T]he average Comcast broadband user (excluding home subscribers in their own home) consumes approximately [] gigabytes of data per month via Wi-Fi, a figure that has increased by [] percent over the past year.”).

29,000 Wi-Fi access points in its footprint and with no equivalent of Neighborhood Hotspots to date. To be sure, Comcast and TWC are already both part of a CableWiFi initiative that allows Comcast and TWC customers to use certain Wi-Fi hotspots in each of their respective markets. But the transaction will provide a more seamless fabric of Wi-Fi connectivity across the combined company's footprint.⁷⁵ The combined company will enjoy the geographic reach, economies of scale, customer density, and return on investment needed to expand Wi-Fi hotspots across the combined footprint, in part because "Comcast will internalize the benefits of a greater number of Wi-Fi access points to legacy Comcast customers who travel in the TWC footprint, and vice versa, because offering a broad Wi-Fi footprint makes Comcast and TWC more attractive to consumers."⁷⁶

This will be an important consumer benefit in its own right, by enhancing consumers' wireline access.⁷⁷ Wider availability of Wi-Fi hotspots means that customers can use advanced devices in more places, more conveniently.⁷⁸ In addition, ubiquitous and robust Wi-Fi has direct and tangible benefits for public safety, as was demonstrated during the Boston Marathon bombing.⁷⁹ The extension and expansion of the combined company's Wi-Fi network will provide a broader platform for the "innovation and decentralized investment that has been a

⁷⁵ Angelakis Decl. ¶ 25.

⁷⁶ Israel Decl. ¶ 195.

⁷⁷ Non-Xfinity Internet customers can also take advantage of greater Wi-Fi availability outside the home. Comcast offers hourly, daily, and weekly Xfinity WiFi access passes for non-customers. *Xfinity WiFi*, Comcast Corp., <http://www.comcast.com/wifi/default.htm?SCRedirect=true> (last visited Mar. 29, 2014).

⁷⁸ In addition, policymakers have acknowledged that unlicensed spectrum technologies like Wi-Fi are "vital to our economy . . . [,] have transformed the personal electronics industry, and are poised to make substantial contributions to the retail, manufacturing, and other sectors." White House Office of Science and Technology Policy & The National Economic Council, *Four Years of Broadband Growth*, at 20 (June 2013).

⁷⁹ After the Boston Marathon attack, cellular networks were overloaded. In response, "Comcast opened its network to anyone – including non-Comcast subscribers – with a Wi-Fi-enabled device to establish communications with loved ones, leading to significantly increased usage of our Xfinity WiFi network in Boston and the surrounding communities." *Hearing on State of Wireless Communications Before the S. Comm. on Commerce, Sci., and Transp.*, 113th Cong. (2013) (Written testimony of Thomas E. Nagel, Senior Vice President, Comcast Corp., at 6).

hallmark of the Wi-Fi boom” across the Internet ecosystem.⁸⁰ As Commissioner Rosenworcel has recognized, “Wi-Fi is an essential onramp to the Internet” that “contribut[es] between \$16-37 billion to our economy annually.”⁸¹

But it could have an additional collateral benefit as well. A ubiquitous Wi-Fi network built by Comcast could make a “Wi-Fi-first” service, which combines commercial mobile radio service with Wi-Fi, a more viable alternative.⁸² One prominent commenter has suggested this could be “a highly disruptive wireless offering,” and “a game changer.”⁸³

b. The Transaction Will Increase Broadband Competition and Enhance the Broadband Ecosystem.

The transaction will also enhance the broadband ecosystem by spurring increased competition among broadband providers and fostering the virtuous cycle of innovation by edge providers.

i. Broadband Providers Will Be Spurred To Compete More Effectively.

The broadband market is competitive today, and this transaction will make it more so. By making the combined company a more effective competitor against traditional and emerging broadband providers, the transaction will spur other providers to act on powerful incentives to

⁸⁰ See Comments of Open Technology Institute at the New America Foundation, Public Knowledge, GN Docket No. 12-354, at 9 (Dec. 5, 2013); New America Foundation, *Solving the “Spectrum Crunch:” Unlicensed Spectrum on a High-Fiber Diet*, at 4 (Fall 2013), available at <http://www.twcresearchprogram.com/publications.php>.

⁸¹ Remarks of FCC Commissioner Jessica Rosenworcel, *Wi-Fi in the 5 GHz Fast Lane*, The National Press Club (Mar. 7, 2014), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0307/DOC-325938A1.pdf.

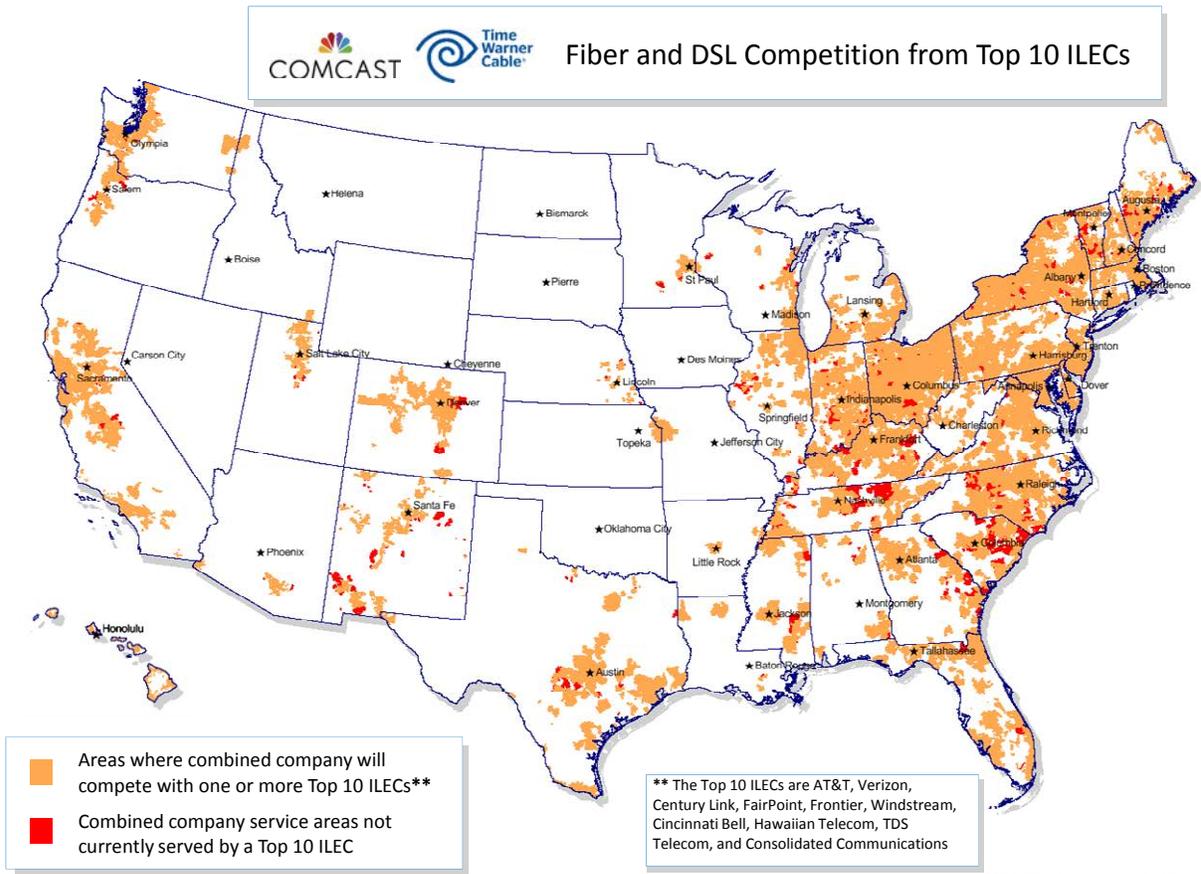
⁸² See Israel Decl. ¶ 197 (describing potential entry by combining Wi-Fi infrastructure with a mobile virtual network operator option); Rosston-Topper Decl. ¶ 99 & n.95 (same).

⁸³ Communications Daily, *Cable Operators Prepare for New Mobile Push with Verizon Wireless*, Sept. 4, 2012 (quoting Craig Moffett); Mike Dano, *Analyst: ‘Disruptive Wi-Fi/MVNO’ Products Coming from Cable Companies in 2014*, FierceWireless (June 27, 2013), <http://www.fiercewireless.com/story/analyst-disruptive-wi-fimvno-products-coming-cable-companies-2014/2013-06-27#ixzz2vgDB5CJu>.

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meet competition and win consumers. In response to the combined company's investments in broadband facilities, equipment, and speeds, AT&T, Verizon, CenturyLink, other ILECs, cable overbuilders, satellite providers, and wireless broadband providers will have every reason to improve and expand the quality of their broadband offerings.

Even considering only wireline ILEC Internet access service, competition is pervasive, and this does not account for cable overbuilders, satellite broadband, and wireless broadband. As shown in the map below, in 98.4 percent of Comcast and TWC's combined service areas, customers have a choice between Comcast or TWC and one or more top-10 ILEC competitors. More specifically, the orange in the map represents the combined service areas of Comcast and TWC where a top-10 ILEC offers Internet access service. The red shows the very few areas (representing about 1.6 percent of Comcast and TWC's service areas) not currently served by a top-10 ILEC.



Cable & Telecom Boundaries Provided by **GeoResults**

Service areas shown represent areas in which the top 10 ILEC providers offer fiber and/or DSL-based Internet access service of any speed. Service area boundaries have been estimated using census block data, wire center locations, and other publicly available information.

Likewise, as Dr. Israel’s report illustrates, “the vast majority of consumers have access to multiple fixed broadband competitors.”⁸⁴ According to recent FCC data, approximately 97 percent of households are located in census tracts where at least two or more fixed broadband providers reported offering at least 3 Mbps downstream and 768 kbps upstream, and approximately 70 percent are located in census tracts where two or more providers reported

⁸⁴ Israel Decl. ¶ 43.

offering at least 10 Mbps downstream and at least 1.5 Mbps upstream.⁸⁵ Taking into account mobile broadband, consumers have even more options. Approximately 97 percent of households are located in census tracts where three or more fixed or mobile broadband providers reported offering at least 3 Mbps downstream and 768 kbps upstream, and over 80 percent are located in census tracts where two or more providers reported offering at least 10 Mbps downstream and at least 1.5 Mbps upstream.⁸⁶

And the transaction will spur only more competition. The entire history of the broadband industry in the United States is one of competitors constantly leapfrogging each other and spurring competitive responses. Twenty years ago, narrowband, dial-up services like AOL, Compuserve, and Prodigy offered maximum speeds of 56 kbps.⁸⁷ Led by Comcast and TWC, among others, the cable industry then took a risk and invested billions in cable modems and network upgrades to achieve higher speeds and facilitate the delivery of innovative services.⁸⁸ Telcos responded with ADSL – vastly increasing the speeds available over the telephone plant with a dedicated connection and exploiting the transmission capacity inherent in the high-frequency portion of the loop.⁸⁹ Cable responded with faster speeds for cable modem service.⁹⁰

⁸⁵ FCC, *Internet Access Services: Status as of December 31, 2012*, at fig. 5(a) (WCB Dec. 2013), http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db1224/DOC-324884A1.pdf.

⁸⁶ *Id.*, fig. 5(b).

⁸⁷ *See generally 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*, Report, 14 FCC Rcd. 2398 ¶ 31 n.31 (1999) (“*First Broadband Progress Report*”) (noting that “broadband Internet access was preceded by narrowband (56 kbps) Internet access”).

⁸⁸ In 1998, the Office of Plans and Policy noted that cable providers had been offering for several years “high-speed data, interactive computer and other Internet-based services.” *See generally* Barbara Esbin, Cable Services Bureau, FCC, *Internet Over Cable: Defining the Future In Terms of the Past*, OPP Working Paper No. 30, at 77 (Aug. 1998), available at http://transition.fcc.gov/Bureaus/OPP/working_papers/oppwp30.pdf.

⁸⁹ *See generally* Jonathan Kraushaar, FCC, Common Carrier Bureau, *Fiber Deployment Update End of Year 1996*, at 21 (1997), available at http://transition.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/Fiber/fiber96.pdf (noting that ADSL technology “expand[s] the capability of existing copper pairs”).

Telcos and new entrants in turn responded with fiber-to-the-home, fiber-to-the-premises (“FTTP”), fiber-to-the-curb, and fiber-to-the-node (“FTTN”) deployments,⁹¹ and cable responded again by developing and deploying higher levels of DOCSIS.⁹² Wireless broadband providers responded to all of this with their own 3G services that offered something no other competitor could – the ability to take your broadband with you.⁹³ And they quickly followed their 3G deployments with upgrades to 4G LTE technology that now provides speeds comparable to many of the wired broadband services consumers purchase.⁹⁴ More recently, telcos have begun investing in gigabit networks of their own, as well as pair bonding, vectoring, and other initiatives.⁹⁵ The marketplace is dynamic and will continue to be; no one knows quite what the future will hold.

⁹⁰ In 1999, the Media Bureau reported to Chairman Kennard that “Cable modem deployment spurs alternative broadband technologies,” and that “cable investment inherently spurs investment in DSL and vice versa.” FCC, Cable Service Bureau, *Broadband Today: A Staff Report to William E. Kennard, Chairman, Federal Communications Commission, On Industry Monitoring Sessions Convened by the Cable Services Bureau* at 33 (Oct. 13, 1999), available at <http://www.fcc.gov/Bureaus/Cable/Reports/broadbandtoday.pdf>.

⁹¹ See, e.g., *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*, Fifth Report, 23 FCC Rcd. 9615 ¶ 14 (2008) (“*Fifth Broadband Progress Report*”).

⁹² See, e.g., Mike Robuck, *DOCSIS 3.0 Arrives*, CED, Apr. 30, 2008, available at <http://www.cedmagazine.com/articles/2008/04/docsis-30-arrives>; Press Release, CableLabs, New Generation of DOCSIS Technology (Oct. 30, 2013), <http://www.cablelabs.com/news/new-generation-of-docsis-technology> (announcing developments in DOCSIS 3.1 specifications).

⁹³ See *Fifth Broadband Progress Report* ¶ 70 (noting that 3G technologies made consumers “increasingly able to connect through broadband connections to the Internet when they travel”).

⁹⁴ 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*, Eighth Broadband Progress Report, 27 FCC Rcd. 10342 ¶ 6 (2012) (“*Eighth Broadband Progress Report*”) (noting that mobile providers are “deploying new, faster, and more spectrally-efficient mobile network technologies, most notably Long Term Evolution (LTE), which offers advertised download speeds as high as 5–12 Mbps”).

⁹⁵ See, e.g., Press Release, AT&T, AT&T to Deliver First All Fiber 1 Gigabit Broadband Network to Austin (Oct. 1, 2013), <http://www.att.com/gen/press-room?pid=24841&cdvn=news&newsarticleid=37036&mapcode>; see also Israel Decl. ¶¶ 55-60 .

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The only certainty is that this leapfrogging is continuing and intensifying in the broadband industry. As the FCC recently affirmed,⁹⁶ investment in broadband shows no signs of slowing:

- Broadband capital expenditures have remained high and have even increased in recent years despite earlier upgrades (and despite challenging economic conditions), rising from \$64 billion in 2009 to \$68 billion in 2012.⁹⁷
- The Progressive Policy Institute identified the telecommunications/cable industry as one of its “Investment Heroes of 2013,” including Comcast, AT&T, and Verizon, which were in the top 10 list of these major investors for the third year in a row.⁹⁸
- Annual investment in U.S. wireless networks grew more than 40 percent between 2009 and 2012, from \$21 billion to \$30 billion, and exceeded investment by the major oil and gas or auto companies.⁹⁹
- According to a PCIA study, private investment in wireless infrastructure over the next 5 years will generate \$1.2 trillion in economic growth and create 1.2 million jobs.¹⁰⁰

This reality plays itself out in the day-to-day competitive marketplace in which Comcast and TWC operate. As shown above, the combined company will face nearly ubiquitous wireline broadband competition from ILECs offering DSL-based and/or fiber services, including FTTN services that rely on DSL to reach consumers’ homes. According to Dr. Israel, “[t]he competitive pressure imposed by wired telco providers is likely to increase over time as telcos

⁹⁶ FCC, Fact Sheet: Internet Growth and Investment (Feb. 19, 2014), http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0219/DOC-325653A1.pdf.

⁹⁷ See Patrick Brogan, *Updated Capital Spending Data Show Rising Broadband Investment in Nation’s Information Infrastructure*, USTelecom, at 1-2 (Nov. 4, 2013), <http://www.ustelecom.org/sites/default/files/documents/103113-capex-research-brief-v2.pdf>.

⁹⁸ See Diana G. Carew & Michael Mandel, Progressive Policy Institute, *U.S. Investment Heroes of 2013: The Companies Betting on America’s Future*, at 2-4 (Sept. 2013), http://www.progressivepolicy.org/wp-content/uploads/2013/09/2013.09-Carew-Mandel_US-Investment-Heroes-of-2013.pdf.

⁹⁹ White House Office of Science and Technology Policy & The National Economic Council, *Four Years of Broadband Growth*, at 2 (June 2013).

¹⁰⁰ Press Release, PCIA – The Wireless Infrastructure Association, *Wireless Infrastructure Investment Will Generate \$1.2 Trillion in Economic Activity and Create 1.2 Million Jobs* (Sept. 19, 2013), <http://www.pcia.com/pcia-press-releases/601-wireless-infrastructure-investment-will-generate-1-2-trillion-in-economic-activity-and-create-1-2-million-jobs>.

invest in new technologies, including FTTN and others, that improve the quality of their broadband services.”¹⁰¹ Indeed, contrary to the picture some have painted of DSL as a defunct service, between December 2008 and December 2012, DSL-based broadband connections grew at an average annual rate of 25 percent, *exceeding cable broadband’s pace of growth at an average annual rate of 18 percent.*¹⁰² Dr. Israel notes that “DSL is broadly deployed and the Commission considers it an effective broadband option.”¹⁰³ As Comcast has documented elsewhere, numerous DSL providers offer speeds equal to or exceeding the Commission’s broadband speed threshold at affordable prices.¹⁰⁴ For example, Verizon offers DSL service at speeds up to 15 Mbps, Frontier offers speeds up to 25 Mbps, and CenturyLink offers speeds up to 40 Mbps. And AT&T, CenturyLink, Frontier, and others are investing significantly in upgrading DSL service through new technologies such as VDSL2 and pair bonding.¹⁰⁵

Consider AT&T in particular – the largest telecommunications company in the United States (by revenues). AT&T’s DSL and FTTN U-verse services significantly overlap both Comcast and TWC – with U-verse currently provisioned at speeds up to 45 Mbps downstream – and AT&T has affirmed its plans to continue to enhance and expand these services. AT&T is currently in the middle of a three-year *\$6 billion* investment plan (called Project Velocity IP

¹⁰¹ Israel Decl. ¶ 57.

¹⁰² *Id.* ¶ 60. December 2012 is the most recent date for which FCC-reported data are available.

¹⁰³ *Id.*

¹⁰⁴ See Letter from Lynn R. Charytan, Senior Vice President, Legal Regulatory Affairs and Senior Deputy General Counsel, Comcast Corp., to Marlene H. Dortch, Secretary, FCC, MB Docket No. 10-56, Ex. A, Pt. 3 (Feb. 21, 2014) (detailing competitive standalone HSD options in Comcast’s top 30 markets).

¹⁰⁵ See *id.* CenturyLink represents the type of multifaceted investment ongoing today by wireline providers: “We have utilized and continued to utilize a balanced capital investment approach, including gigabit fiber, VDSL2, and pair bonding deployments to efficiently enable higher speeds, enhanced services to consumers and businesses in our markets.” CenturyLink, Inc., Q4 2013 Earnings Call, Tr. at 5 (Feb. 12, 2014); see also Robert W. Starr, Treasurer & SVP, Frontier Commc’ns Corp., Goldman Sachs TMT Leveraged Finance Conference, Tr. at 5 (Mar. 19, 2014) (noting Frontier is “compet[ing] against [cable] today on the residential and on the small business side and we’re taking share away from them on the residential side . . . [W]e think that our opportunities against the cable companies continue to be a very good one.”).

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(“Project VIP”) to expand its U-verse service to 33 million homes.¹⁰⁶ Dr. Israel notes that, “outside the U-verse footprint, AT&T will also upgrade ATM-DSLAMS to IP-DSLAMS for another 24 million households, allowing it to achieve speeds as high as 45 Mbps.”¹⁰⁷ And AT&T plans to offer speeds as high as 100 Mbps in the future.¹⁰⁸ As AT&T’s CEO Randall Stephenson has aptly described it, cable and telcos will be in an incessant “dogfight” for the next 20 years when it comes to broadband competition:

Somebody invests in technology and it gives them an advantage and they ride it for a while. Somebody comes along and they invest. . . . [Y]ou’re just going to continue to see bandwidth improvements over time. And it’s going to be a dogfight between us and cable for the next 20 years. I don’t see that changing. They will invest and they’ll step up. We’ll invest. It’ll go back and forth. But I feel really good that we’re doing very well against cable today.¹⁰⁹

Indeed, in response to the proposed transaction, Stephenson stressed:

[W]e came into 2014 really focused on completing our VIP build that’s our network infrastructure commitment that we began a little over a year ago, and [the transaction] puts a heightened sense of urgency on the VIP build. And we’re really going to be very, very aggressive pushing hard on completing all these various areas of VIP.¹¹⁰

For its part, Verizon appears just as eager to compete with its DSL and FiOS FTTP service, which presents substantial and well-known competition to both Comcast and TWC in significant parts of their service areas. As its spokesman said in response to the announcement of the Comcast/TWC transaction: “Verizon has a history of introducing the next big thing for

¹⁰⁶ See Press Release, AT&T, AT&T to Invest \$14 Billion to Significantly Expand Wireless and Wireline Broadband Networks, Support Future IP Data Growth and New Services (Nov. 7, 2012), <http://www.att.com/gen/press-room?pid=23506&cdvn=news&newsarticleid=35661&mapcode=>.

¹⁰⁷ Israel Decl. ¶ 59.

¹⁰⁸ See *id.* ¶ 57.

¹⁰⁹ Randall Stephenson, Chairman & CEO, AT&T, Inc., Goldman Sachs 22nd Annual Communacopia Conference, Tr. at 14 (Sept. 24, 2013).

¹¹⁰ Randall Stephenson, Chairman & CEO, AT&T, Inc., Morgan Stanley Technology, Media & Telecom Conference, Tr. at 3 (Mar. 6, 2014).

our video and Internet customers. This [transaction] just changes the name of the competitor in some of our markets.”¹¹¹ Verizon’s CFO more recently affirmed:

I compete against Time Warner Cable today. I compete against Comcast today. I’ll just compete against Comcast tomorrow and the way I view it is FiOS is a superior product to any of them because it is the only one that is fiber to the prem[ises]¹¹²

While telco DSL and fiber services make up the greatest share of fixed broadband competition that Comcast and TWC face, they are by no means the only source of such competition. The combined company also will continue to face significant competitive pressures from cable overbuilders such as WOW! and RCN; new and ambitious entrants such as Google Fiber; municipal providers; fixed wireless broadband services like Verizon’s HomeFusion; and satellite broadband offered by Hughes and WildBlue¹¹³ – with Dish aggressively developing plans for spectrum-based broadband offerings.¹¹⁴

Google, for example, is now deploying a competitive fiber network in several areas of the country. Notably, on February 19, 2014, Google announced plans to quadruple the number of cities in which it provides service, potentially launching in *nine* new metro areas. Comcast or TWC has a significant presence in eight of those nine areas (which are already served by

¹¹¹ Gautham Nagesh, *Comcast Sees Time Warner Cable Deal Boosting Broadband Competition*, Wall St. J., Feb. 21, 2014, available at <http://online.wsj.com/news/articles/SB10001424052702304275304579397541413329198> (quoting Verizon spokesman Ed McFadden).

¹¹² Fran Shammo, EVP & CFO, Verizon, Deutsche Bank Media, Internet and Telecom Conference, Tr. at 13 (Mar. 10, 2014).

¹¹³ The Commission recently recognized that “[s]atellite broadband has made significant improvements in service quality.” FCC, Office of Engineering and Technology and Consumer and Governmental Affairs Bureau, 2013 Measuring Broadband America Report – February 2013, at 7, available at <http://www.fcc.gov/measuring-broadband-america/2013/February#Background>.

¹¹⁴ See, e.g., Press Release, Sprint Corp., Sprint and Dish to Trial Fixed Broadband Service (Dec. 17, 2013), <http://newsroom.sprint.com/news-releases/sprint-and-dish-to-trial-fixed-wireless-broadband-service.htm>.

multiple other MVPDs and broadband providers).¹¹⁵ This means that millions of the combined company’s customers may soon have an additional choice of high-speed broadband service providers. And Google possesses the financial and technical wherewithal to expand Google Fiber to many additional markets.

Competitive forces are also present – increasingly and robustly so – via mobile wireless services offered by well-capitalized and aggressive national wireless providers. For a large number of Americans, wireless is already a meaningful broadband alternative.¹¹⁶ And it will become an increasingly effective competitor in the near future, as even bandwidth-intensive edge providers have recognized.¹¹⁷ This reality was reinforced when President Obama enlisted two wireless providers to help him achieve his goal of bringing ultra-high-speed Internet connectivity to schools and making it available to students at school, in the community, and at home.¹¹⁸ As

¹¹⁵ See John Brodtkin, *Google Fiber Chooses Nine Metro Areas for Possible Expansion*, Ars Technica, Feb. 19, 2014, <http://arstechnica.com/business/2014/02/google-fiber-chooses-nine-metro-areas-for-possible-expansion/>.

¹¹⁶ See Israel Decl. ¶¶ 61-62; Kathryn Zickuhr & Aaron Smith, Pew Research Center, *Home Broadband 2013* (Aug. 26, 2013), <http://www.pewinternet.org/2013/08/26/home-broadband-2013/> (“*Pew Home Broadband 2013*”).

¹¹⁷ As the head of MLB Advanced Media recently articulated in an interview, in response to the claim that “[t]he cable guys pretty much control broadband”:

How? We have telcos now. You’ve got wireless. The only pay TV business that’s growing now is U-[v]erse and FiOS. They’re owned by AT&T and Verizon. I don’t think you should discount what AT&T and Verizon can do without a landline – what they can do through the air. Who knows what this is going to look like?

* * *

A lot of our people watch our live games in 4G. . . . If you watch [a] live baseball game in 4G it looks pretty good and 5G is just round the corner.

David Lieberman, *Q&A: MLB Advanced Media CEO Bob Bowman on WWE Network, Sony’s Virtual Pay TV Plans, and What’s Next for Streaming Video*, Deadline (Jan. 21, 2014), <http://www.deadline.com/2014/01/qa-mlb-advanced-media-ceo-bob-bowman-on-wwe-network-sonys-virtual-pay-tv-plans-and-whats-next-for-streaming-video/> (quoting Bob Bowman).

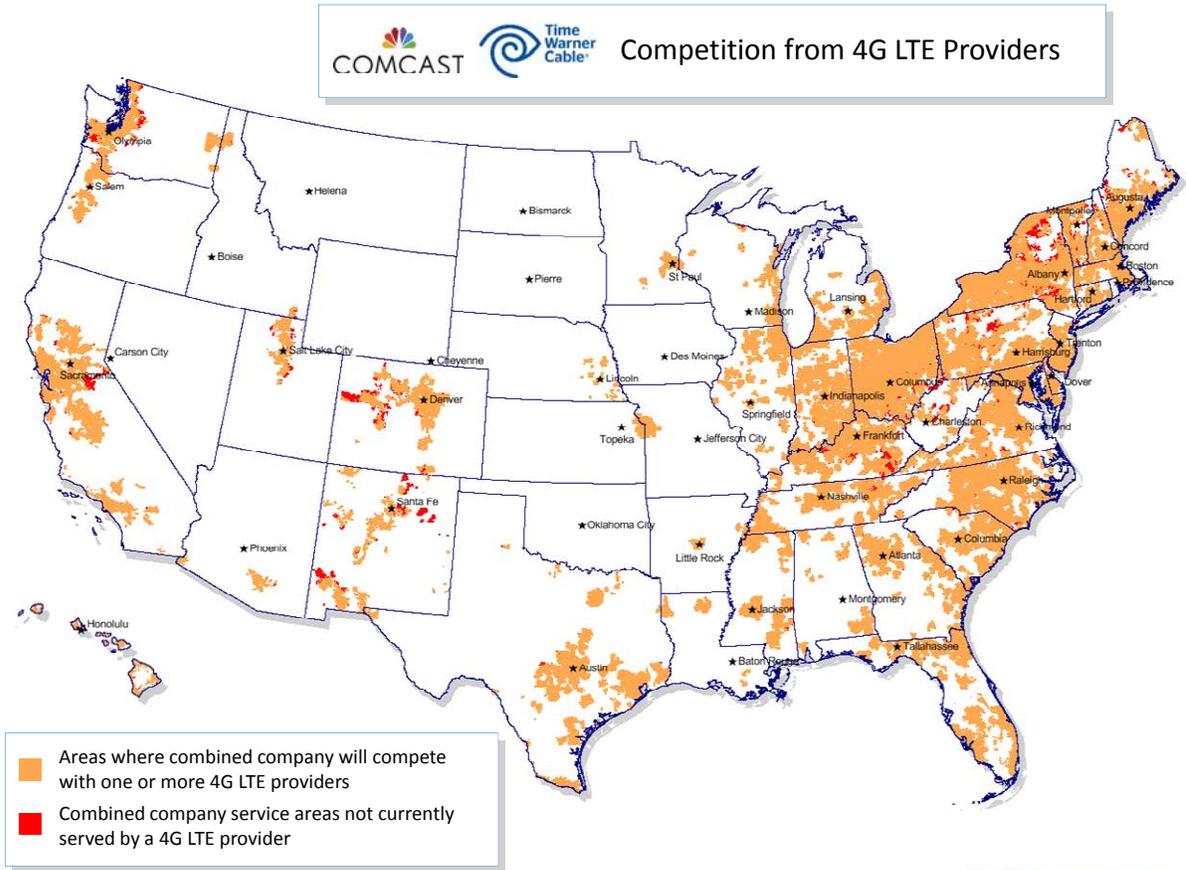
¹¹⁸ Karl Bode, *AT&T, Sprint Promise Free Wireless Service for Schools*, DSL Reports (Feb. 4, 2014), <http://www.dslreports.com/shownews/ATT-Sprint-Promise-Free-Wireless-Service-for-Schools-127609>. President Obama previously noted “innovative new mobile technologies hold the promise for a virtuous cycle – millions of consumers gain faster access to more services at less cost, spurring innovation, and then a new round of consumers benefit from new services. The wireless revolution has already begun with millions of American taking advantage of wireless access to the Internet. . . . In order to achieve mobile wireless broadband’s full potential, we need an

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wireless data speeds and capacity continue to increase substantially with the deployment of advanced services – including LTE, LTE-Advanced, and beyond – wireless broadband service will increasingly become even more competitive with wireline broadband.¹¹⁹ These developments will further enhance competition and benefit Comcast and TWC customers, virtually all of whom currently have access to 4G LTE service as illustrated in the map below. More specifically, the orange in the map represents those parts of the combined service areas of Comcast and TWC where a 4G LTE provider offers Internet access service. The red shows the very few areas not currently served by a 4G LTE provider.

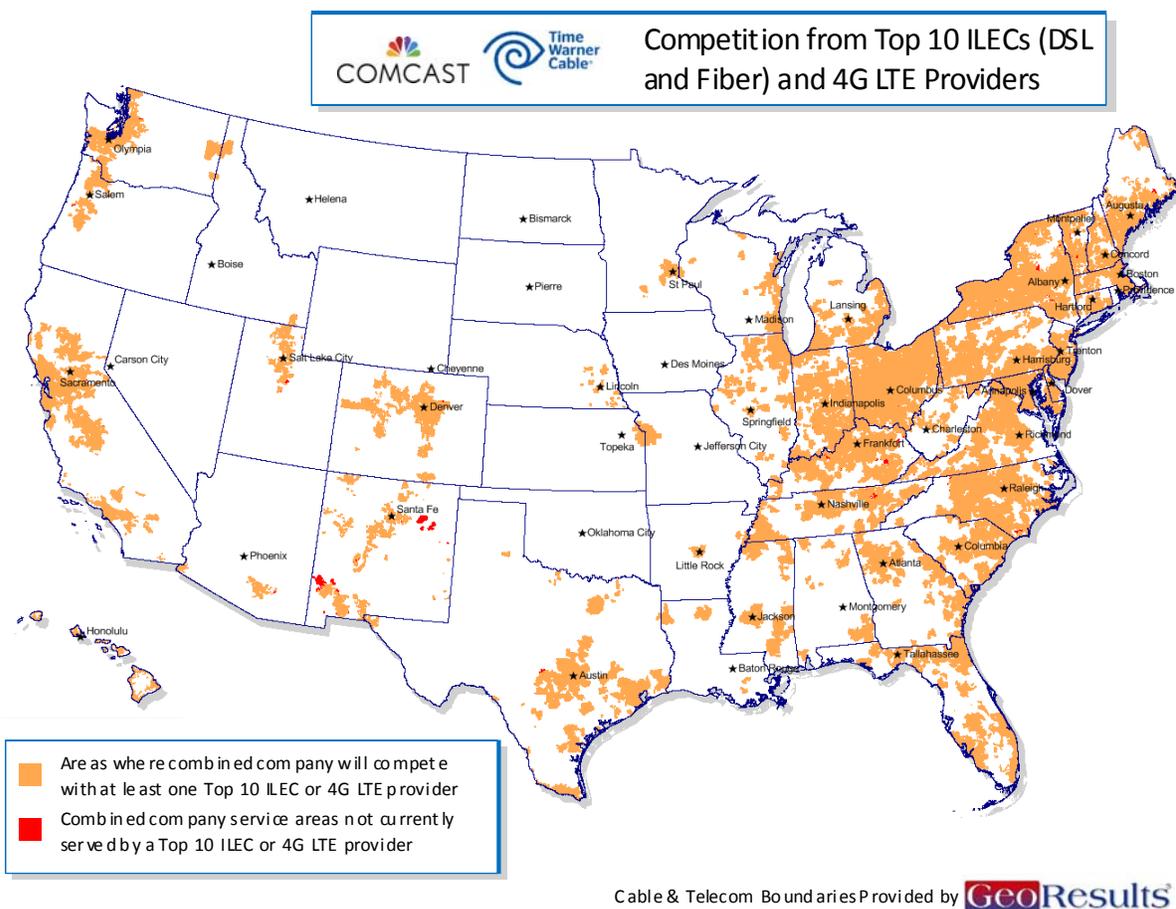
environment where innovation thrives” Office of the Press Secretary, Presidential Memorandum, *Unleashing the Wireless Broadband Revolution* (June 28, 2010), <http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution>.

¹¹⁹ Wireless providers see wireline providers as competition: Randall Stephenson, Chairman and CEO of AT&T, also observed that this transaction would spur AT&T’s advanced wireless build-out as well as its wired build-out. Randall Stephenson, Chairman & CEO, AT&T, Inc., Morgan Stanley Technology, Media & Telecom Conference, Tr. at 3 (Mar. 6, 2014).



Cable & Telecom Boundaries Provided by **GeoResults**

Moreover, when one considers the near-ubiquitous availability of top-10 ILECs plus 4G LTE providers, there are virtually no areas of the combined Comcast and TWC services areas where customers do not have one of these options, as shown in the map below.

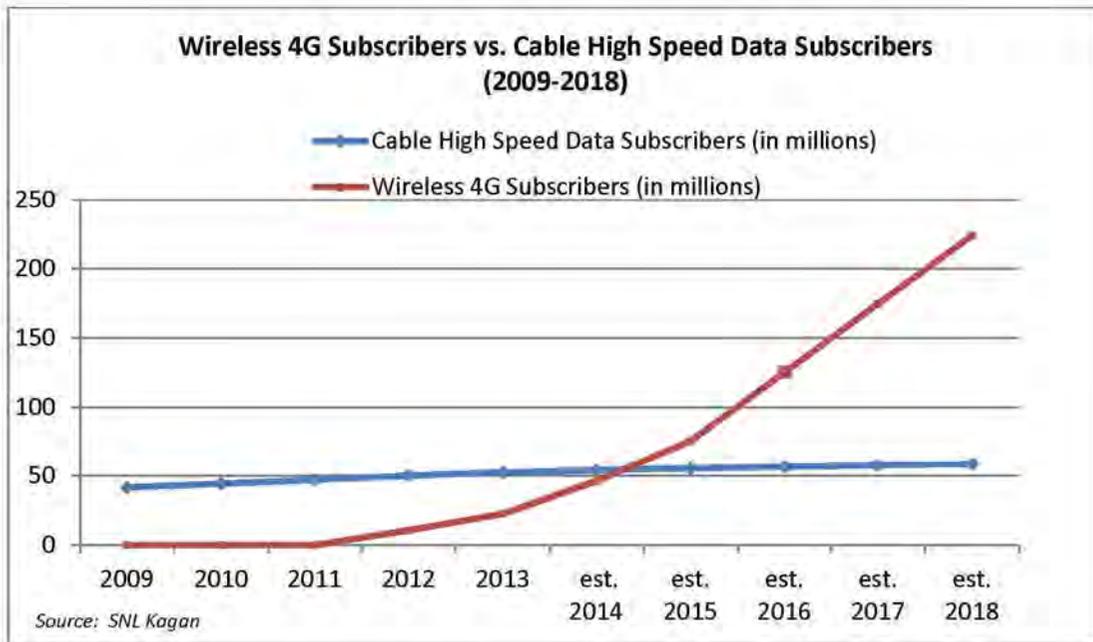


The Commission has repeatedly recognized the possibility of significant wireless broadband substitution – including in the *Adelphia Order* in 2006, the National Broadband Plan in 2010, and the most recent 706 Notice of Inquiry – as has the Department of Justice.¹²⁰ Similarly, as Dr. Israel notes, the cable industry is well aware of the possibility of material

¹²⁰ *Adelphia Order* ¶ 218 (noting the possibility that cable broadband would lose market share from emerging wireless broadband competitors); FCC, *Connecting America: The National Broadband Plan*, at 40-43 (2010), available at <http://www.broadband.gov/download-plan/> (discussing possibility of wireless substitution); *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Ninth Broadband Progress Report Notice of Inquiry, 27 FCC Rcd. 10523 ¶ 42 (2012) (“[H]igh speed, high quality, and mobility are all important characteristics of broadband service today. To what extent do Americans currently subscribe to mobile broadband as their only form of Internet access, and what demographic or geographic differences correlate with this choice?”); *Ex Parte* Submission of the U.S. Dep’t of Justice, GN Docket No. 09-51, at 10 (Jan. 4, 2010) (“It is premature to predict whether the wireless broadband firms will be able to discipline the behavior of the established wireline providers, but early developments are mildly encouraging. Notably, the fact that some customers are willing to abandon the established wireline providers for a wireless carrier suggests that the two offerings may become part of a broader marketplace.”).

mobile broadband substitution for cable broadband within the next few years.¹²¹ With the increasing ubiquity of 4G wireless connectivity and the multitude of enabled devices including smartphones and tablets, these predictions are increasingly becoming a reality.

Looking out to 2018, SNL Kagan predicts that there will be *224 million* unique 4G subscriptions active in the United States, up from 22.6 million at year end 2013.¹²²



That is – literally – an order of magnitude of growth over a five-year period, easily lapping the growth of cable broadband service during the past five years (and predicted growth over the next five).¹²³ And 4G wireless broadband technology can deliver speeds that rival those of wireline cable and telco companies – well over 50 Mbps downstream (and averaging in the double

¹²¹ See Israel Decl. ¶¶ 64-65 (II

II).

¹²² SNL Kagan, Covered Pops & Subscribers by Technology in U.S. Wireless (July 2013). Similarly, Cisco predicts the number of 4G connections in North America in 2018 to be 372 million. *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2013–2018*, at 36 (2014).

¹²³ See SNL Kagan, U.S. Multichannel Industry Benchmarks (detailing the number of cable high speed data subscribers since 2009 and estimating the number of subscribers through 2018).

digits).¹²⁴ Recognizing this enormous marketplace opportunity, Masayoshi Son, Chairman and CEO of SoftBank, recently observed that “[u]p to now wireless was much slower speed, more expensive, so it was not [an] alternative . . . But I’d like to give [it] a shot. . . . The cable that you are getting on the average in the States is 50 megabits per second I’d like to provide up to 200 megabits per second[.]”¹²⁵ As Dr. Israel explains, while pricing for wireless broadband plans with substantial data usage is higher than for other broadband services today, these prices have and will continue to come down over time as wireless providers achieve more capacity.¹²⁶ And, for many lighter broadband users, this is not an issue even today.

ii. Edge Providers Will Benefit from the Transaction.

As the Commission has recognized, speed and reliability in the last-mile and in the backbone spur innovation at the edges and all along the network, which in turn feeds consumer demand for broadband *and* edge services. Broadband investment in last mile and backbone transit facilities, for example, has provided the speeds and reduced transport costs to make possible what Chairman Wheeler described as “tremendous growth in the online video market,” nearly tripling revenues for online video between 2010 and 2012.¹²⁷ Indeed, in emphasizing the “impact of Internet video,” Commissioner Pai has noted that the “largest Internet video provider,

¹²⁴ Sascha Segan, *Fastest Mobile Networks 2013*, PCMag, June 17, 2013, <http://www.pcmag.com/article/0,2817,2420334,00.asp>; Israel Decl. ¶ 61.

¹²⁵ Masayoshi Son, CEO, SoftBank Corp., *The Promise of Mobile Internet in Driving American Innovation, the Economy and Education*, Tr. at 12 (Mar. 11, 2014), http://cdn.softbank.jp/en/corp/set/data/irinfo/presentations/vod/2013/pdf/press_20140311_02.pdf.

¹²⁶ See Israel Decl. ¶ 67 (“As more spectrum is released (*e.g.*, through the upcoming 600 MHz incentive auction) and average spectral efficiency continues to improve through broader LTE deployment and advances in LTE technology, the associated increase in the capacity of wireless networks will put downward pressure on the cost and price per gigabyte on wireless networks. . . . Due to these declines in cost and thus price per gigabyte, wireless broadband will likely become an increasingly economical alternative in coming years, including higher usage levels as wireless networks progress.”) (citations omitted).

¹²⁷ FCC, Fact Sheet: Internet Growth and Investment (Feb. 19, 2014), http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0219/DOC-325653A1.pdf.

Netflix, has more American subscribers than any single cable or satellite operator.”¹²⁸ In the *Open Internet Order*, the Commission aptly described this dynamic as “a virtuous circle of innovation in which new uses of the network – including new content, applications, services, and devices – lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses.”¹²⁹ The Commission went on to explain that

[n]ovel, improved, or lower-cost offerings introduced by content, application, service, and device providers spur end-user demand and encourage broadband providers to expand their networks and invest in new broadband technologies. Streaming video and e-commerce applications, for instance, have led to major network improvements such as fiber to the premises, VDSL, and DOCSIS 3.0. These network improvements generate new opportunities for edge providers, spurring them to innovate further.¹³⁰

By virtue of the better broadband speeds and services and increased competition this transaction will produce across the combined company’s footprint, the Internet ecosystem as a whole will benefit. Edge providers in particular will have better tools with which to build novel services. The last-mile improvements that the combined company will bring to customers more quickly than either company could do on its own will provide an even stronger foundation for new, powerful apps and services that are dependent upon higher-quality, reliable broadband networks and Wi-Fi gateways to reach and serve customers, such as distance learning, home security, remote healthcare, and others. As Dr. Israel explains, the improvements in broadband services that will arise from this transaction will trigger this virtuous cycle of innovation.¹³¹ As

¹²⁸ Keynote Address of FCC Commissioner Ajit Pai, FICCI Frames 2014 (Mar. 12, 2014), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0312/DOC-326016A1.pdf.

¹²⁹ *Preserving the Open Internet; Broadband Industry Practices*, Report and Order, 25 FCC Rcd. 17905 ¶ 14 (2010) (“*Open Internet Order*”).

¹³⁰ *Id.*

¹³¹ *See* Israel Decl. ¶¶ 163-66.

the combined company's broadband service improves more rapidly than it otherwise would (especially in the acquired systems), it will enable increased quality of edge services, which will increase the value of broadband for end-users. Because edge providers are available to all ISPs, edge provider improvements that are spurred by the combined company's broadband investments will in turn create additional incentives for other ISPs to improve their own broadband services.¹³²

Investors in tomorrow's edge providers are well aware of the virtuous cycle of innovation brought about by successive leaps forward in broadband speed and quality. Indeed, venture capitalists and others consistently argued for the last decade that certain services and apps required better wired or wireless broadband before they could be rolled out and achieve viability.¹³³ As economist Ev Ehrlich recently observed, edge providers capture the benefits of broadband innovation most directly, because "companies that use the broadband Internet make six to eight times the margins of the companies who provide it."¹³⁴

¹³² See *id.*

¹³³ See Peter Grant & Bruce Orwall, *After Internet's Big Bust, Broadband Shift Went On*, Wall St. J., Jan. 8, 2003, available at <http://online.wsj.com/news/articles/SB1041979000108173904> (John Doerr of Kleiner Perkins: "There's no question that broadband enables paid-for-content business models."); *id.* (Disney Internet Group President Steve Wadsworth on why ABC and ESPN websites were launching new video technology in 2003 as compared to the Dot Com bust: "We're getting to critical mass in broadband."); *id.* (Peter Murphy, Disney's strategic planning chief: "We are 20% into the development of broadband . . ."); Josephine Moulds, *Boom, boom. Dotcoms Are Back in the Frame*, Telegraph, Apr. 20, 2007, available at <http://www.telegraph.co.uk/finance/markets/2807599/Boom-boom.-Dotcoms-are-back-in-the-frame.html> (Judy Gibbons of Accel: "A whole industry infrastructure has been established, there are millions of users, people are consuming online versus offline. It's become very mainstream and therefore there are still lots of opportunities to both transform existing business and create new applications that are only possible with broadband internet, like social networking."); see also *Hearing on The American Clean Energy Security Act of 2009: Before the Subcomm. on Energy & Env't of the H. Comm. on Energy & Commerce*, 111th Cong. 1245 (Apr. 24, 2009) (remarks of Rep. Edward Markey) ("[I]n 1996, we went from a point where not one home in America had broadband in 1996, not one home, to a point where, 10 years later, there is a whole new vocabulary, YouTube, Google, eBay, Amazon, Hulu, thousands of companies, millions of new jobs. They didn't exist because the market wasn't there before 1996 for broadband. It was all narrowband.").

¹³⁴ Ev Ehrlich, *Who Holds the Cards Online*, San Jose Mercury News, Mar. 8, 2014, available at http://www.mercurynews.com/opinion/ci_25291788/ev-ehrllich-who-holds-cards-online (calculating that "[t]he (average weighted) rate of profit on sales for 'providers' is 3.7 percent, versus 24.4 percent for 'residers'").

Finally, as further discussed in Section V.D.1 below, Comcast is now the only company legally bound by the no-blocking and non-discrimination rules in the FCC’s *Open Internet Order*, in the wake of the recent D.C. Circuit decision vacating these rules. It is subject as well to unique restrictions on offering, and how it offers, “specialized services.” This transaction, therefore, will spread the reach of those protections to all of TWC’s customers. The Open Internet rules were designed to establish baseline requirements to foster the virtuous cycle of innovation involving edge providers and to provide consumers and edge providers some important certainty.¹³⁵

Accordingly, not only will this aspect of the transaction address and prevent any of the putative competitive harms certain parties may allege regarding edge providers, but application of these Open Internet rules to all of TWC’s cable systems is an immediate and substantial public interest benefit that approval of this transaction will extend to millions of additional consumers.

c. The Transaction Will Accelerate and Expand Broadband Adoption Efforts to Reduce the Digital Divide.

One of the most pressing challenges facing this country is the significant broadband adoption gap – known as the “digital divide.” The combination of Comcast and TWC will demonstrably advance the goal of bringing all Americans into the digital communications age by extending Comcast’s landmark *Internet Essentials* broadband adoption program to TWC’s territories, and building upon TWC’s efforts. By extending and expanding the Comcast program

¹³⁵ As Chairman Wheeler recently put it, the D.C. Circuit affirmed that “the Commission was justified in concluding that an open Internet would further the interest of broadband deployment by enabling the virtuous cycle of innovation that unites the long-term interests of end-users, broadband networks[,] and edge-providers.” Prepared Tom Wheeler, Chairman, FCC, Remarks at Silicon Flatirons (Feb. 10, 2014), *available at* <http://www.fcc.gov/document/fcc-chairman-tom-wheeler-remarks-silicon-flatirons> (discussing *Verizon v. FCC*). Likewise, Commissioner Clyburn has stated that “clear rules of [the] road are absolutely necessary for consumers . . . broadband providers, and other users of the Internet to be able to further innovate and invest.” Press Release, FCC, Statement By FCC Commissioner Mignon L. Clyburn on Chairman Genachowski’s Circulation of a Draft Order Preserving the Open Internet (Dec. 1, 2010), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-303145A1.pdf.

to reach new geographic areas – including large metropolitan and rural areas – the transaction will help to connect many thousands of additional low-income households to today’s high-speed Internet.

The Pew Research Center’s latest survey report, *The Web at 25 in the U.S.*, notes the “explosive adoption” of Internet connectivity since 1995 and “its wide-ranging impacts on everything from[] the way people get, share, and create news; the way they take care of their health; the way they perform their jobs; the way they learn; the nature of their political activity; their interactions with government; the style and scope of their communications with friends and family; and the way they organize in communities.”¹³⁶

According to the most recent statistics, a large majority of Americans have already embraced broadband – in their homes, at their work places, and on the go with mobile devices. Eighty-seven percent of American adults now use the Internet.¹³⁷ About 70 percent of American homes are connected to wired broadband,¹³⁸ and the residential penetration figure rises to 80 percent when wireless-only broadband homes are added.¹³⁹

But as policymakers well understand, these statistics mean that tens of millions of Americans still remain out of the broadband loop. Beyond the sheer number of disconnected Americans in the aggregate, there are disheartening demographic distinctions. Pew reports that

¹³⁶ Susannah Fox & Lee Rainie, Pew Research Center, *The Web at 25 in the U.S.* 4 (Feb. 27, 2014), available at http://www.pewinternet.org/files/2014/02/PIP_25th-anniversary-of-the-Web_022714_pdf.pdf.

¹³⁷ *Id.* at 5 (noting near-saturation usage among those living in households earning \$75,000 or more (99%), young adults ages 18-29 (97%), and those with college degrees (97%)).

¹³⁸ See *Pew Home Broadband 2013*, at 2 (Aug. 26, 2013); NTIA & Econ. & Statistics Admin, *Exploring the Digital Nation: America’s Emerging Online Experience* at 2 (June 7, 2013), available at http://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_-_americas_emerging_online_experience.pdf (“Approximately 69 percent of households used broadband Internet at home (72 percent if including dial-up) in July 2011.”).

¹³⁹ *Pew Home Broadband 2013* at 4.

there are “notable differences in adoption” among those lacking higher-level educational degrees, those in lower income households, and those aged 65 and older.¹⁴⁰ Minority adoption rates also lag behind.¹⁴¹ Chairman Wheeler explained correctly that “having a significant percentage of Americans bypassed by the Internet revolution is unacceptable. We can’t maximize economic growth and job creation when 20 percent of our population is cut off from the digital economy at home.”¹⁴² Commissioner Michael O’Rielly has similarly emphasized the importance of “ensur[ing] that *all* Americans have access to modern communications networks.”¹⁴³ Noting that “certain populations find themselves disproportionately on the wrong side of the digital divide,” Commissioner Mignon Clyburn likewise recognized that “broadband adoption is critical for full participation in today’s economy.”¹⁴⁴

The primary barriers to broadband adoption have been fairly well identified as the following: (1) perceived lack of relevance of the Internet to the lives of individual consumers, (2) the lack of “digital literacy” in consumers’ understanding of how to use the technology, and (3) the price of getting online (primarily the cost of a computer, but also the cost of service as

¹⁴⁰ *The Web at 25*, at 17. For example, one of the most important determinants of low adoption is education – only 37 percent of Americans without a high school diploma have adopted broadband, while college graduates have an 89 percent adoption rate. *Pew Home Broadband 2013* at 3.

¹⁴¹ According to Pew, 74 percent of white Americans have broadband at home, but only 64 percent of African Americans and 53 percent of Hispanic Americans have the same high-speed connections. *Pew Home Broadband 2013*, at 5.

¹⁴² Tom Wheeler, Chairman, FCC, Remarks at The Ohio State University, Columbus, Ohio 5 (Dec. 2, 2013), available at <http://www.fcc.gov/document/remarks-fcc-chairman-tom-wheeler-ohio-state-university>.

¹⁴³ *Technology Transitions*, Order, GN Docket No. 13-5 (Jan. 30, 2014) (statement of Comm’r Michael O’Rielly), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0130/DOC-325345A6.pdf (emphasis added).

¹⁴⁴ Mignon Clyburn, Acting Chairwoman, FCC, Prepared Remarks at National Urban League Washington/Urban Solutions Forum: Advancing a Broadband Agenda for Urban America (Oct. 30, 2013), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-323813A1.pdf.

well).¹⁴⁵ As explained below, Comcast has engaged in an unprecedented effort to address and overcome each of these barriers in an attempt to eliminate the digital divide.

Comcast Internet Essentials. Comcast shares the Commission’s concern about broadband adoption, and has dedicated significant resources to closing the gap. The company’s *Internet Essentials* initiative is the nation’s largest and most comprehensive broadband adoption program and is specifically designed to systematically address the primary barriers to broadband adoption noted above. Working in concert with community partners and local elected officials, Comcast developed the *Internet Essentials* program to help low-income Americans begin to overcome these obstacles. The program is in keeping with Comcast’s corporate ethos, which emphasizes community service generally – and an achievement record that ranks the company among the nation’s best in commitment to community service.¹⁴⁶

Internet Essentials provides low-income households with low-cost broadband service for \$9.95 a month and the option to purchase an Internet-ready computer for under \$150. In addition, *Internet Essentials* offers multiple options for accessing free digital literacy training in print, online, and in-person – whether the individual is officially enrolled in the program or not.¹⁴⁷ In the first two and a half years of its existence, *Internet Essentials* has connected more

¹⁴⁵ Kathryn Zickuhr, Pew Research Center, *Who’s Not Online and Why 2* (Sept. 25, 2013), http://www.pewinternet.org/~media/Files/Reports/2013/PIP_Offline%20adults_092513_PDF.pdf.

¹⁴⁶ See Charisse Lillie, *Comcast Ranks Among Top 50 Companies for Commitment to Community*, Comcast Voices (Dec. 5, 2013), <http://corporate.comcast.com/comcast-voices/comcast-ranks-among-top-50-companies-for-commitment-to-community>; see also *2013 Results*, The Civic 50, http://www.civic50.org/2013_results.php (last visited Mar. 30, 2014); *Comcast-NBCUniversal Order*, 25 FCC Rcd. at 4514-15 (Statement of Comm’r Mignon Clyburn) (explaining that “[t]he adoption initiative . . . is well-crafted, ambitious, and has enormous potential. By offering the possibility of affordable, high-speed broadband to families . . . not only will school-age children be able to explore the infinite worlds of the web, but the others in their homes will be able to join them.”).

¹⁴⁷ See *Getting Started with the Internet*, Internet Essentials, <http://learning.internetessentials.com/tour/getting-started-internet> (last visited Apr. 5, 2014).

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than 1.2 million low-income Americans, or 300,000 families, to the power of the Internet at home.

Helping people successfully cross the digital divide requires ongoing outreach. To increase awareness of the *Internet Essentials* program, Comcast has made significant and sustained efforts within local communities. To date, those outreach efforts have included:

- Distributing over 33 million brochures to school districts and community partners for free (available in 14 different languages);
- Broadcasting more than 3.6 million public service announcements with a combined value of nearly \$48 million;
- Forging more than 8,000 partnerships with community-based organizations, government agencies, and elected officials at all levels of government;

Other significant milestones for Comcast's *Internet Essentials* program include:

- Offering *Internet Essentials* in more than 30,000 schools and 4,000 school districts in 39 states and the District of Columbia to spread the word and help bring more families online;
- Investing more than \$165 million in cash and in-kind support to help fund digital literacy initiatives nationally, reaching more than 1.6 million people through Comcast's non-profit partners;
- Fielding 1.9 million phone calls to the *Internet Essentials* call center;
- Welcoming 1.8 million visitors to the *Internet Essentials* websites, which supply information in both English and Spanish, and the Online Learning Center; and
- Providing more than 23,000 subsidized computers at less than \$150 each.

Moreover, the program has not remained static. As Comcast has gained insights from hands-on experience, it has consistently implemented significant enhancements to *Internet Essentials* along the way. As a result, the program has grown well beyond the company's original commitment in the NBCUniversal transaction. These enhancements include:

- Eligibility criteria expanded – Comcast has expanded *Internet Essentials*' eligibility criteria twice, first by extending it to families with children eligible to receive reduced-

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price school lunches, and then by offering it to parochial, private, cyberschool, and homeschooled students. As a result, nearly 2.6 million families nationwide are now eligible for *Internet Essentials*, an increase of nearly 25 percent.

- Broadband speeds increased – Comcast increased the program’s broadband speeds twice in less than two years (from 1.5 to 3 to 5 Mbps downstream), and *Internet Essentials* families now receive downstream speeds of 5 Mbps and upstream speeds of 1 Mbps.
- Instant approval process expanded – Comcast expanded an instant approval process for families whose students attend schools with 70 percent or more National School Lunch Program participation (previously, the threshold was 80 percent), which further increased participation rates.
- Online support enhanced – Comcast created an online application tool on the program’s English- and Spanish-language websites to make it easier and faster for a family to apply.
- Partner support facilitated – Comcast’s community partners now may help connect low-income families to the Internet by purchasing “Opportunity Cards” that help defray the cost of the service. And Comcast launched a program that gives third parties such as schools and community-based organizations the ability to purchase *Internet Essentials* service and equipment in bulk for families in their community.
- Registration process expanded – Comcast conducts on-site registration during *Internet Essentials* events all over the country.
- Residential moves supported – Comcast updated the “transfer of service” process for *Internet Essentials* customers, which now allows customers to move their accounts to a new home address in a Comcast service area without having to re-apply for the program.

Thanks to all of these efforts, *Internet Essentials* is doing exactly what it was designed to do, as confirmed by two surveys compiled from families who participate in the program.¹⁴⁸

Approximately 98 percent of participants in one survey reported that their school-age children used the *Internet Essentials* service for school assignments.¹⁴⁹ Of that group, 94 percent felt

¹⁴⁸ See Letter from Lynn R. Charytan, Senior Vice President, Legal Regulatory Affairs and Senior Deputy General Counsel, Comcast Corp., to Marlene H. Dortch, Secretary, FCC, MB Docket No. 10-56, at 10-11 (July 31, 2013) (“IE Report”) (detailing results of survey of *Internet Essentials* customers); see also Dr. John B. Horrigan, *The Essentials of Connectivity* (Mar. 2014) (“Horrigan Report”), available at <http://corporate.comcast.com/news-information/news-feed/internet-essentials-2014>.

¹⁴⁹ IE Report at 11; see also Horrigan Report at 2.

Internet Essentials had a positive impact on their child’s grades.¹⁵⁰ About 85 percent of respondents said they use *Internet Essentials* to go online on a daily basis.¹⁵¹ Overall, 90 percent of *Internet Essentials* customers in the survey were “highly satisfied” with the service, and 98 percent said that they would recommend *Internet Essentials* to others. A subsequent survey of *Internet Essentials* participants found that 90 percent said access to the Internet helps them with schoolwork; 59 percent said that the Internet helps them get access to government services; and 57 percent indicated that the Internet helped them with job searches.¹⁵²

An Expanded Commitment. The combined company will be well-positioned to work proactively with the Commission and community leaders to address broadband adoption challenges and opportunities. Comcast’s voluntary broadband adoption commitment under the *Comcast-NBCUniversal Order* expires this summer, when the program completes three full years. But Comcast’s commitment to this cause is stronger than ever. That is why Comcast recently announced that it will *extend the Internet Essentials program indefinitely* and enhance it

¹⁵⁰ IE Report at 11.

¹⁵¹ *Id.*

¹⁵² Horrigan Report at 3. TWC also has undertaken broadband adoption efforts in recent years. TWC has offered an entry-level “Everyday Low Price” broadband access service for \$14.95 per month, as well as its Starter Internet program targeted to schools in several areas in its footprint, which provided eligible families a basic tier of broadband service for two years for \$10/month. See Mike Robuck, *Time Warner Boots Up Wi-Fi Hotspots, Starter Internet Tier in K.C.*, CED, Nov. 30, 2012, <http://www.cedmagazine.com/news/2012/11/time-warner-boots-up-wi-fi-hotspots-starter-internet-tier-in-kc>. Ultimately, 486 schools participated in the pilot program, which ended in January 2013. TWC also has been actively engaged in a variety of other broadband adoption and digital literacy efforts through partnerships with non-profit and community organizations. For example, in partnership with the nation’s largest civil rights organizations, TWC carried \$1 million worth of PSAs in key markets throughout 2012-2013 to promote the importance of broadband. The PSAs were carried in English, Spanish, and five other languages and were prepared by the Broadband Opportunity Coalition (“BBOC”). BBOC’s members include: National Urban League, NAACP, National Council of La Raza, Asian American Justice Center, and League of United Latin American Citizens (“LULAC”). TWC has also partnered with the McCain Internet Empowerment Project, a non-profit initiative that brings broadband service and computer accessibility to senior citizens. TWC has provided computers and broadband connectivity at the Wilson Senior Center and eight other assisted-living facilities to expand digital literacy among senior citizens. And TWC has partnered with LULAC to support technology centers at LULAC locations that provide training, technology, and support services in the Latino communities served by the company.

in various ways, for example, by optimizing the online application tool.¹⁵³ Thanks to this upgrade, families will be able to complete the online *Internet Essentials* application form via a mobile device and upload their eligibility documentation through the website.

In addition, Comcast recently made grants totaling more than \$1 million to 15 communities to create “*Internet Essentials* Learning Zones.”¹⁵⁴ The grants are part of Comcast’s multifaceted Gold Medal Recognition Program for communities that have done the most to help close the digital divide. Learning Zones will bring together the non-profit community, schools, and Comcast to create a continuum of connectivity during the day, after school, and at home. As part of these efforts, Comcast offered an opportunity for all eligible families in these communities, as well as five additional “most improved” communities to receive free *Internet Essentials* service for six months if they registered with the program during a three-week period in March.¹⁵⁵ More than 4,300 low-income families registered and are now connected to the Internet at home.

When this transaction is approved, this program will apply to all of the communities in the TWC markets, thereby extending *Internet Essentials*’ reach into 19 out of 20 of the nation’s largest cities. Thus, a tangible and far-reaching benefit of this transaction, effective upon approval by the Commission, will be to make the power of broadband and the Internet available to many more low-income families and help reduce the unacceptable digital divide in the country.

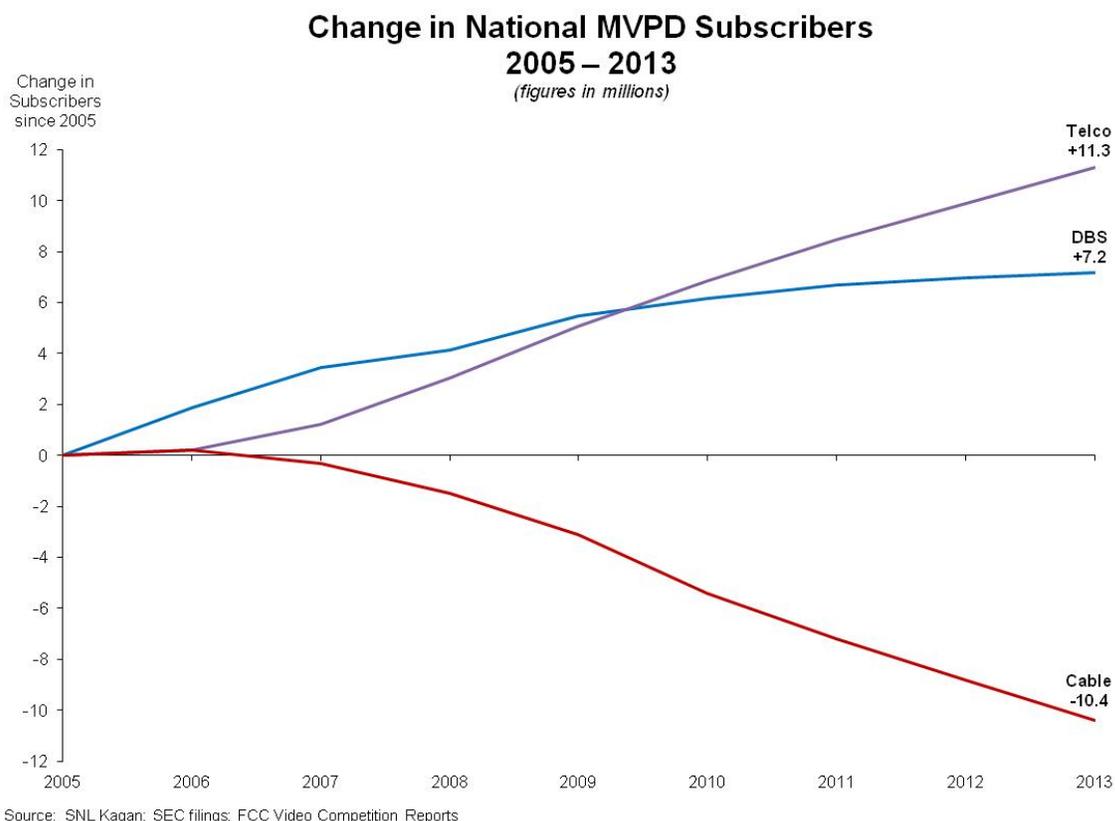
¹⁵³ Press Release, Comcast Corp., Comcast Extends National Broadband Adoption Program for Low-Income Families (Mar. 4, 2014), <http://corporate.comcast.com/news-information/news-feed/internet-essentials-2014>.

¹⁵⁴ *See id.*

¹⁵⁵ Initially, the application and approval deadline for complimentary Internet service was March 15, 2014. Comcast subsequently extended the deadline.

2. The Transaction Will Accelerate Deployment of Advanced Video Technologies and the Development of New and Innovative Video Products and Services.

As video competition from satellite, telcos, overbuilders, and others continues to mount, established cable operators across the nation continue to lose subscribers, even as overall video subscriber figures grow. Since 2009 alone, after the court rejected the Commission’s 30 percent cable horizontal ownership rules for the second time, the two DBS providers have added another 1.7 million subscribers, the telco MVPDs have added another 6.2 million subscribers, while cable companies have *lost* 7.3 million subscribers. And if one goes back to 2005, as illustrated in the chart below, the increase in MVPD competition is even more pronounced:



To meet this challenge head-on, Comcast has invested billions to reinvigorate its services

(e.g., by transitioning to all-digital and deploying the X1 platform) and develop new ones.¹⁵⁶

Indeed, Comcast’s recent “positive video subscriber result [for the 4th quarter of 2013], coming as it does when their video penetration of homes passed has fallen . . . is testament not to a ‘good quarter’ but instead to a good half-decade of hard work and heavy lifting.”¹⁵⁷ This hard work and commitment is what led to the company’s notable improvements, reflected in the Fortune and J.D Power surveys noted above. Adding scale to Comcast’s leadership and expertise will produce a significant and galvanizing combination.

A larger video customer base will facilitate accelerated investment by reducing the effective costs of innovation on a per-subscriber basis.¹⁵⁸ According to Dr. Israel, “[b]y allowing the combined firm to amortize fixed cost investments over a larger base of customers, the transaction is likely to generate new investment and innovation that would not have been profitable absent the transaction. The economic logic behind this conclusion is simple and well established.”¹⁵⁹ As a result, the combined company will be better able to take risks on developing and deploying advanced video products and services to all of its customers, a fact that the FCC has consistently recognized is a public interest benefit in similar transactions.¹⁶⁰

As in the broadband space, investing in the video platform and video technologies in turn

¹⁵⁶ Angelakis Decl. ¶ 26. Comcast appears to recently have stanchd the flow (and even gained customers in the most recent quarter), in large part because of its innovative products. See MoffettNathanson Research, Comcast Q4 2013: Boardwalk Empire (Jan. 28, 2014); see also Trefis Team, *The Latest Deal with Sony Pictures Highlights Comcast’s Efforts to Push Its On-Demand and Streaming Services*, Forbes, Mar. 12, 2014, available at <http://www.forbes.com/sites/greatspeculations/2014/03/12/the-latest-deal-with-sony-pictures-highlights-comcasts-efforts-to-push-its-on-demand-and-streaming-services/> (“Comcast has been successful in trimming the subscriber losses in the past few quarters and we believe this was partly due to its advanced offerings that include X1/X2 platform and Xfinity Streampix services.”).

¹⁵⁷ MoffettNathanson Research, *supra* note 156 at 2.

¹⁵⁸ See Rosston/Topper Decl. ¶¶ 85-94.

¹⁵⁹ Israel Decl. ¶ 107.

¹⁶⁰ See, e.g., *Adelphia Order* ¶ 256 (“As the Commission has stated many times, the deployment of advanced video services is a recognized public interest benefit. . . . Thus, we find it more likely than not that the proposed transactions will have a positive impact on the deployment of certain advanced services to Adelphia subscribers.”).

helps produce new opportunities for content providers – by offering, for example, more VOD capacity, more HD opportunities, and TV Everywhere. Programmers have also acknowledged the benefits that will flow from this transaction:

- Viacom: “[W]e welcome what Comcast had said about investing in its platform, providing more revenue opportunities with its consumers, investing in the capital infrastructure, both in its own systems and the newly acquired systems because . . . what is of highest importance to us is to make sure our content is available ubiquitously on different platforms in a measured way.”¹⁶¹
- Discovery: “Comcast is a great company. If they’re successful in bringing this deal to the finish line, I’m sure that they’ll do a great job in offering a lot of different products to consumers to consume content, including TV Everywhere where they’re a leader, and that will be advantageous for us.”¹⁶²
- Fox: “[T]here may be some positive [consequences from cable consolidation] [N]ew digital platforms in over-the-top players may grow even more quickly with a consolidated distribution industry.”¹⁶³
- CBS: Comcast put together “a pretty terrific deal” and CBS looks forward to working with the Comcast-owned TWC. “[T]he good news about Comcast is they own a network that competes with us and they own a number of cable channels, so they are a company that believes in content and they believe in paying fairly for content.”¹⁶⁴
- Starz: “[W]hatever the final configuration [of the transaction] is, there is a real opportunity for those companies with Starz products.”¹⁶⁵

Comcast is committed to deepening the value proposition for programmers and residential video customers – not only retaining them, but growing their numbers and giving them new and better ways of experiencing video.

¹⁶¹ Philippe Dauman, CEO, Viacom, Inc., Deutsche Bank Media, Internet & Telecom Conference, Tr. at 10 (Mar. 10, 2014).

¹⁶² David Zaslav, President & CEO, Discovery Communications, Inc., Q4 2013 Earnings Call, Tr. at 11 (Feb. 13, 2014).

¹⁶³ Charles Carey, President, 21st Century Fox, Inc., Q2 2014 Earnings Call, Tr. at 6 (Feb. 6, 2014).

¹⁶⁴ Hilary Lewis, *Les Moonves Thinks Comcast-Owned Time Warner Cable Will ‘Pay Appropriately’ For CBS Content*, Hollywood Reporter, Feb. 13, 2014, available at <http://www.hollywoodreporter.com/news/les-moonves-thinks-comcast-owned-680139>.

¹⁶⁵ Christopher P. Albrecht, CEO, Starz, Q4 2013 Earnings Call, Tr. at 10 (Feb. 21, 2014).

a. The Benefits of All-Digital.

Accelerated Transition to All-Digital. Improving cable services for customers – adding channels, improving picture quality (i.e., HD), adding advanced features, offering faster broadband speeds – depends on securing additional bandwidth.¹⁶⁶ To free up the bandwidth needed for more channels and quality, TWC made an early commitment to adopting switched digital video (“SDV”) technology to manage content and video quality. But in order to offer super high-speed Internet service going forward, TWC is now focused on migrating to all-digital systems. TWC’s all-digital migration currently is complete in about 17 percent of its footprint,¹⁶⁷ and TWC expects to have completed only 75 percent of its footprint by the end of 2016.¹⁶⁸

Comcast took a different approach to freeing up bandwidth, reclaiming the bandwidth devoted to analog delivery of programming through an arduous, resource-intensive, community-by-community, scheduled five-year effort to convert to all-digital – an effort that the company referred to as “Cavalry” to underscore the intention to charge forward. That approach paid off, and Comcast completed its transition to an all-digital platform in 2012, ahead of schedule. The transaction will allow TWC’s transition to all-digital to be accelerated, and Comcast’s substantial

¹⁶⁶ See, e.g., *Comcast Finishes Digital Conversion and Launches 139 New TV Networks in Santa Cruz and Surrounding Areas*, PR Newswire, July 9, 2013, available at <http://www.prnewswire.com/news-releases/comcast-finishes-digital-conversion-and-launches-139-new-tv-networks-in-santa-cruz-and-surrounding-areas-214767921.html> (describing Comcast’s completion of the digital conversion and launch of 69 new HD networks, 17 SD channels and 53 multicultural networks in Santa Cruz County after Comcast successfully converted to all-digital delivery system). Digital also needs to happen for faster broadband speeds, even with the deployment of DOCSIS 3.0.

¹⁶⁷ See Ian Olgeirson, *Charter, Time Warner Cable Lag in All-Digital Push To Convert CapEx into Capacity*, SNL Kagan (Jan. 17, 2014) (“Time Warner Cable is estimated to have made the [digital] transition in 17% of its homes passed, including markets in its New York cluster. The MSO has indicated plans to expand in 2014, but it has not laid out a roadmap for the markets and is not expected to complete the effort this year.”). TWC has migrated to all-digital only in New York City; Augusta, Maine; parts of Kentucky and Indiana; and portions of Los Angeles.

¹⁶⁸ See Time Warner Cable, *TWC Operational and Financial Plan*, at 11 (Jan. 30, 2014).

experience with Cavalry, in which it worked through the various complexities of an all-digital transition in a disciplined and sustained effort, will enable the transition in the TWC cable systems to take place more efficiently and with less customer disruption.¹⁶⁹ As a result of these upgrades, customers on TWC systems will enjoy more innovative video products and faster broadband speeds on an accelerated basis.

Enhanced Network Reliability and Customer Service Innovations. The benefits of a more robust and reliable all-digital network also extend to network reliability and performance. Comcast has invested billions of dollars to transform the end-to-end customer experience through an advanced broadband network and state-of-the-art care and tech diagnostic tools for technicians and customer account executives. Comcast uses these tools to detect and remediate quality issues, often before issues arise to a level noticeable by consumers, and also is adapting these in-network tools to give customers more information about system status. One example of this is the recently released “Xfinity My Account” app, which provides systems status updates as well as troubleshooting tips and advice.¹⁷⁰ In addition, Comcast’s all-digital network improves overall video quality and consumer satisfaction: Comcast is able to ingest digital signals from programmers and move the signals through the network to set-top boxes without conversion to and from analog and the accompanying loss of fidelity.

Beyond this, an all-digital network facilitates customer service innovations, efficiencies, and lower costs by allowing Comcast to remotely activate and deactivate services.¹⁷¹ This has

¹⁶⁹ See Angelakis Decl. ¶ 27.

¹⁷⁰ See Roger Yu & Mike Snider, *Comcast Seeks Uber-like Customer Service*, USA Today, Mar. 19, 2014, available at <http://www.usatoday.com/story/money/business/2014/03/18/comcast-ceo-interview/6577633/>.

¹⁷¹ The Commission has acknowledged that all-digital service, along with encryption, benefits customers by enabling cable operators to remotely activate and deactivate service. This not only eliminates the need for customers to rearrange their schedules and wait for a technician, but it reduces the number of truck rolls necessary, leading to cost savings that can translate to increased investment in innovative products and services. See *Basic*

enabled Comcast’s development of next-generation customer self-service products, including self-install kits and online self-service, which save both customers and the company significant time and money and improve customer satisfaction. These options are now ubiquitous across Comcast’s footprint and are having real-world impacts: Since 2010, inbound customer service and billing-related call volume has decreased by approximately 20 million. In the last two years, Comcast has reduced its truck rolls by eight million. And, building on this positive momentum, Comcast has made improved customer service a key focus over the past several years, offering shorter appointment windows and reducing repeat service visits by about 20 percent since 2010. Those improvements have been recognized by external objective parties: For example, in 2014, Comcast earned a gold Stevie award in innovation in customer service, and, in 2013, Comcast earned a bronze Stevie award in e-Commerce customer service.¹⁷² Since 2010, Comcast has improved its J.D. Power Overall Satisfaction by nearly 100 points as a video provider and close to 80 points in High Speed Data – more than any other provider in the industry during the same period.¹⁷³

While TWC has been able to invest in some self-installation options for existing

Service Tier Encryption, Report and Order, 27 FCC Rcd. 12786 ¶¶ 8, 12-13 (2012); *see also Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, Third Report and Order and Order on Reconsideration, 25 FCC Rcd. 14657 ¶ 45 (2010) (supporting the transition to all-digital cable service and noting that all-digital service allows operators to “make more efficient use of spectrum capacity, allowing the operators to dedicate more of their spectrum to broadband and other services”); *Cable Television Technical and Operational Requirements*, Notice of Proposed Rulemaking, 27 FCC Rcd. 9678 ¶ 2 (2012) (same).

¹⁷² 2014 Stevie Award Winners, https://www.stevieawards.com/pubs/sales/awards/426_2281_24735.cfm (last visited Apr. 4, 2014); 2013 Stevie Award Winners, https://www.stevieawards.com/pubs/sales/awards/426_2281_22268.cfm (last visited Apr. 4, 2014).

¹⁷³ *Compare* Press Release, J.D. Power, 2013 U.S. Residential Television Service Provider Satisfaction Survey (Sept. 26, 2013), <http://www.jdpower.com/content/press-release/jxh1ZHX/2013-u-s-residential-television-service-provider-satisfaction-study.htm>, and Press Release, J.D. Power, 2013 U.S. Residential Internet Service Provider Satisfaction Survey (Sept. 26, 2013), <http://www.jdpower.com/press-releases/2013-us-residential-internet-service-provider-satisfaction-study>, with Press Release, J.D. Power & Assocs., 2010 U.S. Residential Television Service Satisfaction Study (Oct. 6, 2010), <http://businesscenter.jdpower.com/news/pressrelease.aspx?ID=2010166>; and J.D. Power & Assocs., 2010 U.S. Residential Internet Service Provider Satisfaction Survey (Oct. 28, 2010), <http://businesscenter.jdpower.com/news/pressrelease.aspx?ID=2010167>.

customers, TWC does not yet offer a self-install option for new customers. As Drs. Rosston and Topper observe:

[C]ustomers in [the] current TWC territory will benefit from getting access to Comcast's innovative self-installation and self-service options. . . . [F]ollowing its conversion to digital, Comcast introduced self-service products, including self-install kits and online self-service. Self-install kits allow customers to hook up video, broadband, or voice service without an on-site cable technician. Self-install kits are cheaper for consumers than a traditional technician installation: \$9.95 shipping and handling compared to a \$50–60 technician installation fee. By investing millions of dollars in developing and designing the self-install kits, Comcast was able to reduce the marginal cost of adding new customers.¹⁷⁴

Comcast's recent advances in customer service and satisfaction have served to focus and intensify its desire to be a leader for an industry historically plagued by dissatisfaction. Comcast will apply this mindset to the TWC systems. Nonetheless, Comcast recognizes it must continue to strive to enhance its customer service. Comcast values its customer relationships tremendously and is firmly committed to invest more in this important area to solidify these relationships, especially in the intensely competitive environment in which the company operates. The combined company will be able to invest ever more in centralized service systems and improvements and will bring a dedicated effort to improving performance in the TWC markets.

b. TWC Customers Will Enjoy More Programming Choices.

Comcast has more extensive programming rights and a broader VOD and online catalog than TWC. These rights, along with the upgrades Comcast would bring to TWC's VOD infrastructure and broadband network, will provide customers in the TWC markets with access to more programming choices in time, particularly in terms of VOD and TV Everywhere options.

¹⁷⁴ Rosston/Topper Decl. ¶ 110.

As a result, the combined company will be better positioned to retain and win back consumers in the face of increasingly widespread and rigorous competition for customers' time and attention.

VOD Leader. As Time Warner, Inc. CEO Jeff Bewkes recently observed, “[t]he world’s going to [VOD].”¹⁷⁵ Bewkes praised Comcast’s VOD platform and X1 interface while noting that other operators “frankly . . . haven’t moved fast enough or effectively enough to deliver,” and pointedly observed that, “[i]f we don’t fill that need, then it is going to get filled by somebody else and it would be a missed opportunity.”¹⁷⁶ Comcast has sought to seize the opportunity. Xfinity On Demand today includes approximately 50,000 programming choices (compared to TWC’s 15,000-20,000), with the most current TV shows and movies, and over 80 percent of those choices are free of charge.¹⁷⁷ It offers the most sought-after movies from all the major studios, and one of the broadest selections of independent films.

To deliver all these offerings to its customers, Comcast has built an industry-leading VOD platform that it will bring to TWC systems. This likely will include, among other things, extending its library servers to serve TWC subscribers, building out its robust VOD content delivery network to TWC systems – i.e., by upgrading the IP network that connects the library servers with TWC’s systems, adding caching and streaming servers to the TWC infrastructure, etc. – and integrating TWC’s VOD back office with Comcast’s system. Comcast will extend its broad VOD programming rights to the TWC systems as soon as its contracts permit, and as soon

¹⁷⁵ Deborah Yao, *Time Warner CEO: Increases in Content Rights Fees Will Not Kill Pay TV Ecosystem*, SNL Kagan, Dec. 10, 2013, <http://www.snl.com/InteractiveX/article.aspx?BeginDate=12/10/2013&ID=26223656&KPLT=2>.

¹⁷⁶ Joe Flint, *Time Warner CEO Jeff Bewkes Says Distributors Need to Boost VOD*, L.A. Times, Dec. 10, 2013, available at <http://articles.latimes.com/2013/dec/10/entertainment/la-et-ct-time-warner-bewkes-20131210>.

¹⁷⁷ Xfinity On Demand averages 400 million views each month. Since the service launched in 2003, there have been 32 billion views.

as the planned upgrades to the TWC systems permit the delivery of this much larger content library to customers.

To expand customers' options for viewing this extensive library of VOD content, Comcast continues to work with third-party device manufacturers, such as Samsung, TiVo, and Microsoft, to enable access to Xfinity On Demand content on a variety of devices. In fact, Comcast and TiVo plan to complete the integration of Xfinity On Demand service on TiVo DVRs for all Comcast markets by June of this year.¹⁷⁸ In TiVo CEO Tom Rogers' view, this transaction may provide TiVo with the further opportunity to expand its connection to Comcast in more key markets, consistent with the Commission's goals of a retail market for navigation devices.¹⁷⁹

Comcast also recently launched (in November 2013) the Xfinity TV Store, giving customers the ability to purchase movies and TV shows for downloading and streaming – often weeks before they are available to rent or purchase on Blu-Ray and DVD – and store them in the cloud. Customers can access their purchases anytime, anywhere, and on any device, without the hassle of managing files, switching devices, or remembering passwords. Comcast customers have already been actively using this robust new platform. Over 2 million movies, TV shows, and other content have been purchased since launch, and Comcast has been the leading seller of certain movies in certain time frames – ahead of iTunes.¹⁸⁰ TWC does not currently offer such

¹⁷⁸ Jeff Baumgartner, *TiVo Profits on New MSO Subscriber Record*, Multichannel News, Feb. 26, 2014, available at <http://www.multichannel.com/distribution/tivo-profits-new-mso-subscriber-record/148553>.

¹⁷⁹ *Id.*; see also 47 U.S.C. § 549.

¹⁸⁰ See Joe Flint, *Comcast's Digital Movie Sales Off to Solid Start*, L.A. Times, Dec. 5, 2013, available at <http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-comcast-digital-sell-through-20131205,0,1835629.story#axzz2wSjkjzYS> (noting that Comcast had been the number one seller of certain movies like “The Hunger Games” in recent weeks).

an electronic sell-through service, so the transaction will bring this service as a new benefit to all of its customers.¹⁸¹

TV Everywhere Leader. Nearly five years ago, Comcast worked with TWC’s then-parent, Time Warner Inc., to establish TV Everywhere principles to bring “significantly more television content to customers online in a manner that is consumer-friendly, pro-competitive and non-exclusive.”¹⁸² Those principles have been made into reality, in significant part through Comcast’s efforts to secure TV Everywhere rights from programmers (and through NBCUniversal’s leading the industry in extending such rights to MVPDs).¹⁸³ Led by Comcast’s initiatives, TV Everywhere is gaining in popularity, doubling its usage in 2013.¹⁸⁴

The popularity of TV Everywhere during the recent Winter Olympics demonstrates Comcast’s deep commitment to this consumer-friendly and convenient platform:¹⁸⁵

- NBC Sports delivered a massive 10.8 million hours of online video as part of its production of the 2014 Winter Olympic Games in Sochi, Russia.
- More than 8.5 million hours of video was consumed through TV Everywhere authenticated live streams on NBCOlympics.com and the NBC Sports Live Extra app.

¹⁸¹ As Drs. Rosston and Topper explain, both because of the combined company’s expanded geographic scope and its ability to overcome technological differences and other challenges, the transaction will facilitate the rollout of such convenient video programming services to TWC’s customers. *See* Rosston-Topper Decl. ¶¶ 102, 115.

¹⁸² Press Release, Comcast Corp., Time Warner Inc. Announces Widespread Distribution of Cable TV Content Online (June 24, 2009), <http://corporate.comcast.com/news-information/news-feed/time-warner-inc-announces-widespread-distribution-of-cable-tv-content-online>.

¹⁸³ Press Release, HIS Inc., TV Everywhere Spreads Among US Television and Cable Networks; NBCUniversal Leads (Oct. 18, 2013), <http://press.ihs.com/press-release/design-supply-chain-media/tv-everywhere-spreads-among-us-television-and-cable-networks>.

¹⁸⁴ Daisy Whitney, *Study: TV Everywhere Doubles, Tablets Drive Usage*, Online Video Insider (Feb. 6, 2014), <http://www.mediapost.com/publications/article/219055/study-tv-everywhere-doubles-tablets-drive-usage.html>.

¹⁸⁵ Press Release, Comcast Corp., Sochi 2014: A TV Everywhere Success Story (Mar. 7, 2014), <http://corporate.comcast.com/news-information/news-feed/sochi-2014-a-tv-everywhere-success-story>.

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- In an unprecedented effort, 225 multichannel distributors offered verification for their customers, with more than 4.8M devices successfully verified.
- NBCOlympics.com and the NBC Sports Live Extra app saw 24.6 million video viewers (160 percent higher than the 2010 Vancouver Winter Games and 8 percent higher than the 2012 London Summer Games).
- And the February 21, 2014 verified live stream of the Olympic men’s ice hockey semifinal between the United States and Canada generated more than 2.1 million unique users – believed to be the largest TV Everywhere verified streaming audience in U.S. history, and ranking No. 1 in unique users for any NBC Sports Digital stream, topping NBC’s non-authenticated Super Bowl XLVI in February 2012.

Today, Comcast offers an industry-leading TV Everywhere experience to its customers.

Comcast customers have access to 300,000-plus streaming choices, including over 50 live TV channels, on XfinityTV.com. These live channels and over 25,000 on-demand choices are also available on the Xfinity TV Go app, which also allows customers to download certain shows and movies to watch offline later.¹⁸⁶ TWC’s TV Everywhere offering is more limited; it provides less content and less flexibility for accessing this content outside the home, with up to just 29 live TV channels and 6,500 hours of video content.

The increased scale from the transaction will allow Comcast to improve the economics of investing in significant fixed-cost programming rights (such as SVOD and other digital rights) to provide greater value to customers. Greater scale and denser geographic coverage will also create marketing efficiencies that are particularly important for the roll-out of services like TV Everywhere that may require aggressive – and expensive – marketing campaigns to educate and attract consumers.¹⁸⁷ For example, Comcast debuted a “Watchathon Week” in April 2013, during which Comcast customers were able to catch up on their favorite shows from more than

¹⁸⁶ See Press Release, Comcast Corp., Xfinity TV Go Network Roster Tops 50 with Latest Update (Mar. 19, 2014), <http://corporate.comcast.com/news-information/news-feed/comcast-customers-can-now-stream-more-than-50-live-channels-anytime-anywhere>.

¹⁸⁷ Angelakis Decl. ¶ 19.

30 programming networks at no additional charge. The promotion set new viewing records, including via Comcast’s TV Everywhere platforms.¹⁸⁸ Another Watchathon Week recently ended (this time with over 5,000 episodes from 48 networks), and early usage data indicate that it remains an immensely popular offering. With added scale, Comcast could make even more effective marketing efforts to inform subscribers across a larger region (or across the nation) about these valuable services. As Drs. Rosston and Topper explain, the combined company’s added scale also will accelerate innovation by allowing Comcast to provide fully-featured apps for more third-party devices more quickly by spreading these fixed costs across a greater number of customers.¹⁸⁹

While the transaction will clearly bring to the TWC systems more content and more convenient ways of accessing such content, it is conversely *not* clear that the transaction will significantly discipline the costs of such content. Programmers as a whole have significant bargaining power, as reflected in the fact that programming costs have far outstripped inflation and retail cable rate increases for many years.¹⁹⁰ While Comcast is far from immune to these rising costs, Comcast’s response has been to obtain from programmers added value for its customers in the form of the most robust suite of on-demand, TV Everywhere, and other digital

¹⁸⁸ See Maggie McLean Suniewick, *Watchathon Week Breaks Major Xfinity TV Records*, Comcast Voices (Apr. 19, 2013), <http://corporate.comcast.com/comcast-voices/watchathon-week-breaks-major-xfinity-tv-viewership-records>.

¹⁸⁹ See Rosston/Topper Decl. ¶ 89.

¹⁹⁰ See, e.g., Ali Choukeir & Chris Young, *Virtual Service Provider Space an Unfinished Puzzle*, SNL Kagan, Feb. 6, 2014, <http://www.snl.com/interactivex/article.aspx?id=26791052&KPLT=6> (noting that “programming costs continue to outpace the rate of inflation, especially [for] sports and retrans”); Tony Lenoir, *Cost of Programming Jumps 54% in 5 years*, SNL Kagan, Aug. 28, 2013, <http://www.snl.com/InteractiveX/article.aspx?BeginDate=08/28/2013&ID=24720103&KPLT=2> (reporting that the top three cable operators (Comcast, TWC, and Charter) have seen programming costs per subscriber increase in the last five years by 54 percent – from \$24.50 to \$37.72); Robert Gessner, *Programming Costs Drive Cable Bills Higher*, TV NewsCheck (Mar. 14, 2014), <http://www.tvnewscheck.com/article/74809/programming-costs-drive-cable-bills-higher>.

rights from programmers like Disney, Fox, AMC, and Viacom.¹⁹¹ These benefits will ultimately redound to the benefit of TWC markets as well. And it is possible that the combined company may be able to realize some programming cost savings by combining contracts in certain cases. These cost savings will allow Comcast to provide even more programming options to meet its customers' demands.

c. The Benefits of the X1 Platform.

Comcast's launch of its X1 platform and successor X2 user interface is a key example of the video technology that Comcast has deployed to its customers and would extend to TWC customers in this transaction. Comcast's scale, as well as its commitment to innovation, research and development, and infrastructure investment led to the development and deployment of the X1 platform throughout Comcast's footprint. Comcast made an upfront investment of {{

}} to develop this platform – and could have done even more, more quickly, with greater scale.¹⁹² The combined company will bring that same commitment to the acquired TWC systems, and with greater scale and investment will be able to do *even more*.¹⁹³

The X1 platform gives customers unmatched interactive TV functionality featuring a state-of-the-art user interface and other product features that revolutionize customers' viewing experiences:

- Integrated search (across TV, Xfinity On Demand, and DVR) with instant play;
- Access to the Internet and apps like Facebook and Pandora, as well as integrated TV apps like weather and traffic;
- Cross-product integration, including access to voicemail from the TV;

¹⁹¹ See MoffettNathanson Research, *Comcast and Time Warner Cable: Of White Knights and Brotherly Love* 5 (Feb. 13, 2014) (noting that Comcast has secured more digital rights than TWC).

¹⁹² Angelakis Decl. ¶ 14; see Rosston/Topper Decl. ¶¶ 87-89.

¹⁹³ Angelakis Decl. ¶ 16.

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- Enhanced personalization and recommendations;
- A “Last 9” feature that enables customers to easily access the last nine channels, VOD programs, and apps that were viewed or used;
- The X1 remote app, which offers a new remote control experience by letting customers use their smartphones and tablets to control their TVs with a simple gesture, or use voice commands to easily navigate the programming guide; and
- The X1’s network-based user interface, which enables Comcast to implement upgrades without swapping out customer equipment, thereby leading to faster innovation cycles.

Comcast also has launched its new X1 DVR with cloud technology, enabling customers in certain markets to watch their DVR recordings on any X1-connected TV and on computers and mobile devices in the home, as well as download recorded content to mobile devices to take on-the-go. At the same time, Comcast has deployed its live in-home IP cable streaming feature, which allows customers on the X1 platform to stream practically their entire cable channel lineup, including must-carry stations and PEG channels, to computers, smartphones, and tablets in the home.

The value and innovation of the X1 platform and X2 user interface have been widely recognized:

- “Today, Comcast’s X2 . . . is the video industry’s best product.”¹⁹⁴
- “I have been testing this sleek black cable box for the past three weeks, but to call it a cable box really doesn’t do it justice. It is a nice blend of Internet content, live television, apps, a multi-tuner DVR and on-demand programming, in one of the cleanest user interfaces that you’ll find from a cable company.”¹⁹⁵

¹⁹⁴ MoffettNathanson Research, *Comcast Q4 2013: Boardwalk Empire 2* (Jan. 28, 2014).

¹⁹⁵ Todd Bishop, *Xfinity X1: How Comcast Roped Me Back in to Cable*, GeekWire, Aug. 22, 2013, <http://www.geekwire.com/2013/xfinity-x1/>.

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- “[X1] feels like a genuinely 21st-century way to use a widescreen television set – like a smart TV inside your cable box.”¹⁹⁶
- Netflix CEO Reed Hastings praised the X1, noting that it’s a “great product.”¹⁹⁷

Without this transaction, TWC customers would likely not experience the benefits of this revolutionary video experience at all, or at least not as rapidly or pervasively. TWC by itself has not had the scale to allow it to invest in and deploy this technology.¹⁹⁸ To be sure, Comcast has explored licensing arrangements to enable unaffiliated companies to use X1 technology, but those efforts are time-consuming and face challenges, such as infrastructure limitations of prospective partners, compensation issues, customization, and so on.¹⁹⁹

In contrast, the combined company may be able to begin deploying Comcast’s cutting-edge X1 entertainment operating system within the first year in certain TWC systems.²⁰⁰ And the transaction presents the opportunity for Comcast to spread the costs of developing and deploying the X1 platform among more Comcast-owned systems, which will in turn help facilitate future innovation.²⁰¹ TWC also has developed certain video service technologies that may be deployed throughout the combined company as well. Notably, TWC offers StartOver

¹⁹⁶ Tim Carmody, *Comcast’s New X1 UI Integrates Real-time and Streaming TV with News and Social Apps*, The Verge, May 21, 2012, <http://www.theverge.com/2012/5/21/3033972/comcast-ui-platforms-video-news-social-apps>.

¹⁹⁷ John McDuling, *The American Cable Industry’s Cunning Plan to Save Itself: Make TV Work Like It Should*, Quartz, Feb. 4, 2014, <http://qz.com/172533/the-american-cable-industrys-cunning-plan-to-save-itself-make-tv-work-like-it-should/>.

¹⁹⁸ Although TWC is now conducting limited employee trials of a new cloud-based user interface, HNav – and plans to conduct a Beta customer trial later this year – it has no firm plans for a commercial launch yet.

¹⁹⁹ See Rosston/Topper Decl. ¶¶ 112-13. The X1 platform currently comprises over 400 separate but to some extent interdependent subsystems. A licensee of the X1 platform might well need or want to swap in several dozens of its own subsystems to handle certain of the platform’s functions, which would require additional design and development work and raise questions as to allocation of responsibility for performance issues that may result.

²⁰⁰ Angelakis Decl. ¶ 28.

²⁰¹ The transaction also will enable Comcast to lower the per-customer costs of developing and deploying in-depth metadata tagging for its video programming, which allows for more efficient and more customer-friendly searching capabilities, thereby accelerating its deployment. See Rosston/Topper Decl. ¶ 93.

and LookBack, two tools that offer customers flexibility in viewing that Comcast does not have. Comcast will explore whether those capabilities can enhance the X1 platform or other technology in the combined company's footprint.

d. The Combined Company Will Continue to Advance the Transition to IP Cable.

Both Comcast and Time Warner Cable have made great strides in the transition to IP cable and have invested significant resources in these efforts. In 2013, Comcast spent approximately {{ }} on IP-delivered cable service and plans to invest another {{ }} this year, and that does not include any expenditures for customer premises equipment like set-top boxes and gateways. Comcast has begun offering streaming IP cable services to universities, has delivered its VOD service in IP to the Xbox and the Samsung SmartTV, and, as noted, has launched a live in-home IP cable streaming feature in two regions. For its part, TWC also has invested in developing IP cable services and has created IP "simulcast" feeds of the company's linear networks, enabling customers to access such programming on a variety of retail devices.²⁰²

The combined company will continue to invest in and advance the IP cable transition, combining both companies' strengths and experience. Doing so will yield a number of consumer and public interest benefits. IP cable:

- Enables consumers to access their cable and advanced video services in their homes on a wide variety of IP-enabled retail devices – video game consoles, tablets, and other connected devices;²⁰³

²⁰² Glenn Britt, CEO, Time Warner Cable, Inc., Bank of America Merrill Lynch Global Telecom & Media Conference, Tr. at 9 (June 4, 2013).

²⁰³ See, e.g., Yaron Raz, *Migrating to IP in the Cable TV Environment: Benefits, Challenges, and Resolutions*, CED, Oct. 16, 2013, <http://www.cedmagazine.com/articles/2013/10/migrating-to-ip-in-the-cable-tv-environment-benefits-challenges-and-resolutions>; *Cable Edges to an IP Future*, Digital TV Europe (July 3, 2013),

- Shifts more of the network intelligence to the cloud, thereby allowing the combined company to rapidly roll out new functionalities to consumers;
- Reduces costs by allowing the combined company to simplify its existing distribution networks by relying on IP technology to transport all of its services and relying on innovative off-the-shelf IP-based retail devices and reducing its home equipment and inventory costs; and
- Dramatically reduces energy consumption for consumer set-top boxes.

In short, like the parallel transition that is beginning to occur in the traditional phone system, the transition to IP cable will improve the “lives of millions of Americans . . . by the direct and spillover effects of the technology transitions, including innovations that cannot even be imagined today.”²⁰⁴

3. The Transaction Will Promote the Deployment of Advanced Voice Services and Enhance Competition in the Voice Marketplace.

By permitting the companies to combine the best aspects of their robust and innovative voice services, approval of this transaction will leave the merged company even better suited to offer an array of advanced voice services in competition with ILECs and other providers. The Commission has long recognized the pro-competitive and pro-consumer impact of cable’s offering of voice services.²⁰⁵ The combined company will build on this strong foundation, facilitating more advanced services and features and a more robust alternative for voice customers.²⁰⁶

<http://www.digitaltveurope.net/74622/cable-edges-to-an-ip-future> (“IP is seen as a desirable platform for video services as it will enable them to deliver multiroom and multiscreen services much more economically.”).

²⁰⁴ *Technology Transitions*, Order, Report and Order, and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, GN Docket No. 13-5, FCC No. 14-5 ¶ 2 (rel. Jan. 31, 2014).

²⁰⁵ See Press Release, FCC, FCC Approves Merger of AT&T Inc. and BellSouth Corp. (Dec. 29, 2006) (noting that “the rapid growth of intermodal competitors – particularly cable telephony providers . . . – is an increasingly significant competitive force in this market”); *Connect America Fund*, 26 FCC Rcd. 17663, App. I ¶ 5 n.11 (2011).

²⁰⁶ Angelakis Decl. ¶ 30.

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Comcast offers its Xfinity Voice customers several enhanced features, including traditional features such as call waiting, three-way calling, and voicemail, as well as newer offerings such as caller ID provided over a television, laptop, or mobile device, and Readable Voicemail. Comcast also offers customers the ability to send and receive unlimited text messages to and from their Xfinity Voice telephone numbers through an application that can be downloaded on a customer's mobile device or using Xfinity Connect on a customer's computer.

Recent network investments have expanded dramatically the features available to Xfinity Voice customers. Comcast has moved to a new advanced and flexible IP Multimedia Subsystem (“IMS”) network architecture, in which a handful of geo-redundant switches serve all Comcast voice customers. This architecture enables customers to access the service from different locations using a variety of methods and networks, including not only the wired connections provided by Comcast, but also Wi-Fi connections and public Internet connections provided by third parties, whether wired or wireless. For example, it enables “Voice 2go,” which allows users to place calls over a Wi-Fi or data connection from their Comcast-assigned telephone numbers using an app downloaded to a mobile device, and to receive calls to their home numbers at multiple locations and on multiple devices using the “Advanced Call Forwarding” feature.

The transaction will allow Comcast to integrate the best features of its voice offerings with the TWC's best features, creating best-in-class voice service offerings. For example, TWC's voice offering currently lacks many of Xfinity Voice's nomadic features, such as the ability to place calls over a third-party Wi-Fi network or through a mobile device.

Finally, both companies have increasingly expanded their international reach and calling options. For example, TWC recently launched free Mexico calling, and Comcast has implemented eight different international calling options (as compared to TWC's two), thereby

allowing customers to select from a range of possibilities that best meet their family and/or business circumstances. Together, the combined company's scale and existing relationships will enable it to reach more countries for its customers, and for very reasonable rates.

C. Businesses of All Sizes Will Benefit from a Substantial Increase in Much-Needed Competition and the Accelerated Deployment of Advanced Services.

The transaction will produce significant public interest benefits by combining the two companies into a stronger, more cost-efficient competitor that can offer new options and aggressively priced services to small, medium, and enterprise businesses across most of the country, challenging the incumbents that have dominated this marketplace for decades. The competitive benefits for the medium-sized and enterprise markets will be particularly substantial and far-reaching.

Although definitions are not uniform across the industry, Applicants generally view the business services space in which they operate as comprised loosely of the following four segments:

- Small business – generally fewer than 20 employees;
- Medium-sized business – generally 20-500 employees often across multiple sites in different geographic locations (includes certain regional and super-regional businesses);
- Enterprise/national accounts – generally over 500 employees across many sites; and
- Cell backhaul service to wireless carriers.

All four segments will benefit from this transaction.

1. Comcast’s and TWC’s Proven Track Records, Though Limited in Scope to Date, Demonstrate the Power of Competition in This Space.

The approximately 23 million small businesses in the United States are the largest source of employment in the country,²⁰⁷ and many of them, until recently, have been paying too much and receiving too little value from their communications service providers.²⁰⁸ For many small businesses, until Comcast, TWC, and other cable operators entered the market, the only data transport option available was too often an expensive T1 line (at 1.54 Mbps) from a legacy provider; for too many others, slower services were their only options.²⁰⁹

Comcast recognized this opportunity several years ago and, since 2006, has aggressively extended its network to enable it to offer small businesses a competitive alternative for their data, voice, and video needs. Comcast moved swiftly to develop business-class billing, provisioning, and customer interface systems. Comcast has built out its network to {{ }} of the estimated {{ }} premise-based (rather than home-based) small businesses in its footprint and continues to expand this investment. It has recruited an aggressive sales force and built the required service delivery and service assurance expertise and systems. And it has brought to thousands of pharmacies, barber shops, dry cleaners, and restaurants a value proposition that was far better than what was previously available.²¹⁰

²⁰⁷ See *Small Business Trends*, U.S. Small Business Administration, <http://www.sba.gov/content/small-business-trends> (last visited Apr. 5, 2014).

²⁰⁸ See Letter from Jamie Belcore Saloom, Assistant Chief Counsel for Telecommunications, Small Business Administration, Office of Advocacy, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 (Dec. 5, 2013); Columbia Telecomms. Corp., *The Impact of Broadband Speed and Price on Small Businesses* 1-4 (Nov. 2010), <http://www.sba.gov/content/impact-broadband-speed-and-price-small-business-1#>.

²⁰⁹ See Charlie Reed, *Comcast-TWC Merger to Create Fourth Largest Business Services Player*, Telecom Reseller, Feb. 13, 2014, available at <http://www.telecomreseller.com/2014/02/13/comcast-time-warner-cable-merger-to-create-fourth-largest-business-services-player/>.

²¹⁰ See J.T. Ramsey, *Q&A with Bill Stemper, President of Comcast Business Services*, Comcast Voices (Feb. 12, 2013) (describing evolution of Comcast’s Business Services).

Comcast’s investments and innovations in this area have led to growing marketplace success. And the company has won several awards for its small business services, including the Leading Lights Award last year for Most Innovative SMB Service and the Hosted VoIP leader award in 2012 and 2013. In the last several years, Comcast has also entered the medium-sized market segment and has made some promising gains.

TWC also robustly serves the small business segment in its footprint. As in the case of Comcast, this market segment accounts for the majority of TWC’s business services revenue. But TWC also has more experience providing advanced services to medium-sized and enterprise businesses because of its presence in the New York and Los Angeles markets, and had an earlier start. Despite the fact that both companies are gaining momentum in their respective segments, in 2013 Comcast and TWC together had only approximately 10-15 percent market share for small- and medium-sized businesses in their footprints, and a *de minimis* share of enterprise businesses.²¹¹

Even at these initial levels of service, however, Comcast and TWC have already had a substantial competitive impact in the business services area, driving legacy providers to drop prices and to upgrade their services and add value for customers. Analyst reports have underscored aggressive price competition by Comcast and TWC in the small- and medium-sized

²¹¹ See Angelakis Decl. ¶ 32; Liana B. Baker, *Comcast: Business services is sweet spot in Time Warner Cable deal*, Wall St. J., Apr. 1, 2014, available at <http://www.reuters.com/article/2014/04/01/us-comcast-twc-business-analysis-idUSBREA3022F20140401> (“The higher you move upmarket, the tougher it's going to be. The combined company will have a bigger regional footprint than AT&T and Verizon but AT&T and Verizon have developed a national structure that'll be hard to crack . . .”) (quoting IDC analyst Matt Davis)). In particular, Comcast has achieved penetration in an estimated 20 percent of the small-business segment in its footprint, see Doug Mitchelson & Brian Russo, Deutsche Bank, *Pay TV Guide / 4Q13 Wrap* 35 (Mar. 6, 2014), and TWC estimates that it serves 12 percent of small- and medium-sized businesses in its area. According to third party estimates, Comcast and TWC combined reportedly only had a 6.4 percent share of the market for retail business broadband Internet service customers in the United States in 2013. See Charlie Reed, *Comcast-TWC Merger to Create Fourth Largest Business Services Player*, Telecom Reseller, Feb. 13, 2014, available at <http://www.telecomreseller.com/2014/02/13/comcast-time-warner-cable-merger-to-create-fourth-largest-business-services-player/>.

business segments,²¹² with a 2013 research report noting that new entry was decreasing Ethernet pricing for business by 10 percent or more a year.²¹³ And cable competition has led incumbent competitors to respond with service enhancements and aggressive new investments as well. For example, AT&T and CenturyLink have intensified efforts to expand fiber to businesses and reduce cable’s speed advantage, with AT&T pledging to extend fiber to one million businesses in its footprint and CenturyLink increasing the number of fiber-fed buildings by 17 percent between the third and fourth quarters of 2013.²¹⁴ Legacy providers also have responded by improving their offerings to bundle new data and voice features with basic network features.²¹⁵

Comcast and TWC customers have praised price and feature enhancements as compared to their previous options:

- A Chicago school district contracted with Comcast and noted that “the district will save about 42 percent over what we were spending with AT&T.”²¹⁶

²¹² Rosston/Topper Decl. ¶ 119.

²¹³ Insight Research Corp., *US Carriers and Ethernet Services, 2013-2018*, at 5 (Aug. 2013); *see also* Century Link Petition for Forbearance, WC Dkt. No. 14-9, at 15 n.52 (Dec. 13, 2013) (quoting TeleGeography, *Global Enterprise Networks: Enterprise Service Pricing*, at 16, 20 (Jan. 2013) (“Median Ethernet market prices remain volatile, fluctuating considerably year to year. . . . With this said however, the long-term price trend is clearly down. . . . As a growing number of carriers offer the service, [Virtual Private LAN Service] prices continue to decline.”); Craig Galbraith, *CableCos Gain Ground in Ethernet, But AT&T, Verizon Still Lead*, Channel Partners, Feb. 12, 2014, <http://www.channelpartneronline.com/news/2014/02/cablecos-gain-ground-in-ethernet-but-at-t-verizon.aspx> (“Cable companies have developed a winning formula for the U.S. business Ethernet market. They are successfully leveraging their on-net fiber footprints to offer aggressive pricing and rapid service provisioning.”).

²¹⁴ *See* Sean Buckley, *AT&T’s \$14B Project VIP: Breaking Out the Business Service, U-verse Numbers*, FierceTelecom, Sept. 24, 2013, <http://www.fiercetelecom.com/special-reports/atts-14b-project-vip-breaking-out-business-service-u-verse-numbers>; Glen Post, CEO, CenturyLink, Inc., Q4 2013 Earnings Call, Tr. at 5 (Feb. 12, 2014).

²¹⁵ *See* Rosston/Topper Decl. ¶ 120; Israel Decl. ¶¶ 159-60. For example, Verizon has added Google Apps for Business for its business customers. Monte Beck, Vice President of Small Business Market, Verizon, *Google Apps for Business Now Available for Verizon Customers*, Google Official Enterprise Blog (Jan. 24, 2011), <http://googleenterprise.blogspot.com/2011/01/google-apps-for-business-now-available.htm>. Similarly, CenturyLink has enhanced its Core Connect product for business by adding website design and hosting, domain name registration, fax over email, and data backup services. *See* Century Link Business, *Core Connect*, <http://www.centurylink.com/smallbusiness/products/bundles/core-connect/> (last visited Mar. 30, 2014).

²¹⁶ Denys Bucksten, *District 112 Will Have A Tenfold Increase in Bandwidth This Year To Improve Internet Access*, Chi. Trib., Aug. 12, 2013, available at http://articles.chicagotribune.com/2013-08-12/news/ct-tl-lk-0815-highland-park-school-technology-20130812_1_north-shore-district-district-112-bandwidth.

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- In Pennsylvania, Comcast was able to provide a number of school districts with connectivity to the PA IUnet, an online, statewide, private network that allows teachers and students to communicate, collaborate, and share resources. According to Jared Mader, director of education technology for the Lincoln Intermediate Unit, which helped facilitate the agreement, “Comcast has allowed many of our districts to increase their bandwidth exponentially – and in some cases for half the price – which has given them access to cloud computing, video conferencing, and other online educational tools that had previously been cost-prohibitive for them.”²¹⁷
- “Utz Quality Foods, Inc. is using Comcast Business Ethernet and Business Trunks to connect multiple office locations and distribution centers throughout the Eastern United States. . . . With its recent acquisitions of three major regional brands and distribution networks – Zapp’s Potato Chips, Wachusett Potato Chip, and The Bachman Co. – within the past 24 months, Utz realized it needed to reassess its existing wide area voice and data networking infrastructure to replace its old T1 lines. . . . ‘In aggregate, we realized a significant savings, while enjoying more bandwidth than what our T1 lines had given us,’” (quoting J. Ed Smith, chief information director).²¹⁸
- In Florida, “Comcast has been aggressively pursuing business that traditionally might be handled by legacy phone companies such as AT&T ‘We are saving money over what we were previously paying for our old phone system, and now we have a completely cloud-based solution that gives our team full freedom to work wherever they need to.’”²¹⁹
- Union Bank in Ohio used T-1 broadband lines provided by five separate telecommunications carriers before switching to TWC. Switching to TWC has provided many benefits. For example, according to a TWC case study: “[T]he data transmission speed has doubled, having gone from 1.5 Mbps on the old T-1 lines to a blazing fast 3 Mbps bandwidth on [TWC]’s state-of-the-art fiber-optic network. As a result, the bank’s data congestion problems are a thing of the past . . . [TWC] was able to fulfill the bank’s most stringent network security needs through its managed security program, which includes filtering and around-the-clock monitoring that Union Bank is required to maintain . . . the solution has

²¹⁷ School CIO, *Back Office Business: Pennsylvania Districts Get Low-Cost Ethernet Service*, Jan. 31, 2014, <http://www.schoolcio.com/cio-feature-articles/0109/back-office-business/54654>.

²¹⁸ *Utz Upgrades Connectivity for Offices, Distribution Centers*, Evening Sun, Apr. 24, 2013, available at http://www.eveningsun.com/news/ci_23096622/utz-upgrades-connectivity-offices-distribution-centers-including-hanover.

²¹⁹ Kevin Gale, *Cutting Edge Phone System Helps Small Business Owners, Road Warriors*, S. Fla. Bus. J., Sept. 23, 2013, available at <http://www.bizjournals.com/southflorida/blog/2013/09/comcast-adds-mobile-feature-to.html> (quoting Jordi Tejero, owner of CRS Technology Consultants).

resulted in a tremendous reduction in the monthly cost of Union Bank’s broadband service.”²²⁰

- Switching to TWC has provided many benefits to the City of Colleyville, TX. For example, according to a TWC case study: “The [TWC] secure and fiber-rich [Ethernet Virtual Private Line] network, scalable up to 10 Gbps+, helps with routine government tasks It has also enabled . . . Colleyville to centralize servers, applications and terabytes of data storage from six to two data center facilities. The centralization has brought numerous enhancements to city administration, such as hardware and electricity cost savings, data synchronization across all its facilities, centralized sewage and water monitoring systems, enabling online training for firefighters and police officers and desktop virtualization.”²²¹

Nevertheless, Comcast and TWC have faced constraints in attempting to replicate their market success on a larger scale. As described below, and as explained by Drs. Rosston and Topper, and Dr. Israel, respectively, the added scale and geographic reach, as well as the complementary strengths afforded by the transaction, will enhance the combined company’s ability to be a more significant player in the medium-sized business segment and beyond.²²²

2. The Transaction Will Enhance Competition for Medium-Sized, Regional, Super-Regional, and Enterprise Businesses.

a. The Combined Company’s Greater Scale, Scope, and Efficiency Will Overcome Key Constraints.

To date, geographic constraints have hindered Comcast, TWC, and other cable companies from competing effectively against incumbent providers with national scale and scope for larger business customers that have multiple office locations in various states.²²³

²²⁰ Time Warner Cable, *The Union Bank Company Cashes in on Blazing Fast Ethernet and Managed Security Services from Time Warner Business Class*, Case Study, <http://www.timewarnercable.com/en/business-home/resource-center/case-studies/union-bank-company.html>.

²²¹ Time Warner Cable, *City of Colleyville Modernizes their Network with Time Warner Cable Business Class Fiber-Rich Ethernet Services*, Case Study (Nov. 2013), <http://www.timewarnercable.com/en/business-home/resource-center/case-studies/city-of-colleyville.html>.

²²² See Rosston/Topper Decl. ¶¶ 122-138; Israel Decl. ¶¶ 133-57.

²²³ See Rosston/Topper Decl. ¶ 125.

Where a customer’s business spans multiple areas, a cable company with a limited footprint is often not an option at all. And while Comcast and TWC could theoretically partner to serve customers that span both companies’ footprints – and in fact have ongoing efforts to do so – such offerings are often difficult to arrange and manage for both the customer and for the providers. Although some customers are willing to work with an “aggregator” to cobble together multiple providers’ offerings to serve their various sites, many customers refuse to use aggregators or are willing to consider such options only where one provider can serve a majority of the locations using its own network.²²⁴ And customers tend to prefer the higher level of reliability that results when a network is built to a common set of technical standards, is managed by a single network operations center, and offers a single point of contact for technical or other customer-service issues. As Dr. Israel explains, both Comcast and TWC now face significant “coordination problems associated with multiple firms serving a single customer,” including differences in business practices between Comcast and TWC themselves. These coordination problems are often impossible to resolve via contracting.²²⁵

Another constraint currently faced by Comcast and TWC is “double marginalization” under which the price that Comcast provides to its customer reflects two profit margins: the margin that the other supplier (say, TWC or another provider) includes in its wholesale price to Comcast and the margin that Comcast includes in the retail price to the customer. Dr. Israel details how “lower margins make it less profitable for Comcast (or TWC) to bid on a project and increase the likelihood that a project will fail to meet Comcast’s (or TWC’s) internal hurdle

²²⁴ Angelakis Decl. ¶¶ 35-36.

²²⁵ Israel Decl. ¶ 147; *see also id.* ¶ 148; Rosston/Topper Decl. ¶ 141.

rates. To the extent that the lower return arising from double marginalization prevents Comcast (or TWC) from bidding on a project, competition in the business services segment is reduced.”²²⁶

As a result of the foregoing constraints, Drs. Rosston and Topper observe, cable companies often are viewed as not being able to make a competitive offering in this market segment.²²⁷ The transaction will help change that by extending Comcast’s geographic reach and enhancing the combined company’s investment incentives.

Medium-Sized, Regional, and Super-Regional Businesses. Economies of scale will allow the combined company to drive fiber and other high-speed capacity technology deeper into the network, creating the broadband infrastructure that is needed to bring business locations “on-net.”²²⁸ TWC already has 58,000 commercial buildings connected with fiber in its footprint, and Comcast has about [] on-net fiber-connected buildings in its footprint. Both Comcast and TWC provide dedicated Internet access to businesses over their fiber networks, offering speeds of up to 10 Gbps. Where fiber is not an option, Comcast has helped pioneer the offering of “Ethernet over HFC” (hybrid fiber/coax) that delivers Metro Ethernet at guaranteed speeds of up to 10 Mbps symmetrical and provides a cost-effective Ethernet option for many customers.²²⁹ The combined company will service a greater total number of on-net fiber and HFC buildings that can serve multi-site customers than either company does alone, and will have greater incentive to build out even more – making it a more viable competitive alternative to legacy providers. Furthermore, increasing the number of “on-net” sites the company serves will further

²²⁶ Israel Decl. ¶ 151; *see also* Rosston/Topper Decl. ¶ 127.

²²⁷ *See* Rosston/Topper Decl. ¶ 120.

²²⁸ Angelakis Decl. ¶¶ 33-34.

²²⁹ With its Ethernet over HFC service, Comcast estimates that it makes Ethernet services available to approximately one million buildings.

reduce the costs and operational barriers for businesses with multiple sites and facilitate the re-investment of operating cash flow in connecting additional sites to its networks.²³⁰

An expanded footprint will also enable the combined company to provide an attractive unified service to regional businesses and super-regional businesses with offices adjacent to or clustered around areas previously split between the Comcast and TWC markets. These opportunities may be greatest in:

- **Northeast Corridor:** Boston (Comcast) → New York (TWC) → New Jersey (Comcast) → Philadelphia (Comcast) → Baltimore (Comcast) → Washington, DC (Comcast);
- **Midwest:** Pittsburgh (Comcast) → Cleveland (TWC) → Columbus (TWC) → Detroit (Comcast) → Chicago (Comcast);
- **Midwest 2:** Milwaukee (TWC) → Green Bay (TWC) → Chicago (Comcast) → Indianapolis (Comcast) → Kansas City (TWC) → Lexington (TWC) → Louisville (TWC);
- **Texas:** Houston (Comcast) → Dallas/Fort Worth (TWC) → Austin (TWC) → San Antonio (TWC);
- **Southeast:** Greensboro (TWC) → Charlotte (TWC) → Columbia (TWC) → Charleston (Comcast/TWC) → Atlanta (Comcast) → Mobile (Comcast) → Tallahassee (Comcast) → Jacksonville (Comcast) → Miami (Comcast); and
- **Pacific Coast:** San Diego (TWC) → Los Angeles (TWC) → San Francisco (Comcast) → Sacramento (Comcast) → Portland (Comcast) → Seattle (Comcast).

In addition to making it possible to reach and serve larger multi-site customers in a uniform fashion, the combined company's larger scale will enhance competition in other dimensions as well. Notably, it will allow the company to build super-regional Metro Ethernet clusters, thereby further consolidating key parts of the company's network and fostering more efficient delivery of services. Scale also will enable the combined company to spread its

²³⁰ Likewise, a reduction in "off network" sites will allow Comcast to spend fewer dollars on processes devoted to managing interconnection contracting, service delivery, and service assurance efforts.

investments in product procurement and development over a larger potential base of customers, which will facilitate more investment and enhance the combined company’s ability to compete with the incumbents (e.g., Comcast’s Business Voice Edge Hosted PBX Service, described further below, is currently available to 6 million businesses, and post-transaction the service could be made available to 10 million prospects).

As Drs. Rosston and Topper explain, “the combined entity will be able to offer lower prices and will therefore be a stronger, more aggressive competitor, to the benefit of business customers,” because “[t]he transaction will likely reduce prices for businesses whose locations span the Comcast and TWC networks by reducing or eliminating double marginalization and reducing the cost of underlying network services required for an out-of-footprint connection.”²³¹ Dr. Israel similarly concludes that “the transaction alleviates both the coordination issues and the double-marginalization problems and makes it more profitable for the combined firm to bid on (and win) contracts from super-regional businesses.”²³²

All of these scale, integration, and operational efficiencies will mean the combined company will be better equipped than either company alone could be to develop, deploy, maintain, and consistently upgrade innovative products and services for larger business customers.

Enterprise Businesses. Delivering services to national enterprise customers requires substantial investment in network infrastructure, data centers, and other facilities.²³³ Comcast estimates that the cost of these network investments alone will exceed \${{ }} billion.²³⁴ The

²³¹ Rosston/Topper Decl. ¶ 129; *see also* Israel Decl. ¶¶ 117-118, 142-144.

²³² Israel Decl. ¶ 153.

²³³ *See* Rosston/Topper Decl. ¶ 136.

²³⁴ *See id.* ¶ 137.

increased number of on-net fiber and HFC buildings that can serve multi-site customers, as well as the increased scale, integration, and operational efficiencies described above will also establish the combined company as a meaningful alternative for enterprise companies that have many locations throughout the expanded Comcast-TWC footprint.²³⁵ An enterprise customer may still need to rely on an aggregator for some of its locations to fill in the holes outside the combined company's footprint. However, with its greater footprint post-transaction, the company will be more likely to be a contender for the aggregator role because of its larger number of locations.²³⁶ And as the main provider, the company can play a bigger role in ensuring quality service and reducing cost by avoiding double marginalization.²³⁷

Even where Comcast and TWC have been able to win some of this enterprise business in the past, they have been able to do so only on a patchwork basis. For example, TWC currently provides business services to the Cleveland Clinic and is partnering with the clinic to provide an in-home health solution to reduce the rate of readmissions. The Cleveland Clinic has two large campuses in Florida in the Comcast footprint, so TWC has not been able to offer those campuses its services or extend the in-home health solution trial to patients of the Cleveland Clinic who live in Florida or are there from Cleveland for part of the year. Approval of the transaction would change that for the first time, allowing the company to offer a unified solution to the Clinic. In short, for that entity, and for many others like it, the transaction offers a new alternative solution for business communications, and the promise of lower prices and more innovation – benefits that will redound to the consumers those businesses serve.

²³⁵ See Rosston/Topper Decl. ¶¶ 135-138.

²³⁶ Angelakis Decl. ¶ 37.

²³⁷ Israel Decl. ¶¶ 153-58.

b. Combining Comcast’s and TWC’s Complementary Business Innovations Will Further Enhance Competition.

Beyond the significant benefits driven by larger scale, the combined company will be able to compete more effectively for medium-sized and enterprise business customers by combining Comcast’s and TWC’s respective product offerings into a “best of the best” service portfolio, thereby capitalizing on their complementary strengths and marketing expertise.²³⁸

For example, Comcast currently offers some services to business customers that TWC does not, including Comcast’s Business VoiceEdge (“BVE”), which provides web-based PBX functionality with a host of nomadic features. This includes a “Be Anywhere” feature that allows customers to make and receive calls from any device at any location with one phone number, and to use 4-digit extensions to contact colleagues from their mobile phones. BVE also includes “Teleworker,” which enables seamless integration of remote and work-at-home employees into a company’s phone infrastructure. In 2013, Comcast was listed as a Leading Hosted VoIP Provider on the Infonetics Research 2013 North America Business VoIP Service Leadership Scorecard.²³⁹

²³⁸ Comcast is currently listed as the 8th largest U.S. Metro Ethernet provider. TWC is 5th. See Press Release, Vertical Systems Group, 2013 U.S. Carrier Ethernet Leaderboard (Feb. 12, 2014), <http://www.verticalsystems.com/vsglb/2013-u-s-carrier-ethernet-leaderboard/>. Additionally, although Comcast only launched its efforts in the medium-sized business market segment in 2010, it has already been recognized for its innovative efforts, winning a variety of Carrier Ethernet awards, including 2013 Metro Ethernet Forum awards for Regional Service Provider of the Year, Best Marketing, and Best Carrier Ethernet Business Application, as well as a 2012 Best Practices Award from Frost & Sullivan for North American MSO Ethernet Services Competitive Strategy Leadership. See Press Release, Comcast Corp., Comcast Introduces New Metro Ethernet Services for Mid-Sized Businesses (May 16, 2011), <http://corporate.comcast.com/news-information/news-feed/comcast-introduces-metro-ethernet-services-to-address-bandwidth-application-and-reliability-requirements-of-mid-sized-businesses>; Bill Stemper, *Comcast Wins Metro Ethernet Forum Service Provider of the Year Award*, Comcast Voices (Nov. 22, 2013), <http://corporate.comcast.com/comcast-voices/comcast-wins-metro-ethernet-forum-service-provider-of-the-year-award>.

²³⁹ Press Release, Infonetics, Infonetics Scoreboard Ranks Comcast, Verizon, 8x8, XO Top N. American Business VoIP Providers, IP Connectivity Becoming Commodity (May 14, 2013), <http://www.infonetics.com/pr/2013/North-America-Business-VoIP-Scorecard.asp>.

Meanwhile, TWC, through its NaviSite subsidiary, provides a range of cloud-based solutions that appeal to medium-sized and enterprise businesses, including “Infrastructure as a Service” and “Desktop as a Service,” and customized managed hosting, managed application, and message solutions, along with other related IT solutions and professional services.²⁴⁰ TWC also offers Session Initial Protocol (“SIP”) trunking, data center services, and other high-end business services products, and has received a “Metro Ethernet Forum” 2.0 Certification in all eight Ethernet product categories.²⁴¹ As Drs. Rosston and Topper conclude, “[c]ombining the complementary products and services offered by Comcast and TWC under a single company will enhance competition in business services” in a way neither company can do today.²⁴²

3. The Transaction Will Enhance Competition for Wireless Backhaul Services.

With mobile data traffic growing incredibly rapidly, wholesale wireless backhaul is also an emerging and significant national service that the combined company will be better positioned to provide in the years ahead.²⁴³ Comcast and TWC have both responded to the growing need for wireless carriers to transport wireless traffic from their cell towers on high-capacity fiber facilities to make the mobile broadband ecosystem work more efficiently and reliably. TWC has grown its business through strategic acquisitions – recently purchasing DukeNet, an 8,700-mile regional fiber-based network that provides wholesale wireless backhaul and other business

²⁴⁰ See Cloud Services, NaviSite, <http://www.navisite.com/> (last visited Apr. 5, 2014).

²⁴¹ See *The MEF Certification Program*, MEF, <http://www.metroethernetforum.org/certification/mef-certification-programs> (last visited Mar. 30, 2014). Comcast was the first service provider to receive CE2.0 certification. See *Comcast Business Services is World’s First CE 2.0 Service Provider*, Telecom Review, http://telecomreviewna.com/index.php?option=com_content&view=article&id=334:comcast-business-services-is-worlds-first-ce-20-service-provider&catid=1:latest-news&Itemid=62 (last visited Apr. 2, 2014). Comcast is certified in six of the eight CE 2.0 categories.

²⁴² Rosston/Topper Decl. ¶ 139.

²⁴³ Angelakis Decl. ¶ 38.

services to customers in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia. TWC currently provides wireless backhaul to approximately 14,000 cell sites, while Comcast serves approximately 8,500 cell sites. Comcast's and TWC's current shares in this segment are small: the companies together had only an estimated 2.8 percent market share in 2013.²⁴⁴

As with the medium-sized and enterprise segments discussed above, the transaction will make the combined company a more effective wireless backhaul competitor to the ILECs due to:

- Improved network reach that will allow the company to serve a much higher proportion of a mobile operator's sites;
- Improved operations resulting from consistency in approach and technology on a larger fraction of a mobile operator's sites;
- Increased ability to build out fiber and invest in wireless backhaul infrastructure because of additional scope and scale; and
- Increased number of on-net locations, which will allow the operating cash flow from those sites to be re-invested in plant expansion to marginal sites.²⁴⁵

By utilizing not only TWC's assets, but also its knowledge and expertise of this business, Comcast will be better positioned to offer mobile operators the services they want in more locations.

4. The Transaction Will Inure to the Benefit of Small Businesses.

The combined investments and network upgrades that are necessary to serve medium-sized, enterprise, and wholesale wireless backhaul customers across the combined company

²⁴⁴ Charlie Reed, *Comcast-TWC Merger to Create Fourth Largest Business Services Player*, Telecom Reseller, Feb. 13, 2014, available at <http://www.telecomreseller.com/2014/02/13/comcast-time-warner-cable-merger-to-create-fourth-largest-business-services-player/>.

²⁴⁵ See Angelakis Decl. ¶ 39.

footprint will also inure to the benefit of small business (and residential customers as well) in a number of ways.

First, since products developed for the medium-sized or enterprise segments can often be offered to/repackaged for small businesses, new product development driven by greater competition for larger businesses will also benefit small business customers. *Second*, small businesses (and residential customers) will enjoy the “spillover effects” from investments and plant upgrades made to serve larger businesses.²⁴⁶ For example, consider a strip mall with 10 separate small business stores that previously did not have a competitive alternative to the ILECs for their broadband, voice, or video services, because it was cost-prohibitive for Comcast or TWC to build out its network for so few additional customers. If the combined company extends the last mile of its network to serve a medium-sized or enterprise customer with, say, five different sites, one of which is near the strip mall, those 10 stores may become serviceable from the same network extension. As Dr. Israel observes:

[T]hrough a forward-looking lens, every build-out Comcast does for a business customer in the future lays down more network infrastructure to serve more businesses and residential customers. Building out the network infrastructure in a way that creates excess capacity effectively reduces the marginal costs of connecting more business and residential customers near the build-out. All expansions of cable plant and investments in core network to serve newly profitable business customer opportunities directly benefit residential customers as well (through a faster core network and more homes passed). In a similar vein, the expansion of broadband to certain businesses within a footprint increases the likelihood of providing access to other business and residential customers in the future.²⁴⁷

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²⁴⁶ Israel Decl. ¶¶ 181-86; Rosston/Topper Decl. ¶ 63.

²⁴⁷ Israel Decl. ¶ 184.

The FCC has recognized that cable entry “foster[s] facilities-based competition in the enterprise market,” and that this promotes “a long-standing goal.”²⁴⁸ As shown above, the transaction will increase competition in all business segments in multiple ways. This is an area of the communications marketplace that is in serious need of increased competition. The Commission can move the needle substantially in this regard by approving this transaction.

D. The Transaction Will Accelerate the Deployment and Adoption of Next-Generation Cable Advertising Technologies that Will Benefit Advertisers and Consumers.

The transaction will accelerate the expanded deployment and adoption of next-generation advertising technologies – notably (1) dynamic ad insertion for VOD and other platforms, and (2) addressable advertising – that will create new benefits for advertisers, content providers, and consumers alike.

Dynamic Ad Insertion. Traditionally, VOD advertising was static and often became stale. The ads were inserted in programming in advance and could not later be modified, regardless of how long the VOD asset was available to consumers. Dynamic ad insertion transforms this platform by separating the ads from the programming stream and dynamically inserting them into VOD segments, and ultimately into other platforms like TV Everywhere (and even cloud DVR).²⁴⁹ This technology thus allows advertisers to tailor their messages on this platform in a more timely manner, giving them more meaningful access to the increasingly large

²⁴⁸ *Applications Filed for the Acquisition of Certain Assets of CIMCO Commc’ns, Inc. by Comcast Phone LLC, Comcast Phone of Mich., LLC and Comcast Business Commc’ns, LLC*, Memorandum Opinion and Order and Order on Reconsideration, 25 FCC Rcd. 3401 ¶ 4 (2010) (“Comcast’s acquisition of CIMCO’s assets and expertise will result in significant public interest benefits, in part because the transaction will foster facilities-based competition in the enterprise market, a long-standing goal of the Commission.”); *Applications Filed for the Transfer of Control of Insight Commc’ns Co. to Time Warner Cable Inc.*, Memorandum Opinion and Order, 27 FCC Rcd. 497 ¶ 23 (WCB 2011) (“[T]he proposed transaction likely will provide benefits to residential and business customers through the combined companies’ increased ability to compete with the incumbent LEC in the provision of voice service and service bundles.”).

²⁴⁹ See Angelakis Decl. ¶ 41.

segment of consumers who engage in time-shifted viewing or view content using devices other than a traditional television (e.g., a computer, tablet, or smartphone).²⁵⁰

Comcast and TWC have both been developing and deploying dynamic ad insertion in VOD, online, and other platforms.²⁵¹ However, further investment and work is needed to make this platform more attractive to advertisers, by improving existing dynamic ad insertion technologies and unifying measurement metrics across platforms.²⁵² The transaction will help address these challenges and unlock the real potential for this new technology for three reasons.²⁵³

First, being able to spread the costs for this new technology over an expanded customer base will allow for greater investment in enhancing and further deploying this technology across multiple platforms.

Second, the combined company's increased scale will likely spur advertisers and ratings agencies to unite around common audience measurement and effectiveness tools for these new platforms and ad technologies. This, in turn, will create greater momentum for their adoption

²⁵⁰ See, e.g., Comcast Spotlight, *Dynamic Ad Insertion: Unlocking the Value of Video on Demand*, at 6, 9, http://www.comcastspotlight.com/takefive/assets/Take_Five_10_DAI_Webcast_FINAL.pdf. Nielsen estimates that between 2011 and 2013 the average time spent per adult per day watching time-shifted television has increased from 25 minutes to 32 minutes. Additionally, the time using the Internet, a smartphone, or a multimedia device has increased from 112 minutes to 130. See Nielsen Co., *An Era of Growth: The Cross-Platform Report*, at 9 (Mar. 5, 2014), <http://www.nielsen.com/us/en/reports/2014/an-era-of-growth-the-cross-platform-report.html>.

²⁵¹ 40 percent of Comcast's VOD viewing is in the C3 window. See Jeff Baumgartner, *Advanced Ads: 40% of Comcast VOD Viewing Is in C3 Window*, Multichannel News, Feb. 28, 2014, available at <http://www.multichannel.com/distribution/advanced-ads-40-comcast-vod-viewing-c3-window/148580>. Comcast had about 1 billion dynamic ad insertion impressions last year and expects to double this in 2014. *Id.*

²⁵² See Leslie Ellis May, *Dynamic Ad Insertion and the Upfronts*, Multichannel News, May 19, 2013, available at <http://www.multichannel.com/blogs/translation-please/dynamic-ad-insertion-and-upfronts>.

²⁵³ See Jeff Baumgartner, *Mega-Merger Could Be A Boon for Advanced Ads*, Multichannel News, Feb. 24, 2014, available at <http://www.multichannel.com/finance/mega-merger-could-be-boon-advanced-ads/148461> (“[T]he proposed Comcast-TWC deal could lead to seismic shifts in how programmers and operators buy and sell ads, and pave the way for a broader use of new technologies.”).

and deployment.²⁵⁴ As Drs. Rosston and Topper point out, despite the technical capabilities, uptake by content providers and advertisers of dynamic ad insertion has been far short of its potential “because viewer measurement tools that include VOD and alternate devices and could accurately value dynamic ad insertion on those platforms are not fully developed.”²⁵⁵ They further explain:

With Comcast’s increased scale and ability to offer more VOD advertising to more customers following the transaction, Comcast may be able to work more closely with ratings firms to accelerate development of measures that include VOD and alternate devices, which in turn would provide incentives for content providers and advertisers to take advantage of dynamic ad insertion in VOD content.²⁵⁶

Third, as discussed above, Comcast is a leader in VOD platforms and content. The transaction will extend Comcast’s VOD and TV Everywhere platforms and digital rights to TWC’s systems, particularly in the important markets of New York²⁵⁷ and Los Angeles, creating additional cable advertising options in these Direct Marketing Areas (“DMAs”).²⁵⁸

²⁵⁴ See Rosston/Topper Decl. ¶ 145.

²⁵⁵ *Id.*

²⁵⁶ *Id.*

²⁵⁷ In the New York market in particular, the integration of TWC with Comcast Spotlight may also help the company build on complementary strengths in managing local “interconnect” advertising arrangements. Interconnects allow MVPDs to pool their advertising avails in an area and then offer them to advertisers. For example, using an interconnect, a car dealer, in one transaction, can schedule a commercial to run at the same time on the same channel on all participating MVPDs. The largest television market in the country, New York, has one interconnect managed by Cablevision that includes Cablevision and Comcast, and a quasi-interconnect (a joint sales agreement that does not easily allow for simultaneous insertion) managed by TWC. Following the transaction, Comcast intends to combine the two interconnects to serve advertisers better. In particular, a single interconnect would create efficiencies for local advertisers by allowing them to target virtually all MVPD households in the greater New York market with a single buy. The combined interconnect would also facilitate hyper-local advertising. Manhattan currently contains two local zones. Comcast’s philosophy is to create smaller, more discrete zones. This would increase the number of local zones in Manhattan and benefit advertisers who want to reach hyper-local audiences. In addition, consolidation of a large base of the advertising technologies discussed above into one interconnect may help galvanize other interconnect participants to accelerate adoption of these technologies.

²⁵⁸ See *id.* ¶ 152.

While dynamic ad insertion will be of most interest to advertisers themselves, the increased deployment and uptake of this technology made possible by the transaction will yield benefits for content providers by allowing them to better monetize programming on VOD and other cable platforms, providing a new source of revenue to support high-quality programming and possibly even reducing pressure on license fees.²⁵⁹ This, in turn, should help consumers by making it more likely that programmers can and will make more popular programming available, including “banking” entire past seasons on VOD to allow consumers to catch up, as USA Networks recently did with *Suits*.²⁶⁰ As Drs. Rosston and Topper point out, if this proves successful and monetizable, “[a]dvanced advertising at the greater scale afforded by this transaction could result in consumers receiving discounted or free access to some of the same content they are purchasing elsewhere at a monthly out-of-pocket cost of \$8-10/month.”²⁶¹

Addressable Advertising. Similar benefits may result with respect to addressable advertising technology.²⁶² Addressable advertising allows marketers purchasing advertising spots on cable network programs to augment geographic zone targeting (i.e., advertising targeted at specific zip codes or neighborhoods) with advertising targeted to individual households based on demographics and other household-specific characteristics.²⁶³ The advertiser identifies the preferred demographics of its target audience, and then the cable operator targets ads to matching neighborhoods or households using various data, in compliance with the Cable Act’s stringent

²⁵⁹ See *id.* ¶ 147.

²⁶⁰ See Jon Lafayette, *VOD Stunt Has Viewers Trying On USA’s ‘Suits’*, *Broadcasting & Cable*, Jan. 14, 2013, available at <http://www.broadcastingcable.com/news/advertising-and-marketing/vod-stunt-has-viewers-trying-usa-suits/53067?nopaging=1>.

²⁶¹ Rosston/Topper Decl. ¶ 147.

²⁶² See Ryan Joe, *CES 2014: Advances in Addressable TV*, *Ad Exchanger*, Jan. 14, 2014, <http://www.adexchanger.com/digital-tv/ces-2014-advancements-in-addressable-tv/>.

²⁶³ See Jeanine Poggi, *The CMO’s Guide to Addressable TV Advertising*, *Advertising Age*, Feb. 19, 2014, available at <http://adage.com/article/cmo-strategy/cmo-s-guide-addressable-tv-advertising/291728/>.

privacy protections.²⁶⁴ Addressable advertising offers important benefits to existing advertisers who can improve the efficiency and cost-effectiveness of their marketing efforts, and may provide a new option to advertisers that might not previously have considered the cable network ads because their products appeal to narrow, niche markets rather than a mass market.

The transaction will accelerate the deployment of addressable advertising not just due to the greater scale and investment potential discussed above,²⁶⁵ but also for two additional reasons.

First, while Comcast has addressable ad technology that it is planning to roll out more widely by the end of 2014, TWC has not deployed addressable advertising on its platform. Accordingly, the transaction will extend Comcast’s addressable ad technology and plans to the TWC systems.

Second, the expanded geographic reach of the combined entity will create attractive new options for advertisers to reach cable network audiences efficiently. As Drs. Rosston and Topper explain, “[a]dvertisers who seek to advertise to a television audience today generally purchase advertising time from cable and broadcast networks and sometimes supplement those purchases with a handful of spot market advertising purchased from local broadcast stations and aggregator

²⁶⁴ See 47 U.S.C. § 551.

²⁶⁵ The advertising success of other technology-focused companies – with an even more expansive reach (and earlier start) than the combined company would have – underscores the benefits of scale for developing next-generation advertising technologies that enable more precise audience targeting. For example, Google’s advantage in targeted advertising technology is well documented; it is recognized as “far and away the biggest player in the ad-tech industry,” serving over 300 billion ad impressions per month. See Alex Kantrowitz, *Just Look At How Google Dominates Ad Tech: Rate New Data Shows Just How Big Google’s Ad-Tech Advantage Is*, Advertising Age, Oct. 18, 2013, available at <http://adage.com/article/digital/google-dominates-ad-tech/244824/>. And the once nascent mobile advertising space has now seen huge growth thanks to efforts by Facebook and Google. See Victor Luckerson, *The Mobile Ad Market is Exploding Because of These Two Companies*, Time, Mar. 19, 2014, available at <http://time.com/#30517/the-mobile-ad-market-is-exploding-because-of-these-two-companies/>. Google netted 49 percent of all mobile ad revenue in 2013, and is projected to \$14.7 billion in mobile ad revenue this year. See *Driven by Facebook and Google, Mobile Ad Market Soars 105% in 2013*, eMarketer, Mar. 19, 2014, available at <http://www.emarketer.com/Article/Driven-by-Facebook-Google-Mobile-Ad-Market-Soars-10537-2013/1010690#EhhmEWkZ6Wje3rut.99>. Facebook, with 172 million users in the U.S. and Canada alone, earned 53 percent of its ad revenue, or \$1.37 billion, from next-generation mobile ads. See *id.*

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NCC Media.”²⁶⁶ The “spot” cable advertising²⁶⁷ available from NCC runs across a variety of MVPDs, many of which do not offer addressable advertising and other advanced capabilities. As such, “Comcast’s greater geographic footprint and accelerated rollout of advanced advertising services resulting from this transaction will create an alternative for advertisers that want Comcast’s targeted or addressable ad services in its markets and can accept the absence of full national reach.”²⁶⁸ Further, if the addressable advertising technology becomes more standardized, as it may once Comcast has invested in and developed it, and spreads across the industry, it will be increasingly interesting to advertisers, since addressability is more valuable as the target audience grows – i.e., with a bigger starting audience, a larger number of “hits” is likely.²⁶⁹

And when addressable technology is combined with the dynamic ad insertion capability described above, the enhanced value and benefits are particularly significant.²⁷⁰ For the first time, advertisers of all types and sizes, including national advertisers, seeking to target customers with spot cable advertising in certain key markets across the country will be able to look to the

²⁶⁶ Rosston/Topper Decl. ¶ 151. NCC Media, a joint venture owned by Comcast, TWC, and Cox Cable, represents national spot ad sales for MVPDs in all 210 U.S. markets and reaches more than 80 million households. *See NCC Media – Local Hits the Spot*, AdWeek, Apr. 22, 2013, available at <http://www.adweek.com/sa-article/ncc-media-148715>.

²⁶⁷ “Spot advertisers” are advertisers that buy advertising at a local Designated Market Area, zone, or subzone level. *See, e.g., Spot Cable Advertising*, Comcast Spotlight, <http://www.comcastspotlight.com/advertising-solutions/on-air/spot-cable> (last visited Apr. 3, 2014).

²⁶⁸ Rosston/Topper Decl. ¶ 152; *see also* Jeanine Poggi, *What Comcast-Time Warner Cable Means for Advertising: A Better Alternative for National Advertisers, More Reach for Addressable Ads*, Advertising Age, Feb. 14, 2014, available at <http://adage.com/article/media/comcast-time-warner-cable-means-advertising/291713/> (“Acceleration of addressable advertising. One of the biggest obstacles to ad targeting at the household level has been a lack of broad reach, which makes running campaigns across multiple operators a clumsy and inefficient effort. The merger should eventually help expand the addressable universe to the kind of scale that advertisers desire and speed up advances in areas such as dynamic ad insertion.”).

²⁶⁹ *See* Rosston/Topper Decl. ¶ 149.

²⁷⁰ Jeanine Poggi, *NBC Universal to Start Selling Addressable Ads in Video on Demand: ‘NBCU+ Powered By Comcast’ Will Expand VOD Addressability*,” Advertising Age, Jan. 30, 2014, available at <http://adage.com/article/media/nbcu-comcast-partner-advanced-advertising-product/291401/>.

combined company to insert their timely, dynamic, addressable ads in a VOD asset or other platform.²⁷¹

Finally, consumers not only will be able to enjoy additional highly popular content on this convenient platform as described above, but they will also receive advertisements, promotions, and discounts that are more relevant to them and their families.²⁷²

E. The Transaction Will Generate Other Significant Public Interest Benefits.

1. Consumers Will Benefit from the Extension to the TWC Systems of Various Commitments and Obligations in the NBCUniversal Order, as Well as Comcast’s Best-in-Class Community Investment and Diversity Programs.

Additional benefits and protections will arise from the extension to the acquired systems of (1) various pre-existing obligations and other commitments developed in connection with the NBCUniversal transaction and (2) Comcast’s best-in-class diversity and community investment programs.

The NBCUniversal transaction contained more than 150 conditions, including substantive subparts. As demonstrated in the last three annual compliance reports, and as detailed in Exhibit 9, in over three years, Comcast has had only one instance where the FCC took issue with the company’s compliance, which was fully addressed by a voluntary consent decree.²⁷³

²⁷¹ Rosston/Topper Decl. ¶ 145; see Jon Lafayette, *What a Comcast-TWC Merger Would Mean for the Rest of the TV Business*, Broadcasting & Cable, Feb. 17, 2014, available at <http://broadcastingcable.com/sites/default/files/public/CommFeb17.pdf> (“[T]he merger hastens tech innovation on the advertising front, as it ‘eventually harmonizes 30 million households on a common ad tech platform.’ That could enable addressable advertising and dynamic ad insertion in VOD, something that industry consortium Canoe Venture could never do”) (quoting Tim Hanlon, CEO, Vertere Group).

²⁷² The transaction also will help support the development of interactive advertising, a technology which TWC has not previously prioritized due to the required investment. See Rosston/Topper Decl. ¶ 157. Bringing Comcast’s efforts to develop interactive advertising technology to TWC systems will benefit both advertisers and consumers. See *id.*

²⁷³ See *Comcast Corp.*, Order, 27 FCC Rcd. 6983 (EB 2012) (“*Comcast EB Consent Decree*”). Comcast promptly resolved the FCC’s concern. Comcast had made a good faith effort to comply with the condition, but the FCC questioned the adequacy of the initial implementation of Comcast’s standalone broadband obligation. In

Comcast otherwise consistently has met, and often exceeded, all of its commitments and obligations. And no serious objections have been filed – either on these reports or otherwise – regarding Comcast’s compliance track record. Comcast intends to build on that record to bring new benefits to customers in TWC markets. Indeed, even when no longer mandated or required, many of these conditions and commitments have become part of Comcast’s core business ethics and operations. Key benefits that will be extended to the acquired systems include:

Open Internet Commitment. As noted above, this transaction will extend the protections of the Open Internet rules that were rejected by the D.C. Circuit to millions of TWC customers, providing greater certainty for consumers and edge companies as the FCC considers a new legal framework.²⁷⁴ Specifically, this Comcast commitment will extend the enforceable protections of the no-blocking and non-discrimination rules to millions of additional broadband customers.²⁷⁵

Standalone Broadband Commitment. Comcast is committed to offering consumers the option to procure their broadband service on a standalone basis. Indeed, this condition has become a core feature of Comcast’s broadband business, with standalone broadband services vigorously marketed and selling well.²⁷⁶ Thus, customers will have faster speeds, as well as the

resolving the issue, Comcast agreed to extend the commitment to offer standalone broadband service at a specific price point for one extra year. Other than this, there were two disputes involving the conditions, both relating to interpretative issues – one with Bloomberg, as to the parties’ different views of the neighborhooding condition, and one with Project Concord, as to the terms of its requested deal – neither of which resulted in the Commission finding or even suggesting noncompliance. See *Bloomberg v. Comcast Cable Commc’ns, LLC*, Memorandum Opinion and Order, 28 FCC Rcd. 14346 (2013); *Project Concord, Inc. v. NBCUniversal Media, LLC*, Order on Review, 27 FCC Rcd. 15109 (MB 2012) (“*Project Concord Order on Review*”) (Commission review pending). A copy of the Comcast-NBCUniversal conditions is attached as Exhibit 10.

²⁷⁴ See *supra* Sections IV.B.1.b, V.C.1.b.

²⁷⁵ See, e.g., *Comcast-NBCUniversal Order* ¶ 94. Further, this commitment is reinforced by Comcast’s additional agreement not to offer “specialized services” for its own or a third party’s content in TWC systems. *Id.* App. A § IV.E.

²⁷⁶ As of January 21, 2014, the aggregate number of standalone broadband lines Comcast provisioned was [] million, more than [] percent of Comcast’s total residential broadband subscribers. Letter from Lynn R. Charytan, Senior Vice President, Legal Regulatory Affairs and Senior Deputy General Counsel, Comcast Corp., to Marlene H. Dortch, Secretary, FCC, MB Docket No. 10-56 (Feb. 21, 2014).

assured flexibility to mix and match *any* speed of broadband with the services of Comcast, another video provider, or no traditional video service at all. Although TWC offers a standalone broadband option today, this commitment ensures that this option will continue to be offered and actively marketed in the TWC acquired systems.²⁷⁷

Program Access Commitment. NBCUniversal will continue to make its programming available to MVPDs at fair market value and on non-discriminatory terms. Notably, NBCUniversal has been able to successfully reach commercial agreements with multiple MVPD partners over the past three years; not a single MVPD has submitted a program access dispute to arbitration. As a safeguard, the NBCUniversal Conditions provide MVPDs the right to seek arbitration with respect to NBCUniversal networks in specific circumstances.²⁷⁸ While not necessitated by this transaction, which involves relatively little new content, this same commitment and approach will be extended to TWC’s controlled programming networks as appropriate; for example, TWC’s controlled RSNs will be subject to standalone arbitration.²⁷⁹

Online Video Commitment. NBCUniversal is committed to working with online video distributors (“OVDs”), and developing mutually advantageous distribution deals.²⁸⁰ The NBCUniversal Condition allowing OVDs to demand, and, if necessary, arbitrate over access to NBCUniversal programming networks in certain circumstances will apply to TWC’s controlled programming assets as appropriate – though, again, nothing in this transaction creates any new issues in this regard. In addition, TWC’s carriage agreements, to the extent they remain in place

²⁷⁷ This commitment has subsequently been reinforced – and, with respect to training, expanded. *See Comcast EB Consent Decree.*

²⁷⁸ *See Comcast-NBCUniversal Order*, App. A § II.

²⁷⁹ *Id.* App. A § VII; *see also* discussion *infra* Section V.C.3.

²⁸⁰ For example, NBCUniversal has entered into or renewed agreements with several OVDs, including, among others, Amazon, Drama Fever, Hoopa, Netflix, and Sensio. *Third Annual Compliance Report*, at 3-4; *see also* discussion *infra* Section V.D.2.

following the transaction, would be subject to prohibitions against practices that unduly influence or unfairly limit the provision of the acquired programming to OVDs.²⁸¹

Broadband Adoption Commitment. This condition will have expired prior to the consummation of this transaction. However, as discussed above, Comcast has already improved and committed to extend its very successful *Internet Essentials* program for broadband adoption, and will expand it to TWC territories, enhancing opportunities for low-income families across the combined company's footprint.²⁸²

Broadcast Commitment. Comcast is proud of its close relationships with affiliated and unaffiliated local broadcast stations, and the commitments captured by letter agreements with both the NBC Television Affiliates Association and the ABC/CBS/Fox Television Affiliates Associations.²⁸³ The concerns underlying many of those provisions have proved unfounded, as Comcast enjoys positive relationships on all sides in retransmission consent and affiliation agreement negotiations.²⁸⁴ Nevertheless, these commitments will continue to apply and will extend to the TWC markets. Specifically, Comcast maintains separation between its cable and broadcast businesses with respect to NBCUniversal's negotiation of retransmission consent agreements with MVPDs, NBCUniversal's negotiation of affiliation agreements with local broadcast stations, and Comcast's negotiations of retransmission consent agreements with broadcast stations. Moreover, Comcast Cable has committed not to import distant NBC

²⁸¹ See *Comcast-NBCUniversal Order*, App. A § IV.A, G.

²⁸² See *id.* App. A § XVI; see also *supra* Section IV.B.2.d.

²⁸³ See *Comcast-NBCUniversal Order*, App. F.

²⁸⁴ Indeed, over the past three years, Comcast has not been party to any retransmission consent disputes resulting in a blackout with respect to its cable or broadcast properties.

broadcast network signals into an affiliate’s market where retransmission consent negotiations have failed.

Other Programming Commitments. Comcast has dedicated considerable resources to expanding access to local programming and children’s VOD content, and to empowering parents. And Comcast will approach the acquired systems with the same goals, though some of these may require more time and technological development to incorporate fully in TWC systems. These include:

- Making available broadcast content in the acquired TWC systems at no additional charge on Comcast’s VOD.
- Expanding VOD programming choices that appeal to children and families.
- Providing improved on-screen program ratings icons.
- Restricting the use of “Interactive Advertising” in programming produced primarily for children.

Non-Commercial Educational (“NCE”) Station Carriage Commitment. Comcast is obligated to continue carrying qualified NCE and local NCE stations that had must-carry rights as of December 31, 2010 and relinquish their broadcast spectrum. NCE stations in the acquired systems will enjoy this protection as well,²⁸⁵ affording such broadcasters the opportunity to both participate in the FCC’s upcoming incentive auction and to continue to deliver important local programming to their local communities.

Diversity Commitments. The transaction will promote significant diversity interests in the TWC markets, because Comcast will extend its best-in-class diversity program to the acquired systems and networks and will incorporate and build upon those TWC programs that would enhance Comcast’s own diversity practices.

²⁸⁵ See *Comcast-NBCUniversal Order*, App. A § XV.

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Diversity is part of Comcast’s corporate DNA. As detailed in Exhibit 11, Comcast is recognized nationally for its commitment to promoting diversity.²⁸⁶ For the past several years, its diversity program has been enhanced by a variety of commitments memorialized in three Memoranda of Understanding (“MOUs”) with diverse leadership organizations in 2010 in connection with the NBCUniversal transaction.²⁸⁷ Those voluntary undertakings span five key focus areas across all aspects of the company’s business: (1) governance, (2) workforce recruitment and retention, (3) procurement, (4) programming, and (5) philanthropy and community investment. Comcast’s progress and accomplishments in its diversity and inclusion programs are detailed in the company’s annual Corporate Social Responsibility Report.²⁸⁸ The first report after consummation of the transaction will include TWC’s operations.

Since approval of the NBCUniversal transaction, Comcast has made demonstrable progress toward these goals, in many cases exceeding its commitments and expanding upon them with new or modified initiatives. That focus and progress will continue with respect to the expanded, post-transaction company, bringing concrete benefits to the TWC markets.

- a) *Governance.* Comcast’s Board of Directors is one-third diverse, including representation of people of color and women. In addition, Comcast and NBCUniversal each have an executive Internal Diversity Council to provide oversight and guidance on development and implementation of diversity and inclusion strategies across the company. These executive councils meet separately and jointly; further, several business units within the company also have diversity councils or committees participating directly in diversity initiatives. In addition, for the past three years, Comcast has received advice and guidance

²⁸⁶ See also Eric Lipton, *Comcast’s Web of Lobbying and Philanthropy*, N.Y. Times, Feb. 20, 2014, available at http://www.nytimes.com/2014/02/21/business/media/comcasts-web-of-lobbying-and-philanthropy.html?_r=0; *Awards & Recognitions*, Comcast Corp., <http://corporate.comcast.com/news-information/awards-and-recognition> (last visited Apr. 3, 2014) (listing awards, recognitions, and honors received by Comcast and its leadership).

²⁸⁷ See *Comcast-NBCUniversal Order*, App. G.

²⁸⁸ *2012 Corporate Social Responsibility Report*, Comcast Corp., http://corporate.comcast.com/images/Comcast_NBCUniversal_CSR_2012.pdf (“2012 Corporate Social Responsibility Report”).

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from the Joint Diversity Advisory Council (“Joint Council”), a unique external advisory group consisting of more than 40 nationally recognized advisors on diversity from business, community-based organizations, and the media/entertainment industry, representing a broad spectrum of diverse constituents and perspectives. The company ensures transparency and measurement of progress through rigorous benchmarking and reporting processes, including regular reports to the Board, Internal Diversity Councils, and external Joint Council.

Within 120 days of the close of the transaction, Comcast will develop a new master strategic plan that will set forth the vision and goals for the combined company’s (including TWC’s) diversity programs, similar to the plan adopted shortly after the NBCUniversal transaction closed. The new plan, like the existing plan, will be formulated with the advice of the Joint Council. This transaction will afford Comcast the opportunity to ensure that the best and most effective approaches to governance for diversity and inclusion are deployed throughout the combined company by extending Board, executive Internal Diversity Council, and Joint Council review to TWC systems.

- b) *Workforce Recruitment and Retention.* Comcast approaches workforce diversity issues with a broad range of initiatives designed to increase diversity at all levels of the workforce, with a particular emphasis on hiring, promoting, and retaining diverse leaders. Since the closing of the NBCUniversal transaction, the numbers of people of color and women have increased among the Comcast’s executive leadership, vice president and above (“VP+”), and director levels, and in the full-time US workforce overall. Of all the VP+ positions added to the workforce since year-end 2010 and year-end 2013, 40 percent were filled by people of color and 57 percent by women. More specifically, the number of people of color at the VP+ level increased by 111 (or 32 percent), which drove a corresponding increase in their proportional representation to 18 percent of the company’s total VP+ population at year-end 2013. During the same time, the number of women at the company’s VP+ level increased by 157 (or 21 percent), which also drove an increase in their proportional representation – to 36 percent of the VP+ population.

This has been accomplished through the company’s multifaceted approach to recruitment, leadership training programs, and innovative engagement initiatives, all aimed at attracting and developing a diverse talent pipeline. In terms of senior leadership, the company requires at least one candidate of color on all hiring slates for positions at and above VP levels. And, to ensure accountability, progress on diversity initiatives is a component of Comcast’s bonus determinations at the executive level.

Comcast is prepared to extend its workforce (and other) diversity commitments to TWC properties. As part of developing the TWC master strategic plan for the company’s workforce, noted above, Comcast would, for example:

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- Analyze TWC’s talent acquisition, development, and promotion, employee engagement practices and programs, and the overall workforce diversity metrics, and identify potential areas for action.
- Develop a plan to build on TWC’s positive workforce initiatives and integrate them into Comcast’s approach to practices and programs.
- Identify specific initiatives and aspirational goals, with quantifiable steps, to increase diversity in the leadership ranks and overall employee base.
 - o These proven methods for creating a culture of inclusion and driving workforce diversity have been recognized time and again. While a complete list of awards is attached as Exhibit 11, it bears noting that Comcast tied for first among Women in Cable Telecommunications’ 2013 Best Operators for Women in Cable (NBCUniversal was the top programmer in the same survey); has been named among the “Top 50 Companies for Diversity” by *DiversityInc* magazine; and has received the New York Urban League’s 2013 “Champions of Diversity” Award; ranked third in the 2013 LATINA Style 50 Report; and earned a 100% score on the Human Rights Campaign’s 2014 Corporate Equality Index.
 - o In addition, Comcast is a leader in supporting and honoring the serving military and in hiring the nation’s veterans. Over the last 12 months, Comcast has hired over 1,400 veterans company-wide and has supported their career development through our VetNet employee resource group. Comcast has been recognized as a 2012 G.I. Jobs Top 100 Military Friendly Employer and a 2013 *US Veterans Magazine* Top 100 Best of the Best Veteran Friendly company, and is a recipient of the 2012 U.S. Chamber of Commerce Foundation’s Lee Anderson Award for its commitment to veteran employment and support as a key partner in their national “Hiring our Heroes” initiative.

The TWC systems, employees, and customers will benefit significantly from the extension of Comcast’s comprehensive diversity program.

- c) *Procurement.* Comcast’s vendors will have more opportunity to do business with the combined company and increase prime vendors (i.e., Tier I) spend. In addition, the combined company will be able to expand opportunity for diverse subcontractors (i.e., Tier II). In the NBCUniversal transaction, Comcast committed to expand its supplier diversity program to increase the amount spent with Tier I and to expand its Tier II program. The company has demonstrated the seriousness of its resolve to create more opportunities for diverse suppliers, increasing its total Tier I spend with diverse suppliers to over \$1.3 billion in 2013 alone – a 44 percent increase since the year before the NBCUniversal transaction.

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Over the course of three years, Comcast has spent almost \$3.2 billion with diverse Tier I vendors. Since Comcast formally launched its Tier II program in 2012 and over the course of the two years ending 2013, prime suppliers have reported over \$325 million in diverse Tier II subcontracting, including \$186 million in 2013 alone. Comcast's supplier diversity program has been recognized by *Black EOE Journal*; *Hispanic Network Magazine*; *Professional Women's Magazine*; and *U.S. Veterans Magazine*.

TWC has a supplier diversity program as well, and Comcast will combine the best aspects of both companies' programs to drive increased opportunities for diverse vendors.

d) *Programming*. Since the NBCUniversal transaction, Comcast has met its commitment to expand minority-focused programming, increasing the amount, quality, and diversity of national and local programming for its customers across its platforms. For example, in the last three years, Comcast has launched four independent networks with Hispanic American or African American ownership or management. In addition, Comcast has expanded the distribution of diverse African American, Asian American and Hispanic content:

- Comcast expanded distribution of The Africa Channel in the Detroit, Chicago, and Washington, D.C. markets. Comcast also launched The Africa Channel in its Northern Santa Barbara County, Savannah, Charleston, and South Florida markets, growing the network's audience by more than 2 million homes.
- Comcast expanded carriage of TV One on its Xfinity TV lineup, making it available to over 600,000 additional customers in the Chicago and Miami markets.
- Comcast announced a significant new carriage agreement with Mnet, the only 24/7 English-language nationwide television network in the U.S. targeting Asian Americans and fans of Asian pop culture, and subsequently extended carriage of Mnet to millions of additional Comcast subscribers in the San Francisco, Chicago, Sacramento, Boston, Washington, D.C., and Philadelphia DMAs in 2012. Comcast also launched MYX TV, a channel made for and by Asian Americans, in Seattle and western Washington.
- Comcast extended distribution of seven Hispanic programming services (Azteca America, Galavisión, HITN, LATV, nuvoTV (formerly SÍTV), Telefutura, and Univision) by more than 14 million subscribers. With this accomplishment, Comcast exceeded by more than 40% its commitment to expand carriage of three Hispanic networks by 10 million subscribers.

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- Comcast fulfilled its commitment to launch a package of 40 to 60 Spanish-language channels in all major Hispanic markets, including Northern California, Houston, South Florida, Chicago, Boston, Philadelphia, Washington, D.C., Denver, Salt Lake City, and Atlanta.

Comcast also has expanded the quality and quantity of diverse programming available through its VOD and online platforms – increasing the number of diverse VOD hours by more than 270 percent and the number of diverse online hours by nearly 170 percent over the past three years. These results are driven by the launch of new diverse-oriented VOD services, including Black Cinema On Demand, Hispanic Cinema On Demand, and Cinema Asian America, and the launch of first-of-their-kind, online destinations for entertainment and news for diverse audiences, such as Celebrate Black TV, Xfinity Latino, Xfinity Asia, and Xfinity TV LGBT.

With this transaction, Comcast will commit to use its VOD and Online platforms to feature Telemundo programming and increase the number of Telemundo and mun2 VOD choices, as well as other diverse VOD content, available to customers in the acquired TWC systems, as soon as TWC's VOD content and delivery platforms can be upgraded.

NBCUniversal has also undertaken initiatives intended to increase news, information, and entertainment choices for diverse viewers. The new NBCNews.com features a new microsite focused on original reporting and analysis relevant to the Latino community (www.nbcnews.com/news/latino), and will soon launch an additional microsite dedicated to serving the Asian Pacific Islander community. By integrating these microsites into the main site, that coverage will benefit from greater exposure to the broader NBCNews.com audience and the more significant promotion of the NBCNews.com site.

NBCUniversal has long been a leader in offering diversity development programs to improve the interest and presence of diverse writers, directors, journalists, and on-screen personalities. Under Comcast's leadership, NBCUniversal has added even more signature programs. Highlights include:

- Universal Pictures Emerging Writers Fellowship is designed to identify and cultivate new and unique voices with a passion for storytelling in the context of film. Emerging writers who are chosen to participate in the program will work within the studio to hone their skills and gain access and exposure to Universal executives, producers, and other key industry professionals.
- The Writers on the Verge program focuses on grooming diverse writers not just for NBCUniversal but for the entire television industry. More than 50% of Writers on the Verge alumni are currently staffed on television shows across the industry landscape (alumni write for NBC

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shows such as “The Blacklist”, “Dracula”, “Chicago Fire”, and “Chicago P.D.” Alumni write for USA Network series “Burn Notice & Suits” and for the Universal Television production “Brooklyn Nine Nine.”

- The Diverse Staff Writer Initiative gives writers from diverse backgrounds an entrée into the writers’ room. The program encompasses NBC’s late-night programs, in addition to prime-time scripted programs from NBC, USA and Syfy. Participants are selected and hired by the showrunners/producers of each show, with the guidance of the network and studios. The program has launched the careers of many talented writers in the past 13 years, including Mindy Kaling (“The Office,” “The Mindy Project”) and Donald Glover (writer on “30 Rock,” and later talent on “Community”).
- The Late Night Writers Workshop is designed for up-and-coming sketch and comedy writers to learn about NBCUniversal’s late night line-up, gain insight into the dynamics of a late night writers’ room, and provide insights on securing a staff writer position.
- The Casting Apprentice Program is a rotational program designed for individuals with diverse backgrounds who aspire to join a casting office.
- The Director Fellowship Program gives well-established directors from the worlds of music video, commercials, and theater and gives them a chance to shadow directors of episodic television, and learn the craft. In the last two years the program has seen three directors had their first episodic directing assignments on “Parenthood,” “Grimm,” and “Community” through the program.
- The NBC News Associates Program is dedicated to identifying outstanding aspiring journalists. In 2011, this program was extended to the newsrooms of NBC Owned Television Stations and CNBC. In keeping with NBCUniversal’s strong commitment to develop a diverse editorial staff across NBC News assets, the News Associates program is designed to attract candidates from diverse racial, ethnic, economic and geographical backgrounds, as well as candidates with disabilities.
- The Reporter Training Program is aimed at developing talented young on-air journalists from diverse backgrounds. Participants, who are selected annually, must hold a bachelor’s degree in Journalism, Communications, or a related field and have a minimum of one to two years of experience in the news room or on-air reporting television news.
- The News Summer Fellowship Program gives paid internships for nominees from the National Association of Black Journalists (NABJ), National Association of Hispanic Journalists (NAHJ), and Asian

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American Journalists Association (AAJA). Participants are college sophomores or above who are members of NABJ, NAHJ, or AAJA.

NBCUniversal has been recognized for its exemplary commitment to diverse programming. For example, MSNBC received a Diversity and Inclusion Award in the Media category; USA Network was honored with the American Association of People with Disabilities Image Award for its work to promote equal rights and opportunities for people with disabilities; on the National Latino Media Council 2011 Network Diversity Report Card, NBCUniversal earned an A+ for “Actors: On-Air Primetime Reality Shows” and an A in the “Entertainment Creative Executives” category; and the 25th Annual GLADD Media Awards included 16 NBCUniversal nominees.

e) *Philanthropy and Community Investment.* In 2010, Comcast and NBCUniversal committed to increase aggregate cash support to minority-led and minority-serving (“MLMS”) organizations by ten percent per year in 2011, 2012, and 2013. The company significantly exceeded this commitment, increasing its cash spending to diverse communities MLMS organizations by more than 100 percent over the three-year period. Comcast achieved this unprecedented level of support for MLMS institutions, in part, through the extensive activities and programs of the Comcast Foundation, led by the corporate team, but extended throughout Comcast’s footprint by the cable divisions and NBCUniversal’s MLMS giving. This included extensive outreach to and work with the company’s community partners, as well as the important work of its signature programs. In addition to *Internet Essentials*, discussed above, some other examples of our deep community roots include:²⁸⁹

- Comcast Cares Day: This is the largest single-day corporate volunteer effort in the nation. In 2013, more than 85,000 volunteers participated in over 750 project sites, contributing their time and energy to clean up parks, make over schools, and landscape playgrounds.
- Comcast Leaders and Achievers: Now in its 13th year, the Comcast Leaders and Achievers® Scholarship Program recognizes high school seniors for their community service, academic achievement and leadership skills. Funded through the Comcast Foundation, the program recognizes high school seniors from Comcast communities for their commitment to community service, academics and demonstrated leadership. To acknowledge these accomplishments, Leaders and Achievers are awarded one-time scholarships, with a base award of \$1,000. Since 2001, Comcast has awarded close to \$20 million in scholarships to nearly 20,000 students. More than 950 scholarships awarded last year benefitted students from diverse backgrounds.

²⁸⁹ See 2012 Corporate Social Responsibility Report.

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- **Digital Connectors:** The Comcast Digital Connectors program trains youth from primarily diverse, low-income backgrounds in Internet and computer skills. Teens meet weekly after school, have the option to earn a Cisco IT Essentials certification of completion, and receive a complimentary laptop upon graduation from the program. Comcast Digital Connectors is also a community service program, as participants volunteer at senior centers, churches, local schools and other community organizations, spreading digital literacy in their communities. Since the program began, more than 2,000 Digital Connectors have participated, volunteering more than 100,000 hours to bridge the digital divide in their communities. Through training and service, Comcast Digital Connectors is preparing today's youth for the jobs of tomorrow.
- **United Way:** Each year, Comcast and NBCUniversal employees rally around our communities by supporting United Way. Through an annual employee giving campaign, company employees pledged nearly \$6.4 million to United Way during the 2013 campaign. Not only did the company employees break the company record for dollars pledged, with year-over-year, double-digit growth, the campaign also had record-breaking employee participation. Combined with matching Comcast Foundation grants, the campaign will provide almost \$8 million next year to local United Ways and affiliate organizations across the country – taking us beyond \$50 million in total historic support to United Way.
- The company supported more than 50 teams around the country competing in the FIRST Robotics Competition and introduced the Comcast and NBCUniversal Media and Technology Innovation Award.
- The NBCUniversal Foundation partnered with our NBC Owned Television Stations division last year to launch 21st Century Solutions, a competitive grant program that supports innovative, high-impact social entrepreneurship projects. The company awards grants to nonprofit organizations in seven categories: arts and media, civic engagement, community development, education, environment, jobs and economic empowerment, and technology. The competition took place in ten major U.S. cities, with one winning organization and two runners-up in each market, for a total of \$1.2 million shared among 30 organizations. Winners included a micro-savings initiative aimed at helping low-income working families develop strong financial habits and an employment program that helps expand work opportunities for disabled youth.

For the first time in 2013, The Civic 50 has recognized Comcast's community investment achievements. In addition, Comcast has received awards from the United States Hispanic Chamber of Commerce, United Way Worldwide, and the Congressional Black Caucus Foundation.

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Moreover, in 2011, Comcast Ventures established a \$20 million venture capital “Catalyst Fund” for investments in early-stage ventures led by diverse entrepreneurs with innovative technology ideas and solutions that fit within its investment focus. The Fund’s goal is to create the most diverse and valuable early stage portfolio in the venture industry.

The Catalyst Fund’s first investment was in the startup accelerator DreamIt Ventures, which operates DreamIt Access, a concentrated effort to increase the number of high-value, minority-led tech startups. During this three-month program, participating startup companies receive seed funding and access to DreamIt Ventures’ benefits and services, including business talent, legal and accounting services, mentoring, office space, guidance from leading business visionaries, and contacts to reach the next level of development. In addition, DreamIt Access offers mentors, special events, and advisors with a particular interest in increasing the number of successful minority-led startups.

Through its DreamIt Access partnership, the Catalyst Fund has sponsored 20 minority-led startups since 2011, sixteen of which are still operating. The majority of these companies are focused on web and mobile technologies. In January 2014, Comcast Ventures announced its commitment to support the DreamIt Access track for two more years, with the ability to support up to 20 minority-led companies over the course of four cycles.²⁹⁰

In addition, the Catalyst Fund has made direct investments in seven minority-led startups:

- ElectNext, a political data analysis firm (Philadelphia Fall 2011 DreamIt participant) (August 2012);
- Quad Learning, an online two-year honors program for community and junior college students to enhance their college transfer options (January 2013);
- Reactor, Inc., a speech enabled news assistant for mobile devices firm (New York Summer 2012 DreamIt participant) (March 2013);
- Loverly, an online wedding discovery and inspiration site (May 2013);
- Viridis Learning, an educational and technology company combining workforce education and human capital solutions for the middle-class workforce (June 2013);

²⁹⁰ See Press Release, DreamIt Ventures, DreamIt Ventures & Comcast Ventures Sign Two-Year Partnership to Support Minority-Led Startups in New York & Philadelphia (Jan. 20, 2014), <http://www.dreamitventures.com/nyc2014announcement/>.

- Maker’s Row, an online marketplace for connecting designers with American-based factories (July 2013); and
- Mercaris, a market data service and online trading platform for organic, non-GMO, and certified agricultural commodities (October 2013).

To ensure that both companies’ community partners enjoy the full benefit of the transaction, Comcast’s community-focused ethos and programs will extend to the TWC markets and will honor and build upon TWC’s existing partnerships and programs.²⁹¹

2. The Transaction Will Generate Significant Public Interest Benefits for People with Disabilities.

Both Comcast and TWC have been deeply committed to providing accessible solutions to customers with disabilities. TWC currently supports many accessibility services, including, among other things, closed captioning on its TWC TV apps on a wide range of device platforms,²⁹² voice-to-text features for its phone services,²⁹³ and large-button remote controls.²⁹⁴ And, as discussed below, Comcast has undertaken a host of technology and other initiatives over the past several years that have made it an industry leader in this area. Following the transaction, Comcast will be able to bring its leadership to bear, building upon TWC’s strong foundation to deploy new assistive technologies and support to TWC customers. As TWC systems are

²⁹¹ See, e.g., Connect a Million Minds, <http://www.connectamillionminds.com/about> (last visited Apr. 1, 2014).

²⁹² See, e.g., *Is Closed Captioning Enabled on the TWC TV for iPad App?*, Time Warner Cable, <http://www.timewarnercable.com/en/residential-home/support/faqs/faqs-tv/twctvapp/twctvforip/is-closed-captioning-supported.html> (last visited Mar. 30, 2014). The TWC TV apps on the following devices support closed captioning: iPhone, iPad, iPod Touch; Android Smartphones & Tablets; Kindle Fire HD/HDX; Roku Streaming Players (generations 2 & 3); Xbox 360; and Samsung Smart TV (2012 – 2014 models). Captioning also is supported on PCs via TWCTV.com.

²⁹³ See *Voice Zone from TWC*, Time Warner Cable, <http://www.timewarnercable.com/content/twc/en/residential-home/phone/features/voicezone.html> (last visited Mar. 30, 2014).

²⁹⁴ See *Solutions for Everyone*, Time Warner Cable, <http://www.timewarnercable.com/en/residential-home/support/accessibility.html> (last visited Mar. 30, 2014) (detailing accessibility solutions on TWC systems). TWC also has been a strong advocate for expanding broadband access for persons with disabilities. See, e.g., Krishna Jayakar, *Between Markets and Mandates: Approaches to Promoting Broadband Access for Persons with Disabilities* (Fall 2012), available at http://www.twcresearchprogram.com/pdf/TWC_Jayakar.pdf.

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integrated, technically and operationally, into Comcast’s network, customers across the newly expanded footprint will be able to enjoy the benefits of Comcast’s accessibility innovations.

Comcast has made accessibility an integral part of its businesses. The company’s goal is a “Smart Home for Everyone,” where accessibility is enabled across products and services, regardless of platform. To that end, Comcast has established an office dedicated full-time to accessibility that is responsible for coordinating accessibility efforts throughout the company and with the disability community.²⁹⁵

A key tool of this dedicated office and team is the Comcast Accessibility Lab. The Lab is used by Comcast’s product development teams to incorporate assistive technologies into new products and services. It also is utilized for focus groups and usability testing with consumers and to help educate Comcast’s employees about accessibility. Comcast supplements these product development activities with regular outreach to the disability community. These activities are producing a wide range of innovative accessibility solutions. For example, in the cable space, Comcast is leveraging the X1 cloud-based platform to deliver the first “talking guide” in the MVPD industry. Comcast demonstrated this voice-guided navigation feature at the 2013 Cable Show, and the feature will be trialed in several markets later this spring with the goal of broader deployment later in 2014. The talking guide feature assists a blind or visually-impaired customer in navigating around the X1 TV user interface and selecting particular services for use. If the customer navigates to the program guide, she will be provided with an aural version of the guide information for a particular program that is included on the display,

²⁹⁵ These activities cover all phases of product development, deployment, and consumer interaction, from engaging people with disabilities to drive a customer-informed accessibility strategy; to working with Comcast’s design and development teams to integrate accessibility into Comcast’s products and services; to helping Comcast’s business units deliver feature-rich, accessible services into the marketplace; to maximizing customer care services aimed at ensuring that customer questions and concerns related to Comcast’s accessibility features are promptly resolved.

such as the network name, the channel number, the title of the program, and any rating information.²⁹⁶

The X1 platform will also simplify the process for activating accessibility features. For example, the remote control for the X1 platform – known as the XR2 – includes “soft keys” that a customer with a disability will be able to configure to enable quick access to the talking guide and other accessibility features, such as closed captioning and video description.²⁹⁷ The X1 user interface also provides for simple navigation to accessibility features, including allowing the customer to activate closed captioning and video description services via the main Settings menu on the user interface and configure enhanced caption features, such as font and color, via the Closed Captioning Settings menu.²⁹⁸ Comcast also is enabling a similar user experience on Xfinity applications used to access Comcast’s IP cable and TV Everywhere services on third-party consumer electronic devices, including tablets, smartphones, and desktops. Comcast will be able to extend the benefits of these accessibility features to customers in the TWC systems as those systems are upgraded to support the X1 platform.

Comcast is providing innovative accessible solutions across other service areas as well. For example, as noted above, Comcast has deployed a Readable Voicemail service that converts voicemail audio into text and aids deaf and hard-of-hearing customers in accessing their voicemail. And, with respect to online services, the Xfinity Connect Mobile App, which enables

²⁹⁶ Comments of Comcast Corp., MB Docket No. 12-108, at 4 (July 15, 2013); Letter from James R. Coltharp, Comcast Corp., to Marlene H. Dortch, Secretary, FCC, MB Docket No. 12-108, at 1 (Aug. 1, 2013) (“*Talking Guide Letter*”).

²⁹⁷ See *Talking Guide Letter*, at 1.

²⁹⁸ See *Setting up Closed Captioning with the XFINITY TV on the X1 Platform Guide*, Comcast Corp., <http://customer.comcast.com/help-and-support/cable-tv/turning-closed-captioning-on-or-off/#Sett> (last visited Mar. 30, 2014).

access to email, text, and other online services on tablets and smartphones, is screen reader-enabled for blind and low-vision users.²⁹⁹

Comcast also is focused on ensuring a high-quality experience for its interactions with customers with disabilities. The company has established a dedicated customer support team of 22 agents in the new Comcast Accessibility Center of Excellence.³⁰⁰

In addition, Comcast is deploying a number of innovative solutions to ensure that its accessibility features work properly. For example, the caption compliance testing program that Comcast adopted for its set-top boxes has shortened quality control testing cycles for new box models from several weeks to a matter of days. Comcast also has started deploying a first-of-its-kind network monitoring tool that enables it to detect remotely when cable program streams are non-compliant with industry standards for closed captioning and video description. Comcast engineers are alerted when these monitoring “probes” detect a problem, thereby giving the company the ability to proactively troubleshoot these issues and quickly mitigate customer-impacting closed captioning and video description impairments and service interruptions. These equipment testing and monitoring activities can be expanded to TWC systems as those systems are integrated into Comcast’s network.

²⁹⁹ It also bears noting that NBCUniversal is an industry leader in providing closed captioning for online content. NBCUniversal captioned online video well before the Commission required such captioning, and also voluntarily captions an unprecedented amount of online content not subject to the Commission’s rules, such as news clips on the NBC News and Today Show websites and Internet-only video feeds for the 2014 Sochi Olympics. See Tom Wlodkowski, *Bringing the Olympic Experience to More People in More Ways Than Ever Before*, Comcast Voices (Feb. 10, 2014), <http://corporate.comcast.com/comcast-voices/bringing-the-olympic-experience-to-more-people-in-more-ways-than-ever-before> (also noting that NBCUniversal will broadcast over 50 hours of the Sochi Paralympics and that the full NBC Sports Network Paralympics primetime show will be available on Xfinity On Demand, Xfinity.com/TV, and the Xfinity TV Go app the next day).

³⁰⁰ *Accessibility Services for Customers with Disabilities*, Comcast Corp., <http://customer.comcast.com/help-and-support/account/accessibility-services> (last visited Mar. 30, 2014).

As the foregoing demonstrates, Comcast is strongly committed to providing accessible services and products to its customers. The transaction thus presents a singular – and unparalleled – opportunity to accelerate the deployment of accessible technology, customer care, and disability inclusion to tens of millions of consumers in the TWC footprint.

3. The Transaction Will Enhance Cybersecurity for the Combined Entity’s Network and Customers, as Well as the Overall Broadband Ecosystem.

The transaction will enable the combined company to invest additional resources in cybersecurity efforts and extend the reach of Comcast’s industry-leading approach to cybersecurity and its use of advanced cybersecurity technologies. Comcast has increased its investment in security assets and resources by over 300 percent in the last four years. Comcast was the first large ISP in North America to fully implement Domain Name System Security Extensions (“DNSSEC”), which provides an enhanced level of Internet security.³⁰¹ Comcast also is the largest ISP to deploy native IPv6 support, the next generation of IP addressing with improved security elements, to 100 percent of its network.³⁰² This transaction will extend the reach of DNSSEC and IPv6 to all the TWC systems, thereby enhancing cybersecurity protections to more networks and to many more American consumers and businesses.

Comcast operates a centralized security organization that oversees the full array of the company’s cybersecurity resources and policies, including risk management, security architecture and engineering, security operations and tools, vulnerability assessment and penetration testing, forensics and intelligence gathering, and identity management and access

³⁰¹ See Jason Livingood, *Comcast Completes DNSSEC Deployment*, Comcast Voices (Jan. 10, 2012), <http://corporate.comcast.com/comcast-voices/comcast-completes-dnssec-deployment>.

³⁰² See John Brzozowski, *Comcast Launches IPv6 for Business Customers*, Comcast Voices (Apr. 29, 2013) <http://corporate.comcast.com/comcast-voices/comcast-launches-ipv6-for-business-customers>.

controls. An internal 24x7 security response and operations center enforces the company's policies governing the use of network infrastructure, employing a defense-in-depth strategy that provides layered redundancies that operate as security fail-safes. Comcast also has invested heavily in network sensors, threat intelligence-gathering capabilities, and internal cybersecurity forensics, enabling the company to engage in pattern-based detection and other threat-monitoring measures that strengthen its defenses in the constantly changing cyber threat landscape. These capabilities help repel sophisticated cyber incursions. This proven security organization would be expanded and extended across the combined company's footprint.³⁰³

In addition to providing advanced security for the protection of broadband network assets, the transaction will benefit TWC's broadband consumers by providing them with new, more robust tools and capabilities to protect against cyber threats. Offered free to all customers, Comcast's Constant Guard security suite is the nation's most advanced and comprehensive consumer-facing cybersecurity product. Constant Guard offers a multi-layered, holistic approach to Internet security that combines extensive technological resources, including anti-phishing and anti-spyware technology, secure data backup, identity protection, anti-botnet tools, DNS security, and privacy protection tools, with an extensive educational program, and strategic partnerships with industry experts.³⁰⁴ In addition, Comcast's Customer Security Assurance

³⁰³ Customers of the merged entity will benefit from Comcast's commitment to utilize the Cybersecurity Framework, which was recently published by the National Institute of Standards and Technology ("NIST"). See Press Release, Nat'l Inst. of Standards & Tech., NIST Releases Cybersecurity Framework Version 1.0 (Feb. 12, 2014), <http://www.nist.gov/itl/csd/launch-cybersecurity-framework-021214.cfm>. The NIST Framework is an excellent resource and a comprehensive compendium of sound and effective cyber defense processes, practices, and protocols available today. In conjunction with developing the appropriate cyber defense components of the integration plan for the Comcast and TWC networks, Comcast anticipates using the Framework Core as one of the reference tools to help manage the cybersecurity risks and threats it faces going forward.

³⁰⁴ *About Constant Guard*, Comcast Corp., <http://customer.comcast.com/help-and-support/internet/constant-guard/> (last updated Jan. 28, 2014, 9:17 PM).

organization assists customers with potential cybersecurity issues to ensure a safe and secure online experience.

Comcast also provides separate botnet notifications to potentially infected customers, irrespective of whether they obtain Constant Guard.³⁰⁵ Further, Comcast has made additional investments in network technologies that protect consumers, deploying advanced inline malware detection that protects the network from infection by detecting and containing malicious network traffic before it traverses network components or reaches end user devices. Making these services and capabilities available to TWC's customers and networks will strengthen their protection against cyber threats and malicious activity, thereby boosting the overall security of the broadband ecosystem.

Even setting aside the specific cybersecurity practices that will be extended by this transaction, customers will benefit from the economies of scale and combined expertise associated with harmonizing the approaches and personnel of Comcast and TWC. By fostering stronger threat intelligence and deeper analytical resources, faster dissemination of threat information and remediation strategies, and common metrics across a broader scale of potentially affected networks and users, the integration and scaling of Comcast and TWC's existing cybersecurity resources will improve the overall cyber defense posture of the combined entity.

V. THE TRANSACTION WILL RESULT IN NO PUBLIC INTEREST HARMS.

As shown below, concerns about potential harms arising from the transaction are not credible in light of the robust state of competition in which the combined company will operate.

³⁰⁵ *Constant Guard – Our Safe Network*, Comcast Corp., <http://constantguard.comcast.net/our-safe-network> (last visited Mar. 30, 2014).

A. Overview of Competitive Analysis

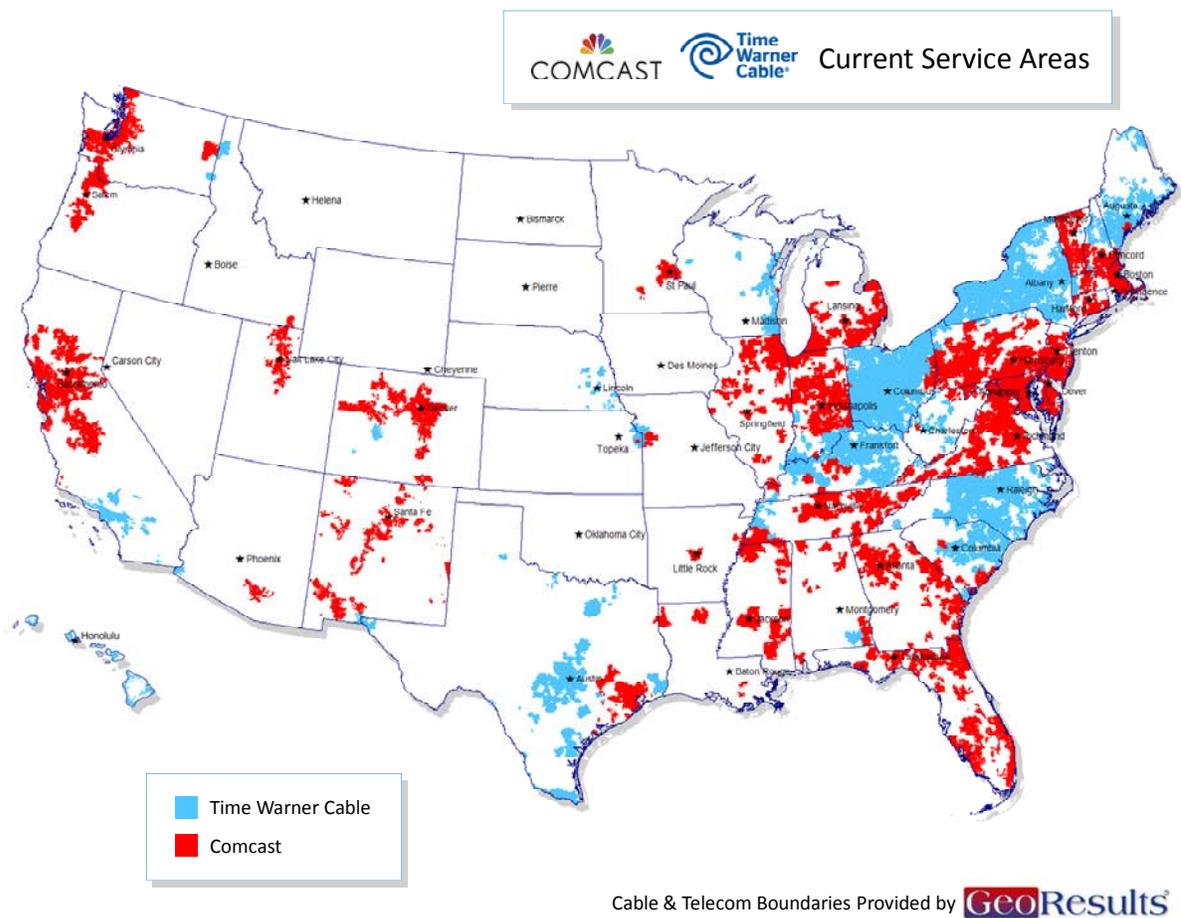
The Commission has previously observed that transactions in which one firm acquires an interest in another may potentially “give rise to concerns regarding increases in vertical integration and/or horizontal concentration, depending on the lines of business in which the firms are engaged.”³⁰⁶

As discussed below, the transaction presents no “horizontal” competitive concerns because, as illustrated in the following map, Comcast’s and TWC’s service areas are distinct and the companies do not compete in any relevant market.³⁰⁷

³⁰⁶ *Comcast-NBCUniversal Order* ¶ 27; *see also News Corp.-Hughes Order* ¶ 69. In this analysis, Applicants apply the framework developed by the Commission in prior merger transactions.

³⁰⁷ *News Corp.-Hughes Order* ¶ 69 (explaining that transactions may present “horizontal” concerns where “they eliminate competition between . . . firms and increase concentration in the relevant markets”); *see also AT&T-Centennial Order* ¶ 34 (“We next determine whether there is a significant increase in horizontal market concentration as a result of the proposed transaction. Transactions that do not significantly increase concentration or do not result in a concentrated market ordinarily require no further analysis of their horizontal impact.”); *AT&T-BellSouth Order* ¶ 113 (“Specifically, we conclude that the merger is not likely to cause horizontal anticompetitive effects [in the markets for mass market high-speed Internet access services] because neither AT&T nor BellSouth provides any significant level of mass market Internet access service outside of its respective region.”); *Sprint-Nextel Order* ¶ 31 (“A horizontal transaction is unlikely to create or enhance market power or facilitate its exercise unless it significantly increases concentration and results in a concentrated market, properly defined and measured. Transactions that do not significantly increase concentration or result in a concentrated market ordinarily require no further competitive analysis.”).

Among the two companies’ more than 33 million subscribers, approximately 2,800 Comcast residential or small- or medium-business customers are located in zip+4 areas where TWC services residential or small-business customers (and the number of TWC customers is similar). These customers are sprinkled across various zip+4 areas, none of which has more than 500 Comcast customers, and it is quite possible that Comcast and TWC are not even providing overlapping services in some of these fringe areas but rather just have facilities that fall within the same zip +4 area. Applicants also analyzed all business services as well (Ethernet, backhaul, wholesale, voice, etc.), and found either no overlap or only a small number (approximately 215 of Comcast and TWC customers in common zip codes). As the Commission has previously recognized, such *de minimis* overlaps are no cause for competitive concern. *See Insight-TWC Order* ¶ 20 (“[W]e find here that the 2,600 Insight customers (out of approximately 643,000 customers system-wide) in the overbuild area represent a *de minimis* reduction in competition that is unlikely to have an adverse effect warranting divestiture or other conditions.”); *AT&T Broadband-Comcast Order* ¶ 153 (“Comcast and AT&T Broadband largely compete in separate geographic markets, and, to the extent their service areas overlap, we find no material increase in concentration that would raise the potential of competitive harm.”); *Adelphia Order* ¶¶ 81, 82 n.287 (“Since the Applicants generally operate in non-overlapping territories and do not compete with each other in the distribution markets they serve, the proposed transactions would not reduce the number of competitive alternatives available to the vast majority of households. . . . In the few areas where Time Warner and Comcast have overlapping service areas, the number of affected subscribers is very low.”).



Nor does the transaction present any plausible threat of “vertical” anticompetitive effects. Such effects may arise when a transaction increases a vertically integrated firm’s incentive or ability to raise its rivals’ costs, for example, by withholding distribution from rivals in an upstream content market or by withholding content from rivals in a downstream distribution market.³⁰⁸ As the Commission has recognized, both theories of vertical foreclosure require (1) that the combined company “possess market power,” and (2) that the proposed “transaction increases the [parties’] incentive and ability to gain from withholding a given input.”³⁰⁹

³⁰⁸ *News Corp.-Hughes Order* ¶ 78; see also *Adelphia Order* ¶ 115; *AT&T-BellSouth Order* ¶ 39; *SBC-AT&T Order* ¶ 35; *Verizon-MCI Order* ¶ 35.

³⁰⁹ *News Corp.-Hughes Order* ¶ 85; see also *Comcast-NBCUniversal Order* ¶ 28.

Neither prerequisite is met here. Comcast and others have documented at length elsewhere that the broadband, video content and distribution, voice, business services, interconnection, and other relevant markets implicated by this transaction are highly competitive and dynamic.³¹⁰ These markets will remain so following the transaction. “The combined company will face the same vigorous competition across its lines of business that Comcast and TWC do as stand-alone companies.”³¹¹ Accordingly, the transaction will not harm the public interest by diminishing competition. Rather, the transaction will lead to substantial benefits for consumers and competition, as explained in Section IV above. As Dr. Israel concludes, “[g]iven (i) the lack of any valid competitive concerns and (ii) the substantial consumer benefits, the proposed transaction—as it relates to the provision of broadband services in particular—is pro-consumer, pro-competitive, and in the public interest.”³¹²

B. Relevant Markets

The Commission typically has commenced its analysis of the potential adverse competitive effects of prior transactions by defining the relevant market(s) in which the applicants operate.³¹³ Relevant markets are typically defined along two dimensions: the product market and the geographic market.³¹⁴ Assessing whether two goods or services should be

³¹⁰ See discussion *supra* Sections IV.A-C; see also Comments of Comcast Corp., MB Docket No. 12-203, at 32-33 (Sept. 10, 2012); Comments of Comcast Corp., MB Docket No. 12-68, at 4-13 (June 22, 2012); Comments of Comcast Corp., MB Docket No. 11-131, at 7-17 (Nov. 28, 2011); *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Fifteenth Report, 28 FCC Rcd. 10496 (2013) (“*Fifteenth Annual Video Competition Report*”); Comments of NCTA, MB Docket No. 14-16, at 4-8 (Mar. 21, 2014).

³¹¹ Rosston/Topper Decl. ¶ 18.

³¹² Israel Decl. ¶ 12.

³¹³ *News Corp.-Hughes Order* ¶ 50; *AT&T Broadband-Comcast Order* ¶ 42; *Adelphia Order* ¶¶ 59-60; see also *Application of EchoStar Commc’ns Corp., General Motors Corp., Hughes Elec. Corp. & EchoStar Commc’ns Corp.*, Hearing Designation Order, 17 FCC Rcd. 20559 ¶ 106 (2002) (“*EchoStar-DirecTV HDO*”). It is important to recognize that market definition is only a means to an end, not an end in itself. This is important because difficulties in market definition can sometimes be an obstacle to sound analysis.

³¹⁴ See *News Corp.-Hughes Order* ¶ 50; *Adelphia Order* ¶ 59; *EchoStar-DirecTV HDO* ¶ 106.

included within the same relevant product or geographic market requires an appraisal of the extent to which consumers regard them as substitutes.³¹⁵

In evaluating prior transactions, the Commission has relied on antitrust precedent and has defined a relevant market “as a product or group of products and a geographic area in which the product or products are produced or sold such that a hypothetical profit-maximizing monopolist would impose at least a ‘small but significant and nontransitory’ increase in price, assuming the terms of sale of all other products are held constant.”³¹⁶ Under this approach, which is generally consistent with the approach that the federal antitrust agencies apply in evaluating mergers,³¹⁷ transactions may raise concerns “when they reduce the availability of substitute choices (i.e., increase market concentration) to the point that the acquiring firm has a significant incentive and ability to engage in anticompetitive actions such as raising prices or reducing output.”³¹⁸

In analyzing transactions involving MVPDs, the Commission has examined two separate video product markets: (1) the distribution of programming to consumers (“the distribution market”); and (2) the acquisition of network programming (“the programming market”).³¹⁹ The Commission also has analyzed the markets for (3) Internet access services, (4) Internet interconnection (in less detail), (5) telephony services,³²⁰ and (6) advertising.³²¹

³¹⁵ See *News Corp.-Hughes Order* ¶ 50; *Adelphia Order* ¶ 59; *EchoStar-DirecTV HDO* ¶ 106.

³¹⁶ *News Corp.-Hughes Order* ¶ 50 (citing U.S. Dep’t of Justice & FTC, *Horizontal Merger Guidelines* § 1.0 (2010)) (“*Horizontal Merger Guidelines*”); *AT&T-BellSouth Order* ¶ 24 nn.85-86; *SBC-AT&T Order* ¶ 21 nn.83-84; *Verizon-MCI Order* nn.82-83; *Sprint-Nextel Order* ¶ 39.

³¹⁷ See generally *Horizontal Merger Guidelines* § 1.0.

³¹⁸ *Adelphia Order* ¶ 59; *EchoStar-DirecTV HDO* ¶ 97.

³¹⁹ See, e.g., *News Corp.-Hughes Order* ¶ 51; *Adelphia Order* ¶ 60; *Applications of Western Wireless Corp. & ALLTEL Corp.*, Memorandum Opinion & Order, 20 FCC Rcd. 13053 ¶ 22 (2005) (“*Western Wireless-ALLTEL Order*”); *AT&T-Cingular Order* ¶ 57.

³²⁰ See, e.g., *Comcast-NBCUniversal Order* ¶¶ 60-109, 144-154; *AT&T Broadband-Comcast Order* ¶¶ 127-153; *SBC-AT&T Order* ¶¶ 108-115; *Verizon-MCI Order* ¶¶ 109-116.

1. MVPD Services

a. Product Market

MVPDs include cable operators, DBS providers, telephone companies (e.g., Verizon and AT&T), and “overbuilders” (e.g., Google Fiber, RCN, and WOW!). MVPDs acquire programming and offer it to consumers, deriving revenue principally from subscription fees. MVPDs also can obtain revenue from the sale of advertising time (to the extent they obtain the right to sell advertising time through carriage agreements).

The Commission repeatedly has found that the relevant product market in which to analyze competition faced by cable operators includes services offered by all MVPDs,³²² expressly rejecting arguments that DBS and cable are not part of the same product market.³²³ And, as the *Comcast-NBCUniversal Order* anticipated, this market is beginning to expand as OVDs increasingly look to offer multiple channels of live, linear programming, in addition to competing with cable VOD offerings.

b. Geographic Market

In prior transactions, the Commission has concluded that the relevant geographic market for MVPD services is local (typically the franchise area of the local cable operator). The Commission has reasoned that consumers select an MVPD provider based on the MVPD choices available at their residences; consumers “are unlikely to change residences to avoid a small but

³²¹ See, e.g., *Comcast-NBCUniversal Order* ¶¶ 60-109, 144-154; *AT&T Broadband-Comcast Order* ¶¶ 127-153; *SBC-AT&T Order* ¶¶ 108-115; *Verizon-MCI Order* ¶¶ 109-116.

³²² See, e.g., *Adelphia Order* ¶ 63; *AT&T Broadband-Comcast Order* ¶ 89; *AOL-Time Warner Order* ¶¶ 244-245; *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Telecommunications, Inc., Transferor to AT&T Corp., Transferee*, Memorandum Opinion and Order, 14 FCC Rcd. 3160 ¶ 21 (1999) (“*AT&T-TCI Order*”). This approach is consistent with the approach to product market definition adopted by the federal antitrust agencies. See, e.g., Compl. ¶¶ 24-27, *United States v. EchoStar Commc’ns Corp.*, No. 1:02CV02138 (D.D.C. filed Oct. 31, 2002) (“*DBS Complaint*”).

³²³ *Adelphia Order* ¶¶ 62-63; *News Corp.-Hughes Order* ¶¶ 52-53; *AT&T Broadband-Comcast Order* ¶ 33; *AOL-Time Warner Order* ¶ 244.

significant increase in the price of MVPD service.”³²⁴ Moreover, to simplify the analysis, the Commission has aggregated consumers that face the same choice in MVPDs into larger relevant geographic markets.³²⁵ There is no reason for the Commission to deviate from its prior approach in this case.

2. Video Programming

Cable programming network rights and broadcast television retransmission rights are licensed to MVPDs by content owners. Companies that own cable or broadcast programming networks produce their own programming and acquire programming produced by others. These companies “package and sell this programming as a network or networks to MVPDs for distribution to consumers.”³²⁶ Companies that own broadcast networks distribute programming through both owned-and-operated (“O&O”) and affiliated television broadcast stations.³²⁷ Television broadcast stations redistribute their programming via MVPDs pursuant to an election that each station makes either to engage in commercial negotiations (“retransmission consent”) or enjoy mandatory (but uncompensated) carriage (“must-carry”).³²⁸ Both cable programmers and broadcast networks also widely license content in different windows to OVDs, which increasingly offer content on an exclusive basis, including original content.

³²⁴ *Adelphia Order* ¶ 64; see also *Comcast-NBCUniversal Order* ¶ 42; *News Corp.-Hughes Order* ¶ 62; *AT&T Broadband-Comcast Order* ¶ 90; *EchoStar-DirectTV HDO* ¶ 119.

³²⁵ *Comcast-NBCUniversal Order* ¶ 42; *Adelphia Order* ¶ 64; *News Corp.-Hughes Order* ¶ 62.

³²⁶ *News Corp.-Hughes Order* ¶ 54; see *Adelphia Order* ¶ 61; *EchoStar-DirectTV HDO* ¶ 248; *AT&T Broadband-Comcast Order* ¶ 34; see also *The Commission’s Cable Horizontal & Vertical Ownership Limits*, Second Further Notice of Proposed Rulemaking, 20 FCC Rcd. 9374 ¶¶ 65-66 (2005).

³²⁷ *News Corp.-Hughes Order* ¶ 54 (“Television broadcast stations affiliated with broadcast networks combine network programming with their own locally originated programming and/or programming secured from other sources to provide over-the-air service.”).

³²⁸ See, e.g., *id.*

a. Product Market

The video programming marketplace is highly dynamic and diverse and includes a wide array of national, regional, and local content. As a result of dramatic growth, MVPDs and other distributors today carry hundreds of networks that did not exist a decade ago.³²⁹

In prior transactions, the Commission has found that markets that include video programming are “differentiated product markets.”³³⁰ According to the Commission, the programming of different networks “differs significantly in terms of characteristics, focus, and subject matter.”³³¹

The Commission has employed a flexible approach with respect to programming in prior transactions. In the *News Corp.-Hughes Order*, for example, the Commission addressed the three categories of programming offered by News Corp.: “(1) national and non-sports regional cable programming networks; (2) regional sports cable networks; and (3) local broadcast television programming.”³³² In the *Adelphia* transaction, the Commission evaluated two categories of programming: “(1) national cable programming networks and (2) regional cable networks, particularly regional sports networks.”³³³ Most recently, in the *NBCUniversal* transaction, the Commission considered regional sports networks, NBC broadcast networks, and national cable networks as part of overall programming.³³⁴

³²⁹ See *Fifteenth Annual Video Competition Report* ¶ 22.

³³⁰ *News Corp.-Hughes Order* ¶ 59; *Adelphia Order* ¶ 66. According to the Commission, “[d]ifferentiated products are products whose characteristics differ and which are viewed as imperfect substitutes by consumers.” *News Corp.-Hughes Order* ¶ 59 n.206 (citing Dennis W. Carlton & Jeffrey M. Perloff, *Modern Industrial Organization* 281 (2d ed. 1991)).

³³¹ *Adelphia Order* ¶ 66; *News Corp.-Hughes Order* ¶ 59; *EchoStar-DirecTV HDO* ¶ 250.

³³² *News Corp.-Hughes Order* ¶ 60 (internal citations omitted).

³³³ *Adelphia Order* ¶ 67.

³³⁴ See *Comcast-NBCUniversal Order* ¶¶ 136, 140.

b. Geographic Market

In prior transactions, the Commission has concluded that it was “reasonable to approximate the relevant geographic market for video programming by looking to the area in which the program owner is licensing the programming.”³³⁵ Under this approach, the relevant geographic market for national programming networks is national in scope, as these networks are generally licensed to MVPDs and now other distributors nationwide.

Under the Commission’s approach, the relevant geographic market for RSNs and other regional networks is regional.³³⁶ Similarly, in the case of retransmission consent rights for local broadcast television programming, the Commission concluded that it is reasonable to use DMAs to approximate the relevant geographic market for each individual broadcast station.³³⁷

According to the Commission, contracts between broadcast stations and the distributors of programming, as well as FCC regulations and broadcasting technology, typically limit the extent to which broadcast station signals can be distributed outside of their assigned DMA.³³⁸ There is no reason for the Commission to adopt narrower geographic market definitions in this matter.

3. Internet Access Services

In prior transactions, the Commission has concluded that residential “high-speed Internet access services” constitute a relevant product market.³³⁹ The Commission determined that the

³³⁵ *Adelphia Order* ¶ 68; *see also News Corp.-Hughes Order* ¶ 64.

³³⁶ *See Adelphia Order* ¶ 68; *AT&T Broadband-Comcast Order* ¶¶ 59-60; *News Corp.-Hughes Order* ¶ 66.

³³⁷ *News Corp.-Hughes Order* ¶ 65.

³³⁸ Broadcasters have the right to prevent cable operators from carrying certain programming from the signals of broadcast stations from other markets. *See* 47 C.F.R. §§ 76.92-76.95 (network non-duplication rule); *id.* §§ 76.101-76.110 (syndicated exclusivity rule).

³³⁹ *AOL-Time Warner Order* ¶ 56; *AT&T Broadband-Comcast Order* ¶ 128. The Commission has found that the market for high-speed Internet services includes, among other things, Internet access services provided “over coaxial cable in the form of cable modem service offered by cable operators, and over copper wires in the form of digital subscriber line (‘DSL’) services by local exchange carriers,” *AT&T Broadband-Comcast Order* ¶ 128

relevant geographic market for high-speed Internet services is local – just as with MVPD services. The Commission reasoned that a “consumer’s choice of broadband Internet access provider is limited to those companies that offer high-speed Internet access services in his or her area.”³⁴⁰ There is no reason for the Commission to define a different product or geographic market in this transaction.³⁴¹

4. Internet Interconnection

The Commission has not previously defined the precise contours of “the market for exchanging and carrying [Internet] traffic.”³⁴² As the Commission has recognized, any “market for exchange of Internet traffic,” or Internet interconnection, contains numerous service providers and is at least national in geographic scope.³⁴³

Should the Commission attempt to define the market for interconnection, it would be sensible to consider two related services together: (1) “peering” services, which facilitate the “exchange of traffic destined for addresses on the peering entities’ own networks or the networks of their customers”;³⁴⁴ and (2) “transit” services, which provide access to “at a minimum, an

(internal citations omitted), as well as fixed wireless, satellite broadband, fiber, and increasingly, mobile wireless. *see infra* Section IV.

³⁴⁰ *AT&T Broadband-Comcast Order* ¶ 128; *see also AOL-Time Warner Order* ¶ 74.

³⁴¹ *See* Israel Decl. ¶ 21 (“Defining a national geographic market would suggest that Comcast and TWC are direct competitors despite the fact that they do not compete, but instead serve different, geographically distinct footprints, and thus are not an option for one another’s customers. Put simply, the transaction will not change the number of broadband choices available to consumers.”).

³⁴² *Applications Filed by Global Crossing Ltd. and Level 3 Commc’ns, Inc. for Consent to Transfer Control*, Memorandum Opinion and Order, 26 FCC Rcd. 14056 ¶ 19 n.64 (WCB & IB 2011) (“*Level 3-Global Crossing Order*”). The Commission has found that there is a distinct product market for Tier 1 Internet backbone services. *Id.* ¶ 21; *see also SBC-AT&T Order* ¶¶ 112-113; *Verizon-MCI Order* ¶¶ 110-113. Neither Comcast nor TWC is a Tier 1 ISP, which is an ISP able to carry traffic to the entire Internet without having to buy transit services from other ISPs.

³⁴³ *Level 3-Global Crossing Order* ¶¶ 20-21 (citing *SBC-AT&T Order* ¶¶ 112-114; *Verizon-MCI Order* ¶ 115).

³⁴⁴ *Level 3-Global Crossing Order* ¶ 19. Peering may be settlement-free (exchange of traffic without exchange of money) or paid (one network compensates the other for the exchange of traffic). *Id.*

Internet region.”³⁴⁵ The Commission previously has observed that peering services may be “settlement-free,” which means that traffic is exchanged without payment, or paid.³⁴⁶

Settlement-free peering is more common when the traffic in each direction is roughly commensurate, or the exchange of network facilities and services each network performs for the other is roughly equal, and paid peering is more common when there is a significant traffic or network imbalance. Similarly, “transit agreements are diversifying into more complex pricing arrangements based on metrics attempting to approximate the cost of carrying traffic.”³⁴⁷ The networks that provide peering and transit vary in type and include Tier 1 Internet backbone providers,³⁴⁸ ISPs, and content delivery networks (CDNs).³⁴⁹ These peering and transit services are often substitutable for one another, and providers compete to offer peering and transit services to one another and to Internet content providers (or “edge providers”).

As explained below, there is no plausible basis to conclude that the combination of Comcast and TWC will harm competition in any market for peering and transit services.

5. Telephony

In prior transactions, the Commission has identified residential telephone services as a relevant product market and determined that cable-based providers compete in that market with

³⁴⁵ *Id.*

³⁴⁶ *Id.*

³⁴⁷ *Id.*

³⁴⁸ The Internet “backbone” refers to high-capacity long-haul transmission facilities, which are interconnected with each other. *SBC-AT&T Order* ¶ 109; *Verizon-MCI Order* ¶ 110; *AT&T-BellSouth Order* ¶ 122.

³⁴⁹ CDNs are “overlay networks that cache content closer to users and compete with transit providers for certain classes of customers.” *Level 3-Global Crossing Order* ¶ 19 n.60.

LECs.³⁵⁰ The Commission also has indicated that, as with MVPD and Internet access services offered by cable companies, the relevant geographic market for telephony services is local.³⁵¹

6. Advertising

The Commission has not attempted to define formally a market or markets for advertising, but it has analyzed competition in advertising in prior transactions. In the *Comcast-NBCUniversal Order*, the Commission expressly rejected a product market definition that would include both broadcast advertising and cable advertising.³⁵² The Commission concluded that “[b]roadcast and cable programming advertising are not sufficiently close substitutes to advertisers to warrant defining a product market that would include both,” and observed that its “view is consistent with the DOJ’s conclusion that cable and broadcast advertising are in separate product markets.”³⁵³ There is no reason for the Commission to adopt a different analysis for this transaction. Nevertheless, should the Commission do so, it should recognize that the advertising marketplace is much broader than just cable and broadcast, encompassing numerous competitors, such as radio, online, and others, as Drs. Rosston and Topper note.³⁵⁴

As explained below, there is no plausible basis to conclude that the combination of Comcast and TWC would harm competition in any advertising market(s).

³⁵⁰ *Insight-TWC Order* ¶ 17; *AT&T Broadband-Comcast Order* ¶¶ 152-53.

³⁵¹ *See TWC-Insight Order* ¶ 16 (“Overall, we conclude that any potential competitive harms are limited because [TWC and Insight] primarily serve separate geographic areas.”); *see also AT&T Broadband-Comcast Order* ¶ 153 (“Comcast and AT&T Broadband largely compete [for telecommunications customers] in separate geographic markets, and, to the extent their service areas overlap, we find no material increase in concentration that would raise the potential of competitive harm”).

³⁵² *Comcast-NBCUniversal Order* ¶ 152.

³⁵³ *Id.* DOJ has recently affirmed this position. *See* Compl. ¶¶ 14-16, *United States v. Gannett Co.*, No. 1:13-cv-01984 (D.D.C. filed Dec. 16, 2013).

³⁵⁴ *See* Rosston/Topper Decl. ¶ 237 n.266.

C. Because the Parties Do Not Compete for Consumers, There Is No Plausible Theory of Competitive Harm Arising from the Horizontal Elements of the Transaction.

1. The Transaction Will Not Reduce Competition in Any Relevant Market for MVPD, Broadband, or Voice Services.

a. Comcast and TWC Do Not Compete in Any Relevant Market.

The FCC’s standard for whether two providers of broadband, video, or voice compete is whether they offer service to the same customers – the same standard reflected in the DOJ’s and FTC’s Horizontal Merger Guidelines.³⁵⁵ Consistent with this standard, as noted above, the Commission has concluded that the relevant market for each of these services is local.³⁵⁶ Because Comcast and TWC serve almost entirely distinct geographic areas, they do not compete for any of these services and the transaction will not result in any reduction in competition or consumer choice for broadband, video, or voice providers – nor will it increase Comcast’s market share in any geographic product market.³⁵⁷

The lack of competition between Comcast and TWC fundamentally distinguishes this transaction from proposed mergers recently challenged by antitrust regulators, such as the AT&T/T-Mobile transaction. Indeed, the absence of any reduction in competition should end the inquiry into any potentially anticompetitive effects in these consumer markets resulting from the horizontal aspects of the transaction. Some have protested that cable – or Comcast or TWC’s – local market share is “too high” in one or more services. Not only does this assertion ignore

³⁵⁵ See *Horizontal Merger Guidelines* § 4.2.2 (“[T]he Agencies may define geographic markets based on the locations of targeted customers. Geographic markets of this type often apply when suppliers deliver their products or services to customers’ locations. Geographic markets of this type encompass the region into which sales are made. Competitors in the market are firms that sell to customers in the specified region.”).

³⁵⁶ See, e.g., *Adelphia Order* ¶ 81 (“Consistent with our precedent, we find that the relevant geographic unit for the analysis of competition in the retail [video] distribution market is the household.”); *SBC-AT&T Order* ¶ 97 (“As with special access and enterprise services, we conclude that the relevant geographic market for mass market local, long distance, and bundled local and long distance services is the customer’s location.”).

³⁵⁷ See *supra* note 307.

the intense competition the companies face for *each* of their services, but it also has no relevance to this transaction. No relevant local market share *changes* as a result of this deal, and the transaction should not be used as an opportunity to air generalized concerns or views of what a different hypothetical market might look like.³⁵⁸

Equally irrelevant to a competitive analysis is the extent of the combined company's presence in particular regional or metropolitan areas, such as DMAs and/or Metropolitan Service Areas ("MSAs"). Consumers do not buy video, broadband, or voice service based on which provider is in their DMA or MSA, but rather based on which provider services their local neighborhood.³⁵⁹ And, the only relevant question is the effects of the transaction on individual consumers. Again, because TWC and Comcast do not compete with each other there will be no reduction in competitive choices in any relevant market. As Drs. Rosston and Topper explain:

Some public commentary on the proposed transaction has focused on Comcast's increased customer share in top DMAs and raised concerns that Comcast's increased presence in these top DMAs will give it increased market power in programming acquisition. Those concerns are without economic basis.

DMAs are Nielsen constructs for rating measurement purposes and do not constitute relevant antitrust markets. Comcast does not compete with TWC for customers or for programming even when both firms operate cable systems in the same DMA. Thus, Comcast and TWC do not compete with each other in purchasing programming, which means content providers currently do not realize any benefits from playing TWC and Comcast off against each other in carriage negotiations that involve a single or multiple DMAs. After the transaction, the combined firm's demand for a content provider's programming in top DMAs (or any DMAs) will not change.³⁶⁰

³⁵⁸ See Section III (discussing precedent on transaction-specific standard of review).

³⁵⁹ Specifically, DMAs are relevant measures for advertisers buying *broadcast* advertising, which is not at issue in the transaction. And as shown below, the company faces competition in its DMAs, which protects programmers and advertisers.

³⁶⁰ Rosston/Topper Decl. ¶¶ 180-81.

Other critics have alleged that an increase in Comcast’s putative national “market” shares generally will reduce competition in consumer markets. Because the relevant markets are local, however, that argument is baseless. In fact, the increase in Comcast’s share of video, broadband, and voice consumers nationwide will not change the Herfindahl-Herschman Index (“HHI”)³⁶¹ in any relevant market.³⁶² Critics have failed to provide any antitrust or economic analysis to warrant a departure from this consistent approach.³⁶³

b. The Consumer Markets That Comcast and TWC Serve Are Competitive and Dynamic.

The transaction will not reduce consumer choices, and that alone precludes a finding of horizontal harm. Nonetheless, it bears emphasis that Comcast and TWC also face robust competition in the local markets for video, Internet, and voice that they respectively serve.

Video. In 2011, 98.6% of homes had access to at least three MVPDs, and 35.3% had access to at least four.³⁶⁴ And as shown above, the video marketplace continues to become ever more competitive, with cable losing market share both to well-established and new competitors.³⁶⁵ These competitive conditions will not change as a result of the proposed transaction. Moreover, the traditional metrics of competition do not account for additional competition from established OVDs or emerging over-the-top multichannel linear service providers like Sony.

³⁶¹ HHI is a measure used by the *Horizontal Merger Guidelines* to assess concentration levels. *Horizontal Merger Guidelines* § 5.3.

³⁶² See Rosston/Topper Decl. ¶ 163.

³⁶³ See Israel Decl. ¶¶ 18-21. As Dr. Israel explains, “[i]n an attempt to find harms to residential broadband customers, commenters may attempt to define a ‘national market’ for residential broadband services and claim that the transaction increases concentration in such a ‘market,’ including claims that the combined firm will have a large share in this alleged national market. Such claims are not grounded in any sound economic theory and provide no valid support for horizontal harms from the proposed transaction.” *Id.* ¶ 20.

³⁶⁴ *Fifteenth Annual Video Competition Report* ¶ 36.

³⁶⁵ See *supra* Section IV.B.2.

Broadband. As discussed in Section IV, the broadband marketplace is especially dynamic, as reflected by the more recent emergence or recent expansion of providers like AT&T, CenturyLink, Verizon, and Google Fiber; continued robust competition from other wireline providers; and the ever-improving broadband speeds offered by the four national wireless carriers – Verizon Wireless, AT&T Wireless, Sprint, and T-Mobile. As wireless data speeds continue to increase substantially with the deployment of advanced technology – including 4G LTE, LTE-Advanced, and beyond – mobile broadband service is increasingly competing with wireline broadband, as the Commission and DOJ have recognized.³⁶⁶ As SoftBank’s Son argued, “[i]n the past, only fixed line broadband could provide high-speed Internet for [tablets and smartphones], but now wireless is becoming very powerful that it would be an alternative.”³⁶⁷ In many ways, wireless broadband is an even more formidable competitor because it offers consumers mobility and national reach.

Again, the relevant market for broadband is local, but it bears noting that Comcast does and the combined company will face competition nearly everywhere it does business from other robust broadband providers, before and after the deal. Although as noted above MSAs are not

³⁶⁶ *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Servs.*, Sixteenth Report, 28 FCC Rcd. 3700 ¶ 2 (2013) (“Mobile wireless Internet access service could provide an alternative to wireline service for consumers who are willing to trade speed for mobility, as well as consumers who are relatively indifferent with regard to the attributes, performance, and pricing of mobile and fixed platforms.”); *id.* ¶ 371 (“[M]obile wireless providers have made substantial progress in upgrading their networks with higher-speed technologies and expanding coverage with these technologies. In some cases mobile broadband networks are being used as a replacement for wireline last-mile solutions, where location makes deployment of wireline facilities inefficient.”); *Ex Parte* Submission of the U.S. Dep’t of Justice, GN Docket No. 09-51, at 8 (Jan. 4, 2010) (“Wireless may be a very attractive alternative for consumers who greatly value mobility and for consumers who do not place much value on the highest speeds (*e.g.*, consumers who do not want advanced services, such as HD video streaming). It appears to offer the most promising prospect for additional competition in areas where user density or other factors are likely to limit the construction of additional broadband wireline infrastructure.”).

³⁶⁷ Masayoshi Son, CEO, SoftBank Corp., Presentation: The Promise of Mobile Internet in Driving American Innovation, the Economy and Education, Tr. at 12 (Mar. 11, 2014), http://cdn.softbank.jp/en/corp/set/data/irinfo/presentations/vod/2013/pdf/press_20140311_02.pdf.

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appropriate markets for assessing potential competitive harms in this transaction, even if one were to consider broadband availability at the MSA level, as the chart below illustrates, there are numerous other broadband providers in all of the top 20 MSAs:³⁶⁸

Broadband Providers in the Top 20 Metropolitan Statistical Areas (MSAs)

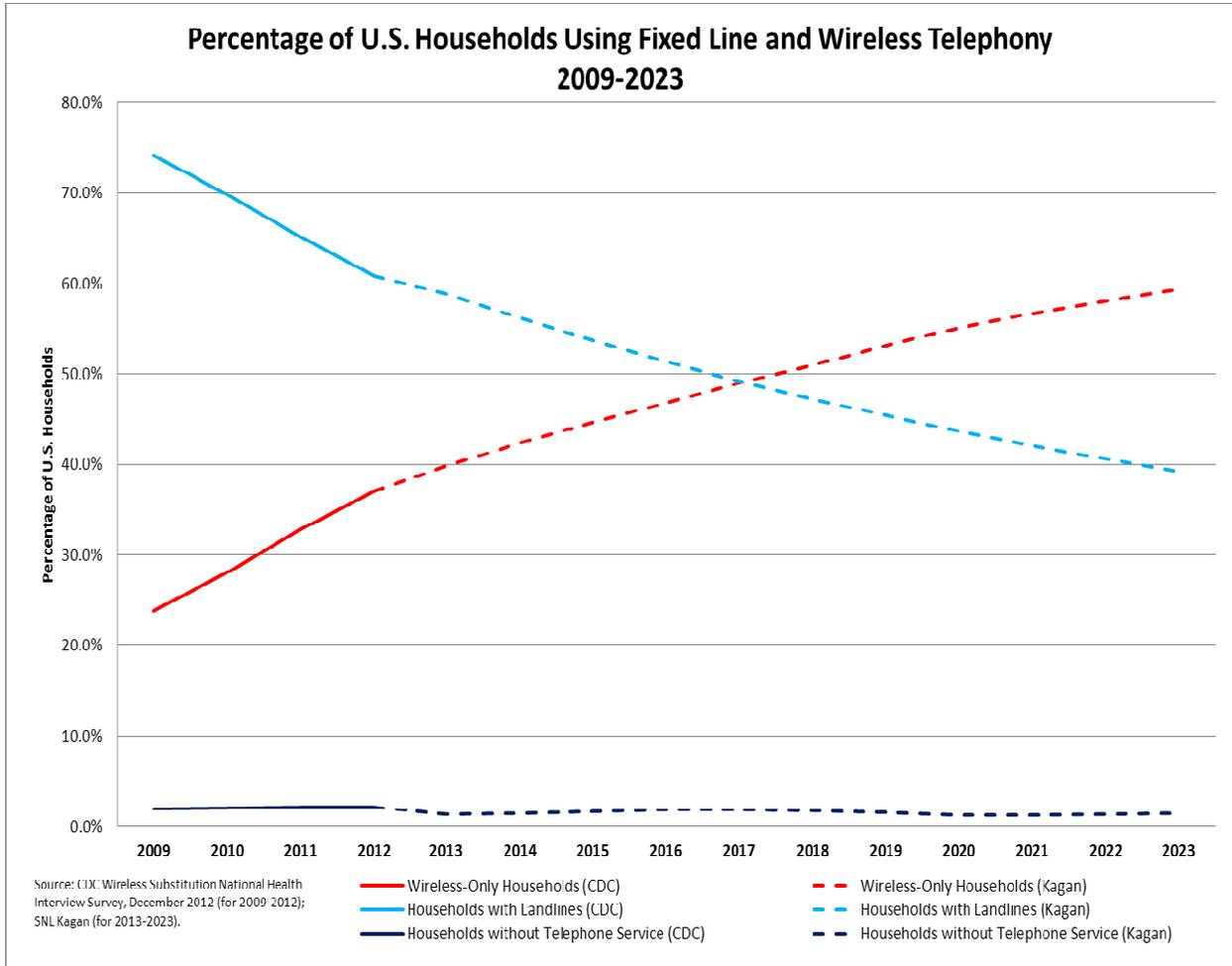
Rank	MSA	Providers (excluding Comcast and TWC)	Total	Post-Transaction
1	New York-Newark-Jersey City, NY-NJ-PA	AT&T, Cablevision, CenturyLink, RCN, Verizon, and 24 others	29	No Change
2	Los Angeles-Long Beach-Santa Ana, CA	AT&T, Cablevision, Charter, Cox, Verizon, and 12 others	17	No Change
3	Chicago-Joliet-Naperville, IL-IN-WI	AT&T, RCN, T-Mobile, Sprint, Verizon, WOW!, and 16 others	22	No Change
4	Dallas-Fort Worth-Arlington, TX	AT&T, CenturyLink, Charter, Suddenlink, Verizon, and 28 others	33	No Change
5	Houston-Sugar Land-Baytown, TX	AT&T, CenturyLink, Charter, Suddenlink, Verizon, and 27 others	32	No Change
6	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	AT&T, Cavalier, Frontier, RCN, Verizon, and 27 others	32	No Change
7	DC-Arlington-Alexandria, DC-VA-MD-WV	AT&T, Cavalier, CenturyLink, Cox, Frontier, RCN, and 31 others	37	No Change
8	Miami-Fort Lauderdale-Pompano Beach, FL	AT&T, CenturyLink, T-Mobile, Sprint, Verizon, and 10 others	15	No Change
9	Atlanta-Sandy Springs-Marietta, GA	AT&T, Charter, Frontier, Mediacom, Sprint, Verizon, and 19 others	25	No Change
10	Boston-Cambridge-Quincy, MA-NH	AT&T, Charter, RCN, Sprint, T-Mobile, Verizon, and 14 others	20	No Change
11	San Francisco-Oakland-Fremont, CA	AT&T, Sprint, T-Mobile, Verizon, Windstream and 9 others	14	No Change
12	Phoenix-Mesa-Glendale, AZ	AT&T, CenturyLink, Cox, Mediacom, Verizon, and 25 others	30	No Change
13	Riverside-San Bernardino-Ontario, CA	AT&T, Charter, Frontier, Mediacom, Sprint, Verizon, and 10 others	16	No Change
14	Detroit-Warren-Livonia, MI	AT&T, CenturyLink, Charter, WOW! and 21 others	25	No Change
15	Seattle-Tacoma-Bellevue, WA	AT&T, CenturyLink, Sprint, T-Mobile, Verizon, and 20 others	25	No Change
16	Minneapolis-St. Paul-Bloomington, MN-WI	AT&T, CenturyLink, Charter, Mediacom, Verizon, and 35 others	40	No Change
17	San Diego-Carlsbad-San Marcos, CA	AT&T, Cox, Mediacom, T-Mobile, Verizon, and 7 others	12	No Change
18	Tampa-St. Petersburg-Clearwater, FL	AT&T, CenturyLink, Verizon, WOW!, and 8 others	12	No Change
19	St. Louis, MO-IL (<i>no Comcast or TWC presence</i>)	--	--	--
20	Baltimore-Towson, MD	AT&T, Cavalier, RCN, Verizon, and 22 others	26	No Change

Source: National Broadband Map (www.broadbandmap.gov). Includes wireline, terrestrial fixed wireless, terrestrial mobile wireless, and satellite providers in the Top 20 MSAs with a reported "highest advertised download speed" of 3Mbps or more. Chicago-Joliet-Naperville, IL-IN-WI MSA information obtained from Broadband Illinois.

Voice. Residential and business customers have numerous competitive alternatives for telephone service, including other traditional providers of phone service, wireless providers, and

³⁶⁸ Information on broadband providers on the National Broadband Map is organized by state, county, state legislative district, MSA, Universal Service Fund (USF) study area, or Native Nations. Each MSA consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core. Collecting broadband data at the MSA level is a requirement of the National Broadband Plan. FCC, Connection America: The National Broadband Plan at 44 (2010), available at <http://www.broadband.gov/download-plan/> (“The data collection should be done in a way that makes possible statistically significant, detailed analyses of at least metropolitan service area (MSA) or rural service area (RSA) levels, thus allowing the FCC to understand the effect of bundles and isolate the evolution of effective pricing and terms for broadband services.”).

providers of nomadic VoIP services. The unmistakable trend in telephony continues to be toward wireless substitution of fixed telephone lines. As the figure below demonstrates, wireless has been eroding fixed line’s share of U.S. households and that trend is projected to continue over the next decade, exerting significant competitive pressure on fixed telephone services.



Moreover, millions of customers now use Vonage, Skype, and other over-the-top options.

2. Comcast’s Increased Scale as a Buyer of Programming Will Not Cause Any Competitive Harm.

As noted above, after the transaction and expected divestiture of systems, Comcast will manage systems serving fewer than 30 percent of total MVPD subscribers in the United States.

This share is plainly insufficient to give Comcast anticompetitive “monopsony” or “buyer power” vis-à-vis sellers of video programming.

Whether the level of concentration in the MVPD industry creates competitive concerns vis-à-vis programmers has been extensively litigated, resulting in clear judicial guidance on this issue. Specifically, the D.C. Circuit concluded more than a decade ago that the evidence before the FCC and the court could not have justified a horizontal ownership limit “lower than 60%” on the basis of buyer power concerns.³⁶⁹ And in 2009, the same court concluded that “[i]n light of the changed marketplace, *the Government’s justification for the 30% cap is even weaker now than in 2001. . . .*”³⁷⁰ As the court explained:

[T]he record is replete with evidence of ever increasing competition among video providers: Satellite and fiber optic video providers have entered the market and grown in market share since the Congress passed the 1992 Act, and particularly in recent years. Cable operators, therefore, no longer have the bottleneck power over programming that concerned the Congress in 1992.³⁷¹

As explained above, today’s MVPD marketplace is even more competitive than it was in 2009 – let alone in 2001 – with cable providers’ share of U.S. MVPD subscribers having declined significantly in recent years in light of robust competition from DBS and telco providers.³⁷² Along with new wireline MVPD entrants, like Google Fiber, a number of online businesses like Netflix, Apple, Google, Amazon, Hulu, Sony, and a host of smaller companies, are entering the online video space and positioning themselves as full or partial competitors to MVPDs.³⁷³ At the same time, MVPDs like Dish,³⁷⁴ DirecTV,³⁷⁵ and Verizon FiOS³⁷⁶ are

³⁶⁹ See *Time Warner Entm’t Co. v. FCC*, 240 F.3d 1126, 1136 (D.C. Cir. 2001) (“*Time Warner II*”).

³⁷⁰ *Comcast Corp. v. FCC*, 579 F.3d 1, 9 (D.C. Cir. 2009) (emphasis added).

³⁷¹ *Id.* at 8.

³⁷² See discussion and graph *supra* Section IV.B.2.

³⁷³ See Rosston/Topper Decl. ¶ 171.

reportedly exploring online video offerings. Growth in online video services has been impressive. By SNL Kagan’s estimate, 45.2 million U.S. households subscribe to online video services in 2013, more than double the 19.8 million that did so in 2010.³⁷⁷ The number of hours Americans spend watching video over the Internet has grown 70 percent since June 2010.³⁷⁸ Surveys of TV households show that the percentage of TV watching time that is spent on viewing of Internet streaming to computers, TV sets, and handheld devices grew from 3 percent in 2011 to 13 percent in 2013.³⁷⁹ Approximately 53 million households used online video in 2013.³⁸⁰ As OVD providers continue to grow, they will give content providers even more ways to distribute their programming and limit Comcast’s bargaining leverage in acquiring

³⁷⁴ See Ryan Nakashima, *Dish, Disney deal envisions Internet-delivered TV*, Associated Press, Mar. 4, 2014, available at <http://entertainment.verizon.com/news/read/category/Top%20News/article/ap-dish-disney-deal-envisions-internetdeliv-ap-2> (describing deal between Dish Network and Disney that paves the way for Dish to offer live local broadcasts from ABC TV stations and programming from ABC Family, Disney Channel, ESPN and ESPN2 over mobile devices, set-top boxes and other means, similar to how Netflix’s video streams are delivered today).

³⁷⁵ See Shalini Ramachandran, *DirecTV Explores Online Video Service*, Wall St. J., Dec. 12, 2013, available at <http://online.wsj.com/news/articles/SB10001424052702304202204579254524162627610> (describing DirecTV’s interest in creating a “niche” online video service” targeting certain groups of consumers who have dropped traditional pay-TV service).

³⁷⁶ See Brian X. Chen & Quentin Hardy, *Verizon Plans to Buy Intel Media Division to Expand Its Television Services*, N.Y. Times, Jan. 21, 2014, available at http://www.nytimes.com/2014/01/22/technology/verizon-to-expand-tv-services-with-intel-media-purchase.html?_r=0 (describing Verizon’s plan to buy the intellectual property and assets of Intel Media, the digital TV division of Intel, which developed a solution to offer channels over the Internet to screens of different sizes, from smartphones to big-screen TVs).

³⁷⁷ See SNL Kagan, *Internet Video-On-Demand Revenue Projections, 2009-2022* (Nov. 2012).

³⁷⁸ See FCC, Fact Sheet: Internet Growth and Investment (Feb. 19, 2014), http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0219/DOC-325653A1.pdf. Compare Nielsen Co., *An Era of Growth: The Cross-Platform Report*, at 11 (Mar. 5, 2014), <http://www.nielsen.com/us/en/reports/2014/an-era-of-growth-the-cross-platform-report.html> (average of seven hours, 34 minutes per month spent watching video over the Internet in Q4 2013) and Nielsen Co., *State of the Media: The Cross-Platform Report*, at 5 (June 14, 2011), available at <http://www.nielsen.com/us/en/reports/2011/cross-platform-report-q1-2011.html> (four hours, 24 minutes in Q4 2010).

³⁷⁹ See Horowitz Associates, Inc., *An In-Depth Look at Alternative Platform Capability and Usage* (Nov. 2013).

³⁸⁰ See SNL Kagan, *Online Video Buffets, But Does Not Break Multichannel Model* (Oct. 1, 2013).

programming.³⁸¹ Indeed, OVDs are increasingly an outlet for original programming that is succeeding with millions of viewers on online platforms with no MVPD carriage at all.³⁸²

In other words, previous concerns about further cable consolidation and “monopsony” power are truly antiquated in light of today’s marketplace realities. In order to compete effectively, Comcast will need to offer its customers the best programming available.³⁸³ Electing not to carry compelling programming would put Comcast at a competitive disadvantage.³⁸⁴ In fact, when addressing the topic of MVPD consolidation earlier this year, Charles G. Carey, President of 21st Century Fox, stated:

We honestly don’t see any material consequences to our business. In fact, there may be some positive ones. First, unique content at scale in an expanding digital world has never held a stronger hand. . . . Furthermore, the real issue is how many choices an individual home has, not how big is the distributor. We already deal successfully with large distributors. Cable consolidation will not change the number of choices. Consumer choice is actually likely to increase, not decrease, as over-the-top digital platforms emerge. Finally, consolidation may spur innovation and improve customer experience, and new technologies like targeted ads as well as other enhancements that enlarge the pie for everyone.³⁸⁵

In any event, there is no economic basis for applying monopsony theory to this transaction.³⁸⁶ In the context of sales to MVPDs (which, unlike programming networks, do not

³⁸¹ See Rosston/Topper Decl. ¶ 188.

³⁸² See Parks Associates, *OTT in a Pay-TV World* (Dec. 2013). OVDs have even begun to offer original and exclusive award-winning programming, such as Netflix’s “House of Cards” series, or purchase exclusive windows of content from other traditional programming suppliers, such as Amazon Prime’s exclusive SVOD rights to FX’s “Justified.” See Greg Satell, *What Netflix’s ‘House of Cards’ Means For The Future Of TV*, Forbes, Mar. 4, 2013, <http://www.forbes.com/sites/gregsatell/2013/03/04/what-netflixs-house-of-cards-means-for-the-future-of-tv/>; Carl Franzen, *Amazon Prime Instant Video gets exclusive rights to ‘Justified’*, The Verge, Feb. 26, 2013, <http://www.theverge.com/2013/2/26/4031472/amazon-prime-video-justified-exclusive-and-the-shield>.

³⁸³ See Rosston/Topper Decl. ¶¶ 176-178 (explaining that the transaction will not give Comcast market power to change the demand for or supply of programming).

³⁸⁴ See *Time Warner II*, 240 F.3d at 1134 (“If an MVPD refuses to offer new programming, customers with access to an alternative MVPD may switch.”).

³⁸⁵ 21st Century Fox, Inc., Q2 2014 Earnings Call, Tr. at 6 (Feb. 6, 2014).

³⁸⁶ Rosston/Topper Decl. ¶ 179.

generally license content exclusively), programming is what is called a “non-rivalrous” good, meaning that one firm’s purchase of it has no effect on the amount of programming available for sale to other firms.³⁸⁷ Indeed, both the opportunity cost and the marginal cost of licensing the same programming to a distributor is essentially zero.³⁸⁸ Further, because Comcast and TWC do not compete for the same video customers, one firm’s purchase of programming does not reduce the other firm’s potential demand for programming. Under these circumstances, Comcast and TWC do not “compete” today to purchase video programming.³⁸⁹ And, in fact, greater concentration among cable operators has coincided with an enormous increase in the number of video programming channels – exactly the *opposite* of what a monopsony theory would predict. Between 1993 and 2013, the number of national programming networks *increased* more than fourfold.³⁹⁰ Drs. Rosston and Topper make clear that there are no monopsony video programming concerns in this transaction:

³⁸⁷ See *id.* ¶ 178. See generally *Implementation of Section 11 of the Cable Television Consumer Protection and Competition Act of 1992*, Further Notice of Proposed Rulemaking, 16 FCC Rcd. 17312 ¶ 15 (2002) (“Consumption of the programming of a video programming network . . . by one viewer does not reduce the amount of the good available for another viewer.”).

³⁸⁸ See David Waterman, *Local Monopsony and Free Riders*, 8 Info. Econ. & Pol’y 337, 339 (Dec. 1996) (video programming is a non-rivalrous good in that the costs of production are incurred up-front; subsequent sales are essentially costless).

³⁸⁹ See generally Reply to Comments & Petitions to Deny Applications for Consent to Transfer of Control, MB Docket No. 02-70, App. 5 (Declaration of Prof. Janusz Ordovery), ¶¶ 25-30 (May 21, 2002). In contrast, many of the classic monopsony cases involve agricultural commodities, like grain or rice, which are plainly “rivalrous” goods—*i.e.*, the purchase of one unit reduces the supply available to other purchasers. See, e.g., *United States v. Cargill, Inc.*, 2000-2 Trade Cas. (CCH) ¶ 72, at 967 (D.D.C. June 30, 2000) (grain); *Beef Indus. Antitrust Litig.*, 907 F.2d 510 (5th Cir. 1990) (fed-cattle); *United States v. Rice Growers Ass’n of Cal.*, 1986-2 Trade Cas. (CCH) ¶ 67, at 288 (E.D. Cal. Jan. 31, 1986) (rice).

³⁹⁰ Compare *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, First Report, 9 FCC Rcd. 7442 ¶ 21 & App. C, tbl. 4 (1994) and Rosston/Topper Decl. ¶ 35 n.12. As Commissioner Pai stated in connection with the latest FCC Video Competition Report, “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.” *Fifteenth Annual Video Competition Report* (Statement of Comm’r Ajit Pai).

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Because the transaction will not change the demand and supply conditions underlying program buying, it would not be profitable for Comcast to limit its output (i.e., the number of customers to whom it distributes certain programming) to depress what it pays a content provider – doing so would cost Comcast valuable programming and ultimately profits. In other words, the transaction will not give Comcast the incentive or ability to exercise market power (or “monopsony power”) in purchasing video programming. The same economic factors also imply that the transaction will not reduce content providers’ incentives to produce high-quality programming.³⁹¹

Nor will the combined entity gain market power from the perspective of bargaining theory. Concerns about a merger leading to an increase in bargaining power usually arise when the merging parties compete with each other for customers because the combined company would face less competitive pressure post-transaction. In the current transaction, this concern does not arise, because Comcast and TWC do not compete for customers. So the transaction does not change Comcast’s incentives or next best alternatives to carrying a content provider’s programming – Comcast will face the same risk post-transaction of losing subscribers to competitors if it does not carry the programming as it does today.³⁹²

Further, because programming providers will have the same distribution options in any given area post-transaction that they have today, the increase in Comcast’s subscriber base is unlikely to have a meaningful impact on its bargaining power. With 22 million customers, Comcast is a significant MVPD in programming negotiations, and it seems unlikely – as a real-world matter – that the addition of 8 million (or even 11 million) more customers creates any truly new bargaining power that will somehow tip the scales in a dramatic fashion against either large or small programmers. To the contrary, programmers with valuable content have significant bargaining power of their own, as reflected in the fact that programming costs have

³⁹¹ Rosston/Topper Decl. ¶ 179.

³⁹² *See id.* ¶¶ 190-92.

outstripped inflation.³⁹³ Programming costs of Comcast, TWC, and Charter have increased, on average, by 54 percent in the last five years.³⁹⁴ Indeed, over the period from 2004 to 2012, Comcast and TWC’s programming costs have also significantly outpaced increases in average cable retail prices, further underscoring programmers’ bargaining power.³⁹⁵

As for smaller independent programmers,³⁹⁶ Comcast is a recognized supporter of such voices, some of which have already spoken in support of this transaction based on Comcast’s consistent support for independent programming voices.³⁹⁷ The company carries over 160 independent networks, including many small, diverse, and international networks. And it is well into the process of fulfilling the commitment it made in connection with the NBCUniversal transaction to launch 10 new independent networks, including at least eight owned or managed by minority groups.³⁹⁸

³⁹³ See *id.* ¶¶ 193-94.

³⁹⁴ Tony Lenoir, *Cost of Programming Jumps 54% in 5 years*, SNL Kagan, Aug. 28, 2013, <http://www.snk.com/InteractiveX/article.aspx?BeginDate=08/28/2013&ID=24720103&KPLT=2>; see also Rosston/Topper Decl. ¶ 194.

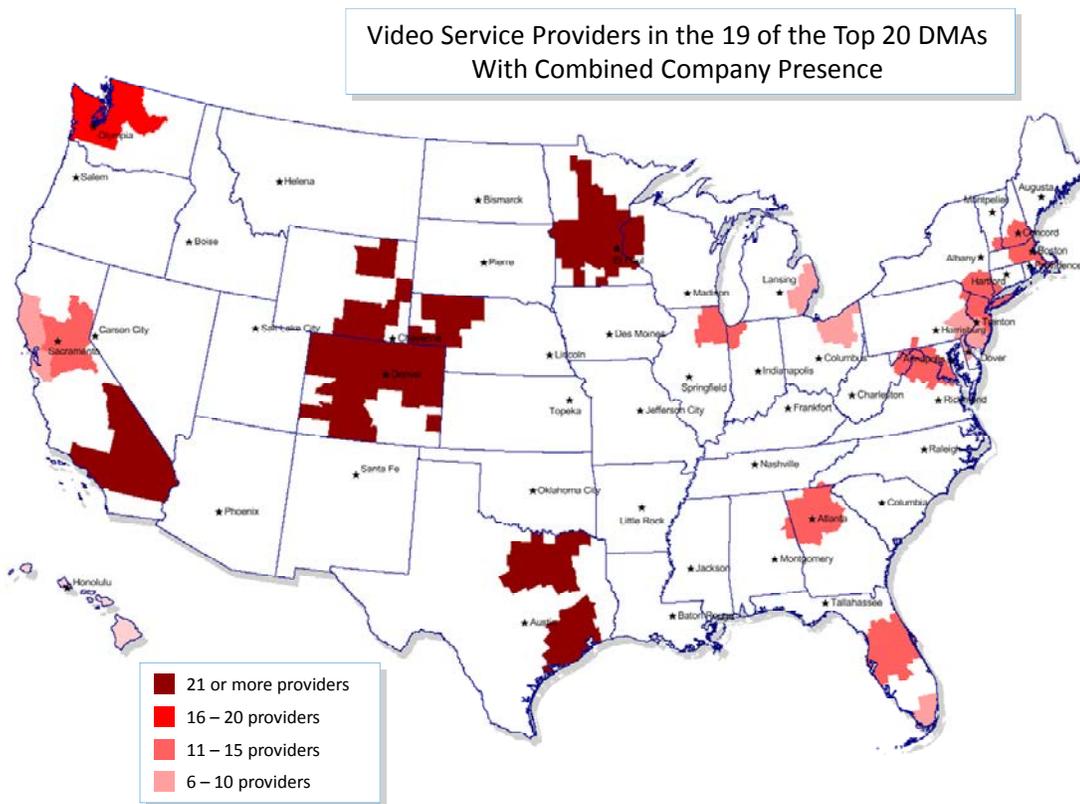
³⁹⁵ Based on the cumulative changes in programming costs reported in Comcast’s and TWC’s annual public filings and the average expanded basic cable price in the FCC’s *Report on Cable Industry Prices* from 2004 to 2012. See *Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, Report on Cable Industry Prices, 28 FCC Rcd. 9857 (2013).

³⁹⁶ Independent programmer as used here means a programmer that is not an affiliate of Comcast or of a top 15 programming network, as measured by annual revenues. This is the definition used in the Comcast-NBCUniversal transaction. *Comcast-NBCUniversal Order*, App. A § III(3).

³⁹⁷ See, e.g., Charles Segars, CEO, Ovation, Letter to the Editor, L.A. Times, Feb. 16, 2014, available at <http://www.latimes.com/opinion/la-le-0216-sunday-comcast-time-warner-20140216,0,6966395.story#axzz2vDweABRP> (“Comcast has been a good friend and ally to the independent programming community, bringing unique content to an underserved audience. . . . This merger will be a boon for unique, independent programmers.”); Carl Guardino, Op-Ed., *The Benefits of Comcast’s TWC Deal*, Fin. Times, Mar. 28, 2014 (“Mark Cuban, who owns AXS TV and the Dallas Mavericks basketball team, argues that a more national Comcast would enhance competition – overall he calls it a ‘huge positive.’”). Sean Combs, an owner of Revolt TV, tweeted: “Congrats to @Comcast on their merger with @TWC! I commend Comcast on their diversity program! Happy to be w/both!” Sean Combs, Twitter (Feb. 13, 2014, 8:08 AM), <https://twitter.com/iamdiddy/status/433996221876015104>.

³⁹⁸ *Comcast-NBCUniversal Order*, App. A § III(3); see also *Third Annual Compliance Report*, at 3.

Nor is there merit to the claim that the combined company’s presence in 19 of the top 20 DMAs creates a bottleneck for programmers. As noted above, DMAs are not relevant competitive markets for MVPD services; they are just Nielsen constructs for rating measurement purposes.³⁹⁹ Nevertheless, it bears noting that programmers have access in all DMAs to two nationwide DBS distributors, and, increasingly, online video distributors. And, as noted above, Comcast will face significant competition in *all* these DMAs. Indeed, as shown in the map below, there will be 11 or more MVPDs in most of these 19 DMAs where the combined company will have a presence and at least six MVPDs in all of them.⁴⁰⁰



Cable & Telecom Boundaries Provided by **GeoResults**

³⁹⁹ See Rosston/Topper Decl. ¶ 181.

⁴⁰⁰ In all events, the transaction only *adds* a presence that Comcast did not previously have in three DMAs (Los Angeles, Dallas/Fort Worth, and Cleveland), since Comcast already *had* a presence in 16 of the top 20 DMAs at issue.

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A specific listing of the number of video providers by DMA is set out below:

Video Providers in the Top 20 Designated Market Areas (DMAs)

Rank	DMA	Providers (excluding Comcast and TWC)	Total	Post-Transaction
1	New York, NY	Dish, DirecTV, Verizon, RCN, Cablevision, and 6 others	11	No Change
2	Los Angeles, CA	Dish, DirecTV, Verizon, AT&T, Charter, and 16 others	21	No Change
3	Chicago, IL	Dish, DirecTV, AT&T, RCN, WOW!, and 7 others	12	No Change
4	Philadelphia, PA	Dish, DirecTV, Verizon, RCN, Atlantic Broadband, and 4 others	9	No Change
5	San Francisco-Oakland-San Jose, CA	Dish, DirecTV, AT&T, Charter, WARPSPEED, and 4 others	9	No Change
6	Dallas-Ft. Worth, TX	Dish, DirecTV, Verizon, AT&T, Cable One, and 28 others	33	No Change
7	Washington, DC (Hagerstown, MD)	Dish, DirecTV, Verizon, RCN, Atlantic Broadband, and 8 others	13	No Change
8	Atlanta, GA	Dish, DirecTV, AT&T, Windstream, WOW!, and 9 others	14	No Change
9	Boston, MA (Manchester, NH)	Dish, DirecTV, Verizon, RCN, MetroCast, and 7 others	12	No Change
10	Houston, TX	Dish, DirecTV, AT&T, CenturyLink, Consolidated Communications, and 24 others	29	No Change
11	Phoenix, AZ (<i>Comcast and TWC have no presence</i>)	---	13	No Change
12	Detroit, MI	Dish, DirecTV, AT&T, WOW!, Charter, and 5 others	10	No Change
13	Seattle-Tacoma, WA	Dish, DirecTV, Frontier, Coast Communications, Wave, and 11 others	16	No Change
14	Minneapolis-St. Paul, MN	Dish, DirecTV, WOW!, CenturyLink, Consolidated Communications, and 36 others	41	No Change
15	Tampa-St. Petersburg, FL	Dish, DirecTV, Verizon, WOW!, CenturyLink, and 6 others	11	No Change
16	Miami-Ft. Lauderdale, FL	Dish, DirecTV, AT&T, Advanced Cable Communications, Atlantic Broadband, and 2 others	7	No Change
17	Sacramento-Stockton-Modesto, CA	Dish, DirecTV, Sierra Nevada Communications, WARPSPEED, Wave, and 9 others	14	No Change
18	Denver, CO	Dish, DirecTV, Consolidated Communications, Suddenlink, Midcontinent, and 16 others	21	No Change
19	Cleveland, OH	Dish, DirecTV, AT&T, WOW!, Fairpoint, and 4 others	9	No Change
20	Orlando-Daytona Beach-Melbourne, FL	Dish, DirecTV, AT&T, Grande Communications, CenturyLink, and 7 others	12	No Change

Source: GeoResults

Finally, as Drs. Rosston and Topper explain, the transaction does not give Comcast any incremental ability or incentive to discriminate on the basis of affiliation in the carriage of RSN programming. Comcast would lose subscribers to other MVPDs if were to fail to carry RSNs its customers want to watch, and any existing or newly affiliated networks would gain little or no benefit from that strategy given the wide variety of unaffiliated viewing options.⁴⁰¹

⁴⁰¹ See *id.* ¶¶ 202-05.

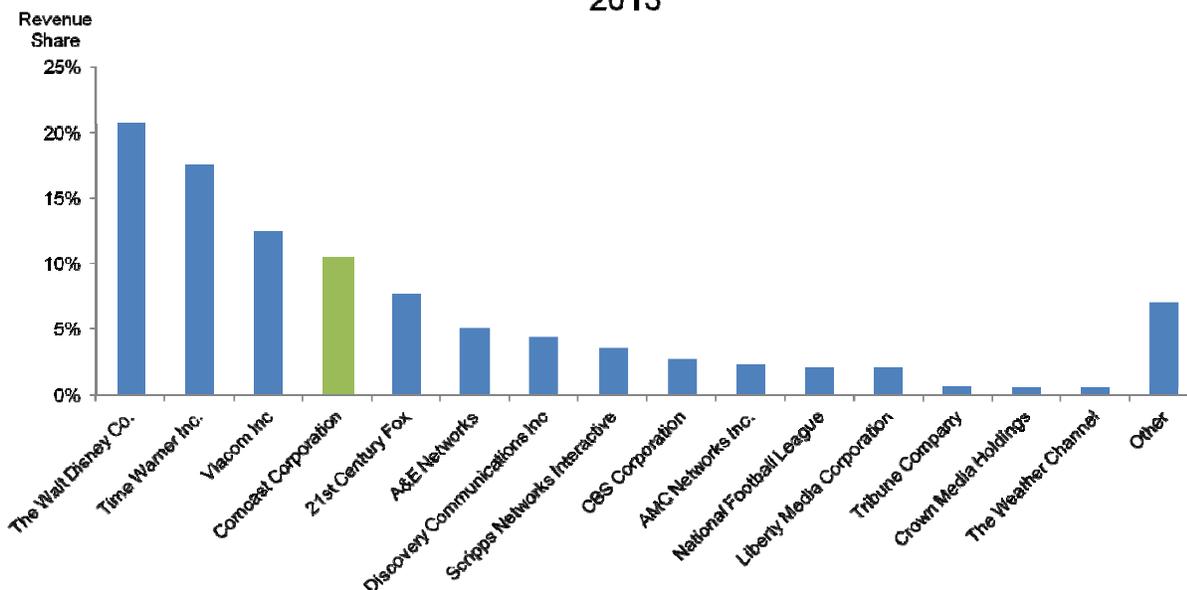
3. Combining Comcast’s and TWC’s Programming Assets Will Not Give Rise to Any Competitive Harm.

The programming marketplace is highly dynamic and competitive, with hundreds of national programming networks and dozens of regional programming networks competing for consumers’ attention. Because TWC accounts for only a tiny percentage of the programming industry, the combination of Comcast and TWC will not materially change competition among programmers. Indeed, after the completion of the transaction, the combined company will rank as the fourth-largest owner of national programming networks (by revenue), after Disney/ABC, Time Warner, and Viacom – the same rank that Comcast has today.

There will be no change in the concentration of ownership of national networks as a result of this transaction. TWC does not have an ownership interest in any national broadcast network, and TWC does not have majority ownership of any national cable programming network. Instead, TWC has only small, non-controlling ownership interests in two national cable programming services (iN Demand and MLB Network) – services in which Comcast already has attributable interests. As shown in the chart below, by revenue, the combined entity’s share of national cable programming networks will be less than 11 percent.⁴⁰²

⁴⁰² See Rosston/Topper. Decl. ¶ 212.

Cable Programming Revenue Share by Owner after TWC Acquisition 2013



Source: SNL Kagan.

Notes: Revenue is defined as net advertising revenue plus affiliate fee revenue. Information based on SNL Kagan estimates of cable network revenues and ownership, except for the cases described below. Revenue data are estimated as of 2/5/14 and ownership is estimated as of January 2014. Regional Sports Networks are not included.

Revenues for one network are not split between owners; they are attributed to the majority owner if there is one (greater than 50% ownership stake); if there is no majority owner, revenues are assigned to a hypothetical entity with the same name as the network. If the ownership shares are not provided by SNL Kagan, or are only provided for some shareholders such that a majority owner is not discernible, or the majority owner is listed as "Other", the network is considered to have no majority owner. All networks that are co-owned by Hearst and Walt Disney are attributed to the ownership entity "A&E Networks." Premium networks are included. SNL Kagan's Economics of Basic Cable Networks does not include ownership information on these networks, so the ownership is determined by annual reports or 10-Ks of their owners. Ownership of EPIX is attributed to Viacom Inc.

In fact, Comcast’s share of national cable programming will be lower than immediately after the Comcast/NBCUniversal transaction. That is because, in 2012, Comcast sold its interest in 17 A&E television networks (counting six HD feeds as separate networks) to Disney and Hearst, a sale that the Commission called “the most significant change in the number of cable MVPD-affiliated national networks” since the last Video Competition Report.⁴⁰³

As to regional and local cable programming, Comcast and TWC do not own any regional or local cable networks that compete with each other. This is not surprising given the different

⁴⁰³ Fifteenth Annual Video Competition Report ¶ 39.

geographies served by Comcast’s and TWC’s cable systems.⁴⁰⁴ Therefore, the transaction will not reduce competition among cable networks in any regional or local market.⁴⁰⁵

There is equally no merit to the claim that, as a result of this transaction, the combined company will “control” any relevant market for sports programming.⁴⁰⁶ There are dozens of national sports networks or networks that show major league professional and other sports programming (including ESPN, Fox, CBS, and the Turner families of networks), and Comcast owns controlling interests in only two national sports networks (NBCSN and Golf Channel). By virtue of this transaction, Comcast will be gaining ownership of only one major additional English-language RSN that features major professional league sports.⁴⁰⁷ Fox will continue to control many more such RSNs across the country than does Comcast.⁴⁰⁸

In all events, this putative concern, not seriously raised by this transaction, is redressed by the NBCUniversal Conditions, which grant MVPD and OVD purchasers of programming defined rights to arbitrate for Comcast-controlled programming under specified circumstances,

⁴⁰⁴ Comcast and TWC each have a minority ownership interest in SportsNet New York, an RSN controlled by the New York Mets.

⁴⁰⁵ In any event, Comcast’s increased scale from the transaction does not increase Comcast’s incentive or ability to engage in a profitable strategy of withholding content from competing MVPDs. *See* Rosston/Topper Decl. ¶¶ 211-31 (explaining why the transaction does not give Comcast an increased incentive or ability to permanently or temporarily foreclose the combined company’s programming – NBC O&Os, Telemundo O&Os, NBCUniversal national cable networks, and Comcast and TWC RSNs – from MVPD rivals).

⁴⁰⁶ Brooks Boliek, *Big Score in Comcast Deal: Sports Programming*, Politico Pro (Mar. 14, 2014).

⁴⁰⁷ Comcast, through the acquisition, will own Time Warner Cable SportsNet, which features the games of the Los Angeles Lakers. Comcast will assume TWC’s rights and obligations as to Time Warner Cable SportsNet LA, which features the games of the Los Angeles Dodgers, and for which TWC provides affiliate sales, ad sales, and certain other production and technical services. The three other RSNs that carry major league sports are Spanish-language channels – Time Warner Cable Deportes (featuring the Lakers), Time Warner Cable Channel 858 (a local channel which shows a simulcast of certain Angels and Clippers games from the Fox feed), and Canal de Tejas (a local channel which shows a simulcast of certain Rangers, Mavericks, and Spurs games from the Fox feeds). TWC’s other networks that qualify as “RSNs” are local-focused channels that show college and high-school sports programming.

⁴⁰⁸ Fox has controlling interests in 18 such RSNs. SNL Kagan (last visited Apr. 5, 2014).

and provide MVPDs with standalone arbitration rights for RSNs.⁴⁰⁹ Notably, these arbitration rights have never been invoked by an MVPD in more than three years.

4. The Transaction Will Not Result in Any Competitive Harm to Advertising Markets.

Post-transaction, Comcast will not have the ability to act anticompetitively in the advertising market. Rather, this market is robustly competitive, and the transaction will help Comcast become a stronger competitor.

As to local advertising, New York is the only DMA where Comcast and TWC both sell cable spot advertising. But advertising on a Comcast system is not a substitute for advertising on a TWC system, since the systems serve different customers. Similarly, there are few DMAs – New York, Los Angeles, and Dallas/Fort Worth – where Comcast currently owns an NBC broadcast station and TWC owns a cable system. The Commission and DOJ have found that local spot advertising on a cable system is not a close substitute for advertising on a local broadcast station. Comcast’s experience in advertising sales is consistent with this finding – the degree of substitutability is constrained by the limited supply of cable spot advertising space in comparison to local broadcast advertising space. In addition, an advertiser is able to target portions of a DMA through cable spot advertising, but must purchase local broadcast advertising on a DMA-wide basis. For those reasons, neither the Commission nor the DOJ considers cable advertising and broadcast advertising to be in the same product market.⁴¹⁰

Regardless, in each DMA, advertisers will continue to enjoy a number of alternative outlets that compete vigorously for local advertising dollars, with varying degrees of

⁴⁰⁹ TWC licenses NY1 to Cablevision and Bright House Networks, but does not license any other local news channels to other MVPDs today. Thus, the only competitive effect of this transaction with respect to that programming is that it will be subject to arbitration remedies.

⁴¹⁰ See *infra* Section V.B.6.

substitutability. As Drs. Rosston and Topper explain, “[b]ecause [Comcast and TWC] do not represent competing choices for an advertiser seeking to reach a given cable household, combining their complementary systems will not reduce the array of choices by which an advertiser can reach a given household today.”⁴¹¹ This includes other MVPDs, as well. In addition, the alternatives include radio, newspapers, outdoor display advertising, and the Internet.

Thus, Drs. Rosston and Topper conclude:

Competition in the advertising industry is robust, and the current advertising services offered by Comcast and TWC compete with many other media. Moreover, the lack of overlap between Comcast and TWC systems and the limited programming assets owned by TWC mean that the transaction will not reduce the advertising options available to national, regional, or local advertisers.⁴¹²

D. There Is No Plausible Theory That the Transaction Will Facilitate “Foreclosure” or Other Exclusionary Conduct.

A transaction involving vertically integrated cable distributors may give rise to competitive concerns only if it results in the combined company having substantial market power in either upstream (programming) or downstream (distribution) markets. The Internet, video programming, and video distribution businesses are all highly competitive, and the proposed combination of Comcast and TWC will not have substantial market power in any of these markets.

1. No Threat of Competitive Harm from Potential Foreclosure of Last-Mile Internet Access.

The combined company will not have the incentive or ability to degrade or otherwise be a “bottleneck” for access to its broadband customers, for at least five reasons.

⁴¹¹ Rosston/Topper Decl. ¶ 240; *see also id.* ¶¶ 241-46 (explaining why the combination of local cable, broadcast, and regional programming assets do not reduce competition in the sale of local or regional video advertising).

⁴¹² *Id.* ¶ 237.

First, the services that edge providers offer are complementary to Comcast’s broadband business, whose value is enhanced by edge providers’ offerings. Comcast needs edge providers to offer attractive content, applications, and services so that existing Internet customers continue to demand Comcast’s broadband service and new Internet consumers choose Comcast.⁴¹³

Indeed, as Dr. Israel explains:

The value of an ISP’s broadband service is largely defined by the quality of the edge services that are available when using the service and whether the speed and reliability of the broadband service permits full utilization of those services. Hence, attractive products from edge providers increase demand for broadband service.⁴¹⁴

Therefore, any action that the combined firm might undertake to harm edge providers would degrade its broadband service and reduce the profits it could earn.⁴¹⁵ For example, if Comcast were to impair its customers’ access to popular content such as online video, it would quickly pay a steep price – both economically in terms of lost subscribers or reduced demand for broadband services, and in the court of public opinion.⁴¹⁶ Providing high-quality broadband service provides Comcast with the significant percentage of its revenue and an even higher percentage of Comcast’s and TWC’s operating cash flow,⁴¹⁷ which is why Comcast has invested substantially in upgrading its networks to deploy faster speeds and more reliable performance.⁴¹⁸

⁴¹³ See Israel Decl. ¶ 36.

⁴¹⁴ See *id.*

⁴¹⁵ *Id.* ¶ 37.

⁴¹⁶ See *AT&T-BellSouth Order* ¶ 117 (“[T]here is substantial competition in the provision of Internet access services. Broadband penetration has increased rapidly over the last year Increased penetration has been accompanied by more vigorous competition. Greater competition limits the ability of providers to engage in anticompetitive conduct since subscribers would have the option of switching to alternative providers if their access to content were blocked or degraded.”) (internal citations omitted).

⁴¹⁷ Israel Decl. ¶ 38.

⁴¹⁸ See *supra* Section IV.A.

Thus, any strategy that reduces demand for broadband services would be costly to the combined firm's profits.⁴¹⁹ As Dr. Israel describes it:

[G]iven the importance of broadband to the combined firm's bottom line, . . . a strategy of harming broadband to help video is likely less attractive than a pro-competitive alternative, in which Comcast invests to offer high quality video services (including online video services). Such efforts are pro-competitive, as they are likely to induce competitive responses from edge providers, which will have an incentive to improve their own online offerings. And because they stimulate demand for Comcast's broadband product, such improvements by other edge providers further benefit Comcast's broadband business. In contrast, the anti-competitive alternative of attempting to harm OTT edge providers by erecting "tollbooths" or otherwise foreclosing access to Comcast's broadband subscribers—were it even feasible (which it is not . . .)—would harm Comcast's broadband business. Thus, such an approach is likely less economically attractive than the pro-competitive strategy [through] which Comcast both expands its video business *and* benefits its broadband business.⁴²⁰

Second, as detailed earlier, the combined company will face substantial competition in the provision of broadband services from a variety of sources – from providers of DSL (including FTTN), FTTP, wireless, and other types of broadband service (including cable overbuilders, satellite, and fixed wireless).⁴²¹ Broadband service is sold on a local basis, and individual customers have ample and increasing choice. For this reason, as Dr. Israel explains, the combined company's static share of the national universe of broadband subscribers (from 20 to less than 40 percent, depending on the calculation) is irrelevant to whether the combined company could act as a bottleneck or harm edge providers:

These competitive alternatives provide consumers with other ways to receive an edge provider's content or service should Comcast limit its customers' access to that edge provider. Edge providers (or their agents) can negotiate advantageous deals with those alternative providers (or at least threaten to do so when negotiating with the combined firm) if useful. Hence, any attempt by the

⁴¹⁹ See *SBC-AT&T Order* ¶ 142 (noting the merged entity's strong incentives to provide competing VoIP services to retain customers because of their demand for such services).

⁴²⁰ Israel Decl. ¶ 39.

⁴²¹ *Id.* ¶¶ 43-47; see also *supra* Section IV.B.1.

combined firm to impede or condition edge providers' access to its customers would risk loss of those customers to other broadband providers.⁴²²

Third, it is a misconception that Comcast or TWC serves as a “gatekeeper” controlling access to its own last mile and to end users. Rather, edge providers have multiple avenues for reaching Comcast’s broadband subscribers, undermining Comcast’s ability to deny access or degrade service to such providers (even if it wished to, which it does not, and even if Comcast’s customers had no other options, which they do).

The hyper-interconnectedness of the Internet backbone means that any major player, such as Comcast or TWC, has dozens of paths into its network on which huge volumes of undifferentiated traffic from millions of sources travels at any given moment. Comcast and TWC have each worked cooperatively together and with other companies to interconnect their networks in mutually beneficial ways through peering and transit arrangements. Comcast itself has over 40 settlement-free routes into its network and TWC has approximately [] [], and both have many other substantial commercial peering and transit connections with CDNs, ISPs, and larger edge providers, among others. Any edge provider therefore can reach either company’s last mile-network through a third party *without having any “permission” or direct relationship (paid or otherwise) with Comcast or TWC*. And, Dr. Israel explains, no peer or transit provider or CDN allows Comcast or TWC to decide which edge provider’s traffic it will accept from among the millions of bits being transmitted on any individual route:

[I]f Comcast were to close other providers’ access to its network, Comcast’s customers would lose access to content. Indeed, even if Comcast were inclined to attempt to foreclose access to its network or increase prices for access on *some* links, edge providers (or their agents) would likely simply shift content to *other* transit options. This effect arises because content providers (and their agents) can multi-home across many interconnection alternatives, so closing off a single link

⁴²² *Id.* ¶ 40.

or even several links does not prevent the edge provider from accessing the Comcast network. Hence, to prevent a particular edge provider's content from reaching its network, Comcast would potentially have to close off a substantial portion of the links into its network (including links to peers and CDNs). In doing so, Comcast would potentially deny its customers access to a substantial amount of content, thus significantly harming its broadband offering by inducing consumers to downgrade their broadband service or switch to other broadband options due to the loss of valuable content.⁴²³

Maintaining a wide variety of open routes into its networks is critical to Comcast's business: Comcast needs to maintain connectivity to many Internet end points that it does not serve directly, both to deliver its customers' traffic to *others* (since Comcast not only serves residential "eyeball" customers, but also serves businesses, content providers, CDNs, and others as a transit provider, and sends such traffic off-net to other providers)⁴²⁴ and to receive traffic from other Internet end points destined for its customers.⁴²⁵ Its business is offering this ubiquitous Internet connectivity to its customers; otherwise it will lose customers.⁴²⁶ Thus, there will always, necessarily, be many "open" routes into Comcast's network provided by third parties – which ensures that the overwhelming majority of edge providers' traffic flows into Comcast's last-mile network without the edge provider having to interact with Comcast directly.

This is not unique to Comcast: It is how the Internet works. The Internet is a network of networks that depends on a web of transit providers and directly connected peers and others, all maintaining diverse flows of traffic. As the Commission concluded in approving Level 3's acquisition of Global Crossing, transit and peering can readily be obtained from any of dozens of

⁴²³ *Id.* ¶¶ 82-83.

⁴²⁴ *Id.* ¶ 83.

⁴²⁵ Contrary to what many believe, Comcast has a rough balance of traffic into and out of its network.

⁴²⁶ *See id.* ¶¶ 81-88; *see also Level 3-Global Crossing Order* ¶ 27 (noting that merged entity would "lack incentives to selectively de-peer or degrade its connections for anticompetitive reasons" because if it did so, it "would lose customers to its remaining peers, because those entities would still enjoy ubiquitous Internet connectivity and, hence, would be more attractive to customers").

providers on a nationwide basis: “[W]e note that the number of Tier 1 ISPs appears to have grown since 2005. . . . [I]f we were to consider the role of non-Tier ISPs in the marketplace, there may be as many as 38 providers that sell transit or offer peering on a nationwide basis.”⁴²⁷

At the same time, the Commission acknowledged, that “there have been changes in how Internet traffic is transported,” with specific reference to the growing role of CDNs in the marketplace.⁴²⁸

And given the proliferation of transit, prices for that service have dropped precipitously over the past decade – which in turn has forced down the prices for direct peering as well.⁴²⁹

Thus, for low, competitive prices, edge providers can purchase transit from any of these companies that peer with Comcast or they can use a CDN service from a multitude of providers (e.g., Akamai, Limelight, Level 3, and many others), all of which have interconnection agreements with Comcast.⁴³⁰ Or a provider can opt to interconnect directly with Comcast under a market-based economic arrangement that offers an economically attractive alternative to indirect transit – as the recent and much discussed Netflix-Comcast agreement illustrates.⁴³¹ In fact, Comcast has thousands of business transit connections to its network, including dozens of substantial commercial peering and transit arrangements, for large entities that do not meet its

⁴²⁷ See *Level 3-Global Crossing Order* ¶¶ 28-29 (concluding that the merger of two “Tier 1” ISPs would not result in public interest harm and that the Tier 1 ISP market was competitive); see also *SBC-AT&T Order* ¶¶ 108-39.

⁴²⁸ *Level 3-Global Crossing Order* ¶¶ 16 n.58, 20 n.69 (“CDNs have taken advantage of the rise of bandwidth-intensive content and have been able to provide service to content providers that historically would have purchased transit.”) (internal citations omitted).

⁴²⁹ See William B. Norton, *The Internet Peering Playbook* 33 (2013) (estimating that transit prices have fallen from \$1200/Mbps in 1998 to \$0.94 Mbps in 2014).

⁴³⁰ Israel Decl. ¶¶ 77, 79.

⁴³¹ Dan Rayburn, *Here’s How the Comcast & Netflix Deal is Structured, With Data & Numbers*, StreamingMedia.com (Feb. 27, 2013), <http://blog.streamingmedia.com/2014/02/heres-comcast-netflix-deal-structured-numbers.html>; see also Richard Bennett, *Paid Peering and the Internet of Video Things*, High Tech Forum (Mar. 28, 2014), <http://www.hightechforum.org/paid-peering-the-internet-of-video-things/>.

settlement-free peering terms.⁴³² As Dr. Israel explains: “[T]he combined firm (like any ISP) will have strong incentives to keep the wide array of paths into its network open post-transaction, thus greatly limiting any alleged power over edge providers (or their agents). The value of broadband services depends on network effects and interconnectivity. Content comes from, and must be sent to, many networks that Comcast does not reach directly.”⁴³³ Thus, Dr. Israel concludes that “the combined firm will lack the incentive and ability to close off or substantially limit these access points into its network.”⁴³⁴

Fourth, the transaction will not shift bargaining power in a way that would prevent edge providers from competing effectively, harm consumers, or reduce welfare. Concerns about increased bargaining power typically arise in the context of transactions in which the merging parties are horizontal substitutes for each other, but Comcast and TWC do not compete with one another and are therefore not substitutes.⁴³⁵ Indeed, the transaction may actually *reduce* the combined entity’s bargaining power because, among other reasons, counterparties will have an increased incentive to resist concessions that would apply over a greater number of consumers.⁴³⁶

As Dr. Israel explains:

There is no economic basis to conclude that the transaction will shift bargaining power in a way that will prevent edge providers from competing effectively or harm consumers or reduce welfare. . . . [T]he established literature shows that if a buyer becomes “pivotal” for a supplier’s survival, that buyer may end up with less incentive and ability to negotiate aggressively against that supplier. For example, a rational buyer will recognize that, given its pivotal role, aggressive

⁴³² Israel Decl. ¶ 78.

⁴³³ *Id.* ¶ 81.

⁴³⁴ *Id.*

⁴³⁵ *Id.* ¶¶ 90-97.

⁴³⁶ *Id.* ¶¶ 101-02.

negotiation may harm the supplier and thus lessen its ability to produce high-quality inputs to the buyer's own product.⁴³⁷

Fifth, the only “last-mile” control Comcast or TWC has is when traffic is, finally, delivered to its network, and it is at this point – on the last-mile network – that the Open Internet prohibitions apply.⁴³⁸ Those rules were adopted to address broadband providers’ incentives to: (1) “block or otherwise disadvantage specific edge providers or classes of edge providers”; (2) “increase revenues by charging edge providers, who already pay for their own connections to the Internet, for access or prioritized access to end users”; and (3) “degrade or decline to increase the quality of the service they provide to non-prioritized traffic,” if they were permitted to charge edge providers for prioritization.⁴³⁹ In particular, the rules prohibit blocking and unreasonable discrimination of lawful network traffic and require that Comcast disclose certain information about its broadband Internet service, including network management practices, service characteristics, and commercial terms.⁴⁴⁰

Comcast’s obligation to abide by all of the Open Internet rules, therefore, protects against any anticompetitive concerns arising from the transaction regarding the provision of high-speed Internet access services. Comcast is currently the only broadband provider legally bound by the now-vacated prohibitions on blocking and unreasonable discrimination, and the transaction will extend those protections to TWC’s broadband customers. Thus, a significant number of

⁴³⁷ *Id.* ¶ 14.

⁴³⁸ *See generally Open Internet Order; see also Comcast-NBCUniversal Order* ¶¶ 94, 285 n.732 (“Comcast and Comcast-NBCU shall also comply with all relevant FCC rules, including the rules adopted by the Commission in GN Docket No. 09-191, and, in the event of any judicial challenge affecting the latter, Comcast-NBCU’s voluntary commitments concerning adherence to those rules will be in effect.”); Modified Final Judgment § V.G, *United States v. Comcast Corp.*, No. 11-cv-00106 (D.D.C. Aug. 21, 2013), available at <http://www.justice.gov/atr/cases/f300100/300146.pdf> (“*Comcast-NBCU Modified Consent Decree*”).

⁴³⁹ *Open Internet Order* ¶¶ 21, 24, 29.

⁴⁴⁰ *Id.* ¶ 54.

additional broadband customers will benefit from the Open Internet rules as a result of this transaction. Comcast’s original commitment, made in the NBCUniversal transaction, was intended to provide the Commission a fail-safe – assuring that Comcast would abide by the Open Internet rules even if they were overturned by a court. The obligation that Comcast undertook in 2011 will thus serve as a bridge to the day new Open Internet rules that apply to all ISPs are in place, and this transaction makes that bridge much wider.⁴⁴¹

2. No Increased Incentive or Ability to Pursue Anticompetitive Foreclosure Strategies Against Rival MVPDs or Unaffiliated OVDs.

Another theory of raising rivals’ costs that the Commission has considered in prior transactions is that a vertically integrated MVPD that owns key “must-have” programming might refuse to sell/license that programming to competing MVPDs or OVDs. By denying competitors or potential competitors access to popular programming, the argument goes, a vertically integrated MVPD might gain a competitive advantage over its rivals. The Commission has considered both whether an MVPD might permanently foreclose access to programming or whether it might engage in temporary foreclosure (or a threat of foreclosure) either to induce customers to switch video providers or as a negotiating tactic to obtain higher license fees.⁴⁴² In addition, the Commission has assessed whether a vertically integrated MVPD might restrict an OVD’s access to affiliated content to forestall potential online competition.⁴⁴³ In prior

⁴⁴¹ There have been many who have tried already, in the press, to use this transaction as an opportunity to pursue their views of the “right” economic framework for peering and transit arrangements. But, as shown above, this transaction raises no unique issues in that regard and thus is not the appropriate context for that debate. Thus, the peering-related concerns that have been suggested are not only factually inaccurate, but are not transaction-specific and are applicable to the marketplace generally. If there is a need to address these issues at all, it should be done in an industry-wide context.

⁴⁴² *Comcast-NBCUniversal Order* ¶ 34; *News Corp.-Hughes Order* ¶ 79; *Adelphia Order* ¶ 121.

⁴⁴³ *Comcast-NBCUniversal Order* ¶ 86.

transactions, the Commission has evaluated potential foreclosure strategies with respect to national cable networks, local broadcast programming, and regional sports networks.⁴⁴⁴

As a preliminary matter, this issue is not transaction specific, because the bulk of Comcast's valuable content was acquired in the NBCUniversal transaction, and those concerns were addressed by conditions adopted in that proceeding. The acquisition of TWC's small amount of programming and the acquisition of approximately eight million more subscribers is simply not sufficient to require reopening of that analysis, or to garner renewed or greater concern, especially in the absence of any issues under the existing conditions (as noted above, no MVPD has ever employed these conditions). That said, as shown here and by Drs. Rosston and Topper, post-transaction, Comcast will have neither the incentive nor the ability to engage in such a withholding strategy with respect to any category of programming following this transaction for several independent reasons.

First, Comcast lacks market power as a seller of national programming content, and this transaction will have no effect on either Comcast's share of national programming networks or local broadcast stations. Comcast already has an attributable interest in the only two national programming networks (MLB Network and iN Demand) in which TWC also has an ownership interest. Comcast's current share of national cable programming networks is less than 11 percent by revenue and will not increase as a result of this transaction.⁴⁴⁵

Similarly, if RSNs are added to the national programming network mix, Comcast has a share of 11.61 percent by revenue and TWC has a share of 0.25 percent by revenue.⁴⁴⁶ Adding

⁴⁴⁴ *News Corp.-Hughes Order* ¶ 60.

⁴⁴⁵ *See Rosston/Topper Decl.* ¶¶ 212-13.

⁴⁴⁶ *Id.* ¶ 212. This figure does not include SportsNet LA because that network just launched on February 25, 2014 and has yet to generate any appreciable revenue.

TWC’s programming interests to Comcast’s interests results in a *de minimis* increase in share to 11.86 percent by revenue. And because TWC has no ownership interest in any local broadcast stations, Comcast’s share of that programming segment will remain unchanged, and there is no basis to conclude that this transaction will in any way change Comcast’s incentives or ability to foreclose broadcast programming.⁴⁴⁷

Following the transaction, networks affiliated with Comcast will represent only a small portion of the total market for cable programming. In fact, Comcast’s share of national programming networks has *declined* since the NBCUniversal transaction. Moreover, the programming market is highly dynamic and competitive, and Comcast’s affiliated programming networks face significant competition.⁴⁴⁸ Indeed, if consumers are denied access to NBCUniversal content through their MVPD, many customers might instead watch substitute programming networks (e.g., TNT instead of USA Network) rather than switch video providers – or obtain NBCUniversal content through alternative non-subscription outlets – thus frustrating the foreclosure strategy. As Drs. Rosston and Topper explain, “foreclosing other MVPDs’ access to Comcast’s national cable networks would not benefit Comcast’s MVPD service as it would not only cause the networks to lose revenues but also would likely not lead to many subscribers of other MVPDs switching to Comcast.”⁴⁴⁹ As a result, Comcast lacks the necessary market power to implement a successful temporary or permanent foreclosure strategy.

⁴⁴⁷ See *id.* ¶¶ 219-22.

⁴⁴⁸ See *id.* ¶ 223. See *News Corp.-Hughes Order* ¶ 129 (“general entertainment and news cable programming networks,” like much of Comcast’s affiliate programming networks, “participate in a highly competitive segment of [the] programming market with available reasonably close programming substitutes”). As noted above, in each relevant area in which the combined entity’s cable systems and affiliated O&Os “overlap,” consumers would enjoy many alternatives, including at least [seven] non-NBCUniversal broadcast stations as well as other media.

⁴⁴⁹ Rosston/Topper Decl. ¶ 223.

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Second, Comcast lacks the incentive to pursue any temporary or permanent foreclosure strategy because its costs would outweigh any potential benefits. To begin with, refusing to license content to other MVPDs would undermine the business model of Comcast’s affiliated programming networks, resulting in substantial lost licensing fees and advertising revenues to the combined company. That is especially true now that NBCUniversal has begun to collect retransmission consent fees.⁴⁵⁰ In addition, Comcast would stand to capture only a portion of any diverted MVPD subscribers, as diverted customers may choose to subscribe to another competing MVPD rather than Comcast. If Comcast were to attempt to foreclose national or regional programming from all competing MVPDs, that would have an extremely destructive effect on the business of the affiliated cable networks. In sum, any effort to withhold affiliated programming from competing MVPDs would not be in the combined company’s overall economic interest.

Third, even if there were any concern here, the Commission’s existing program access regulations⁴⁵¹ and the NBCUniversal Conditions would fully mitigate it. In particular, the *Comcast-NBCUniversal Order* provides that MVPDs “may choose to submit a dispute with Comcast-NBCU over the terms and conditions of carriage of Comcast-NBCU affiliated programming to commercial arbitration”⁴⁵² Notably, this protection has never been invoked.

The *Comcast-NBCUniversal Order* also provides that OVDs must receive “non-discriminatory access to Comcast-NBCU video programming,” either on the same terms and conditions that are made available to MVPDs or on terms comparable to those offered to OVDs

⁴⁵⁰ *Id.* ¶ 219.

⁴⁵¹ *See generally* 47 C.F.R. §§ 76.1000-1004.

⁴⁵² *Comcast-NBCUniversal Order* ¶ 50.

by Comcast's non-vertically integrated peers (as defined by the Order).⁴⁵³ Like MVPDs, OVDs also have the ability to arbitrate disputes in defined circumstances.⁴⁵⁴ In addition, the conditions also provide for arbitration regarding retransmission consent disputes regarding O&Os.⁴⁵⁵

It is important to highlight that, to date, the NBCUniversal Conditions have almost never been invoked precisely because Comcast and NBCUniversal are licensing programming to willing buyers through marketplace negotiations. Indeed, since the NBCUniversal transaction closed, there have been no major disputes with any MVPDs regarding access to affiliated NBCUniversal programming on fair and reasonable terms. Since 2011, NBCUniversal has successfully reached comprehensive renewal agreements with, among others, Verizon, Cablevision, Charter, Dish Network, Suddenlink, Mediacom, and NCTC without resort to arbitration.⁴⁵⁶

Likewise, NBCUniversal has successfully licensed or renewed programming content to numerous OVDs, including Amazon, Netflix, and YouTube. Only one OVD has elected to proceed to arbitration, and those proceedings have unfolded as intended by the *Comcast-*

⁴⁵³ *Id.* ¶¶ 87-88.

⁴⁵⁴ *Id.* ¶ 89.

⁴⁵⁵ *Id.* ¶ 52.

⁴⁵⁶ *See, e.g.*, Press Release, NBCUniversal, NBCUniversal and Cablevision Sign Comprehensive Content Affiliation Agreement (Nov. 5, 2012), <http://stage.nbcuni.com/corporate/newsroom/nbcuniversal-and-cablevision-sign-comprehensive-content-affiliation-agreement/>; Mike Farrell, NBCUniversal, Suddenlink Reach Carriage Agreement, Multichannel News (Nov. 20, 2012), *available at* <http://www.multichannel.com/cable-operators/nbc-universal-suddenlink-reach-carriage-agreement/140373>; Press Release, NBCUniversal, NBCUniversal and Verizon Offer TV Everywhere Rights for Top Sports, News and Entertainment Programming to Verizon FiOS TV Customers Beginning Early Next Year (Nov. 26, 2012), <http://stage.nbcuni.com/corporate/newsroom/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, NBCUniversal, NBCUniversal and Mediacom Communications Announce Wide-Ranging, Multi-Year TV Everywhere Distribution Agreement (Dec. 19, 2012), <http://stage.nbcuni.com/corporate/newsroom/nbcuniversal-and-mediacom-communications-announce-wide-ranging-multi-year-tv-everywhere-distribution-agreement/>; Press Release, NBCUniversal, NBCUniversal Signs Multi-Year Carriage Deal With NCTC (Dec. 31, 2012), <http://stage.nbcuni.com/corporate/newsroom/nbcuniversal-signs-multi-year-carriage-deal-with-nctc/>.

NBCUniversal Order.⁴⁵⁷ Real-world evidence, therefore, powerfully refutes the suggestion that Comcast has, or will have, the incentive or ability to discriminate against MVPDs or OVDs.

3. No Increased Incentive or Ability to Pursue Anticompetitive Foreclosure Strategies Against Unaffiliated Programmers.

The combined company would have no enhanced ability or incentive to pursue anticompetitive foreclosure strategies as a “buyer” of programming by withholding distribution from competing “unaffiliated” content providers (e.g., “independent” cable networks or unaffiliated providers of online video content).⁴⁵⁸ The anticompetitive theory of harm is that an MVPD that owns cable networks may refuse to carry at least some unaffiliated cable networks in order to reduce the ability of the latter to compete for viewers, advertising, and programming. According to this theory, unaffiliated networks would be weaker competitors if a denial of carriage by a large MVPD prevented them from achieving substantial economies of scale.⁴⁵⁹ Again, this concern is not related to the present transaction, but instead was already raised and addressed in the Comcast-NBCUniversal proceeding, and is simply not presented anew here.

First, as shown above, and as the courts have repeatedly found, a 30 percent market share does not give rise to buyer power concerns in today’s highly competitive MVPD market.

Second, the additional TWC programming at issue here will not create incentive for Comcast to pursue a programming foreclosure strategy. Comcast has no ownership interest in the overwhelming majority of content that it distributes, and this will not change post-

⁴⁵⁷ That arbitration involved fundamental issues concerning obligations to other licensees – issues on which the Media Bureau fully agreed with NBCUniversal (the Commission’s review of two applications for review is still pending). Both the arbitrator and the Media Bureau rejected claims that NBCUniversal acted unreasonably in the arbitration. *See Project Concord Order on Review* ¶¶ 63, 65 (Commission review pending).

⁴⁵⁸ *See Rosston/Topper Decl.* ¶¶ 199-208 (explaining that the combined company will have no incremental incentive or ability to discriminate on the basis of affiliation against unaffiliated programmers).

⁴⁵⁹ Steven C. Salop & David T. Scheffman, *Raising Rivals’ Costs*, 73 *Am. Econ. Rev.* 267, 267-68 (1983).

transaction. Since the NBCUniversal transaction closed, the percentage of affiliated content carried by Comcast has declined. Meanwhile, Comcast has launched several new independent networks, including BBC World News, ASPIRE, Baby First Americas, Revolt, and El Rey – and as noted above, it carries over 160 fully independent networks including many that are small, diverse, and international.⁴⁶⁰ The MVPD market is more competitive than ever, and refusing to carry unaffiliated programming content that customers demand would critically damage Comcast’s core subscription business and drive customers to competing MVPDs.

Third, the Commission’s existing comprehensive regulatory scheme already addresses anticompetitive denial of program carriage. In particular, the program carriage regulations prohibit MVPDs from “engag[ing] in conduct the effect of which is to unreasonably restrain the ability of an unaffiliated video programming vendor to compete fairly by discriminating . . . on the basis of affiliation or non-affiliation of vendors in the selection, terms or conditions for carriage of video programming provided by such vendors.”⁴⁶¹ Notably, recent program carriage rulings make clear that Applicants do not and have not discriminated against independent programmers on the basis of affiliation.⁴⁶²

Fourth, real-world experience demonstrates that Comcast has no interest in refusing to carry unaffiliated content. Since the NBCUniversal transaction closed, Comcast (unlike some MVPDs) has not dropped any major cable programming network over an inability to reach a

⁴⁶⁰ See *Third Annual Compliance Report*, at 3.

⁴⁶¹ 47 C.F.R. § 76.1301(c).

⁴⁶² See *Comcast Cable Commc’ns, LLC v. FCC*, 717 F.3d 982 (D.C. Cir. 2013), *cert. denied sub nom. Tennis Channel, Inc. v. Comcast Cable Commc’ns, LLC*, 134 S. Ct. 1287 (2014) (determining that Comcast did not discriminate against Tennis Channel) (petition for further proceedings pending); *Herring Broad., Inc. v. FCC*, 515 F. App’x 655 (9th Cir. 2013) (affirming FCC determination that Comcast and TWC, *inter alia*, did not discriminate against WealthTV); *TCR Sports Broad. Holding, L.L.P. v. FCC*, 679 F.3d 269 (4th Cir. 2012) (affirming FCC determination that TWC did not discriminate against MASN).

carriage agreement. Likewise, Comcast has not lost the signal of any major broadcaster in connection with a retransmission consent dispute. There is no evidence that Comcast has sought to engage in programming foreclosure.

VI. THE TRANSACTION WILL NOT RESULT IN ANY VIOLATION OF THE COMMUNICATIONS ACT OR THE COMMISSION’S RULES.

The transaction will not result in the violation of any provisions of the Communications Act or the Commission’s rules.

A. Cross-Ownership and Other Ownership Limits

Comcast’s acquisition of TWC will be in full compliance with the Commission’s various cross-ownership and multiple ownership rules. TWC owns no TV or radio broadcast stations, or newspaper interests, so the transaction creates no new combination that implicates the radio/television cross-ownership rule, the local TV duopoly rule, the national TV broadcast audience cap, or the newspaper/broadcast cross-ownership prohibition.

Moreover, neither Comcast nor TWC owns any attributable interest in a broadband radio service (“BRS”) system or satellite master antenna television (“SMATV”) system that would implicate the Commission’s cable/BRS or cable/SMATV cross-ownership restrictions.⁴⁶³

The Commission has forborne from applying the LEC buyout restriction⁴⁶⁴ to acquisitions of CLECs by cable operators, and the TWC subsidiaries that provide telecommunications services are all CLECs.⁴⁶⁵ Therefore, the LEC buyout restriction does not apply to this transaction.

⁴⁶³ See generally 47 C.F.R. § 73.3555 (broadcast multiple ownership limits); *id.* § 27.1202 (cable/BRS cross-ownership limit); *id.* § 76.501(d) (cable/SMATV cross-ownership limit).

⁴⁶⁴ See *id.* § 76.505(b) (LEC-cable buyout prohibition); see also 47 U.S.C. § 572(b) (statutory prohibition).

⁴⁶⁵ See *Conditional Petition for Forbearance from Section 652 of the Communications Act for Transactions Between Competitive Local Exchange Carriers and Cable Operators*, Order, 27 FCC Rcd. 11532 ¶ 2 (2012) (“[W]e forbear from applying section 652(b) to acquisitions of competitive LECs. By granting limited forbearance from

B. Channel Occupancy Limit

The Commission’s “channel occupancy” rule requires that no more than 40 percent of the first 75 channels of a cable system be used to carry affiliated national programming services.

The Commission has clarified that this means that, for cable systems with 75 or more channels, at least 45 channels of that system must be unaffiliated with the system owner.⁴⁶⁶

To verify compliance with this rule, Comcast and TWC surveyed each of their respective cable systems and individual channel line-ups within systems that have multiple channel line-ups. For each channel line-up that included more than 45 unaffiliated channels,⁴⁶⁷ compliance with the rule was assured and no further analysis was required. For systems with fewer than 45 unaffiliated channels, individual channel line-ups were examined and the percentage of unaffiliated channels was determined. In every case, the percentage of unaffiliated channels exceeded the requisite 60 percent. In short, Comcast and TWC confirmed that all of Comcast’s cable systems and all of TWC’s cable systems are and will be in compliance with the 40 percent channel occupancy limit post-closing of the transaction. Indeed, Comcast verified in the

section 652(b), we harmonize the rules that apply to transactions between competitive LECs and cable operators regardless of which entity acquires the other.”).

⁴⁶⁶ See *Implementation of Sections 11 and 13 of the Cable Television Consumer Protection and Competition Act of 1992*, Second Report and Order, 8 FCC Rcd. 8565 ¶ 84 n.107 (1993) (“The channel occupancy limits need not necessarily apply to the first 75 channels. . . . On a system with 100 channels at least 45 channels would still be required to be devoted to the carriage of unaffiliated programming services, however, these 45 channels could be any of the system’s 100 channels.”); see also *Adelphia Order* ¶ 36 & n.134. Although the D.C. Circuit reversed and remanded the Commission’s channel occupancy rule twelve years ago, and a decision about what to do on remand remains pending, the Commission continues to enforce the rule. See *Time Warner II*, 240 F.3d at 1139 (reversing and remanding the rule); *Implementation of Section 11 of the Cable Television Consumer Protection and Competition Act of 1992*, Further Notice of Proposed Rulemaking, 16 FCC Rcd. 17312 ¶ 83 (2001) (inviting comment on whether “the Commission may relax, exempt specific cable operators from, or even forego imposing, vertical limits if the Commission determines that such a course of action would be justified given the prevailing market conditions”); *Adelphia Order* ¶ 38 (noting that “Comcast will be expected to comply with any revised limits that the Commission may adopt in the pending rulemaking proceeding.”); *Comcast-NBCUniversal Order* ¶ 259 (“Comcast-NBCU will be expected to comply with any revised limits that the Commission adopts in these proceedings.”).

⁴⁶⁷ For purposes of this analysis, “unaffiliated” channels are those in which none of Comcast, NBCUniversal, or TWC holds an attributable interest.

NBCUniversal transaction that, after that transaction, six out of seven channels that Comcast carries would be unaffiliated. And, since then, Comcast divested its interest in the family of A&E networks, thereby increasing the percentage of carried channels that are unaffiliated.

VII. PROCEDURAL MATTERS

The subsidiaries and affiliates of TWC hold a number of licenses and authorizations issued by the FCC, including domestic and international Section 214 authorizations, transmit/receive satellite earth station licenses, receive-only satellite earth station registrations, private wireless licenses, and cable television relay service licenses. The transaction will result in the transfer of control of all of these licenses and authorizations.⁴⁶⁸

Given the ongoing regulatory activity of TWC and its subsidiaries, including the need for those entities to file applications with the Commission during the period in which the instant

⁴⁶⁸ In addition to the Applications seeking consent to transfer control of TWC's licenses and authorizations to Comcast, Time Warner Entertainment–Advance/Newhouse Partnership (“TWE-A/N”) and Comcast have submitted applications for the *pro forma* transfer of TWE-A/N's interest in the licenses and authorizations held by Bright House Networks, LLC (“Bright House”). TWC holds 66.67 percent of TWE-A/N, which in turn is the sole member of Bright House. TWC also provides certain services to Bright House for an annual fee, including programming and technology support; however, TWC does not share in any of the profits and losses from the operation of the Bright House systems. Advance-Newhouse Partnership (an entity in which TWC holds no legal or economic interest) holds the remaining 33.33 percent of TWE-A/N, but has exclusive day-to-day management responsibility for and *de facto* control over the operation of the Bright House systems. Advance/Newhouse Partnership's interest in TWE-A/N tracks exclusively the economic performance of the Bright House systems and, as a result, TWC's financial statements do not include the results of the Bright House systems. While the Comcast-TWC transaction therefore will technically effect a transfer of TWC's indirect legal interest in Bright House to Comcast, the transaction will not result in any actual change of control over the Bright House licenses and authorizations, because Advance/Newhouse Partnership (not TWC) currently has and will post-transaction retain all day-to-day managerial control over, and all economic interest in, all of the licenses and authorizations held by Bright House. See, e.g., *2000 Biennial Regulatory Review, Amendment of Parts 43 and 63 of the Commission's Rules*, Notice of Proposed Rulemaking, 15 FCC Rcd. 24264 ¶ 15 n.33 (2000) (citing *Teléfonos de México, S.A. de C.V.*, Public Notice, 15 FCC Rcd. 1227 (WTB & IB 1999)) (stating that the acquisition by Telmex of a 50 percent *de jure* controlling interest in a CMRS subsidiary of SBC was *pro forma* because specific facts showed there was no change in *de facto* control); *Applications of Softbank Corp, Starburst II, Inc., Sprint Nextel Corp., & Clearwire Corp. for Consent to Transfer Control of Licenses & Authorizations*, Memorandum Opinion and Order, 28 FCC Rcd. 9642 ¶ 144 (2013) (rejecting two petitions for reconsideration of the *pro forma* processing of a transaction in which Sprint acquired a small additional equity interest in Clearwire, thereby effecting a transfer of *de jure* control, and finding that Sprint's acquisition of the additional interest was a *pro forma* transfer of control because it did not give Sprint *de facto* control over Clearwire). This *pro forma* transfer of TWC's indirect interest in Bright House will thus have no competitive significance.

transfer of control will remain pending at the Commission, the Applicants request that the Commission's grant of its consent to the transfer of control of these licenses and authorizations include the authority for Comcast to acquire control of: (1) any licenses and authorizations issued to TWC or to its subsidiaries or affiliates during the Commission's consideration of the transfer of control applications and the period required for the consummation of the proposed transaction following approval; and (2) applications that will have been filed by TWC or its subsidiaries or affiliates and that are pending at the time of the consummation of the proposed transaction. Such action would be consistent with prior decisions of the Commission.⁴⁶⁹

VIII. CONCLUSION

For the foregoing reasons, the proposed transaction between Comcast Corporation and Time Warner Cable Inc. serves the public interest, convenience, and necessity. Applicants, therefore, respectfully request that the Commission grant these applications promptly and provide for any other authority that the Commission deems necessary or appropriate to enable the Applicants to consummate the proposed transaction.

⁴⁶⁹ See, e.g., *AT&T-MediaOne Order* ¶ 185; *AT&T-TCI Order* ¶ 156; *Adelphia Order* ¶ 312; *AT&T Broadband-Comcast Order* ¶ 224; *Comcast-NBCUniversal Order* ¶ 291.

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Respectfully submitted,

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Important Information For Investors And Shareholders

This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. In connection with the proposed transaction between Comcast Corporation (“Comcast”) and Time Warner Cable Inc. (“Time Warner Cable”), on March 20, 2014, Comcast filed with the Securities and Exchange Commission (the “SEC”) a registration statement on Form S-4 containing a preliminary joint proxy statement of Comcast and Time Warner Cable that also constitutes a preliminary prospectus of Comcast. The registration statement has not yet become effective. After the registration statement is declared effective by the SEC, a definitive joint proxy statement/prospectus will be mailed to shareholders of Comcast and Time Warner Cable. INVESTORS AND SECURITY HOLDERS OF COMCAST AND TIME WARNER CABLE ARE URGED TO READ THE JOINT PROXY STATEMENT/PROSPECTUS AND OTHER DOCUMENTS FILED OR THAT WILL BE FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION. Investors and security holders may obtain free copies of the registration statement and the joint proxy statement/prospectus and other documents filed with the SEC by Comcast or Time Warner Cable through the website maintained by the SEC at <http://www.sec.gov>. Copies of the documents filed with the SEC by Comcast are available free of charge on Comcast’s website at <http://cmcsa.com> or by contacting Comcast’s Investor Relations Department at 866-281-2100. Copies of the documents filed with the SEC by Time Warner Cable will be available free of charge on Time Warner Cable’s website at <http://ir.timewarnercable.com> or by contacting Time Warner Cable’s Investor Relations Department at 877-446-3689.

Comcast, Time Warner Cable, their respective directors and certain of their respective executive officers may be considered participants in the solicitation of proxies in connection with the proposed transaction. Information about the directors and executive officers of Time Warner Cable is set forth in its Annual Report on Form 10-K for the year ended December 31, 2013, which was filed with the SEC on February 18, 2014, its proxy statement for its 2013 annual meeting of stockholders, which was filed with the SEC on April 4, 2013, and its Current Reports on Form 8-K filed with the SEC on April 30, 2013, July 29, 2013 and December 6, 2013. Information about the directors and executive officers of Comcast is set forth in its Annual Report on Form 10-K for the year ended December 31, 2013, which was filed with the SEC on February 12, 2014, its proxy statement for its 2013 annual meeting of stockholders, which was filed with the SEC on April 5, 2013, and its Current Reports on Form 8-K filed with the SEC on July 24, 2013, August 16, 2013 and February 14, 2014. These documents can be obtained free of charge from the sources indicated above. Additional information regarding the participants in the proxy solicitations and a description of their direct and indirect interests, by security holdings or otherwise, are contained in the preliminary joint proxy statement/prospectus filed with the SEC and will be contained in the definitive joint proxy statement/prospectus and other relevant materials to be filed with the SEC when they become available.

Cautionary Statement Regarding Forward-Looking Statements

Certain statements in this communication regarding the proposed acquisition of Time Warner Cable by Comcast, including any statements regarding the expected timetable for completing the transaction, benefits and synergies of the transaction, future opportunities for the combined company and products, and any other statements regarding Comcast’s and Time Warner Cable’s future expectations, beliefs, plans, objectives, financial conditions, assumptions or future events or performance that are not historical facts are “forward-looking” statements made within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are often, but not always, made through the use of words or phrases such as “may”, “believe,” “anticipate,” “could”, “should,” “intend,” “plan,” “will,” “expect(s),” “estimate(s),” “project(s),” “forecast(s),” “positioned,” “strategy,” “outlook” and similar expressions. All such forward-looking statements involve estimates and assumptions that are subject to risks, uncertainties and other factors that could cause actual results to differ materially from the results expressed in the statements. Among the key factors that could cause actual results to differ materially from those projected in the forward-looking statements are the following: the timing to consummate the proposed transaction; the risk that a condition to closing of the proposed transaction may not be satisfied; the risk that a regulatory approval that may be required for the proposed transaction is not obtained or is obtained subject to conditions that are not anticipated; Comcast’s ability to achieve the synergies and value creation contemplated by the proposed transaction; Comcast’s ability to promptly, efficiently and effectively integrate Time Warner Cable’s operations into those of Comcast; and the diversion of management time on transaction-related issues. Additional information concerning these and other factors can be found in Comcast’s and Time Warner Cable’s respective filings with the SEC, including Comcast’s and Time Warner Cable’s most recent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Comcast and Time Warner Cable assume no obligation to update any forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof.