BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
And Related Matters.	Application 14-06-012 (Filed June 17, 2014)

BRIEF
OF THE OFFICE OF RATEPAYER ADVOCATES
(PUBLIC VERSION)
EXHIBITS 1-5, 7-18

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December 10, 2014

ORA EXHIBIT INDEX

EXHIBIT	DOCUMENT	Confidential Version	Public Version
1	Declaration of Lee Selwyn	X	X
2	Declaration of Ayat Osman	X	X
3	Declaration of Adam Clark	X	X
4	Declaration of Eileen Odell	X	X
5	ORA Section 706 Jurisdiction Letter	N/A	X
6	Comcast Master IP Backbone Services Agreement – HIGHLY CONFIDENTIAL (no public version; just confidential)	X	N/A
7	Comcast's Response to ORA Data Request, Set 1	X	X
8	Comcast's Response to ORA Data Request, Set 2	N/A	X
9	Comcast's Response to ORA Data Request, Set 3	X	X
10	Time Warner Cable's Response to ORA Data Request, Set 1	X	X
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12	Charter's Response to ORA Data Request, Set 1	X	X
13	Charter's Response to ORA Data Request, Set 3 (includes supplemental submissions)	X	X
14	Bright House's Response to ORA Data Request, Set 1	X	X
15	Bright House's Response to ORA Data Request, Set 2	X	X
16	Grear v Comcast Federal District Court Class Action Lawsuit	N/A	X
17	FCC Media Bureau Memorandum	N/A	X
18	List of Additional documents Relied Upon and/or Referenced in ORA's Declarations	N/A	X

EXHIBIT 1

Declaration of Lee Selwyn

(PUBLIC)

Before the
CALIFORNIA PUBLIC UTILITIES COMMISSION

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851	Application 14-06-012

Expert Report and Declaration

of

LEE L. SELWYN

on behalf of the

Office of Ratepayer Advocates
of the
California Public Utilities Commission

December 10, 2014

PUBLIC VERSION – REDACTED

EXPERT REPORT AND DECLARATION OF LEE L. SELWYN

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Merger or not, the Joint Applicants apparently have no immediate plans to invest in or otherwise upgrade their California broadband infrastructure. 27

Much of the "competition" that the Joint Applicants claim to confront with respect to their broadband services falls well outside of the fixed wireline broadband Internet access relevant product market. 32

Although AT&T and Verizon do offer competing wireline broadband services, their speed and geographic availability are far more limited than the Joint Applicants' broadband offerings. 36

Due to its lower speed, bandwidth caps, and usage-based pricing, mobile wireless broadband is not viewed by consumers as a competitive alternative to the Joint Applicants' wired broadband services. 40

Due to its limited availability, technological and geographical constraints, and substantially higher price, fixed wireless broadband cannot be considered a close substitute for the Joint Applicants' broadband services. 41

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The majority of the Joint Applicants' California broadband customers appear to be choosing services offering download speeds rated at up to 25 Mbps, well above the 10 Mbps in the download direction that the FCC has proposed to adopt as the minimum threshold definition for "broadband." 48

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Unlike their cable TV MVPD services, the Joint Applicants' high-speed broadband access service does not confront significant price-constraining competition, thereby enabling the Joint Applicants to extract economic rents at both ends of this two-sided market and in the process inhibit competition in the Online Video Distribution (OVD) market. 107

As an economic matter, the Joint Applicants have the ability to extract monopoly rents at both ends of their two-sided broadband market – from end user "eyeballs" as well as from OVDs and other content providers whose access to customers is subject to the monopoly control of the Joint Applicants. 108

Broadband access providers are "terminating monopolies" and operate as "gatekeepers" through which all content providers must pass in order to access end user "eyeballs," enabling them to extract monopoly rents from content providers that will ultimately be flowed through to consumers. 117

In a ruling addressing analogous "terminating access" type services, the FCC recognized the market distortions created when the person ultimately responsible for paying for terminating access is not the one selecting the terminating access provider. 136

The merged entity would have enhanced incentives and opportunities to use its vertical relationships to disadvantage rivals and increase the profitability of its services. 142

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1 Statement of Qualifications – Dr. Lee L. Selwyn

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3 Analysis of Web Traffic Statistics

4 Glossary of Acronyms Used in this Report

DECLARATION AND EXPERT REPORT OF LEE L. SELWYN

EXECUTIVE SUMMARY

The proposed transaction

On April 11, 2014, Comcast Corporation ("Comcast"), Time Warner Cable Inc. ("TWC"), Time Warner Cable Information Services (California), LLC ("TWCIS") and Bright House Networks Information Services (California), LLC ("Bright House") filed Application 14-04-013 with the California Public Utilities Commission for approval of the transfer of control of TWCIS and Bright House to Comcast. On June 17, 2014, Comcast and Charter Fiberlink (Charter's CLEC subsidiary) filed Application 14-06-012 setting forth the California impact of various market swaps and divestitures. All of the California service areas controlled by Charter would be transferred to the post-merger Comcast/TWC entity. (Comcast Corporation and all related affiliates and Subsidiaries, Time Warner Cable Inc. and all related affiliates and Subsidiaries, Charter Communications, Inc. and all related affiliates and Subsidiaries, and Bright House Networks and all related affiliates and Subsidiaries, are referred to herein collectively as "Joint Applicants.")

Comcast and TWC are the two largest cable "Multi-System Operators" ("MSOs") both nationally and in California. Nationally, the two companies currently "pass" about 80-million homes or about 60% of the 132.8-million housing units nationwide. However, their post-merger control of California's broadband infrastructure will be far greater; in California, a post-merger Comcast will "pass" 12.25-million homes, about [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of the -million housing units in the state. A competitive source of high-speed broadband access providing at least 25 Mbps in the download direction is currently available to only about 18% of the post-merger Comcast-passed California households. The post-merger Comcast will serve some [**BEGIN HIGHLY CONFIDENTIAL**] -millioin [**END HIGHLY CONFIDENTIAL**] broadband customers statewide.

The Joint Applicants together will control a vast broadband distribution infrastructure that supports their broadband Internet access, Multichannel Video Program Distribution ("MVPD") cable television, and voice (and some non-voice business) telephone and telecommunications services. Because they maintain an often unchallenged monopoly with respect to the type of high-speed broadband Internet access being demanded by the majority of the Joint Applicants' California customers – service that provides download speeds of at least 25 Mbps – the Joint Applicants are in a position to exploit that broadband access monopoly to limit entry into the MVPD and telephone markets where the firms may actually confront some degree of competition. As the Scoping Memo points out, "Comcast and TWC, through their California subsidiaries, would potentially combine the two largest providers of high-speed last mile broadband service in the state. The Merger would impact competition and consumer welfare in

California's market for wholesale telecommunications, retail voice, backhaul and broadband services. More importantly, the Merger would have an impact on broadband deployment in California as two of the largest cable broadband providers in the state merge to form one entity."

The proposed merger presents substantial risks of consumer and competitor harm.

On the basis of my review and analysis of the Application and related documentation and testimony, it is my conclusion that there are substantial risks of consumer and competitor harm as a result of the proposed merger. These risks, and their potential impacts, include, *inter alia*:

- The post-merger Comcast will become the single dominant provider of last-mile broadband access in California. Its broadband distribution network will serve census blocks with more than 84.04% of all California households and will "pass" some [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of all California housing units – a far greater percentage than nationally (roughly 60%) or in any other state. Thus, in the California market for high-speed broadband Internet access offering download speeds of 25 Mbps and up, Comcast will have a monopoly except in those few areas where Verizon's *FiOS* or AT&T's *U-Verse* is deployed. The resulting impact of the merger upon the California broadband market is both unique and unparalleled, and has the potential to lead to even greater price increases than those that the Joint Applicants have, individually, put into effect in recent years (see paras. 12-17 and 27-75);

- As the importance of the incumbent local exchange carriers' narrowband infrastructure diminishes and as multiple services are integrated into the same common broadband distribution plant, prices for stand-alone residential telephone service will necessarily rise, an outcome whose greatest impact will be felt by low-income households that, due to limited disposable income, may choose not to purchase double/triple play packages (see paras. 128-129 and 138-144);

- Despite the Joint Applicants' claims, they have failed to demonstrate that the merger will produce efficiencies that each of the Joint Applicants could not otherwise achieve on their own and, moreover, that even if such efficiencies or cost savings were actually realized as a result of the merger, there is serious doubt and certainly a lack of evidence that any of these will flow through to consumers in the form of lower prices. On the contrary, Comcast Executive Vice President David L. Cohen has publicly stated that "We're certainly not promising that customer bills are going to go down or even increase less rapidly." Moreover, to whatever extent certain of the claimed efficiency gains might be achieved through adoption of best practices across the two merging companies, the Joint Applicants offer no evidence that the proposed merger is in any sense a prerequisite to the adoption of such best practices, or that these could not be accomplished by each company individually in the absence of the merger. Finally, even if such gains were to materialize, there is no basis to

expect that the highly concentrated California broadband market – a near-monopoly in many locations and at most a duopoly elsewhere – would be disciplined by competition to the point where the post-merger Comcast entity would be compelled to flow any efficiency gains that might actually arise – gains that by the Joint Applicants' own admission could not be achieved by any smaller rival – through to customers in the form of lower prices, and the Joint Applicants have offered no evidence that would suggest otherwise (see paras. 151-153);

- This same lack of any competitive discipline would reduce incentives for, and thus reduce the likelihood of, further build-out by the Joint Applicants or anyone else of advanced telecommunications network facilities in areas where such facilities do not presently exist. It will also result in diminished competition and innovation in the market for broadband access overall (see paras.19-26);

- Expanded opportunities for leveraging of the post-merger entity's market power in residential broadband and cable TV distribution into the potentially more competitive content markets, including increased opportunity and incentive for discriminatory treatment of competing online video distributors ("OVDs") (see paras. 76-127 and 130-137).

These risks, individually and collectively, far outweigh any putative benefits. Overall, allowing the transaction to proceed will be "adverse to the public interest" and will not "[b]e beneficial on an overall basis to state and local economies, and to the communities in the area served" by the merged entity. Accordingly, and for the reasons set forth herein, the Commission should not authorize the change of control for which the Joint Applicants seek its approval.

DECLARATION AND EXPERT REPORT OF LEE L. SELWYN

I, Lee L. Selwyn, declare as follows:

Qualifications, background and experience

1. My name is Lee L. Selwyn. I am President of Economics and Technology, Inc. ("ETI"), One Washington Mall, 15th Floor, Boston, Massachusetts 02108. ETI is a research and consulting firm specializing in telecommunications economics, regulation and public policy. My Statement of Qualifications is annexed hereto as Attachment 1 and is made a part hereof.

2. I hold a Ph.D. degree in Management from the Alfred P. Sloan School of Management, Massachusetts Institute of Technology. I also hold a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with Honors in Economics from Queens College of the City University of New York. In 1970, I was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time-sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where I was appointed a Research Associate. I was also a member of the faculty at the College of Business Administration at Boston University from 1968 through 1973, where I taught courses in economics, finance and management information systems. I founded my firm, Economics and Technology, Inc., in January 1972, and have served as its President continuously since that date.

3. I have been actively and continuously involved in the fields of telecommunications economics, policy and regulation since the late 1960s. I have provided expert testimony and analysis on telecommunications economics, technology, rate design, service cost analysis, market structure, form of regulation, and numerous other telecommunications issues before more than forty state public utility commissions, the Federal Communications Commission, the United States Congress, and regulatory bodies in a number of foreign countries, on behalf of commercial organizations, non-profit institutions, and local, state and federal government authorities. Attachment 1 to this Declaration provides a complete record of my publications and prior expert testimony and appearances before regulatory agencies and courts.

4. I have submitted expert reports and testimony in numerous telecommunications regulatory proceedings before the Federal Communications Commission ("FCC") and state public utilities commissions in approximately forty states dating back to the late 1960s, dealing with a broad range of ratesetting and policy matters, including switched and special access charges, price cap regulation, Sec. 251/252 interconnection and unbundling requirements, total service resale and wholesale pricing, universal service, broadband and related Internet access issues, intercarrier compensation, spectrum allocation, handset interoperability, CMRS early termination fees, and many others. I have provided expert testimony in numerous California PUC proceedings dating back to the mid-1970s. A complete listing of these appearances is included in Attachment 1 hereto.

5. I have had extensive experience with the analysis of consumer and competitive impacts of mergers and spin-offs involving large telecommunications companies, including a number of matters before the California PUC on behalf of the Office of Ratepayer Advocates or Division of Ratepayer Advocates – A. 96-04-038, SBC/Pacific Bell merger (1996-7); A. 98-12-005, Bell Atlantic/GTE merger (1998); A. 05-02-027, SBC/AT&T merger (2005); and A. 05-04-020, Verizon/MCI merger (2005). In 1993, I submitted testimony on behalf of DRA in(I. 93-02-028, the "spin-off" by Pacific Telesis Group of its cellular and other wireless subsidiaries. I also submitted expert testimony on similar merger-related issues before the FCC and in several other state PUC matters, including Maine PUC Docket No. 96-388, Bell Atlantic/NYNEX merger (1996), on behalf of the Maine Office of Public Advocate; Connecticut DPUC Docket No. 98-02-20, SBC/SNET merger (1998), on behalf of the Connecticut Office of Consumer Counsel; United States District Court for the District of Columbia, Civil Action No. 1:05CV02102 (EGS), SBC/AT&T merger; Verizon/MCI merger, Civil Action No. 1:05CV02103 (EGS) (1996), on behalf of the National Association of State Utility Consumer Advocates (NASUCA); Illinois Commerce Commission Docket No. 09-0268, Verizon sale of its Illinois exchanges to Frontier Communications, Inc. (2009), on behalf of the People of the State of Illinois and the Citizens Utility Board; and FCC WT Docket No. 11-65, AT&T/T-Mobile merger (2011), on behalf of the Ad Hoc Telecommunications Users Committee.

6. I have published several articles dealing specifically with Net Neutrality and related Open Internet issues, including "Revisiting the Regulatory Status of Broadband Internet Access: A Policy Framework for Net Neutrality and an Open Competitive Internet," (with Helen E.

Golding), *Federal Communications Law Journal*, Vol. 63 Num. 1, December 2010. I have also contributed chapters to two recent American Bar Association publications, "Network Industry Markets: Telecommunications" (with Helen E. Golding), Chapter X in *Market Definition in Antitrust: Theory and Case Studies*, ABA Section of Antitrust Law (2012), at pp. 411-436, and "Economic Underpinnings: The Economics of Communications Networks, Market Power, and Vertical Foreclosure Theories" (with Helen E. Golding et al), Chapter I in *Telecom Antitrust Handbook, Second Edition*, ABA Section of Antitrust Law (2013), at pp. 1-61.

7. In addition to my various professional activities, I am an elected Town Meeting Member in the Town of Brookline, Massachusetts, and serve on the Town's Advisory and Finance Committee and on the Town's Audit Committee, and have recently served on a special Tax Override Study Committee.

Assignment

8. I have been asked by the Office of Ratepayer Advocates ("ORA") of the California Public Utilities Commission ("CPUC" or "Commission") to review Application 14-04-013 filed herein by Comcast Corporation, Time Warner Cable, and Bright House Networks, *et al*, and Application 14-06-012 filed by Comcast Corporation and Charter Fiberlink (collectively, "Joint Applicants"), together with their Applications and accompanying expert reports and other related documentation, and based thereon to provide the Commission with an assessment of the potential impact upon competition for broadband telecommunications and Internet access

services within the Joint Applicants' individual and combined California operating areas, and to offer specific recommendations to the Commission regarding the disposition of this Application.

Description of the proposed transaction

9. On April 8, 2014, Comcast Corporation and Time Warner Cable, Inc. ("TWC") filed an application with the Federal Communications Commission ("FCC") "for Consent to Transfer Control of Licenses and Authorizations," i.e., to merge.[1] On April 11, 2014, Comcast Corporation ("Comcast"), Time Warner Cable Inc. ("TWC"), Time Warner Cable Information Services (California), LLC ("TWCIS") and Bright House Networks Information Services (California), LLC ("Bright House") filed an Application with the California Public Utilities Commission for approval of the transfer of control of TWCIS and Bright House to Comcast.[2] On April 28, 2014, Comcast announced that it had reached an agreement with Charter under which (assuming the Comcast/TWC merger is approved) Comcast and Charter would swap certain service areas so as to accomplish a "realignment of key cable markets [that] ... will enable Comcast to fill in [its] footprint and deliver operational efficiencies and technology

1. *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Transfer Control of Licenses and Authorizations*, FCC MB Docket No. 14-57 ("FCC Application").

2. *Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).*, A.14-04-013, filed April 11, 2014 ("*CPUC Application*").

1 improvements."[3] On June 17, 2014, Comcast and Charter Fiberlink (Charter's CLEC subsidiary)
2 filed Application 14-06-012 setting forth the California impact of their various market swaps and
3 divestitures, impacts that (with respect to Charter's CLEC operations) are limited to a relatively
4 small number of business customers, which are to be transferred to TWCIS and ultimately to an
5 affiliate of the post-merger Comcast.[4] Comcast and Charter explain that "In connection with the
6 divestiture, Comcast Corporation and Charter are exchanging systems to rationalize both
7 companies' footprints. The transfer will rationalize Comcast Corporation's territory in
8 California and other states, allowing Comcast Corporation to provide service more efficiently
9 and effectively."[5] All of the California service areas controlled by Charter would be transferred
10 to the post-merger Comcast/TWC entity. Comcast Corporation and all related affiliates and
11 Subsidiaries, Time Warner Cable Inc. and all related affiliates and Subsidiaries, Charter
12 Communications, Inc. and all related affiliates and Subsidiaries, and Bright House Networks and
13 all related affiliates and Subsidiaries, are referred to herein collectively as "Joint Applicants."
14
15 10. The current and proposed post-merger condition of the four companies' California
16 broadband service areas are shown in Figures 1-5 below. As shown in Figures 1 and 2,

---

3. "Comcast and Charter Reach Agreement on Divestitures," Comcast Press Release, April 28, 2014, available at http://corporate.comcast.com/news-information/news-feed/comcast-and-charter-reach-agreement-on-divestitures; see also, "Comcast to swap customers with Charter in an effort to ease TWC deal," *Los Angeles Times*, April 29, 2014, accessed 11/23/14 at http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-comcast-charter-20140429-story.html#page=1 .

4. *Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851*, A.14-06-012, filed June 17, 2014.

5. *Id.*, at 10-11.

1 Comcast's operating areas are primarily concentrated in northern California, while TWC's
2 service territory is heavily concentrated in southern California. Charter's operating areas are
3 more dispersed around the state (Figure 3), and Bright House serves an area concentrated in
4 Kern County (Figure 4). The combined post-merger operating areas for the four Joint
5 Applicants, net of any divestitures, are shown in Figure 5.[6]
6
7 11. The Joint Applicants' CPUC Application seeks authority for a change of control with
8 respect to the companies' non-VoIP *voice telephone service* operations only. Counsel has
9 informed me that the Joint Applicants believe that, following the adoption of Public Utilities
10 ("PU") Code §710 in 2012 deregulating telephone services based upon Voice-over-Internet
11 Protocol ("VoIP") technology, the Commission's jurisdiction under PU Code §854 extends only
12 to their *circuit-switched* (i.e., non-VoIP) voice telephone services that are regulated by the
13 CPUC. Counsel has also advised that the August 14, 2014 Scoping Memo[7] has determined that,
14 pursuant to Section 706(a) of the *Federal Telecommunications Act of 1996* ("Section 706"), the
15 Commission's jurisdiction also extends to the Joint Applicants' broadband services.
16

6. Figures 1 through 5 were prepared by the Commission's Communications Division based upon the California "Round 10" carrier-provided broadband availability data as of June 30, 2014, as submitted by ISPs providing broadband Internet access in California.

7. *Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge*, August 14, 2014.

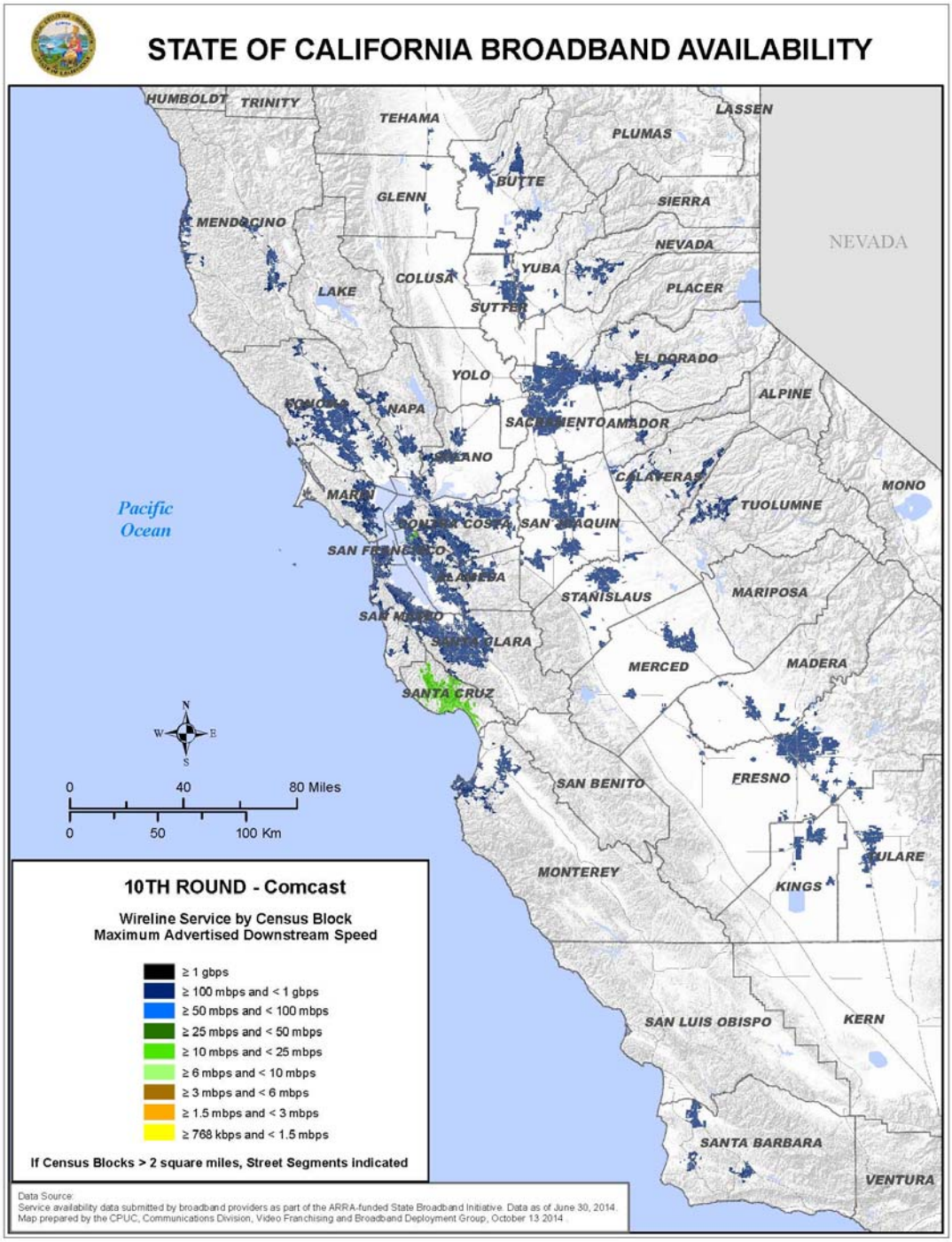

Figure 1. Comcast operating areas in California

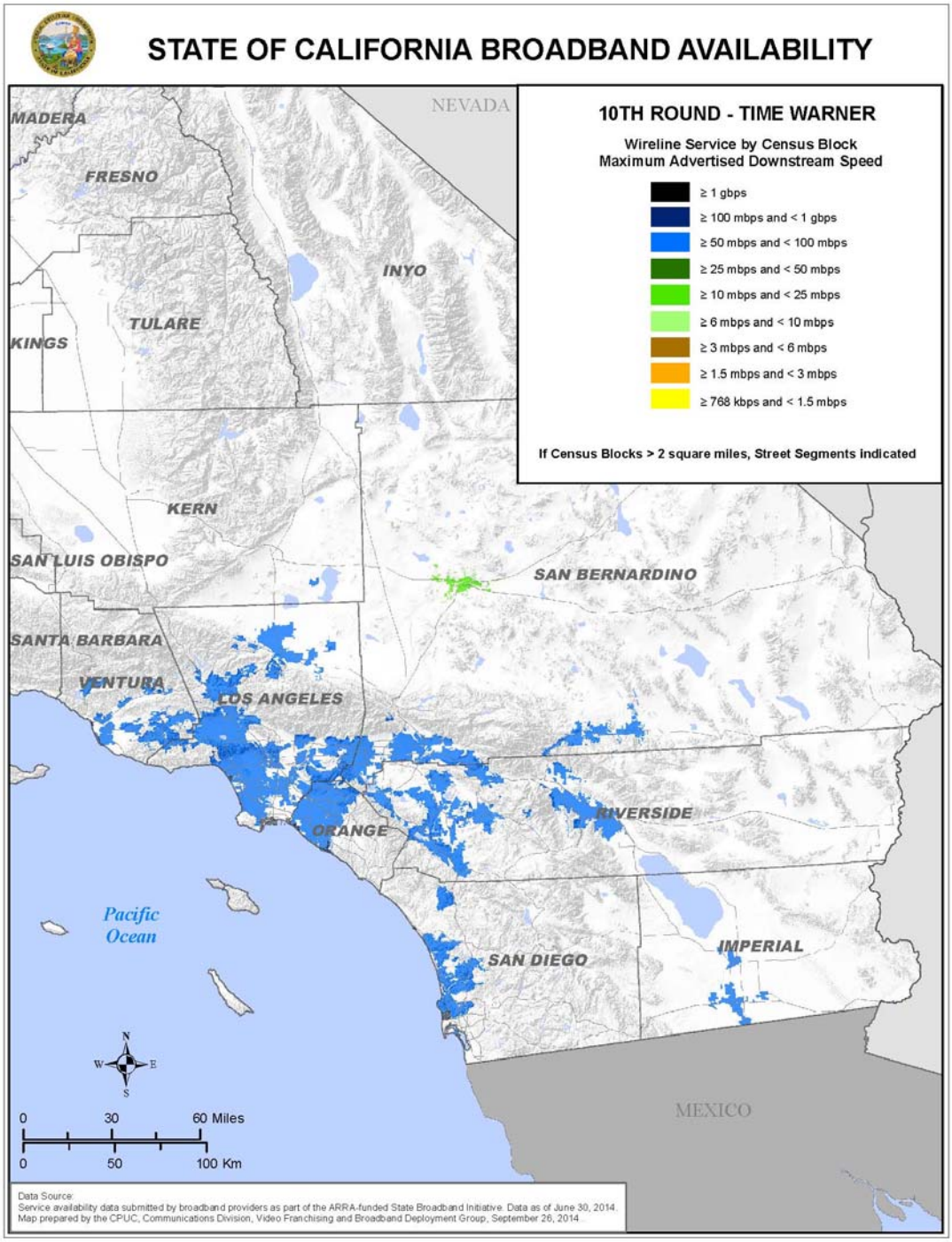

Figure 2. Time Warner Cable operating areas in California.

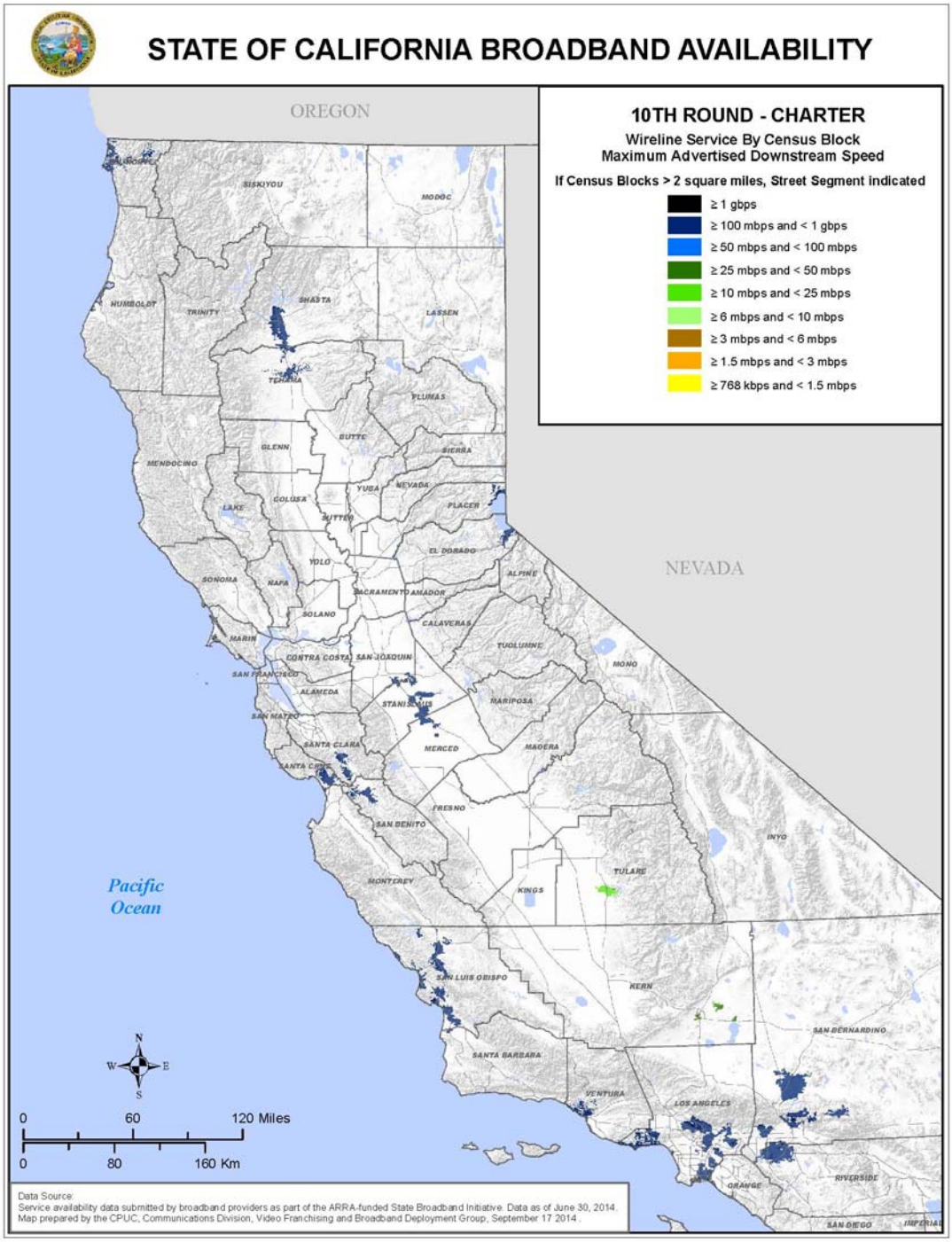

Figure 3. Charter operating areas in California

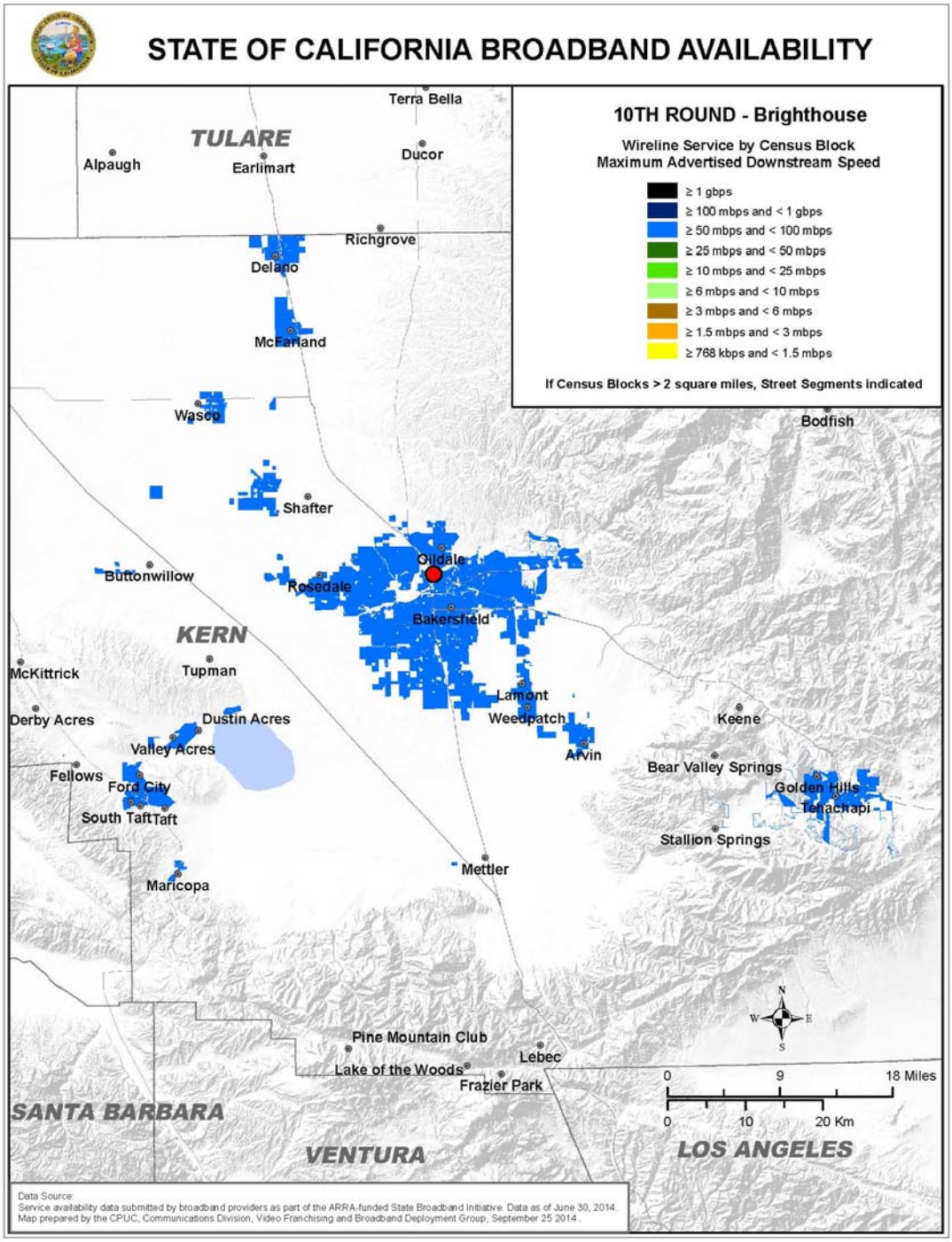

Figure 4. Brighthouse operating areas in California

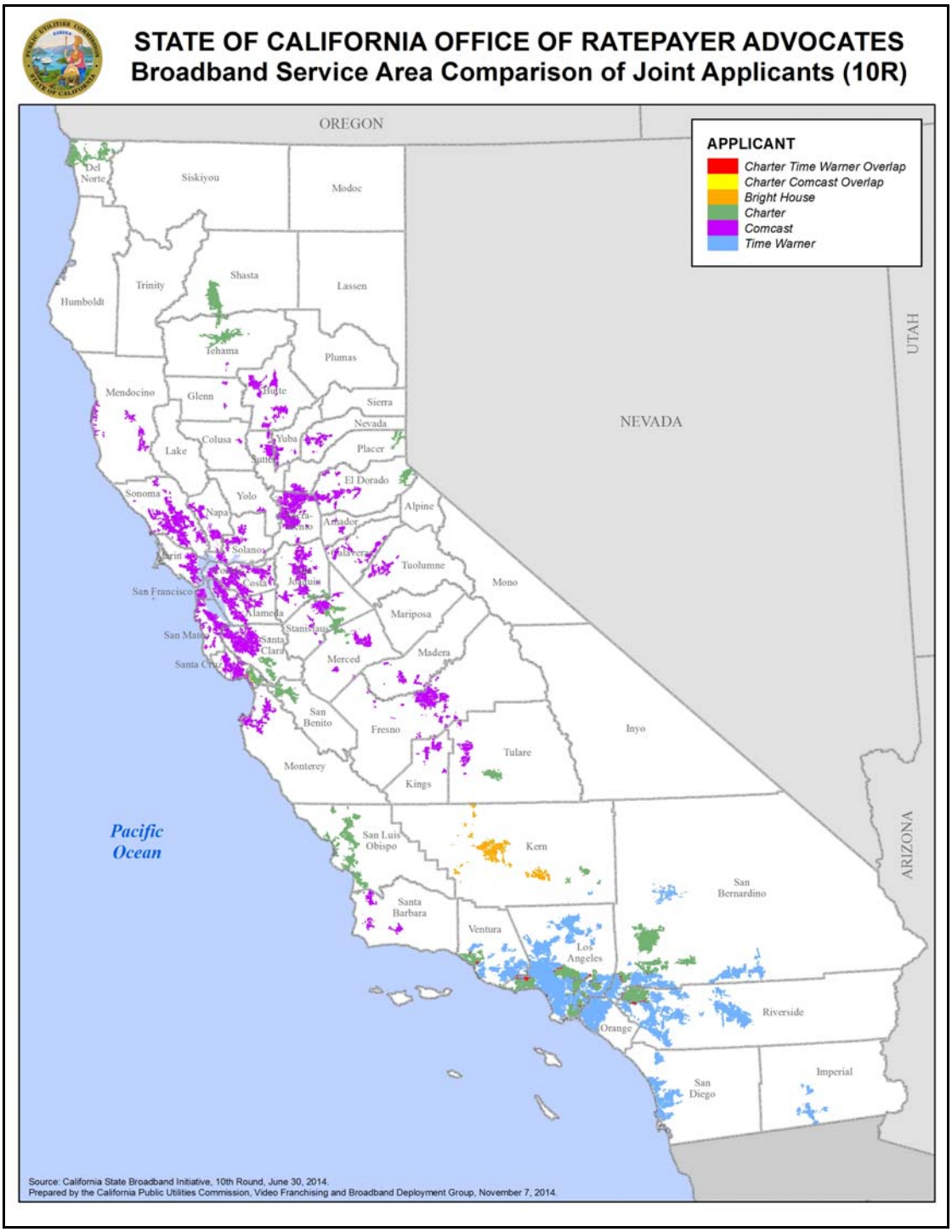

Figure 5. Joint Applicants' combined post-merger operating areas in California.

12. Comcast and TWC are the two largest cable "Multi-System Operators" ("MSOs, " a term commonly used in the cable industry to describe a company that owns and operates two or more cable TV systems) in California. The Commission's Communications Division maintains a database of broadband service availability (the "California Broadband Availability Database") that can be used to assess the extent to which residential customers confront competitive sources of broadband access services at various bandwidths, based upon each provider's maximum advertised bandwidth. From data derived from the California Broadband Availability Database, Comcast and TWC together, without including the existing Charter and Bright House service areas, serve census blocks containing some 9.04-million households, representing about 71.7% of the total 12.6-million households in the state.[8] When the additional Charter and Bright House[9] service areas are included, the post-merger Comcast will serve census blocks containing 10.6-million California households, representing about 84.04% of the total 12.6-million households in the state.

13. Data on "homes passed" was also provided by each of the Joint Applicants in response to ORA Data Requests Set 1, Nos. 3 and 4. The responses show larger numbers of homes passed in aggregate as well as for each of the four providers than the count of "households" as provided in the Broadband Availability Database. One possible source of the discrepancy between the

8. The California Broadband Availability ("CBA") Database contains household counts by census block based upon the 2010 US Census. More recent census data indicate a somewhat larger number of California households; however, the 12.6-million statewide household count is the aggregate of all census blocks in the CBA Database, assuring consistency between the per-provider and total state figures.

9. Although Bright House is not technically part of the post-merger Comcast entity, its close ties with TWC, which will be maintained post-merger, suggest a less-than-arm's-length competitive relationship with the post-merger Comcast/TWC, requiring that these be combined for purposes of competitive analysis..

CBA data and the Joint Applicants' responses to ORA Data Requests may be due to different definitions of "households" vs. "homes." Because the "homes passed" figures (shown in Table 1 below) were not derived from US Census data, they are not directly comparable to the 12.6-million statewide *household* count that was based upon the 2010 US Census. The Census Bureau figures that total 12.6-million statewide (i.e., not limited to the four Joint Applicants here), refer to "households," not "homes." The Census Bureau also maintains counts of "housing units," which may be more directly comparable to the Joint Applicants' "homes passed" numbers. Housing Units in California for 2013 are given as 13,790,495.[10] Comparing the Joint Applicants' "homes passed" figures ([**BEGIN HIGHLY CONFIDENTIAL**] -million [**END HIGHLY CONFIDENTIAL**] as of 2014) to the Census Bureau Housing Units figure for 2013, we can estimate the percentage of California homes passed by at least one of the Joint Applicants at [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**]. Thus, a post-merger Comcast will "pass" roughly [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of the 13.79-million housing units in the state. Based upon the Data Responses, and also including Charter and Bright House, the Joint Applicants together currently provide broadband Internet access to some [**BEGIN HIGHLY CONFIDENTIAL**] -million [**END HIGHLY CONFIDENTIAL**] residential customers. Since subscriber counts for California broadband providers other than the four Joint Applicants are not available, market shares based upon *subscribers* cannot be calculated. However, I have calculated market shares along with pre- and most-merger Herfindahl-Hirschman Indices ("HHIs") based upon Homes Passed. See Table 1 below.

10. http://quickfacts.census.gov/qfd/states/06000.html (accessed 11/21/14).

[**BEGIN HIGHLY CONFIDENTIAL**]

Table 1

CALIFORNIA HOMES PASSED AND BROADBAND CUSTOMERS SERVED BY JOINT APPLICANTS

MSO	Homes passed		Broadband subscribers
	Number	Share	
Comcast			
TWC			
Charter			
Bright House			
TOTALS			
STATEWIDE	13,790,495	100.00%	
Pre-merger HHI based on homes passed			
Post-merger HHI based on homes passed			
Merger-driven increase in HHI			

Source: HIGHLY CONFIDENTIAL Comcast, TWC, Charter, Bright House responses to ORA Data Requests, Set 1, Nos. 3 and 4. "Statewide Homes Passed" represents the total number of individual housing units in California, not just those passed by Joint Applicants, obtained from the US Census Bureau, See fn. 11.

[**END HIGHLY CONFIDENTIAL**]

The US Department of Justice/Federal Trade Commission's 2010 *Horizontal Merger Guidelines* ("*HMG*") defines a market with an HHI in excess of 2500 as "highly concentrated," and suggests that "[m]ergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power."[11] As Table 1 demonstrates, the increase in the HHI of the California residential broadband Internet access market that would result from the proposed merger is many multiples of the 200-point threshold set out in the *HMG*.

11. United States Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines 2010 edition* ("*HMG*"), at §5.3, Market Concentration.

14. Nationally, Comcast and TWC currently "pass" approximately 80-million homes[12] or about 60% of the 132,802,859 housing units nationwide. A Comcast/TWC entity would control 33% of the US "pay TV" market and 36% of the US broadband market[13] – and much higher shares within their combined operating footprint. Depending upon whether the calculation is based upon "households passed" vs. "homes passed," a post-merger Comcast/TWC entity would "pass" somewhere in the range of 84.04% to [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of the households or homes in the state Additionally, the Joint Applicants are major players in several other already highly concentrated markets and market segments and, organizationally, are both horizontally and vertically integrated.

15. The Joint Applicants together will control a vast broadband distribution infrastructure that supports their broadband Internet access, Multichannel Video Program Distribution ("MVPD") cable television, and voice (and some non-voice business) telephone and telecommunications services. Because they maintain an often unchallenged monopoly with respect to the type of high-speed broadband Internet access being demanded by the majority of the Joint Applicants' California customers – service that provides download speeds of at least 25 Mbps – the Joint Applicants are in a position to exploit that broadband access monopoly to limit entry

12. Comcast's 2013 Form 10-K provides an estimate of 53.5-million "homes and businesses passed" (as of year end 2013), but in a footnote states that "Homes and businesses are considered passed if we can connect them to our distribution system without further extending the transmission lines." No separate "Homes Passed" figure is provided. TWC's 10-K does not provide this information. However, a third-party website (accessed 11/23/14), http://www.ecamgroup.com/customers.php, puts the figure for TWC Homes Passed at 27-million.

13. "Comcast, TWC Blast Critics of Merger," *The Wall Street Journal*, September 24, 2014, available at http://online.wsj.com/articles/comcast-time-warner-cable-say-merger-wouldnt-reduce-choice-1411563601 (accessed 11/18/14 [subscription may be required]).

1 into the MVPD and telephone markets where the firms may actually confront some degree of
2 competition.[14] As the *Scoping Memo* points out, "Comcast and TWC, through their California
3 subsidiaries, would potentially combine the two largest providers of high-speed last mile
4 broadband service in the state. The Merger would impact competition and consumer welfare in
5 California's market for wholesale telecommunications, retail voice, backhaul and broadband
6 services. More importantly, the Merger would have an impact on broadband deployment in
7 California as two of the largest cable broadband providers in the state merge to form one
8 entity."[15]
9
10 16. In their contemporaneous filings at the FCC, the Joint Applicants have claimed that the
11 proposed merger is in the public interest and, specifically, that the merger will yield significant
12 benefits and will produce little or no harm for consumers, Internet edge (i.e., content) providers,
13 and the national economy. The CPUC application echoes these claims (insofar as the merger
14 partners concede that they are or may be relevant to the CPUC's review) on a California-specific
15 basis.
16
17 17. With respect to potential harms, the Joint Applicants have claimed that the proposed
18 transaction will not diminish competitive alternatives available to residential broadband

14. The broadband market is clearly moving in the direction of 25 Mbps or higher download speeds as the expected norm for California consumers, as evidenced by the high take rate at that speed among Joint Applicants' customers. Even more customers would likely purchase higher speed plans if price were not a barrier. Where a competitive alternative offering download speeds at or above 25 Mbps is available (e.g., from AT&T or Verizon), the competitors' prices are roughly comparable to those being charged by the Joint Applicants. See, e.g., Table 4 *supra*.

15. Scoping memo, at 4-5.

customers or to business customers.[16] At the FCC, they have also argued that the transaction will not increase the merged entity's bargaining power *vis-à-vis* edge providers such that edge providers will be able to compete less effectively, consumers will be harmed, or overall economic welfare will be diminished.[17] With respect to the countervailing benefits of the transaction, the Joint Applicants assert that the transaction will produce economies of scale unattainable by any of the pre-merger entities individually[18] and that it will result in greater competition for business customers and faster, more reliable service for all customers.[19] Contrary to such claims, the following section discusses the harms that the proposed merger will have upon California consumers.

The proposed merger presents substantial risks of consumer and competitor harm.

18. On the basis of my review and analysis of the Application and related documentation and testimony, it is my conclusion that there are substantial risks of consumer and competitor harm as a result of the proposed merger. These risks, and their potential impacts, include, *inter alia*:

- The post-merger Comcast will become the single dominant provider of last-mile broadband access in California. Its broadband distribution network will serve census

16. CPUC Application, at 20-21.

17. FCC Application, at 169-171.

18. *Id.*, at 23-28.

19. *Id.*, at 86-100.

blocks with more than 84.04% of all California households and will "pass" some [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of all California housing units – a far greater percentage than nationally (roughly 60%) or in any other state. Thus, in the California market for high-speed broadband Internet access offering download speeds of 25 Mbps and up, Comcast will have a monopoly except in those few areas where Verizon's *FiOS* or AT&T's *U-Verse* is deployed. The resulting impact of the merger upon the California broadband market is both unique and unparalleled, and has the potential to lead to even greater price increases than those that the Joint Applicants have, individually, put into effect in recent years (see paras. 12-17, *supra*, and paras., 27-75, *infra*);

- As the importance of the incumbent local exchange carriers' narrowband infrastructure diminishes and as multiple services are integrated into the same common broadband distribution plant, prices for stand-alone residential telephone service will necessarily rise, an outcome whose greatest impact will be felt by low-income households that, due to limited disposable income, may choose not to purchase double/triple play packages (see paras. 128-129 and 138-144, *infra*);

- Despite the Joint Applicants' claims, they have failed to demonstrate that the merger will produce efficiencies that each of the Joint Applicants could not otherwise achieve on their own and, moreover, that even if such efficiencies or cost savings were actually realized as a result of the merger, there is serious doubt and certainly a lack of evidence

that any of these will flow through to consumers in the form of lower prices. On the contrary, Comcast Executive Vice President David L. Cohen has publicly stated that "We're certainly not promising that customer bills are going to go down or even increase less rapidly."[20] Moreover, to whatever extent certain of the claimed efficiency gains might be achieved through adoption of best practices across the two merging companies, the Joint Applicants offer no evidence that the proposed merger is in any sense a prerequisite to the adoption of such best practices, or that these could not be accomplished by each company individually in the absence of the merger. Finally, even if such gains were to materialize, there is no basis to expect that the highly concentrated California broadband market – a near-monopoly in many locations and at most a duopoly elsewhere – would be disciplined by competition to the point where the post-merger Comcast entity would be compelled to flow any efficiency gains that might actually arise – gains that by the Joint Applicants' own admission could not be achieved by any smaller rival – through to customers in the form of lower prices, and the Joint Applicants have offered no evidence that would suggest otherwise (see paras. 151-153, *infra*);

- This same lack of any competitive discipline would reduce incentives for, and thus reduce the likelihood of, further build-out by the Joint Applicants or anyone else of advanced telecommunications network facilities in areas where such facilities do not

20. "As Services Expand, Cable Bills Keep Rising," *New York Times*, February 14, 2014, available at http://www.nytimes.com/2014/02/15/business/media/as-servicesexpand-cable-bills-keep-rising.html?_r=0

presently exist. It will also result in diminished competition and innovation in the market for broadband access overall (see paras.19-26 *infra*);

- Expanded opportunities for leveraging of the post-merger entity's market power in residential broadband and cable TV distribution into the potentially more competitive content markets, including increased opportunity and incentive for discriminatory treatment of competing online video distributors ("OVDs") (see paras. 76-127 and 130-137, *infra*).

These risks, individually and collectively, far outweigh any putative benefits. Overall, allowing the transaction to proceed will be "adverse to the public interest" and will not "[b]e beneficial on an overall basis to state and local economies, and to the communities in the area served" by the merged entity.

Comcast and TWC – the two largest US cable companies – contend that they each confront strong competition from other providers within their own core territories while inconsistently asserting that pursuing their own investment to expand into the other's core territories would not be economically feasible.

19. Fundamental inconsistencies in the Joint Applicants' positions with respect to the potential for competitive inroads into their respective operating areas raise serious doubts about their claims as to the absence of harm and the purported benefits of their proposed merger. The two largest cable companies here claim that they cannot, as an economic matter, justify investing to expand into each other's core territories. But they also claim to confront strong competition

from other providers within their own core territories. It is difficult to see how both of these contentions can be true: If competitors have seen fit to enter and invest in Comcast's (or TWC's) core territories, then why is such entry "uneconomic" for TWC (or Comcast)? And if such overbuilds are not economically feasible – as others who have tried it have learned the hard way[21] – then there will not be sufficient competition to actually discipline the Joint Applicants' post-merger market power.

20. It is clear that *market allocation*, at least tacit if not overt, rather than competition, has been the driver for the Joint Applicants' individual business models, and now lays the foundation for the proposed merger of California's largest cable companies. The Joint Applicants anchor their defense of the transaction in the claim that their combination cannot be seen as limiting consumer choice, because Comcast and TWC (and Charter, after its proposed territory swaps and divestitures) have non-overlapping operating footprints and thus do not compete with one another in any event.[22] The Joint Applicants' expert, Dr. Mark Israel, supports this theory:

> I understand that neither Comcast nor TWC has any plans in either the short-term or the long-term to expand into one another's footprint, because such an expansion would not be sufficiently profitable to pursue. Overbuilding (i.e., building a network entirely from scratch) in one another's service area would be a

21. For example, RCN, formed in 1993, began an ambitious cable overbuild in several major markets including Boston, New York, eastern Pennsylvania, Washington, DC, and Chicago, only to curtail further expansion after 2000 due to a cash shortage . Dodd, Annabel, *The Essential Guide to Telecommunications*, Prentice-Hall, 2002, at 155. And as I shall discuss in more detail below, Verizon was similarly forced to scale back its original plans for *FiOS* and has not expanded its *FiOS* footprint since 2010.

22. CPUC Application at 20-21; see also, FCC Application at 145-168.

> significant expense made more difficult to recover by the competitive video and broadband marketplace that already exists.[23]

Even if this theory has any merit – which it does not, for the reasons I shall discuss in detail below – the Joint Applicants' focus upon the "eyeball" (i.e., end user) side of their business[24] ignores other related markets in which they compete and where their combination will decidedly inhibit and in some instances foreclose competition, and in so doing will seriously limit consumer choice.

21. There are, in fact, two mutually exclusive theories to explain why Comcast and TWC, or cable MSOs generally, do not compete in each other's core geographic market:

(1) Broadband distribution is fundamentally a natural monopoly, a market characterized by extremely high fixed costs that cannot realistically or economically support multiple competing providers in the same geographic area. This was certainly the prevailing view at the time that cable television franchises were initially awarded on an exclusive basis and when, as a result, cable television rates were regulated.

(2) Broadband distribution is capable of supporting multiple providers in the same geographic area, but by acting to foreclose entry the incumbent is able to exercise market

23. Declaration of Mark A. Israel (Exhibit 6 to FCC Application), April 7, 2014, at para. 115, footnote omitted.

24. The term "eyeball" is industry jargon for an end user viewer of Internet or video content.

1 power and realize higher prices and profits. Market allocation – tacit or overt – can
2 accomplish this result.
3
4 The Joint Applicants' contention that entry into each other's operating areas is not economically
5 feasible – a claim that is entirely consistent with the "natural monopoly" theory – cannot be
6 squared with their contention that the merger and resulting economies of scale will enhance their
7 ability to compete more effectively in (what they seek to portray as) a highly competitive market
8 *except to the extent that their post-merger share of the national Multi-Channel Video*
9 *Distribution ("MVPD") cable TV market and in the broadband Internet access market will then*
10 *be sufficiently large that the post-merger Comcast will be able to exercise market power to limit*
11 *or foreclose competition in adjacent content production and online video distribution markets*.
12
13 22. Here, the Joint Applicants treat their respective exclusivity in each geographic area as an
14 economic given, while at the same time arguing that other providers – both incumbent wireline
15 telephone companies, mobile and fixed wireless broadband carriers, and new entrants, such as
16 Google – can somehow overcome these same economic barriers to expansion and/or entry that
17 purportedly operate to limit the Joint Applicants' own ability to compete outside of their core
18 operating area, and in so doing pose a viable competitive threat. Senator Al Franken (D-Minn.),
19 among others, exposes the inconsistency in this position in comments he submitted to the FCC:
20
21 It is no answer for Comcast to assert that the costs of entering these new markets
22 are prohibitive, as that contention squarely contradicts Comcast's argument that
23 companies like Google, Verizon, and AT&T are competitive threats to Comcast
24 precisely because they are entering new markets. Put differently, it cannot be the

> case that it is simultaneously cost prohibitive for Comcast to expand into TWC's footprint to compete with TWC and not cost prohibitive for Google, Verizon, and AT&T to expand into Comcast's footprint to compete with Comcast – yet that is the internally inconsistent position that Comcast has taken.[25]

As the first- and second-largest cable companies nationwide and in California, Comcast and TWC are uniquely qualified to expand into each other's territories as competitors in terms of their expertise and financial strength. Yet, by their own admission, they have maintained their non-overlapping service territories – apparently even when they come close enough to provide service to customers in the same zip code[26] – and have publicly communicated to each other their respective intentions not to compete outside of each's core geographic footprint. Moreover, and as I noted earlier in the discussion of Comcast's agreement with Charter, the two MSOs plan to swap certain service areas so as to accomplish a "realignment of key cable markets [that] ... will enable Comcast to fill in [its] footprint and deliver operational efficiencies and technology improvements." Trading service areas in order to "fill in" gaps in existing territories, rather than undertaking a *de novo* entry into those same areas and competing with the incumbent exploiting the efficiencies gained by filling in those gaps, is yet another form of market allocation, albeit a bit more overt in this case, in that the territory swaps are set out in a formal and binding contract.

23. This conduct is entirely consistent with a market allocation strategy:

> Agreements to divide markets take many forms. Firms can agree to allocate markets geographically .... In some respects, market division agreements can

25. *Franken Statement*, at 14.

26. See CPUC Application at fn. 20; FCC Application, Rosston-Topper Report, at footnote 7.

> affect competition more severely than price-fixing. By eliminating competitors, a sole remaining market occupant has a monopoly (in a limited area) and is freed of competition not only with respect to prices but also with respect to service, quality, and innovation."[27]

In fact, if there are as many opportunities to improve on TWC's operations as the Joint Applicants have suggested, expansion into TWC's territory as a competitor would have provided Comcast with an attractive opportunity to obtain additional scope. However, if Comcast and TWC are correct in concluding that entry into each other's territories is economically infeasible, then their attempt to persuade the Commission of the ample opportunities for others to compete must also fail.

24. Notably, under this same theory, a combination of *nearly all* incumbent cable MSOs nationwide would also not diminish competition or limit consumer choice in that, as in the case of the Joint Applicants here, most US cable MSOs also have non-overlapping service areas and do not currently compete with one another. Thus, if the Joint Applicants' "we do not compete with each other because our operating areas are non-overlapping" theory had any merit, the same argument could also be used to justify a consolidation of the entire US cable television industry into a single nationwide entity. It is possible that a case could be made for such an outcome – after all, prior to the 1984 break-up of the former Bell System, AT&T Corp. controlled some 80% of the US local telephone market, and an even higher percentage of the US long distance market. However, under that "natural monopoly" market model, AT&T was pervasively regulated both with respect to its rates and service obligations, and was largely foreclosed from

27. Gellhorn, Ernest *et al*, *Antitrust Law and Economics, Fifth Edition*, Thomson-West, 2004, at 236-7.

entry into adjacent competitive markets. Cable MSOs could be permitted to acquire similarly extensive geographic footprints if they agreed to be subjected to similar regulatory conditions and entry restrictions. However, the Joint Applicants standing alone, as well as in combination with all other US cable MSOs, are *not* currently subject to any rate regulation or pricing constraints and are also *not* restricted as to their concurrent involvement in adjacent content markets, *even where rival content providers are forced to utilize the MSOs' broadband networks in order to deliver their competing content to the MSOs' end user customers*. And it is the Joint Applicants' concurrent involvement in adjacent content markets that creates the strong relationship between their share of the end user broadband market and their market power overall.

Merger or not, the Joint Applicants apparently have no immediate plans to invest in or otherwise upgrade their existing California broadband infrastructure.

25. On the very first page of their FCC Application, the Joint Applicants advise the FCC that

> By combining these two companies' technological developments and know-how, and their geographic reach, along with Comcast's 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 ...[28]

Responding to President Obama's November 10, 2014 statement supporting Net Neutrality and Title II regulation,[29] Comcast's Executive Vice President David L. Cohen admonished:

> In 2013, the top four ISPs invested a combined $46 billion in the U.S. economy – with Comcast investing $6.6 billion in infrastructure in America, up from $5.7 billion in 2012. This investment has been made possible through the sound application of light touch regulation and it is simply indisputable that Title II would put these significant investments in jeopardy and diminish innovation and job creation as a direct result.[30]

Such rhetoric aside, it appears that, at least with respect to their *California* operations, the Joint Applicants have *no current or immediate plans for additional infrastructure investment in the state*, as confirmed by Comcast, TWC and Charter responses to ORA Data Requests:[31]

> Please identify all Your planned broadband and voice deployment in California in the next three years. Please include the following:
>
> a. Description
> b. Speeds offered
> c. County/city/community name

---

28. FCC Application, at 1-2.

29. "Obama Asks F.C.C. to Adopt Tough Net Neutrality Rules," *The New York Times,* November 10, 2014, http://www.nytimes.com/2014/11/11/technology/obama-net-neutrality-fcc.html?_r=0 (accessed 11/26/14).

30. http://corporate.comcast.com/comcast-voices/surprise-we-agree-with-the-presidents-principles-on-net-neutrality-reiterating-our-strong-support-for-the-open-internet (accessed 11/25/14).

31. ORA Data Request, Set 1, No. 32.

d. Estimated deployment schedule

The following specific responses were received:

From Comcast: "[**BEGIN CONFIDENTIAL**] . [**END CONFIDENTIAL**]"

From TWC: "TWC does not prepare or maintain three-year broadband and voice deployment plans pertaining to California. Further, if TWC completes the merger as anticipated, any future broadband or voice deployment for the next three years in California will be determined by Comcast."

From Charter: "No projects are planned for California."

Comcast, TWC and Charter were each asked by ORA:[32]

Will Your existing build-out plans be affected by the planned merger? If yes, what considerations are involved? Please state specifically how Your build-out plans will be affected by the planned merger.

To which the following responses were provided:

From Comcast: "[**BEGIN CONFIDENTIAL**] [**END CONFIDENTIAL**]"

From TWC: "If TWC completes the merger as anticipated, any future build-out plans will be determined by Comcast. Until such time as the merger is

32. ORA Data Request, Set 1, No. 35.

consummated, TWC will continue to build out facilities in line with the policy described in Question 33."[33]

From Charter: The request was objected to, and no response was forthcoming.

ORA asked:[34]

Will Your existing build-out plans be affected by the planned merger? If yes, what considerations are involved? Please state specifically how Your build-out plans will be affected by the planned merger.

The following responses were received:

From Comcast: [**BEGIN CONFIDENTIAL**]

[**END CONFIDENTIAL**].

From TWC: "If TWC completes the merger as anticipated, any future build-out plans will be determined by Comcast. Until such time as the merger is consummated, TWC will continue to build out facilities in line with the policy described in Question 33."

From Charter: "Charter ... has not undertaken efforts to identify how its build-out plans in California might be affected by the merger; however, Charter speculates that any such plans would not be affected. If this request is referring to the asset sale that is the subject of Application 14-06-012, Charter responds that any plans

33. TWC's Response to ORA Data Request Set 1, No. 33, was as follows: "TWC generally seeks to invest in expansion of its existing network footprint where the revenue opportunities from the provision of video, Internet, and voice services will enable the company to earn a reasonable rate of return on the investment. Within TWC's franchise areas, TWC furnishes services to any customers upon reasonable request. In cases where the construction costs would prevent TWC from earning a reasonable return on investment, TWC will seek a contribution from the customer, in accordance with standard industry practice and wellestablished law. Since 2009, TWC is not aware of any refusal to provide service to any customer or developer within TWC's franchise areas. To the extent that TWC has declined requests to expand its network outside its franchise areas, such decisions have resulted from the fact that the requested service would have exceeded TWC's acceptable return on investment and/or the customer was unwilling to aid in construction."

34. ORA Data Request, Set 1, No. 36.

> for any projects in the California service areas affected by the asset sale will not be pursued by Charter. Charter has no information as to what plans would be pursued by the purchaser of those assets."

And pursuing the interrelationship between the proposed merger and the Joint Applicants' respective investment plans, ORA asked:[35]

> Are there any build-out projects for which further action would be dependent on the merger happening? If yes, how will the timelines for these projects be set?

To which the Joint Applicants responded:

> From Comcast: "[**BEGIN CONFIDENTIAL**] . [**END CONFIDENTIAL**]"
>
> From TWC: "No, we have no current build out plans that are dependent on the merger happening. If TWC completes the merger as anticipated, any future build-out plans will be determined by Comcast."
>
> From Charter: "If this request is referring to the "merger" that is the subject of Application 14-04-013, Charter responds that there are no build-out projects in California that would depend on the merger taking place. If this request is referring to the asset sale that is the subject of Application 14-06-012, Charter responds that any plans for any build-out projects in the California service areas affected by the asset sale will not be pursued by Charter. Charter has no information as to what plans would be pursued by the purchaser of those assets."

26. The merger will thus not bring about any *increase* in investment by the Joint Applicants in their California broadband networks. Indeed, it may well have precisely the opposite effect.

35. ORA Data Request, Set 1, No. 37.

The tacit and now overt market allocation among the Joint Applicants enables them to avoid investing beyond their own existing (or "realigned") footprints. To the extent that the increased market concentration in California discourages entry by others, the net result will be less investment and innovation in California overall. One of the most oft-repeated claims by those opposed to increased regulation – as exemplified by Mr. Cohen's response to President Obama's net neutrality statement quoted above – is that investment and innovation is best stimulated by *competition*, not by regulation. Increased market concentration of the type that will result from the proposed merger makes competitive entry more difficult and diminishes competition overall. In the absence of both competition *and* effective regulation, there will be little incentive or motivation for a post-merger Comcast to do other than exploit its existing infrastructure, as the Joint Applicants' responses to the ORA Data Requests confirm will in fact be the case.

Much of the "competition" that the Joint Applicants claim to confront with respect to their broadband services falls well outside of the fixed wireline broadband Internet access relevant product market.

27. An analysis of the extent to which a given market is "competitive" requires, at the outset, that a definition of the subject market be established. Market definition is typically expressed in terms of a "relevant product or geographic market" within which products or services are generally *substitutable* for one another and between which they are not. "Market definition focuses solely on demand substitution factors, i.e., on customers' ability and willingness to substitute away from one product to another in response to a price increase or a

corresponding non-price change such as a reduction in product quality or service."[36] Conversely two products or services are *not* in the same relevant product market if customers are unwilling "to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service." There are specific analytical tests to determine whether two products fall within the same or different relevant product markets, which I shall discuss in more detail later in this report.

28. The fixed wireline broadband services being offered by the Joint Applicants within the California operating areas have few close substitutes, such that other varieties of "broadband" service that possess certain superficial similarities to fixed wireline broadband are not in the same relevant product market. The existence of a close substitute for a product or service that is not also being sold by the same provider operates as a constraint on price increases for that product or service. Conversely, the absence of a close substitute means that the provider of the product or service at issue enjoys a *de facto* monopoly with respect to it. Merely identifying a service as "competing" with the Joint Applicants' fixed wireline broadband Internet access services does not necessarily mean that such putatively "competing" service actually constrains the Joint Applicants' prices. To make that determination, the US Department of Justice/Federal Trade Commission *Horizontal Merger Guidelines* employ a so-called "hypothetical monopolist test" under which an assessment is made as to whether a "seller of those products ('hypothetical monopolist') likely would impose at least a small but significant and non-transitory increase in

36. *HMG*, at §4, "Market Definition."

price ('SSNIP') on at least one product in the market. ..."[37] If substitutes exist, such a price increase would result in some loss of business to a substitute product whose price is, for this purpose, assumed to be held constant – the closer the substitute, the greater the potential loss. Economic theory teaches that the "hypothetical monopolist" would only increase its prices where the revenues gained from the price increase exceeds the revenues lost from customers switching to the substitute product. More importantly, where the seller provides both products to the same customer – e.g., cable television *and* broadband Internet access – it is in a position to concurrently increase prices for both, thereby minimizing the potential for any switching, even where the products in question are close substitutes.

29. In seeking to portray an expansive product market definition – and in so doing understating the actual extent of their own market dominance – the Joint Applicants and their experts have identified various services with superficial similarities to their own fixed broadband service while failing to establish that such services are sufficiently close substitutes as to fall within the scope of a "relevant product market." The fact that a particular service may, under certain circumstances, provide an alternative means of obtaining Internet access does not in and of itself make that alternate service a sufficiently close substitute as to fall within the same relevant product market.

30. Substitutability of one broadband service for another is critically dependent upon the nature of the *use* to which such service is being put. For example, for ordinary text e-mails, a

37. *Id.* at 9, ¶4.1.1.

slow DSL type connection (e.g., 768 kbps down, 200 kbps up) might provide functionality that is largely equivalent to that provided by high-bandwidth (e.g., 25 Mbps down, 1 Mbps up) cable-or fiber-based broadband. However, for such uses as video chat, video streaming, over-the-top VoIP telephony, medical monitoring and other telemetry applications, tele-help, virtual private network (VPN) transmissions, e-mails with large file attachments, telemedicine, security, and others, slow-speed DSL would not support, in any satisfactory manner, the user's needs, and would thus not be seen as a close substitute for the high-speed service.

31. The demand for successively higher bandwidth broadband services has been increasing rapidly both nationally and, of particular importance, in California. As I will discuss in greater detail below, [**BEGIN CONFIDENTIAL**] % [**END CONFIDENTIAL**] of TWC's California residential broadband customers currently take service at download speeds at or above 15 Mbps.[38] Some [**BEGIN CONFIDENTIAL**] % [**END CONFIDENTIAL**] take service at 25 Mbps or greater.[39] Going forward, for competing providers to effectively serve the *geographic* market as defined by the Joint Applicants' combined California footprint, they will need to support download speeds of 25 Mbps or above. At the present time, only about 22.5% of the homes passed by competitors within the Joint Applicants' combined California operating areas have an alternative to the Joint Applicants at download speeds of 25 Mbps or greater.[40]

38. Para. 46; Table 7, *infra*.

39. *Id.*

40. Derived from CBA Database.

Although AT&T and Verizon do offer competing wireline broadband services, their speed and geographic availability are far more limited than the Joint Applicants' broadband offerings.

32. As I will discuss in greater detail below (at paras. 76-88), the competitive conditions that the Joint Applicants claim to confront are almost entirely confined to their MVPD cable television operations. These may have superficial similarities to the Joint Applicants' high-speed broadband access services, but upon closer examination, broadband access is not perceived by consumers as having close substitutes and there is thus no competition in broadband capable of constraining the incumbent providers' prices. Comcast and TWC's principal competitors for wired broadband are Verizon and AT&T. These large ILECs have not made the predicted competitive inroads in the wired broadband market, as they have a limited footprint for their respective fiber-based services, which has not increased significantly in several years. For example, Verizon's *FiOS* data product is only available in 20 metro areas in its own legacy RBOC service territory,[41] covering about 16% of all US households.[42] Meanwhile, AT&T's *U-verse* service, also offered only in its legacy RBOC footprint, is only available to roughly 23% of US households,[43] and in most cases does not support download speeds at or above 25 Mbps.[44]

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41. See, http://fios.verizon.com/fios-coverage.html (last accessed November 5, 2014.)

42. Verizon Communications, 2013 10-K Annual Report filed with the SEC, February 27, 2014; http://quickfacts.census.gov/qfd/states/00000.html (last accessed November 5, 2014).

43. AT&T Inc., 2013 10-K Annual Report filed with the SEC, February 21, 2014.

44. See (accessed 12/3/2014) http://www.dslreports.com/shownews/Examining-ATTs-45-Mbps-UVerse-Tier-And-If-You-Can-Get-It-126226

33. Verizon curtailed its new *FiOS* deployments as of the end of 2010, and its CFO recently affirmed that there would be no *FiOS* expansion until the existing wireline investments met their return targets.[45] AT&T had put its *U-verse* expansion on hold[46] until recently, when it announced a Google-style, campaign to win concessions for a limited 1-Gbps expansion (primarily within existing *U-verse* footprint), "screening" various cities as candidates for upgraded *U-verse* gigabit service.[47]

34. In fact, at the same time as the prospect of additional or faster last-mile fiber broadband from ILECs is still uncertain – and highly doubtful for non-urban customers – the ILECs have also demonstrated that they are not particularly interested in maintaining their copper networks and the DSL services provided over them. For example, in the wake of Hurricane Sandy, Verizon refused to rebuild damaged and destroyed copper facilities, instead offering a wireless

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45. *See*, e.g., http://www.fiercetelecom.com/story/verizons-mcadam-new-fios-markets-are-not-cards/2013-12-09; http://www.buffalonews.com/business/verizon-still-cant-justify-expanding-its-fios-service-20140421; http://www.fiercetelecom.com/story/verizons-shammo-well-look-fios-expansions-once-it-returns-cost-capital/2014-03-10 (quoting Verizon CFO Fran Shammo, in remarks to the Deutsche Bank Media, Internet & Telecom Conference, as saying: "I am not going to build beyond the current LSAs that we have built out," Shammo said. "We have to generate more cash within the wireline business and once we do that and I feel that FiOS has returned its cost of capital, then we can look at expansion, but at this point we're happy with what we have.")

46. See, e.g., http://stopthecap.com/2012/02/08/at-atts-rural-broadband-solution-we-don't-have-one/ (quoting AT&T CEO Randall Stephenson as stating, "Our U-verse build is now largely complete" at the level of 30 million customer locations.

47. Compare http://about.att.com/story/att_eyes_100_u_s_cities_and_municipalities_for_its_ultra_fast_fiber_network.html with http://www.dslreports.com/shownews/Why-ATTs-Promise-To-Bring-1-Gbps-to-Austin-is-Mostly-Empty-123807 expressing skepticism about AT&T promise.

alternative, so-called *VoiceLink*,[48] that does not come close to providing the functionality of high-speed wireline broadband. Earlier this year, TURN filed an emergency petition with this Commission, urging the adoption of rules to "protect Verizon customers and prevent further deterioration of Verizon's landline network" to avoid this very situation.[49]

a. While there is presently much publicity surrounding Google's 1 GB fiber deployments, it is clear that the selective entry into several mid-size urban areas (e.g., Kansas City, Austin, San Jose) will not bring competitive alternatives to the vast majority of Californians any time soon.[50] To qualify even for *consideration*, Google requires that candidate cities confirm that they are prepared to satisfy a detailed screening "checklist,"[51] which includes a set of detailed criteria that many cities will be unwilling or unable to meet, and even those that are will most likely have to wait years before any actual deployment can begin. In particular, and unlike cable companies whose franchise

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48. See, e.g., https://www.publicknowledge.org/files/Voice%20Link%20One%20pager.pdf (last accessed November 5, 2014); Wireless Home Phones: A Plan Strikes a Chord, The New York Times, May 20, 2013.

49. Emergency Motion of the Utility Reform Network (Turn) Urging the Commission to Take Immediate Action to Protect Verizon Customers and Prevent Further Deterioration of Verizon's Landline Network, R.11-12-001, filed March 17, 2014.

50. See generally, http://online.wsj.com/articles/google-fuels-internet-access-plus-debate-1408731700.

51. To qualify for *consideration* as a candidate for Google Fiber, Google requires that a city:
- Provide information about existing ... local infrastructure like utility poles, conduit and existing water, gas and electricity lines so we'd know where to efficiently place every foot of fiber.
- Help ensure access to existing infrastructure ... help ensure that [google], and other providers, can access and lease existing infrastructure. ...
- Help make construction speedy and predictable ... make sure you have efficient and predictable permit and construction processes appropriate for a project as large as a Google Fiber network build.

See, https://fiber.storage.googleapis.com/legal/googlefibercitychecklist2-24-14.pdf

1 agreements committed them to cover entire municipalities, Google wants the ability to
2 selectively serve only portions of a city.[52] To date, San Jose and vicinity is the only
3 location in California to have so far made the cut to be *considered* for Google Fiber.[53]
4 Finally if, as is more likely than not, Google Fiber ends up in the very same communities
5 where Verizon or AT&T have also chosen to locate their own fiber-based services, it will
6 increase competition for the small percentage of customers that already have some (albeit
7 a duopoly) but not offer a competitive alternative to the very large percentage of house-
8 holds for whom the Joint Applicants are the only providers offering broadband at 10-25
9 Mbps or higher. There is a vast expanse of unmet need between what most customers
10 require and the ultra-high-capacity service that Google proposes to provide to a
11 privileged few.[54]
12

52. Google Fiber's own "Terms of Service" make this abundantly clear: " Although we hope to make Google Fiber available to as many people as possible as quickly as we can, you agree that it is up to Google Fiber to determine whether any Services are made available to a particular address. Your payment of a pre-registration fee, construction fee or service initiation fee for Services to be provided at a particular address does not obligate Google Fiber to provide any Services to a particular address." Available online at https://fiber.google.com/legal/residential-terms/ (last accessed November 5, 2014).

53. https://fiber.google.com/newcities/

54. The FCC's March 2010 *National Broadband Plan* established, as its "Goal No. 1," that "[t]he United States must lead the world in the number of homes and people with access to affordable, world-class broadband connections. As such, 100 million U.S. homes should have affordable access to actual download speeds of at least 100 Mbps and actual upload speeds of at least 50 Mbps by 2020. This will create the world's most attractive market for broadband applications, devices and infrastructure. FCC, *Connecting America: The National Broadband Plan*, March 17, 2010 ("*National Broadband Plan*"), at 9.

Due to its speed variability, bandwidth caps, and usage-based pricing, mobile wireless broadband is not viewed by consumers as a competitive alternative to the Joint Applicants' wired broadband services.

35. The Joint Applicants' attempts to elevate broadband provided by mobile wireless carriers to the status of a serious competitive alternative for non-mobile applications cannot withstand scrutiny. Mobile broadband may suffice for a wide variety of "on-the-go" applications, but it is still not a substitute for wired fixed broadband services.[55] It is widely understood that mobile wireless broadband speeds fall far short of what cable companies can offer customers and, even if wireless and wireline speeds were comparable, cannot fulfill the rising demand for functionalities that are difficult to support on a mobile device, such as the ability for students to do homework and to participate in remote video "virtual classrooms," streaming HD video at a quality level sufficient for viewing on a large screen, or running applications that require high bandwidth capacity in one or both directions. For the vast majority of end users, mobile broadband is supplemental to fixed broadband, it is not a substitute. Even where mobile broadband can nominally support high-bandwidth applications, its use is not economically practical, in large part because mobile wireless services are typically also subject

55. Mobile broadband is inferior to wired broadband along almost every measure: transmission quality is affected by factors like topography and weather, as well as the near-monopoly conditions extant in some wireless backhaul markets (the radio or RF part of the transmission covers only the last mile). Additionally, mobile data plans are capped at relatively small quantities of data use or are subject to "throttling" by the provided where use exceeds some preestablished threshold, whereas most wired broadband plans offer "unlimited" or extremely high bandwidth caps; data transfer rates are markedly lower than wired; price per gigabyte is substantially higher; and myriad technical factors limit wireless data plans (e.g., blocked ports, lack of static IP addresses, lack of devices with interconnectivity to traditional wired network gear, etc.).

to usage and data cap restrictions that force users either to curtail usage or pay a steep price premium.[56]

36. In the end, investment in competitive broadband must come, if it is to arise at all, from companies with financial strength and an innovative strategy for serving customers' needs. The Joint Applicants are theoretically as strong as any potential competitor to take on this role as new entrants in each other's service territories and should be encouraged to expand their scope through competition rather than by combining.

Due to its limited availability, technological and geographical constraints, and substantially higher price, fixed wireless broadband cannot be considered a close substitute for the Joint Applicants' broadband services.

37. Fixed wireless broadband is sometimes held out as another approach to serving residential customers at their homes without the cost of deploying extensive wireline distribution infrastructure, particularly in rural and low-density suburban areas. It is sometimes suggested that fixed wireless broadband presents an effective competitive challenge to wireline broadband access of the type being provided by the Joint Applicants as well as by local telephone companies. For the reasons that I shall discuss below, I conclude that, while a small number of

56. For example, streaming of a typical HD movie consumes approximately 3 GB per hour of bandwidth, and will usually require 4G LTE mobile data service, whose availability is still somewhat limited. AT&T Mobility's family share data plans provide up to 5GB for $80 per month, up to 10 GB for $100 per month, and up to 20 GB for $130 per month, all plus $15 per month per device. Overage charges run at $15 per Gb. At 6 GB per movie, the per-download cost would be in the range of $39. And at an overage charge of $15 per Gb, additional downloads would work out to about $90 each. A suggestion that mobile broadband data service is a competitor to the Joint Applicants' fixed wireline broadband service can only be described as pure fantasy.

customers may benefit from the availability of fixed wireless broadband *in areas where no wireline broadband service is being offered*, the level of "competition" that it represents is so minuscule as to have zero impact in constraining the market power of the Joint Applicants or otherwise limiting their ability to increase prices in those areas where a "competing" fixed wireless service is nominally being offered

38. The Commission's Communications Division has compiled a database of census blocks where some type of fixed wireless service is putatively available. As with the California Broadband Availability Round 10 fixed wireless data, the fixed wireless database identifies the service provider and the maximum download and upload speeds being offered in each census block in which some fixed wireless service is being offered. Table 2 summarizes the CD's fixed wireless dataset:

Table 2 SUMMARY OF CALIFORNIA RESIDENTIAL FIXED WIRELESS BROADBAND AVAILABILITY DATA WITHIN AREAS SERVED BY THE JOINT APPLICANTS	
Number of fixed wireless providers offering residential service in California	32
Number of fixed wireless providers offering residential service in California serving at least 10,000 census blocks	16
Number of California census blocks in which residential fixed wireless broadband is being offered	249,218
Source: Round 10 California Fixed Wireless Broadband Availability database	

A superficial examination of this data might lead one to conclude that fixed wireless broadband is widely available in California and thus represents a substantial competitive challenge to the Joint Applicants' broadband services. Looking at this market a bit more carefully, however, reveals an entirely opposite picture.

39. The FCC's Wireline Competition Bureau Industry Analysis and Technology Division regularly publishes reports on broadband Internet access, the most recent one of which was released in June of this year and provides data as of June 30, 2013.[57] Table 3 below compares the number of subscribers for fixed wireline broadband and fixed wireless broadband services nationally for each of four speed categories:

57. FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Internet Access Services: Status as of June 30, 2013*, rel. June 2014.

Table 3

US RESIDENTIAL BROADBAND CONNECTIONS BY DOWNSTREAM SPEED TIER AND TECHNOLOGY AS OF JUNE 30, 2013
(In thousands)

	6-10 Mbps	10-25 Mbps	25-100 Mbps	> 100 Mbps	Total
Fixed wireline broadband	12,025	6,868	32,077	21,345	72,315
Fixed wireless broadband	216	55	49	1	321
Total fixed broadband	12,241	6,923	32,126	21,346	72,636
Pct. fixed wireless broadband	1.76%	0.79%	0.15%	0.15%	0.44%

Source: FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, Internet Access Services: Status as of June 30, 2013, rel. June 2014, at Table 11.

Although there is no California-specific data for residential fixed wireless broadband connections, there is no *a priori* reason to expect that the national pattern would be consequently different here.

40. The companies offering fixed wireless broadband services in California are all quite small. None appear to be publicly traded. Underscoring their small size, in a filing made July 16, 2014 by the Wireless Internet Service Providers Association ("WISPA") in FCC GN Docket No. 14-28 ("Open Internet"), Wireless Internet Service Providers ("WISPs") are described as follows:

> WISPs rely on unlicensed spectrum in various spectrum bands. *All but a few of WISPA's members are "small businesses" under the Small Business Act, the U.S.*

> *Small Business Administration's size standards and the Small Business Paperwork Relief Act of 2002.*[58]

Entities of this type may be well-suited to provide fixed wireless broadband in sparsely populated rural areas, but their business models, limited capital, and spectrum resources are not scalable and do not translate into a major presence in the fixed broadband market. Even in sparsely populated rural areas, there are problems relating to physical topography, foliage and weather, all of which can interfere with the radio signal and degrade the overall customer experience.

41. A comparison of fixed wireless vs. wireline broadband prices further confirms that WISPs should not be considered as providing a consequential competitive challenge to the Joint Applicants. As shown in Table 4 below, fixed wireless broadband prices are consistently higher than prices for wireline broadband. There is no obvious reason why a customer would willingly pay 30% to 300% more for wireless broadband than for wireline broadband if both services are otherwise equivalent, *and available*. Additionally, some wireless broadband service prices include caps on the amount of bandwidth that can be used during each billing cycle, with additional overage charges applying for usage in excess of those caps. While wireline broadband services may well become subject to usage caps in the future, most are not now, both in California and nationwide and, in any event, when, as and if caps are introduced, they are likely to be considerably higher than those being imposed by wireless broadband service providers.

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58. *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, *Comments of The Wireless Internet Service Providers Association*, July 16, 2014, at p. iv, emphasis supplied.

Table 4

WIRELINE AND FIXED WIRELESS BROADBAND SAMPLE PRICE COMPARISONS

	Wireline		Fixed Wireless		
Max Download	Provider	Price	Provider	Data cap	Price
1-3 Mbps	Comcast	N/A	Cal.net	N/A	$54.95-69.95
	TWC	N/A	Central Valley	N/A	$39.95-89.95
	AT&T	N/A	Digital Path	N/A	$49.95
			Internet Free Planet	N/A	$79.00-99.00
			North Coast	50GB	$34.99-40.00
			OACYS	20-40GB	$49.95-79.95
			Smarter	20-50GB	$49.00-99.00
			Succeed.net	N/A	$39.99-49.99
			unWired	N/A	$59.95-149.95
			Valley	N/A	$54.00
			Velocity	N/A	$39.95-49.95
			Winters	N/A	$52.45-62.45
3-6 Mbps	Comcast	$39.95	Cal.net	N/A	$84.95-129.95
	TWC	N/A	Central Valley	N/A	$59.95
	AT&T	N/A	Digital Path	N/A	$59.95
			Etheric	150GB	$85.00
			North Coast	10GB	$55.00
			OACYS	60-90GB	$59.99-199.95
			Smarter	40-100GB	$49.00-149.00
			Succeed.net	50GB	$59.99
			unWired	N/A	$109.95-349.95
			Velocity	N/A	$59.95
			Winters	N/A	$82.45-102.45
6-9 Mbps	Comcast	$49.95	Netlink	10-65GB	$45.00-145.00
	TWC	N/A	Cal.net	N/A	$40.00
	AT&T	$34.95	North Coast	50GB	$49.99
			OACYS	120GB	$65.00-249.95
			Smarter	120-160GB	$69.00-149.00
			Valley	N/A	$99.00
10-25 Mbps	Comcast	$44.99	Cal.net	N/A	$199.95
	TWC	$44.99	California Broadband	N/A	$49.95-89.95
	AT&T	$44.95	Central Valley	N/A	$89.95
			Digital Path	N/A	$69.95-99.95
			Etheric	300-500GB	$99.00-139.00
			North Coast	50GB	$74.99
			Smarter	120-200GB	$89.00-199.00
			Succeed.net	50GB	$69.99
			Valley	N/A	$144.00
25-100 Mbps	Comcast	$54.99	Etheric	1,000-1,500GB	$179.00-229.00
	TWC	$64.99			
	AT&T	$64.95			

Sources: Provider websites

42. The competitive importance of fixed wireless broadband is also far more theoretical than real. Fixed wireless broadband is available in various parts of the state and at advertised data rates that are superficially similar to those offered by the Joint Applicants' fixed wireline broadband. However, where fixed wireless is offered, it is priced well in excess of seemingly comparable wireline broadband. It is difficult to understand why any customer, if given the choice between wireline and fixed wireless broadband at a 50% to 75% higher price, would ever select the latter.[59] If fixed wireless were a serious competitor to the Joint Applicants' broadband services, such price differentials would be unsustainable.

43. In her book, *Captive Audience: The Telecom Industry and Monopoly Power in the New Gilded Age*,[60] Professor Susan Crawford writes authoritatively about Comcast's relentless and

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59. More than a decade after it took on a commitment to deploy statewide broadband in Pennsylvania in exchange for rate concessions, Verizon has recently asserted the right to fulfill this commitment in certain areas using fixed wireless. In a complaint to the PUC, a consumer who was provided with fixed wireless, despite having complied with the approved process for requesting a DSL deployment to his neighborhood, described why the alternative service was totally unsuited to his family's needs and budget: "Basic DSL are $19.99/mo or $29.99/mo for Enhanced DSL for a one-year contract. 4G LTE monthly pricing starts at approximately $50/mo. plus equipment fees" [with a two year contract]; and, "DSL offers unlimited data usage. 4G LTE is 'pay as you go' which equates to roughly $10/GB, depending on the plan you select. This drives up the cost significantly. In my first month of service, I used 5 GB of data within 8 days of the billing cycle. The plan I selected is a 5 GB plan, so I will now be charged $10/GB for each additional GB. As of this writing, I have used 6.1 GB, making my total bill at least $70. It is important to note that my Internet usage is only for casual web browsing, email and some music and application downloads. I do not stream video or music. I've had to turn off my Internet periodically until next billing cycle to minimize the chance for additional charges. 4G LTE is not practical for home use because it is cost-prohibitive." He also noted that the service was subject to a two-year contract and that the actual data speeds for the service at his home were consistently below the advertised speeds. Affidavit of David K. Ebersole, Jr., Petition of David K. Ebersole, Jr. and the Office of Consumer Advocate for a declaratory Order, P-2012-2323362.

60. Crawford, Susan, *Captive Audience: The Telecom Industry and Monopoly Power in the New Guilded Age*, Yale University Press, 2013 ("*Captive Audience*"),

largely successful pursuit of wired broadband dominance.[61] With respect to claims about wireless broadband competition, she states bluntly:

> It bears repeating: wireless access cannot be a direct substitute for high-speed wired services (other than legacy DSL services, which have already become irrelevant). Ever since the dawn of the digital age, wireless-technology speeds have lagged behind wired speeds by substantial margins.[62]

She goes on to note that even the highest speeds referenced for (theoretical) wireless performance assume optimal (and unlikely) conditions.[63]

The majority of the Joint Applicants' California broadband customers appear to be choosing services offering download speeds rated at up to 25 Mbps, well above the 10 Mbps in the download direction that the FCC has proposed to adopt as the minimum threshold definition for "broadband."

44. The FCC's *National Broadband Plan* was published in March 2010 and set out initial and long-term goals for broadband deployment and availability throughout the United States. One specific recommendation was that the FCC

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61. *Id.*, at 157. Prof. Crawford posits that Verizon and AT&T have effectively ceded dominance of wired broadband to Comcast, by curtailing their *FiOS* and *U-verse* expansions and choosing, instead, to invest in wireless. As an example of this, she observes the following with respect to Verizon Wireless's joint market arrangement with Comcast: "In most areas served by Comcast and Time Warner [Cable], Verizon's FiOS – the only real competition the two face for wired Internet access – is not present. (Comcast and FiOS overlap in just 15 percent of Comcast's physical market; Time Warner [Cable] and FiOS overlap in 11 percent of Time Warner [Cable]'s.) By cooperating, Verizon Wireless is implicitly promising that FiOS will spread no farther; Comcast and Time Warner [Cable], for their part, are implicitly promising that they will not go into the wireless business." As discussed below, FiOS is available to less than 1.5-million households within the Joint Applicants' combined California footprint.

62. *Id.*

63. *Id.*, at 180-181.

> ... set a national broadband availability target to guide public funding. An initial universalization target of 4 Mbps of *actual* download speed and 1 Mbps of *actual* upload speed, with an acceptable quality of service for interactive applications, would ensure universal access. This represents a speed comparable to what the typical broadband subscriber receives today, and what many consumers are likely to use in the future, given past growth rates. While the nation aspires to higher speeds ..., it should direct public investment toward meeting this initial target. A universalization target of 4 Mbps download and 1 Mbps upload is aggressive. It is one of the highest universalization targets of any country in the world.[64]

45. The California PUC has also established minimum Broadband speed standards, in this case applicable to the California Advanced Services Fund (CASF). On February 1, 2012 the Commission issued D.12-02-015 that adopted a new definition of an underserved area as one "where broadband is available, but no wireline or wireless facilities-based provider offers service at advertised speeds of at least 6 Mbps download and 1.5 Mbps upload/"[65] The California standard was established two years later than the FCC's current 4 Mbps/1 Mbps minimums, so it is hardly surprising that, in this rapidly evolving environment, the California standards exceed those adopted by the FCC.

46. Today, nearly five years since the FCC's 4 Mbps and nearly three years since the CPUC's 6 Mbps minimum download speeds were adopted, what the FCC had in 2010 described as "aggressive" – i.e., a download speed of 4 Mbps – now seems woefully inadequate. Responding to the immense growth in the availability of Internet-based applications, consumers

64. *National Broadband Plan.*, at 135, emphasis in original, footnote references omitted.

65. http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/CASF/index.htm

have demanded corresponding increases in the bandwidth capacity of their Internet access services. ISPs vary in their capability to offer higher bandwidth services over their distribution infrastructures. The Joint Applicants here have responded to this demand by redefining their "standard" service offerings and by offering premium services at successively higher bandwidths. For example, as summarized in Table 5 below, between 2009 and 2014, TWC's "standard" broadband offering has been redefined several times, from the [**BEGIN CONFIDENTIAL**] Mbps/ Mbps [**END CONFIDENTIAL**] download/upload speeds in 2009 to the current [**BEGIN CONFIDENTIAL**] Mbps/ Mbps [**END CONFIDENTIAL**] offering in 2014. Over that same period, TWC expanded the array of bandwidth tiers being offered, and also increased the highest speed it made available to its residential subscribers.

[**BEGIN CONFIDENTIAL**]

Table 5

TIME WARNER CABLE
"STANDARD" AND MAXIMUM BROADBAND
INTERNET ACCESS SPEED TIERS
2009-2014

Date	Download speed	Upload speed
"STANDARD" BROADBAND INTERNET ACCESS		
December 2009	Mbps	Mbps
December 2010	Mbps	Mbps
December 2013	Mbps	Mbps
MAXIMUM DOWNLOAD SPEEDS OFFERED		
December 2009	Mbps	Mbps
December 2011	Mbps	Mbps
December 2012	Mbps	Mbps
June 2014	Mbps	Mbps

Source: TWC CONFIDENTIAL Response to ORA Data Request Set 1, Nos. 8, 9, Exhibit 3.

[**END CONFIDENTIAL**]

Similar data for Comcast is provided in Table 6. Like TWC, Comcast has been steadily increasing the download and upload speeds for its standard offering, branded "Performance Internet." Comcast has also increased the maximum advertised (download) speed from 16 Mbps in 2009 to 105 Mbps currently.

[**BEGIN CONFIDENTIAL**]

Table 6

COMCAST
"STANDARD" AND MAXIMUM BROADBAND INTERNET ACCESS SPEED TIERS
2009-2014

Date	Download speed	Upload speed
"PERFORMANCE" INTERNET		
December 2009	Mbps	Mbps
December 2010	Mbps	Mbps
December 2012	Mbps	Mbps
December 2014	Mbps	Not given
MAXIMUM DOWNLOAD SPEEDS OFFERED		
December 2009	Mbps	2 Mbps
December 2010	Mbps	Mbps
December 2011	Mbps	Mbps
December 2012	Mbps	Mbps

Source: CONFIDENTIAL Comcast Supplement Response to ORA Data Request Set 1, No. 9.

[**END CONFIDENTIAL**]

Notably, in each of these periods, TWC's "Standard" offering was consistently the [**BEGIN HIGHLY CONFIDENTIAL**] [**END HIGHLY CONFIDENTIAL**] choice by its customers among the various speed tiers being offered. More importantly, and as Table 7 demonstrates, only about [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY**

CONFIDENTIAL] or fewer of all TWC broadband subscribers opted for a service tier *below* the "Standard" level. In fact, over the 2009-2014 period, while the percentage of customers opting for bandwidths below TWC's "Standard" offering remained relatively stable in the [**BEGIN HIGHLY CONFIDENTIAL**] %-% [**END HIGHLY CONFIDENTIAL**] range, the demand for bandwidth levels in excess of "Standard" increased, *despite the progression of bandwidth increases for the "Standard" tier from* [**BEGIN CONFIDENTIAL**] *Mbps to* *Mbps* [**END CONFIDENTIAL**] *over the same period*. Table 7 also provides similar data for Comcast over the same 2009-2014 period. In 2014, only about [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] or fewer of all Comcast broadband subscribers opted for a service tier *below* the "Performance" level, which (in 2014) provides download speeds of up to 25 Mbps. In fact, over the 2009-2014 period, while the percentage of customers opting for bandwidths below Comcast's "Performance" offering remained relatively stable in the [**BEGIN HIGHLY CONFIDENTIAL**] %-% [**END HIGHLY CONFIDENTIAL**] range, the demand for bandwidth levels in excess of "Performance" has remained in the [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] range, *despite the same type of progression of bandwidth increases for the "Performance" tier from* [**BEGIN CONFIDENTIAL**] *Mbps to* *Mbps* [**END CONFIDENTIAL**] *as was the case with TWC over the same period*. Table 7 summarizes this shift in demand to successively higher bandwidth service tiers for both companies:

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Table 7

CUSTOMER DEMAND FOR BROADBAND
2009-2014

Year	2009	2010	2011	2012	2013	2014
TIME WARNER CABLE						
TOTAL Subs (w/o Earthlink)						
"Standard" broadband						
TOTAL Subs below "standard"						
TOTAL Subs at "standard"						
TOTAL Subs above "standard"						
TOTAL Subs at "standard" or above						
Sub-"Standard" as pct of total						
"Standard" as pct of total						
Above "Standard" as pct of total						
"Standard" or above as pct of total						
COMCAST						
TOTAL Subs						
"Performance" broadband						
TOTAL Subs below "Performance"						
TOTAL Subs at "Performance"						
TOTAL Subs above "Performance"						
TOTAL Subs at "Performance" or above						
Sub-"Performance" as pct of total						
"Performance" as pct of total						
Above "Performance" as pct of total						
"Performance" or above as pct of total						

Sources: HIGHLY CONFIDENTIAL TWC Response to ORA Data Request Set 1, Nos. 8, 9, Exhibit 3; HIGHLY CONFIDENTIAL Comcast Supplemental Response to ORA Data Request Set 1, No. 9

[**END HIGHLY CONFIDENTIAL**]

47. In June of this year, the FCC issued a *Further Notice of Proposed Rulemaking* (FNPRM) in WC Docket No. 10-90 ("Connect America Fund") *et al* in which it asked for comments regarding a proposal that it "increase the minimum broadband speeds that we seek to achieve with universal service funding to 10 Mbps downstream."[66] In August of this year, the FCC released a *Notice of Inquiry* in GN Docket No. 14-126 in which it asked for "comment on the appropriate speed benchmark that would permit users to achieve the purposes identified in section 706," and "ask[ed] parties to provide information on which of the applications described in section 706's definition of advanced telecommunications capability Americans are using most today and how they affect the need for broadband services at a particular speed."[67] The FCC noted that "[b]eginning with the 2010 *Sixth Broadband Deployment Report*, the Commission has used 4 Mbps download/1 Mbps upload as the speed benchmark. The Commission noted in 2012 that it may be time to update the speed benchmark 'consistent with the 2010 *National Broadband Plan*, which recommended that the Commission 'review and reset' this benchmark every few years.'"[68] The FCC sought comment on setting a speed benchmark based upon an "assessment of common household broadband use ... [that would involve] estimat[ing] the typical number of users in a household[,] ... the typical uses of broadband by a household during peak demand hours" and from that information "assess the download and upload speeds

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66. *Connect America Fund et al.*, WC Docket No. 10-90 *et al.*, *Report and Order et al.*, FCC 14-54 (rel. June 10, 2014) ("*Connect America Fund FNPRM*")., at para. 138.

67. *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 14-126, *Tenth Broadband Progress Notice of Inquiry*, FCC 14-113 (rel. August 5, 2014), at para. 6, footnote references omitted.

68. *Id.*, at para. 5, footnote references omitted.

necessary to meet the demands of a common household."[69] The FCC also asked for comment "on whether [it] should consider multiple simultaneous uses of broadband in a household when adopting the next speed benchmark."[70] Citing data from its *2011 Household Broadband Guide*, the FCC provided a compilation of typical household uses and the aggregate bandwidth required to support all of the concurrently during peak hours (Figure 6):[71]

Table 1 FCC 2011 Household Broadband Guide FCC Recommended Download Speeds for Multiple Users/Devices			
Users/Devices	**Light Use** Basic functions only: email, web surfing, basic streaming video	**Moderate Use** Basic functions plus one high-demand application: streaming high-definition (HD), video conferencing, OR online gaming	**High Use** Basic functions plus *more than one* high demand application running at the same time
1 User on 1 Device (e.g., laptop, tablet, or game console)	1-2 Mbps	1-2 Mbps	6-15 Mbps
2 Users or Devices at a time	1-2 Mbps	1-2 Mbps	6-15 Mbps+
3 Users or Devices at a time	1-2 Mbps	1-15 Mbps	More than 15 Mbps
4 Users or Devices at a time	1-15 Mbps	6-15 Mbps	More than 15 Mbps

Figure 6. FCC recommended broadband access service download speeds required to support households with multiple users and Internet-connected devices.

The FCC provided estimates "of the amount of download and upload bandwidth a typical household may need today" based on data from its *2014 Household Broadband Guide*. The table reproduced in Figure 7 below "estimates low to high household broadband use as reflected

69. *Id.*, at para. 8.

70. *Id.*, at para. 9.

71. *Id.*, at para. 11, Table 1.

in a range of specific applications. The estimates ... are based on a household with fixed broadband service and three broadband users:"[72]

Table 2 FCC 2014 Household Bandwidth Scenarios[26]				
Scenario	**Application**	**Activity**	**Download**	**Upload**
Low Use Household	Streaming Video[27]	1 user watching a standard definition (SD) movie	3.0 Mbps	0.1 Mbps
	VoIP[28]	1 user making a high-quality voice call	0.1 Mbps	0.1 Mbps
	Browser[29]	1 user browsing on the web	0.5 Mbps	0.25 Mbps
	Background[30]	Syncing email, alerts, and weather	0.4 Mbps	0.2 Mbps
Total			4.0 Mbps	0.65 Mbps
Moderate Use Household	Streaming Video	1 user watching a HD movie	5.0 Mbps	0.1 Mbps
	Interactive Education[31]	1 user taking an online education course	2.0 Mbps	0.5 Mbps
	Browser	1 user browsing on the web	0.5 Mbps	0.25 Mbps
	Background	Syncing email, alerts, and weather	0.4 Mbps	0.2 Mbps
Total			7.9 Mbps	1.05 Mbps
High Use Household	Streaming Video	1 user watching a super HD movie	7.0 Mbps	0.1 Mbps
	Video Call	1 user making a HD video call	1.5 Mbps	1.5 Mbps
	Cloud Storage[32]	1 user saving files to and from the cloud	1.1 Mbps	1.1 Mbps
	Background	Syncing email, alerts, and weather	0.4 Mbps	0.2 Mbps
Total			10.0 Mbps	2.9 Mbps

Figure 7. FCC Low-, medium- and high-use household Internet activity scenarios.

Not only is the TWC demand data consistent with the FCC's preliminary assessment, it actually suggests that the FCC's assessment may be overly conservative. Even though TWC has itself redefined "Standard" broadband several times to the point where it is currently set at 15 Mbps in the downstream direction – i.e., 5 Mbps greater than the FCC's *proposed* minimum benchmark level – nearly [**BEGIN HIGHLY CONFIDENTIAL**] (%) [**END HIGHLY CONFIDENTIAL**] of TWC's California residential broadband customers have chosen a service tier offering download speeds *in excess of the TWC "Standard Broadband" 15 Mbps tier*.

72. *Id.*, at para. 12, Table 2, citations omitted.

48. Initial and Reply Comments in GN Docket No. 14-126 were submitted on September 4 and 19, 2014, respectively, and obviously any final determination by the FCC is at least months away. However, it is notable that a number of parties submitting comments suggested that even 10 Mbps was still too low, and urged that a minimum 25 Mbps benchmark be established, arguing that 10 Mbps was not sufficient for current *and future* household needs.[73] Citing remarks by FCC Chairman Tom Wheeler, Netflix noted:

> The recommendations of content providers suggest that the Commission's "high use household" scenario may not reflect accurately the broadband needs of even a moderate use household. That scenario calculates the total broadband requirements for simultaneous engagement in streaming video, an HD video call, cloud storage, and certain "background" services to be 10 Mbps downstream/2.9 Mbps upstream. That speed may be sufficient for some services, but section 706 defines "advanced telecommunications capability" as "broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphs, and video telecommunications[.]" The benchmark used to assess advanced telecommunications capability should accommodate the evolution in the standard for "high quality" video, as well as the likelihood that multiple members of a household will rely on broadband to access multiple streams of high-quality video simultaneously. As Chairman Wheeler said today, "[w]hen these devices are used at the same time, as they often are in the evenings, it's not hard to overwhelm 10 Mbps of bandwidth." As consumers interact with increasingly sophisticated content and services on increasingly sophisticated devices, "[a] 25 Mbps connection is fast becoming 'table stakes' in 21st century communications."[74]

73. FCC GN Docket No. 14-126, Comments of The Internet Association, September 19, 2014, at 5; Comments of Public Knowledge, September 4, 2014, at 16; Comments of Netflix, Inc., at 5.,

74. GN Docket No. 14-126, Comments of Netflix, Inc., September 4, 2014, at 5-6, citing Tom Wheeler, Chairman, Federal Communications Commission, Prepared Remarks at 1776 Headquarters, 2 (Sep. 4, 2014), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0904/DOC-329161A1.pdf

49. The matter of what download speed constitutes the minium acceptable level in the context of 2014 and beyond has a direct bearing upon this Commission's assessment as to the level of competition in the market for broadband access in California, and the extent to which the proposed merger will diminish broadband competition for these services. The speech by Chairman Wheeler cited by Netflix directly addressed this question. There, Mr. Wheeler observed that

> The underpinning of broadband policy today is that competition is the most effective tool for driving innovation, investment, and consumer and economic benefits. Unfortunately, the reality we face today is that as bandwidth increases, competitive choice decreases."

To illustrate this conclusion, he presented the following chart (Figure 8) which, as he aptly put it, "says it all:"[75]

75. Prepared Remarks of FCC Chairman Tom Wheeler, "The Facts and Future of Broadband Competition", 1776 Headquarters, Washington, D.C., September 4, 2014, at 1-2.

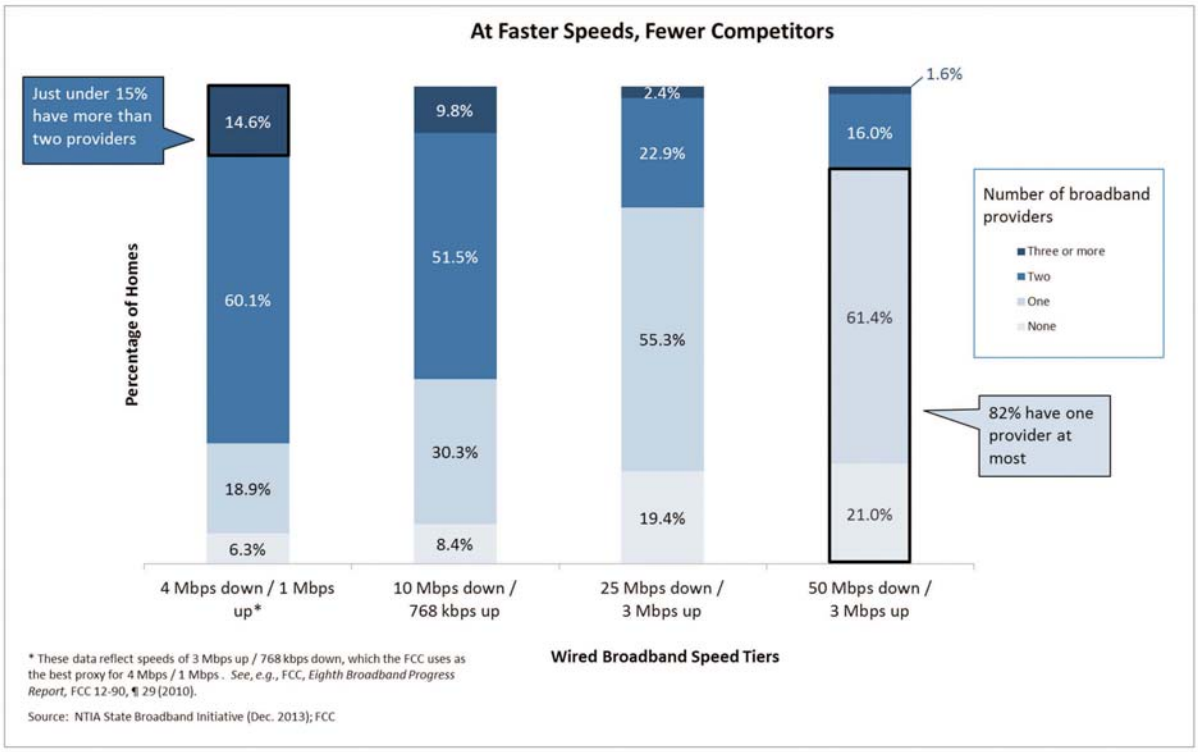

Figure 8. Level of competition diminishes at successively higher download speeds.

Several other comments submitted in Docket 14-126 also support benchmark speeds of 25 Mbps or greater. The Internet Association, which "represents the world's leading Internet companies including: Airbnb, Amazon, AOL, eBay, Expedia, Facebook, Gilt, Google, IAC, LinkedIn, Lyft, Monster Worldwide, Netflix, Practice Fusion, Rackspace, reddit, Salesforce.com, SurveyMonkey, TripAdvisor, Twitter, Uber Technologies, Inc., Yelp, Yahoo!, and Zynga,"[76]

76. GN Docket no. 14-126, Reply Comments of the Internet Association, September 19, 2014, at 1, fn. 1.

even suggests that "providing 25 Mbps, which may be 'table stakes' today, will soon no longer serve the basic needs of most consumers."[77]

50. Indeed, the only parties to consistently argue for retention of the current 4 Mbps benchmark are the broadband providers themselves and their trade associations.[78] The providers' position on this issue is both self-serving and hardly surprising. As the City of Boston correctly points out:

> The [FCC] should also ensure that consumers can better evaluate what is truly a "competitive" broadband option. Boston's belief and experience is that the current benchmark allows providers to claim unaffordable 4G services and unacceptably slow DSL options qualify – even though these options do not work for many households.[79]

While the broadband providers have vested interests in keeping the speed bar as low as possible so as to maintain the *illusion* of a competitive market for broadband services, when the competitive availability of services at *appropriate* minimum speed levels is considered, it is clear that Chairman Wheeler's conclusion – that "as bandwidth increases, competitive choice decreases" – is indisputably correct. As he observed, "[t]oday, cable companies provide the

77. *Id.*, at 5.

78. See, e.g., GN Docket No. 14-126, AT&T Comments, at 7-9; Verizon Comments, at 30; NCTA comments, at 5-7.

79. *Id.*, Comments of the City of Boston, September 4, 2014, at 8.

overwhelming percentage of high-speed broadband connections in America. *Industry observers believe cable's advantage over DSL technologies will continue for the foreseeable future.*"[80]

51. Although both Comcast and TWC urged the FCC to retain the 4 Mbps download speed as the minimum definition of "broadband," the two companies take a decidedly different position in communications with their own customers, as Netflix has noted in its *Petition to Deny*:

> ... most ISPs, including Applicants, recommend speeds greater than 10 Mbps for seamless streaming of video or Internet gaming – and even more for homes with more than one Internet-connected device. TWC, for example, suggested at least 20 Mbps if you want to "stream video," 30 Mbps for gaming, and 50 Mbps "if you have multiple people on multiple devices in your home." TWC advertised its 3 Mbps package as sufficient only to '[s]urf the web, connect with friends and family through Facebook, send email, and download medium sized files.
>
> Comcast advised customers that they likely will need even more bandwidth – recommending 50 Mbps for "downloading, streaming and sharing – all at the same time" and 105 Mbps for "households with multiple computers or devices." Its 25 Mbps offering is more appropriate if you want to only "[s]hare photos, book travel, and watch the latest viral video craze." Both Comcast's and TWC's advertisements make clear that consumers need more than a 3 Mbps connection for rich content.[81]

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80. Wheeler, September 4, 2014, fn. 75 *supra*, at 3, emphasis supplied.

81. *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Transfer Control of Licenses and Authorizations*, FCC MB Docket No. 14-57, *Petition to Deny of Netflix, Inc.*, August 27, 2014 ("*Netflix Petition to Deny*"), at 13-14, citing "Time Warner Cable, High Speed Internet Pans and Packages, available at http://www.timewarnercable.com/en/internet/internetserviceplans.html (last visited Aug. 16, 2014)" and "Comcast, New Customer Offers in Washington, DC, http://www.comcast.com/shop/dealsdealfinder (last visited Aug. 16, 2014)." While I would ordinarily have quoted and cited the source material directly from the TWC and Comcast websites, the specific URLs referenced by Netflix in support of these statements appear to have been removed by the TWC and Comcast, respectively, at some point between the filing of the *Netflix Petition to Deny* and November 11,

(continued...)

For the reasons discussed above, even the FCC's proposed 10 Mbps minimum definition of "broadband" is insufficient to meet consumers' needs going forward. Thus, the extent to which the Joint Applicants confront *actual* competition for their broadband services should be limited to locations at which a minimum 25 Mbps in the downstream direction is offered by a rival ISP. In her book, *Captive Audience*, Prof. Susan Crawford has noted that:

> Verizon's FiOS fiber-optic Internet access service is as good as cable (better, in fact, because it allows for uploads that are as speedy as downloads), but it is available to only 14 percent of U.S. residences; from Verizon's shareholders' perspective, it is too expensive to dig up traditional phone lines and replace them with fiber.
>
> Cable, on the other hand, exploded into an enormous market: 80 percent of Americans buying a wired high-speed connection these days sign up with their local cable incumbent. The FCC has said that for 75 percent of Americans the only choice for globally standard high-speed Internet access would soon be the local cable guy. Comcast is adding subscribers at an accelerating pace at the same time that its revenue per user is rising. At this rate, Bernstein Research predicts that about 70 percent all wired Internet access subscribers in America will be cable customers by the end of 2015.[82]

Referring to *pre-merger* Comcast and TWC, Prof. Crawford observed that "as of 2012, Comcast was getting the lion's share of these new accounts: more than four hundred thousand new subscribers for wired high-speed Internet access per quarter, amounting to a total of almost 19 million subscribers overall. Time Warner Cable was a distant second, with about a hundred

81. (...continued)
2014, when I attempted to access the cited web pages.

82. Crawford, *Captive Audience*, at 64-65, footnote references omitted.

1 thousand new customers each quarter and a total of 11 million subscribers."[83] Limiting this
2 discussion just to California, a post-merger Comcast will pass census blocks containing some
3 10.6-million households – 84% of the total 12.6-households in the state[84] – and will have roughly
4 [**BEGIN HIGHLY CONFIDENTIAL**] -million [**END HIGHLY CONFIDENTIAL**]
5 broadband subscribers.[85] Within the Joint Applicants' conbined California serving areas,
6 Verizon's *FiOS* passes census blocks containing only 1.49-million homes; and the version of
7 AT&T's *U-Verse* service offering download speeds of at least 25 Mbps is available in census
8 blocks containing only about 391,000 California households. Thus, of the roughly 10.6-million
9 households identified in the Commission's Broadband Availability database as being served by
10 at least one of the Joint Applicants, only about 1.9-million of these, i.e., about 17.9%, will have a
11 competitive alternative capable of providing service with a download speed of at least 25 Mbps.
12 In short, a post-merger Comcast will become the overwhelming dominant broadband provider in

83. *Id.*

84. As noted at fn. 9, *supra*, 12.6-million is the total number of California *households* included in the CBA Database. While the Commission's Broadband Availability database indicates that the Joint Applicants collectively serve census blocks containing 10.6-million homes, the Joint Applicants' responses to ORA Data Requests, Set 1, nos. 3 and 4 and 9 put the total number of homes passed at [**BEGIN HIGHLY CONFIDENTIAL**] -million [**END HIGHLY CONFIDENTIAL**], which is more directly comparable to the "Housing Units" count as provided by the US Census Bureau. The Joint Applicants "pass" some [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of California housing units.

85. Comcast, TWC, Charter, Bright House Highly Confidential responses to ORA Data Requests, Set 1, Nos. 3 and 4.

California, and will likely retain that status as long as the ILECs continue their policy of harvesting their existing broadband service areas rather than expanding into new ones.[86]

The Joint Applicants – and the post-merger entity that they propose to create – will face limited or no competition for broadband services offering download speeds capable of satisfying the growing demands of California residents across large portions of the California market that they will serve.

52. As Chairman Wheeler correctly observed, it is precisely because their distribution infrastructure is heavily committed to DSL that most non-cable broadband access providers – particularly incumbent local exchange carriers such as AT&T and Verizon – have generally been less able to offer comparable bandwidth across their entire operating footprints without undertaking substantial investment, which has rolled out far more slowly than for the cable MSOs. Verizon, for example, initiated its fiber-to-the-home ("FTTH") deployment branded as

86. On November 11, 2014, following the announcement by President Obama of his support for Title II regulation of broadband Internet access, AT&T CEO and Chairman Randall Stephenson rejected Obama's position and said that AT&T would pause its planned investments in high-speed fiber-optic broadband networks at least until the FCC decides how it will regulate Internet service. According to Stephenson, "We can't go out and invest that kind of money deploying fiber to 100 cities not knowing under what rules those investments will be governed," "Pressure Mounts on F.C.C. Chief Over Net Neutrality Rules," *The New York Times*, November 12, 2014, at http://www.nytimes.com/2014/11/13/technology/pressure-mounts-on-fcc-head-over-open-internet-rules.html?_r=0 (visited 11/13/14). Inasmuch as the stock market's reaction to AT&T's April 21, 2014 FTTH investment announcement was lukewarm at best (AT&T's share price dropped by about 3.8% after its first quarter earnings were reported two days later), it's certainly possible that Stephenson has used President Obama's support for Title II reclassification as an excuse to scale back on an investment program about which AT&T may already have had second thoughts. Indeed, by November 13 – two days following Stephenson's November 11, 2014 announcement, AT&T share prices were up about 1.5%! Notably, at a November 12, 2014 press conference in San Francisco, Comcast CEO Brian Roberts said Comcast has not made any similar decisions to scale back its capital investments in light of Obama's support for Title II treatment. *SFGate*, November 12, 2014, available at http://www.sfgate.com/business/article/Comcast-CEO-agrees-with-Obama-on-net-neutrality-5889215.php

"*FiOS*" in 2004, but curtailed further expansion of *FiOS* after the end of 2010[87] and has not yet resumed *FiOS* construction nor provided any indication as to when that might occur.[88] *FiOS* Internet is available to some 18.5-million homes across Verizon's footprint nationally;[89] but within the Joint Applicants' potential post-merger footprint in California, *FiOS* is available in only 42,254 of the 75,540 census blocks currently being served by Verizon; representing approximately 1,487,165 households passed by *FiOS* out of the total 2,440,202 Verizon-served households.[90] Thus, *FiOS* is available at only 42,254 out of the 354,729 census blocks that will be served by the Joint Applicants, and is available to only 1.49-million, or about 14.0% of the roughly 10.62-million California homes located in census blocks that will be passed by a post-merger Comcast's California infrastructure. See Table 13 below.

53. AT&T's *U-Verse* service started out as basically an enhanced DSL offering utilizing existing copper distribution plant supporting maximum download speeds of 6 Mbps or less, depending upon the customer's distance from the wire center or remote terminal. AT&T has been upgrading *U-Verse* nationally by extending fiber closer to its customers' homes, but these upgraded *U-Verse* areas still cover far less than AT&T's total operating territories. AT&T California serves 214,918 census blocks within the Joint Applicants' potential post-merger

87. "Verizon Poised to Deliver First Set of Services to Customers Over Its Fiber-to-the-Premises Network," Verizon Communications Investor Release, July 19, 2004; "Verizon to End Rollout of FiOS," The Wall Street Journal, March 30, 2010.

88. Fn. 45, *supra*.

89. Verizon Communications, 2013 10-K Annual Report filed with the SEC, February 27, 2014.

90. Derived from CBA Database.

footprint in California, but currently offers service with download speeds at or above 25 Mbps in only 19,850 of them, representing 391,619 households out of the total 7,654,353 within the portion of the AT&T service area within the Joint Applicants' post-merger footprint.[91] See Table 13 below. AT&T offers several *U-Verse* speed tiers, but the primary one appears to be its "Max Plus" service, offering download speeds of 12-18 Mbps.[92] Because *U-Verse* is based upon DSL technology, its effective speed decreases rapidly as the distance between the customer premises and the nearest AT&T network node increases. *AT&T High Speed Internet Terms of Service* provides that:

> The speeds identified at http://att.com/speedtiers are Service Capability Speeds, which are the downstream rates at which your line transfers Internet access data between the network interface device at your premises , office or apartment building to the first piece of routing equipment in AT&T's network. Service Capability Speeds should not be confused with Throughput Speed, which is the speed at which your modem receives and sends Internet access data ("Throughput Speed"). *These speeds may vary and are not guaranteed.* Throughput speed depends upon many factors including customer location, destination and traffic on the Internet, interference with high frequency spectrum on your telephone line, wiring inside your premises , office or apartment, the capacity or performance of your devices or modem, the server with which you are communicating, internal network management factors (including Overhead), and the networks you and others are using when communicating. *In order to provide a consistently high-quality video service, AT&T Uverse High Speed Internet throughput speeds may be temporarily reduced when a customer is using other U-verse services in a manner that requires high bandwidth. This could occur more often with higher speed Internet access products. ...*[93]

91. *Id.*

92. http://www.att.net/speedtiers (accessed 11/18/14).

93. http://www.att.com/shop/internet/att-internet-terms-of-service.html#fbid=XSbXdGLUJQz (accessed 11/18/14), emphasis supplied.

Customer location, interference on the telephone line, and concurrent use of video services are limitations that are particularly applicable to DSL, and have little or no major impact upon cable and fiber optic broadband services, suggesting that the stated "maximum advertised speeds" for U-Verse may not be directly comparable to those given for cable and FTTH services.

54. The California Broadband Availability Database contains data for each census block in the state indicating the maximum advertised download and upload speeds for each provider offering broadband service in each census block. The maximum advertised download and upload speeds are identified in terms of 11 broad categories, as shown in Table 8 below:

Table 8

CPUC California Broadband Availability Data Maximum Advertised Bandwidth Speed Categories

SPEED TIER	SPEED
1	≤200 kbps
2	>200 kbps and <768 kbps
3	≥768 kbps and <1.5 Mbps
4	≥1.5 Mbps and <3 Mbps
5	≥3 Mbps and <6 Mbps
6	≥6 Mbps and <10 Mbps
7	≥10 Mbps and <25 Mbps
8	≥25 Mbps and <50 Mbps
9	≥50 Mbps and <100 Mbps
10	≥100 Mbps and <1 gbps
11	≥1 gbps

55. Note that, for *residential* customers, the "advertised speed" is not a guarantee, but is expressed as a so-called "best efforts" offering.[94] Actual speeds that customers of these services will actually experience in practice may, and often do, fall far short of the advertised maxima, for any of several reasons, including traffic congestion within the broadband provider's distribution network, insufficient capacity in upstream connections into the Internet "cloud," traffic congestion at "peering points" where broadband provider networks interconnect and exchange traffic, deliberate actions by the broadband provider to "throttle" traffic from certain sources (e.g., from video streaming services) or to its own end user customer where the provider considers that customer's use to be excessive, and/or bandwidth limitations associated with the source data stream that is being accessed. From its response to ORA data requests, it would appear that TWC, at least, has more than sufficient capacityto avoid any inbound congestion on its California network.[95] For its three largest peers in California, TWC has built out interconnection bandwidth capacities of [**BEGIN CONFIDENTIAL**] . [**END CONFIDENTIAL**][96] For its "Core to Market" connectivity in California (a hub-and-spoke distribution system that connects the TWC California network to the TWC nationwide backbone), TWC has [**BEGIN CONFIDENTIAL**] [**END CONFIDENTIAL**] connectivity to its backbone, and from that backbone, TWC has [**BEGIN CONFIDEN-**

94. Broadband services furnished to larger business ("enterprise") customers and to major content and website providers are typically denominated in so-called "Service Level Agreements" or "SLAs" that do specify guaranteed transmission speeds. SLAs are rarely, if ever, offered in the consumer market.

95. Comcast was also asked for this information, but declined to provide it. See Comcast's First Supplemental Responses to ORA's First, Third and Fourth Sets of Data Requests, Nos. 65-69.

96. Confidential Response of Time Warner Cable to ORA Data Request, Set 3, No. 65.

TIAL] [**END CONFIDENTIAL**] transport hub routers and one [**BEGIN CONFIDENTIAL**] 1 [**END CONFIDENTIAL**] transport hub router.[97]

56. While the California Broadband Availability Database provides a valuable tool for the analysis of competitive service availability across the Joint Applicants' post-merger footprint, the broad downlink categories (e.g., 10 Mbps to 25 Mbps) do not permit an analysis at intermediate speed tiers, e.g., at 15 or 20 Mbps. Thus, if a competitor's maximum advertised download speed is 10 Mbps, the California Broadband Availability Data would classify the census block as having a competitive presence at speeds of up to just under 25 Mbps. As a result, the analysis described here likely *overstates* the actual extent of competition, particularly within the 10-25 Mbps tier. Even with that limitation, the California Broadband Availability Data confirms that the competitive conditions extant in California are entirely consistent with Chairman Wheeler's overall observation that competition decreases as bandwidth increases.

57. I undertook a detailed analysis of the data on *wireline* broadband providers operating in each census block in which one or more of the Joint Applicants currently provides service. This data did not include any fixed or mobile wireless broadband providers and their services since, for reasons discussed earlier, these are not close substitutes for wireline broadband. Also excluded from the analysis were providers of broadband services targeted specifically to *business* customers, such as Megapath, Integra, and Earthlink Business, that do not market their services to residential users. Analysis of the California Broadband Availability Data confirms

97. Confidential Response of Time Warner Cable to ORA Data Request, Set 3, No. 69.

that the relationships between bandwidth and the availability of competitive alternatives as reported by Chairman Wheeler apply with equal force in California – and in particular within the specific portion of the overall California market that would be served by a post-merger Comcast entity.[98] Table 9 provides the number of census blocks within the post-merger Comcast/TWC California footprint in which one, two, and three or more competitors are offering broadband access at each of the 11 speed tiers as defined by the National Telecommunications and Information Administration ("NTIA").[99] As the data demonstrate, the presence of competitive services drops off rapidly as the bandwidth speed increases. At the very lowest speeds – i.e., at download speeds at or below 1.5 Mbps – there is at least one competitor offering service in some 84% of the census blocks. At speeds in excess of 25 Mbps, the census blocks with competitive service availability drops to about 25.0%, and continues to decrease to about 15.4% for speeds in excess of 50 Mbps. Between about 6% and 7% of census blocks have two alternative providers, but only at the very lowest speeds. At 10 Mbps, the percentage of census blocks with two broadband providers drops to just above 1% for the 10 Mbps – 25 Mbps speed tier, falling off to near 0% at higher speeds. There are a handful of census blocks with three or more competitors, but only at the very lowest speeds.

98. The CBA Database incorrectly identified Sonic.net as providing broadband service with download speeds in the 25-50 Mbps tier. Sonic.net is a *reseller* of AT&T California broadband and voice telephone service, and thus does not offer speeds that exceed those being offered by AT&T within the same census blocks. I verified this fact with Sonic.net, and have corrected the CBA Database accordingly. Sonic.net does offer FTTH services on its own infrastructure in several Bay Area communities at download speeds in excess of 100 Mbps. These are not affected by this correction.

99. National Telecommunications and Information Administration, State Broadband Data and Development Grant Program, 74 *Federal Register* 32545, at 32559 (July 8, 2009).

Table 9

CENSUS BLOCKS WITH AT LEAST ONE COMPETING PROVIDER AT EACH DOWNLOAD SPEED TIER

SPEED TIER	CBs served by Jt. Applic.	CBs with one competitor	CBs with two competi-tors	CBs with at least three competi-tors	Pct of CBs with One Competitor	Pct of CBs with two competi-tors	Pct of CBs with at least three competitors
1 ≤200 kbps	354,729	297,689	27,914	1,601	83.92%	7.87%	0.45%
2 >200 kbps and <768 kbps	354,729	297,689	27,914	1,601	83.92%	7.87%	0.45%
3 ≥768 kbps and <1.5 Mbps	354,729	297,689	27,914	1,601	83.92%	7.87%	0.45%
4 ≥1.5 Mbps and <3 Mbps	354,729	290,991	27,452	1,591	82.03%	7.74%	0.45%
5 ≥3 Mbps and <6 Mbps	354,729	265,405	25,145	1,439	74.82%	7.09%	0.41%
6 ≥6 Mbps and <10 Mbps	354,729	243,398	23,975	1,390	68.62%	6.76%	0.39%
7 ≥10 Mbps and <25 Mbps	354,729	220,620	23,332	1,379	62.19%	6.58%	0.39%
8 ≥25 Mbps and <50 Mbps	354,729	74,824	2,589	161	21.09%	0.73%	0.05%
9 ≥50 Mbps and <100 Mbps	354,729	55,941	280	6	15.77%	0.08%	0.00%
10 ≥100 Mbps and <1 gbps	354,729	44,562	223	0	12.56%	0.06%	0.00%
11 ≥1 gbps	354,729	1,281	25	0	0.36%	0.01%	0.00%

Source: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs.

58. Table 10 provides similar data in terms of homes passed. Here, the percentage of homes within the post-merger Comcast/TWC footprint where a competitive broadband service provider is available is somewhat greater than when viewed in terms of census blocks. This suggests, not surprisingly, that competition tends to be somewhat more prevalent in higher-density census blocks – i.e., those census blocks in which competitors have invested in facilities have, on average, more households than those census blocks that competitors have thus far avoided. Indeed, at the very lowest speeds, the California Broadband Availability Data indicate that some 97% of households have at least one competitive alternative to services being provided by one of the Joint Applicants. That drops off to about 77% for speeds in the 10-25 Mbps range. Thus, if all of the competitors identified as falling in the 10-25 Mbps range are actually offering services

at up to 25 Mbps, then roughly 2.5-million households within the Joint Applicants' post-merger service area will be located in census blocks with no competitive alternative. However, as is far more likely the case, to the extent that competitors are offering maximum download speeds of less than 25 Mbps, the number of households with no competitive alternative will be considerably larger.

Table 10

HOUSEHOLDS PASSED WITH AT LEAST ONE COMPETING PROVIDER AT EACH DOWNLOAD SPEED TIER

SPEED	HHs passed by Joint Applicants	Hhs with one competitor	HHs with two competitors	Hhs with at least three competitors	Pct of HHs with one competitor	Pct of HHs with two competitors	Pct of HHs with at least three competitors
1 ≤200 kbps	10,604,329	10,262,602	1,512,400	115,510	96.78%	14.26%	1.09%
2 >200 kbps and <768 kbps	10,604,329	10,262,602	1,512,400	115,510	96.78%	14.26%	1.09%
3 ≥768 kbps and <1.5 Mbps	10,604,329	10,262,602	1,512,400	115,510	96.78%	14.26%	1.09%
4 ≥1.5 Mbps and <3 Mbps	10,604,329	10,127,518	1,487,884	114,113	95.50%	14.03%	1.08%
5 ≥3 Mbps and <6 Mbps	10,604,329	9,319,406	1,358,894	103,877	87.88%	12.81%	0.98%
6 ≥6 Mbps and <10 Mbps	10,604,329	8,816,949	1,324,113	102,352	83.14%	12.49%	0.97%
7 ≥10 Mbps and <25 Mbps	10,604,329	8,236,633	1,300,984	101,193	77.67%	12.27%	0.95%
8 ≥25 Mbps and <50 Mbps	10,604,329	2,384,780	88,132	8,700	22.49%	0.83%	0.08%
9 ≥50 Mbps and <100 Mbps	10,604,329	2,019,187	12,680	46	19.04%	0.12%	0.00%
10 ≥100 Mbps and <1 gbps	10,604,329	1,590,864	8,201	0	15.00%	0.08%	0.00%
11 ≥1 gbps	10,604,329	47,257	421	0	0.45%	0.00%	0.00%

Source: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs.

59. Because the California Broadband Availability Database has been organized into "speed tiers" one of which – 10 Mbps to 25 Mbps – covers a particularly broad range including the most popular service offerings, we have no information as to where, within that range, competitive services are or are not available. For example, from the TWC data summarized in Table 7

above, we see that some 52% of all current TWC broadband customers subscribe to "Standard Broadband" with an advertised maximum download speed of up to 15 Mbps. The California Broadband Availability Data tells us where competition is present *anywhere within that range*, but teaches nothing as to whether service at 15 Mbps *or greater* is actually being offered by competitors in any of the specific census blocks where *some* competitive presence in excess of 10 Mbps is indicated. From the large drop-off in competitive presence as we go from the 10-25 Mbps tier on up to the 25-50 Mbps tier, there is strong reason to believe that the actual extent of competitive presence at the upper end of the 10-25 Mbps tier is far less than what might appear superficially to be the case based solely upon the California Broadband Availability Data.

60. Because of this concern, I have undertaken to examine the specific competitive services that are being offered in the areas being served by the Joint Applicants. For example, most AT&T-served census blocks indicate the company as offering service in the 10-25 Mbps tier. However, from a review of AT&T's website, it appears that what is actually being offered falls in the 12-18 Mbps range, with the actual maximum download speed varying with the route distance between the customer and the serving node on the AT&T distribution network.[100]

100. See paragraph 53, *supra*.

Providers of competing broadband services appear to be targeting relatively more affluent areas, leaving a disproportionate share of lower income households with no broadband provider other than one of the Joint Applicants, thus making the lowest income households most vulnerable to future rate increases.

61. Perhaps not surprisingly, and almost certainly a consequence of an unregulated market for broadband services, analysis of the California Broadband Availability Data reveals that, for each speed tier, competitors are disproportionately focusing their attention on relatively more affluent customers. Table 11 below highlights this condition. I have calculated the median household income[101] separately for census blocks in which one or more competitors offers service at the indicated download speed tier and for census blocks in which no competitor offers service at the indicated download speed tier. As the Table demonstrates, *the weighted average median household income is consistently greater for every speed tier in census blocks where one or more competitors offer service than for those census blocks where the Joint Applicants are the only source of broadband access at that speed*. Moreover, while this condition holds for every one of the eleven speed tiers that are defined in the California Broadband Availability Data, the income differential between areas with and without competition increases the higher the speed. For example, in the 6-10 Mbps tier, there are roughly 8.8-million households in census blocks with at least one competitor in addition to one of the four Joint Applicants. For that group, the weighted average median household income is $69,756. In that same speed tier, there are some 1.8-million households in census blocks where one of the four Joint Applicants is the only

101. Median Household Income and Per Capita income data that is contained in the California Broadband Availability Database was derived from the 2008-2012 American Community Survey data published by the US Census Bureau. It is reported at the Census Block Group (CBG) level. CBG median household and per capital income are used for each individual Census Block within a CBG.

broadband provider; for this group, the weighted average median household income is $68,133, i.e., some $1,623 less. In the 25-50 Mbps tier, there are only 2.4-million households in census blocks served by one or more competitors, with a weighted average median household income of $70,988. For the remaining 8.2-million households with not competitive service availability, the weighted average median household income is $69,046, or $1,942 less. The income differential becomes even more pronounced at the 1 Gbps level.

Table 11

COMPETITORS APPEAR TO BE SERVING CENSUS BLOCKS WITH DISPROPORTIONATELY GREATER MEDIAN HOUSEHOLD INCOMES – LOCATIONS WITH AT LEAST ONE COMPETITOR

CBs with one or more competitors vs. those served only by Joint Applicants

SPEED	Households passed by Jt Applicants AND by One or More Competitors			Households passed Only by Jt Applicants			Income Differential
	Number	Percent	Median Income	Number	Percent	Median Income	
1 ≤200 kbps	10,262,602	96.78%	$69,512	341,727	3.22%	$68,584	$928
2 >200 kbps and <768 kbps	10,262,602	96.78%	$69,512	341,727	3.22%	$68,584	$928
3 ≥768 kbps and <1.5 Mbps	10,262,602	96.78%	$69,512	341,727	3.22%	$68,584	$928
4 ≥1.5 Mbps and <3 Mbps	10,127,518	95.50%	$69,508	476,811	4.50%	$68,947	$561
5 ≥3 Mbps and <6 Mbps	9,319,406	87.88%	$69,887	1,284,923	12.12%	$66,546	$3,341
6 ≥6 Mbps and <10 Mbps	8,816,949	83.14%	$69,756	1,787,380	16.86%	$68,133	$1,623
7 ≥10 Mbps and <25 Mbps	8,236,633	77.67%	$69,910	2,367,697	22.33%	$67,994	$1,916
8 ≥25 Mbps and <50 Mbps	2,384,780	22.49%	$70,988	8,219,550	77.51%	$69,046	$1,942
9 ≥50 Mbps and <100 Mbps	2,019,187	19.04%	$71,211	8,585,142	80.96%	$69,076	$2,135
10 ≥100 Mbps and <1 gbps	1,590,864	15.00%	$69,955	9,013,466	85.00%	$69,399	$556
11 ≥1 gbps	47,257	0.45%	$83,187	10,557,072	99.55%	$69,421	$13,766
TOTAL HOUSEHOLDS							10,604,329
WEIGHTED AVERAGE MEDIAN HOUSEHOLD INCOME							$69,483

Source: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs.

Table 12 provides comparable results for locations with two or more competitors in each speed tier. As the analysis demonstrates, the income differentials are even greater in census blocks where at least two competitors offer service than where only one competitor is present.

Table 12

COMPETITORS APPEAR TO BE SERVING CENSUS BLOCKS WITH DISPROPORTIONATELY GREATER MEDIAN HOUSEHOLD INCOMES – LOCATIONS WITH AT LEAST TWO COMPETITORS

CBs with two or more competitors vs. those served by Joint Applicants and one or no competitors

SPEED	Households passed by Jt Applicants AND by Two or More Competitors			Households passed Only by Jt Applicants			Income Differential
	Number	Percent	Median Income	Number	Percent	Median Income	
1 ≤200 kbps	1,512,400	14.26%	$74,239	9,091,929	85.74%	$68,691	$5,548
2 >200 kbps and <768 kbps	1,512,400	14.26%	$74,239	9,091,929	85.74%	$68,691	$5,548
3 ≥768 kbps and <1.5 Mbps	1,512,400	14.26%	$74,239	9,091,929	85.74%	$68,691	$5,548
4 ≥1.5 Mbps and <3 Mbps	1,487,884	14.03%	$74,602	9,116,445	85.97%	$68,647	$5,955
5 ≥3 Mbps and <6 Mbps	1,358,894	12.81%	$74,309	9,245,435	87.19%	$68,773	$5,535
6 ≥6 Mbps and <10 Mbps	1,324,113	12.49%	$73,935	9,280,216	87.51%	$68,847	$5,087
7 ≥10 Mbps and <25 Mbps	1,300,984	12.27%	$73,686	9,303,346	87.73%	$68,895	$4,792
8 ≥25 Mbps and <50 Mbps	88,132	0.83%	$77,304	10,516,197	99.17%	$69,417	$7,887
9 ≥50 Mbps and <100 Mbps	12,680	0.12%	$79,396	10,591,649	99.88%	$69,471	$9,925
10 ≥100 Mbps and <1 gbps	8,201	0.08%	$69,714	10,596,128	99.92%	$69,482	$231
11 ≥1 gbps	421	0.00%	$59,517	10,603,908	100.00%	$69,483	($9,966)
TOTAL HOUSEHOLDS							10,604,329
WEIGHTED AVERAGE MEDIAN HOUSEHOLD INCOME							$69,483

Source: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs.

I do not offer an opinion as to whether the service deployment strategies of the other California broadband providers suggest an affirmative redlining policy or some other prioritization of their respective investments in broadband. However, the operative effect of whatever policy or policies have produced this outcome is that the least affluent communities appear to also be

those least likely to confront any competitive alternative to the broadband services being offered to them by any of the Joint Applicants here.

62. AT&T and Verizon are the two largest providers of broadband services that compete with those offered by one or more of the Joint Applicant. Both ILECs offer some form of broadband – including relatively low-speed DSL – throughout their respective operating areas. However, the availability of higher-speed offerings is far more limited, as shown in Table 13.

Table 13

CENSUS BLOCKS SERVED BY AT&T AND VERIZON WITHIN JOINT APPLICANTS' SERVICE AREAS AT VARIOUS SPEED TIERS

AT&T			Verizon		
SPEED	CBs	Households	SPEED	CBs	Households
<1.5 Mbps	214,918	7,654,353	<3 Mbps	75,540	2,440,202
1.5 - 3 Mbps	208,049	7,515,499			
3 - 6 Mbps	187,153	6,810,865	3 - 6 Mbps	70,024	2,301,814
6 - 10 Mbps	175,012	6,555,796	6 - 10 Mbps	59,394	2,033,160
18 Mbps	170,000	6,508,281	>15 Mbps	42,254	1,487,165
45 Mbps	19,850	391,619			

Source: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs; speed tiers as defined on AT&T and Verizon websites..

63. By contrast, both Comcast and TWC have upgraded the entire network, and are able to offer services in excess of 50 Mbps throughout virtually all of their California footprints, as shown in Table 14 below.

Table 14

CENSUS BLOCKS AND HOUSEHOLDS PASSED BY COMCAST AND TWC AT VARIOUS SPEED TIERS

	Comcast		TWC	
SPEED	CBs	Households	CBs	Households
<25 Mbps	134,133	4,255,540	151,896	4,789,432
25 - 100 Mbps	131,416	4,180,910	151,032	4,777,480
100 Mbps - 1 Gbps	131,416	4,180,910	19	687

Source: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs.

We do not know what effect, if any, the proposed merger will have upon further broadband deployment by the incumbent LECs or by other actual or potential providers of last mile wireline broadband access. If, as the Joint Applicants claim, the merger will make the post-merger Comcast entity an even stronger competitor in the broadband space, that could well have a chilling effect upon further broadband investment by any rival, ILEC or otherwise. As noted previously, Verizon has made no consequential investment in *FiOS* expansion since 2010, and AT&T's *U-verse* expansion is slow at best, as cities vie for possible gig-level service. In that event, any expansion beyond the existing competitive availability of the highest speed broadband services could be locked out for some time to come.

TWC, Charter and Bright House currently serve areas with significantly lower average household income than those being served by Comcast, and have significantly lower broadband subscriber penetration rates.

64. There appear to be substantial differences in the median household incomes across the four merger partners, with the areas currently being served by Comcast being the most affluent. Notably, and as shown in Table 15 below, there appears to be a relationship between median household income and the percentage of homes passed by each provider that subscribe to broadband access:

[**BEGIN HIGHLY CONFIDENTIAL**]

Table 15

POPULATION, MEDIAN HOUSEHOLD INCOME AND SUBSCRIBER PENETRATION OF AREAS SERVED BY JOINT APPLICANTS

	DR Resp.	Broadband Availability Database				Response to ORA DRs	
Provider	Broadband Subscribers	Census Blocks Served	Households in Census Blocks Served	Median Household Income	Penetration Rate	Homes Passed by Joint Applicants	Penetration Rate
Comcast		134,133	4,255,540	$75,012			
TWC		151,896	4,789,432	$66,942			
Charter		62,244	1,409,858	$64,087			
Bright House		7,948	207,165	$53,923			
All		354,729	10,604,329	$69,483			

Sources: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs. Comcast, TWC, Charter, Bright House HIGHLY CONFIDENTIAL responses to ORA Data Requests, Set 1, Nos. 3 and 4.

[**END HIGHLY CONFIDENTIAL**]

65. While the apparent relationship between household income and demand for broadband access does not confirm *causality*, the relationship also appears to hold with respect to the

entirety of the Joint Applicants' combined operating areas. Table 16 below provides rank Coefficients of Correlation ρ calculated across all Census Block Groups in the combined operating areas of Comcast, TWC and Charter[102] as well as in each of these three providers' individual operating areas. "Rank correlation" is a measure of the ordinal relationship between rankings of different variables or different rankings of the same variable, where a "ranking" represents the assignment of ordinal labels, i.e., "first", "second", "third", etc. to the individual observations of each of the two variable, i.e., Median Household Income and Broadband Penetration Rate in this instance. The use of such rankings, rather than the absolute values of the individual observatons, overcomes any nonlinearity or other anomalies in the underlying data while still permitting the relationship between the two variables to be examined. The correlation coefficient takes on values between 0 and 1, with values closer to 1 indicating a higher correlation between the two variables. The results here are well within the range that would be expected for highly correlated cross-sectional data of this sort.

102. Data for Bright House that would be required for this calculation was requested in ORA Data Request Set 1, Nos. 3 and 4 but was not provided by Bright House.

[**BEGIN HIGHLY CONFIDENTIAL**]

Table 16

CORRELATION BETWEEN MEDIAN HOUSEHOLD INCOME AND SUBSCRIBER PENETRATION OF AREAS SERVED BY JOINT APPLICANTS

	Data from Responses to ORA DRs [HIGHLY CONFIDENTIAL]			CBA Data		
Provider	Broadband Subscribers	Census Block Groups Served	Households in Census Block Groups Served	Median Household Income	Penetration Rate	Rank Correlation
Comcast						
TWC						
Charter						
All Three						

Sources: California Broadband Availability Database, Round 10 data (as of June 30, 2014) as submitted by ISPs.; Comcast, TWC, Charter, Bright House HIGHLY CONFIDENTIAL Responses to ORA Data Requests, Set 1, Nos. 3 and 4.

[**END HIGHLY CONFIDENTIAL**]

Modeling the Broadband Penetration Rate / Household Income relationship

66. Tables 11 and 12 above demonstrate that the median household income of census blocks that are served only by the Joint Applicants is consistently lower than the median household income of census blocks that have access to competitive alternatives. As discussed, these findings indicate that competitors of the Joint Applicants tend to be serving relatively more affluent customers. Economic theory suggests that consumers with higher levels of income will also tend to have higher levels of consumption and therefore are more likely to engage in what many consider to be discretionary purchases -- such as broadband Internet access. In order to test if the positive relationship between consumption and income applies for the consumption of broadband provided by the Joint Applicants in California, I developed a multivariable linear

regression model capable of quantifying this relationship. In response to ORA data requests,[103] three of the four Joint Applicants -- Comcast, Charter, and Time Warner -- provided information on the number of homes passed and the number of subscribers in each census block served. This data allows for a calculation of penetration rates for each census block group (CBG) served by each of the three responding Joint Applicants.[104] If the relationship between median household income and the penetration rate is indeed positive as economic theory would suggest and, additionally, if consumption of broadband provided by the Joint Applicants is curtailed in areas where competitive providers are present, then holding income constant, it would appear that Joint Applicants' market penetration is lower in the presence of competition offering comparable or higher speeds than where they operate as a monopoly provider. Conversely, if there are situations in which, despite the presence of some level of competition, for example, offering an inferior, slower speed service than the Joint Applicants such that their own market penetration is minimally impacted or not impacted at all, one can conclude that an expansive definition as to what constitutes "competition," as suggested by the Joint Applicants, is not valid.

67. Attachment 2 provides details of the model and its statistical results. The regression analysis confirms that the quality of any competitive broadband services in any given area actually matters a great deal. One would expect that the presence of competitors offering speeds equal to or greater than 25 Mbps is likely to reduce Joint Applicant penetration rates

103. Comcast, TWC and Charter Highly Confidential Responses to ORA Data Requests, Set 1, Nos. 3 and 4.

104. Median Household Income is reported by the Census Bureau on a Census Block Group basis. For the regression analysis, homes passed and subscriber counts, from the Joint Applicants' responses to the ORA Data Requests, for each individual Census Block within a CBG are aggregated.

significantly more than the presence of competitors offering speeds less than 25 mbps. Furthermore, in CBGs where the Joint Applicant's speed is greater than the competition, its penetration rates will be higher than penetration rates in CBGs where the Joint Applicant's speed is less than the competition. The results support and are consistent with both of these hypotheses.

68. Finally, the household income / broadband penetration relationship, together with the propensity of competitors to selectively serve relatively more affluent areas as identified here, raises important policy concerns that should not be lightly dismissed. High-speed broadband access in the 21st century is rapidly taking on the same level of societal importance as voice telephone service did in the latter half of the 20th century. The FCC, through its National Broadband Plan and related initiatives, is addressing these "digital divide" concerns. Actions that would authorize combinations of service providers that result in increased market concentration and vertical integration, enhancing the ability of the remaining dominant providers to extract economic rents at both the end user and content provider sides of the broadband access market, are at odds with Congressional objectives, as set out at Section 706, of assuring universal access to advanced telecommunications capabilities for all Americans.

The nominal presence of more than one broadband access provider in a given geographic area is unlikely to materially constrain the market power of a post-merger Comcast/TWC entity.

69. As the California Broadband Availability Data confirms, for any of the broadband speeds that California customers are actually using, there are *at the very most* only two providers

within the Joint Applicants' combined operating areas – one of the Joint Applicants and one other provider, most typically an ILEC. Thus, depending on speed tier, the fixed broadband market in California is either a monopoly or, at most, a duopoly. Markets characterized by two firms are far more likely to engage in tacit market allocation rather than attempt to capture market share by underpricing the rival's offerings. The history of Commercial Mobile Radio Service ("CMRS") since it was first introduced in the mid-1980s demonstrates how the *number of firms* materially affects the nature of competitive activity in the market. For more than a decade after the FCC first began licensing CMRS cellular carriers in the early to mid 1980s, only two licenses were issued in each market area ("Cellular Geographic Service Area" or "CGSA"), and the two licensees were each allocated equal amounts of electromagnetic spectrum in the 800 MHz band.[105] In the mid-1990s and following Congressional approval in 1993,[106] the FCC began allocating additional spectrum to cellular, and started granting CMRS spectrum licenses through competitive auctions, a process that both opened the market to new entrants and also created competitors of unequal size. Competition in this sector increased, and prices fell. By the early 2000s, there were six cellular carriers with broad national footprints, and a number of smaller regional players as well. Prices continued to fall, but then began to level off after several mergers reduced the number of nationally-based providers to four. In 2011, AT&T and

105. *In the Matter of An Inquiry Into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the C ommission's Rules Relative to Cellular Communications Systems*, CC Docket No. 79-318, 89 F.C.C.2d 58, released March 3, 1982 ("*Cellular Reconsideration Order*"); *In the Matter of Amendment of the Commission's Rules for Rural Cellular Service*, CC Docket No. 85-388 RM 5167, released July 18, 1986 ("*Rural Cellular Order*").

106. *Omnibus Budget Reconciliation Act of 1993*, P. L. 103-66 ("*OBRA 1993"*), Title VI.

T-Mobile, announced plans to merge,[107] a move that would have reduced the number of national wireless carriers to just three. Strong opposition emerged, and in November 2011, the FCC staff issued a lengthy report recommending to the Commission that the merger not be allowed to go forward.[108] In the face of that report and mounting opposition, the two companies immediately announced that they were abandoning their merger and would go their separate ways.[109] T-Mobile, now the smallest of the "big four," then embarked upon an aggressive marketing and price-cutting effort to capture market share, and assumed the role of a "disruptive competitor," introducing several new and innovative pricing plans that the larger providers (AT&T, Verizon and Sprint) were ultimately compelled to mimic. In December 2013, Sprint began efforts to acquire rival T-Mobile,[110] a move that once again would have reduced the number of nationally-based providers to just three. Faced with similar regulatory pushback as had arisen with the AT&T/T-Mobile merger, Sprint and T-Mobile were ultimately forced to abandon their effort. In a very brief statement issued August 6, 2014, FCC Chairman Tom Wheeler said that "Four national wireless providers are good for American consumers. Sprint now has an opportunity to

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107. "AT&T to Acquire T-Mobile USA from Deutsche Telekom," AT&T, Inc. News Release, March 20, 2011. Available online at http://www.att.com/gen/press-room?pid=19358 (last accessed November 6, 2014).

108. In the Matter of Applications of AT&T Inc and Deutsche Telekom AG For Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65, DA 11-1955, 26 FCC Rcd 16184, released November 29, 2011.

109. "AT&T and Deutsche Telekom Continue to Pursue Sale of DT's U.S. Wireless Assets," AT&T Inc. News Release, November 24, 2011. Available online at http://www.att.com/gen/press-room?pid=22077 (last accessed November 6, 2014.)

110. "Sprint Working on a Bid for T-Mobile," The Wall Street Journal, December 13, 2013. Available online at http://online.wsj.com/articles/SB10001424052702303293604579256561000513396 (last accessed November 6, 2014 [subscription may be required]).

focus their efforts on robust competition."[111] The FCC has twice rejected proposals that would have reduced the number of national wireless carriers from four to three specifically due to concerns about a diminution of competition and the potential for increased prices.

70. The Cellular Telecommunications and Internet Association ("CTIA"), the principal wireless industry trade group, maintains data on industry-wide service volumes and revenues, Using data derived from the CTIA's *Wireless Industry Survey*[112] and the FCC's annual *Cable Report*,[113] Figure 9 compares historic price level changes in the monopoly/duopoly cable market (which includes both MPVD and broadband Internet access services) vs. the multi-firm CMRS market. The differences are striking: Prices for wireless voice, SMS and data services have been steadily decreasing. Meanwhile, prices for basic cable service have been rising steadily.

111. Statement from FCC Chairman Tom Wheeler on Competition in the Mobile Marketplace, August 6, 2014, available at http://www.fcc.gov/document/chairman-wheeler-statement-competition-mobile-marketplace

112. http://www.ctia.org/docs/default-source/Facts-Stats/ctia_survey_ye_2013_graphics-final.pdf (accessed 12/3/14).

113. *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992*, MM Docket No. 92-266, *Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, Report on Cable Industry Prices*, May 16, 2014 ("*FCC Cable Report*"), at Table 3. Between 2009 and 2013, Basic Cable rates increased 28.2%, and Expanded Basic rates rose 23% over the same period. The CPI for the US economy overall rose only 9.1% between 2009 and 2013.

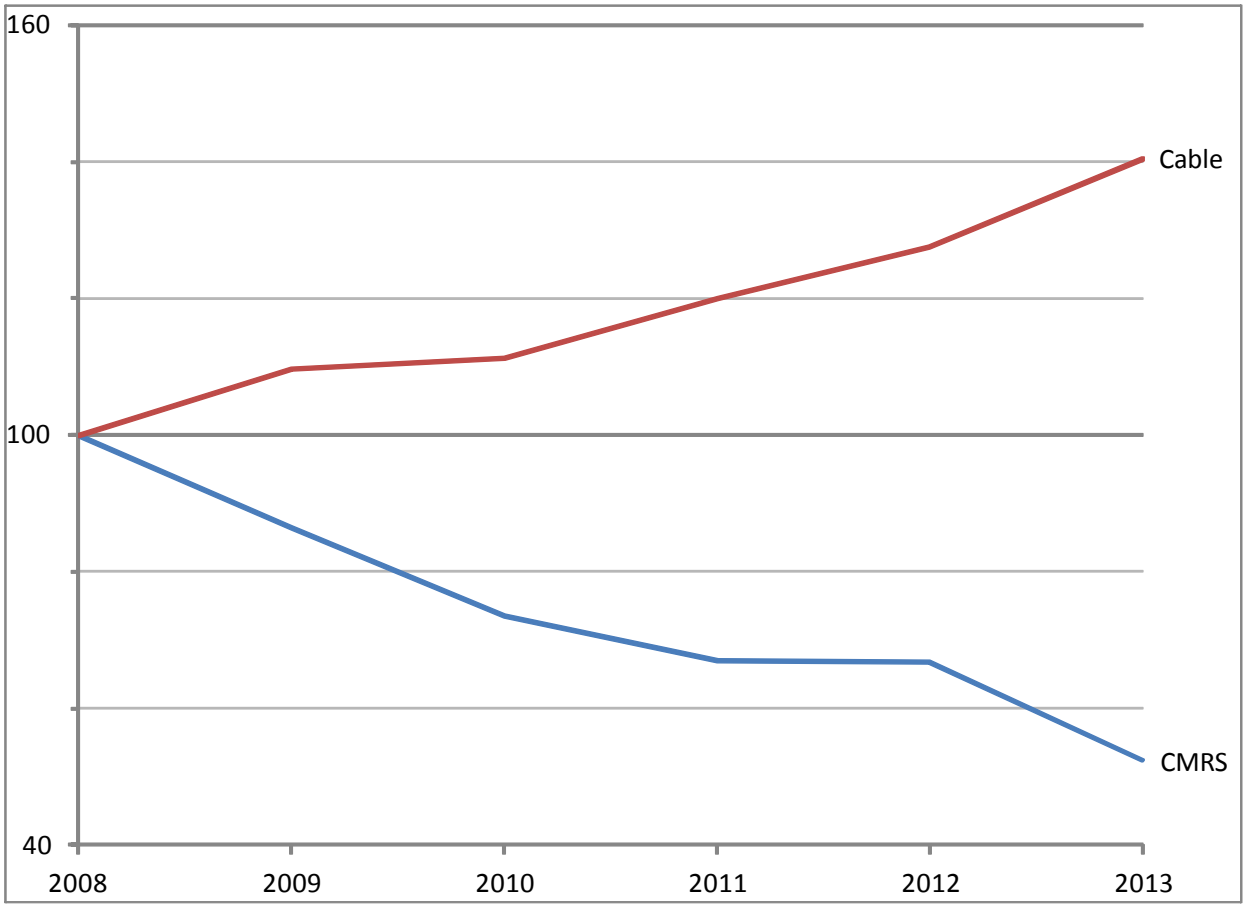

Figure 9. Prices for wireless voice and data services have been steadily decreasing, while Basic Cable prices have steadily risen. Index (2008=100) of Basic Cable average service price and Average Revenue per Mixed Unit for CMRS. Sources: FCC Cable Report; CTIA Semi-Annual Wireless Industry Survey, year end 2013.

71. Even where "choice" is nominally available (i.e., where there are two providers), the extent to which the availability of a competitor's service would operate to constrain the Joint Applicants' market power must be examined at two separate levels – (1) as it affects potential customers who have no broadband service and are in the process of selecting a service provider where there is more than one offering service in their area; and (2) as it affects customers who

are currently buying broadband service from one of the Joint Applicants. Even where competition is present, the nature of broadband access service is itself not particularly conducive to competitive choice *even where two broadband providers offer service in a given geographic area*. As FCC Chairman Tom Wheeler observed:

> But even two "competitors" overstates the case. Counting the number of choices the consumer has on the day before their Internet service is installed does not measure their competitive alternatives the day after. Once consumers choose a broadband provider, they face high switching costs that include early-termination fees, and equipment rental fees. And, if those disincentives to competition weren't enough, the media is full of stories of consumers' struggles to get ISPs to allow them to drop service.[114]

The "high switching cost" to which Chairman Wheeler refers has the effect of locking customers in to their existing service provider. But high switching cost is hardly the only factor that operates to effectively lock-in customers to their existing provider and limit their ability to switch to an alternative firm.

The presence of high "switching costs" limits competitive entry and protects the Joint Applicants' market power

72. When competition was first introduced into the "long distance" telephone service market in the mid-1980s following the 1984 break-up of the former Bell System, ILEC central offices were modified to provide competing long distance carriers with "equal access" to the ILECs'

114. Wheeler, September 4, 2014, fn. 75 supra, at 4.

customers.[115] Once the customer's serving central office was modified in this manner, all that was physically required to switch a customer from one long distance carrier to another was a software entry in a data table maintained in the computer than controlled the electronic central office switch. ILECs typically applied a small charge, usually in the range of $5, to accomplish this rerouting of its customer's calls to the selected long distance carrier; and the long distance carrier usually absorbed this cost as part of its customer acquisition outlays. Thus, from the standpoint of an individual consumer, the cost of switching from one long distance carrier to another was at or near zero. The changeover could be accomplished within a matter of days, and had no effect upon the manner in which customers used their phones to place long distance calls. Similarly, when "wireless local number portability" ("WLNP") became available in 2003,[116] customers could then retain their wireless phone number when switching from one wireless carrier to another. The transfer also involved a few software entries in various data tables, and in some cases could be accomplished within a few minutes following the completion of the handset purchase transaction at a retail store. Low or no switching costs facilitates customer choice and enables customers to respond quickly to attempts by his or her existing service provider to increase prices or modify service terms in ways that the customer considers to be unacceptable. As a result, the ability of customers to switch operates to constrain even the customer's current provider from raising prices or pursuing other measures that might induce a customer to go

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115. These modifications and "equal access" were explicit requirements set out in the so-called *Modification of Final Judgment*, the Department of Justice Consent Decree that settled the DoJ's 1974 antitrust action against AT&T Corp. and that resulted in the break-up of AT&T in 1984. *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 139 (D.D.C. 1982), *Modification of Final Judgment*, at 224.

116. *Telephone Number Portability*, CC Docket No. 95-116, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, FCC 03-284, 18 FCC Rcd 23697, rel. November 10, 2003.

somewhere else for service. Because the presence of high switching costs can operate to prevent customer defections and in so doing reduce customer churn, providers will sometimes attempt to create switching costs through contractual terms and conditions even where there is no specific physical impediment to switching. For example, customers might be required to enter into a term service agreement with an early termination penalty, thereby creating a barrier to switching (the termination penalty). Notably, a provider's ability to impose these kinds of contrived switching costs is itself evidence of market power – i.e., presenting even a prospective customer with a "take-it-or-leave-it" offer that includes an early termination penalty can only be accomplished in a market with limited or no effective competition. A provider's interest in mainlining switching costs at any particular level is thus highly dependent upon whether the provider is more concerned about losing customers than about gaining them. Thus, established incumbent providers with large market shares are far more likely to adopt measures aimed at increasing their customers' switching costs, whereas smaller providers and entrants, anxious to capture customers from a larger rival, may adopt practices such as offering to pay early termination penalties for customers electing to migrate to their service, or promoting a "no fixed contract" offer as an inducement for customers to select them in the first place. As noted above, competition in the US wireless services market has been growing in recent years, with several smaller providers engaging in disruptive price cutting and similar tactics. One "casualty" of the expansion of competition in this market has been an erosion in the use of term contracts, to the point where even the two largest wireless carriers are being forced to back down from these policies.

73. In the case of broadband access services, there are several physical impediments to switching that operate to lock customers in to their existing service provider even in the absence of contrived switching costs, such as term contracts. First, there is the physical installation required to provide the service. If the customer does not presently have any cable service (e.g., cable TV), the cable operator will need to schedule a premises visit to install a cable drop into the customer's premises, and will probably also be required to install some inside wiring to connect the cable drop to the location in the residence where the customer's broadband router or other terminal equipment will be located. Even if the customer presently has cable TV service, the cable company will still need to provide certain equipment to separate the TV signals from the broadband access service, and may also need to provide some inside wiring as well. Some of this equipment, such as the cable modem and router, may be provided by the customer rather than being provided by and rented from the cable operator. However, it is my understanding that the vast majority of consumers do not own their own equipment. Notably, some of the equipment that will be required for cable-based broadband, such as the cable modem, is not compatible with certain competitive broadband services, such as DSL and FTTH (e.g., *FiOS*). If an existing cable broadband customer would like to switch to, for example, Verizon's *FiOS* service, Verizon will typically have to send a technician to the customer's premises to install a fiber optic drop (if one is not already in place), provide and install the terminating optronic and digital electronic equipment and, in some cases, to provide inside wiring. A migration from FTTH to cable broadband will confront similar incompatibilities and installation requirements. In addition to the physical installation issues, service providers may still impose up-front "service connection charges" and/or require term contracts with early termination fees.

74. Faced with these types of transactional "stickiness" that tend to lock customers in to their existing service provider, broadband providers will frequently offer various promotions and other inducements aimed at attracting new customers who do not currently have any broadband service or, for those that do, to help offset switching costs that might otherwise apply. And even though some customers might well choose to discontinue service at the end of the "promotional pricing" period, the vast majority will tend to retain the service indefinitely in spite of the sometimes large price increase that occurs when the promotional period comes to its end.

75. The Joint Applicants' claims that they face strong competition for the provision of broadband services is also belied by their pricing practices. If competition was capable of constraining prices in the relevant market, one would expect prices to have been relatively stable or even to have decreased as they have in almost every other technology sector. However, both Comcast and TWC have implemented a succession of price increases for their broadband services over the 2009-2014 period. These have occurred, although in varying amounts, across the bandwidth tiers and markets served by Comcast and TWC. Tables 17 and 18 below summarizes Comcast's and TWC's California prices for their standard service offering, which Comcast brands as "Performance Internet" and TWC calls "Standard Internet" service, over the 2009-2014 period.

[**BEGIN CONFIDENTIAL**]

Table 17

COMCAST
"PERFORMANCE INTERNET" SERVICE PRICES
2009-2014

Year	Speed down/up	Monthly rate
2009	6 Mbps / 1 Mbps	$
2010	12 Mbps / 2 Mbps	$
2011	12 Mbps / 2 Mbps	$
2012	15 Mbps / 2 Mbps	$
2013	15 Mbps / 2 Mbps	$
2014	25 Mbps / 5 Mbps	$
Pct. increase, 2009-2014		%

Source: Comcast CONFIDENTIAL Supplemental Response to ORA Data Request Set 1, No. 9.

Table 18

TIME WARNER CABLE
"STANDARD INTERNET" SERVICE PRICES
2009-2014

Year	Speed down/up	Los Angeles	San Diego	Desert Cities	El Centro
2009	6 Mbps / 1 Mbps	$	$	$	$
2010	10 Mbps / 1 Mbps	$	$	$	$
2011	10 Mbps / 1 Mbps	$	$	$	$
2012	10 Mbps / 1 Mbps	$	$	$	$
2013	15 Mbps / 1 Mbps	$	$	$	$
2014	15 Mbps / 1 Mbps	$	$	$	$
Pct. increase, 2009-2014		%	%	%	%

Source: TWC CONFIDENTIAL Response to ORA Data Request Set 1, Nos. 8, 9, Exhibit 3 CONFIDENTIAL

[**END CONFIDENTIAL**]

To be sure, the maximum download speed associated with both Comcast's "Performance Internet" and with TWC's "Standard Internet" offerings increased substantially over this period, similar capacity/capability improvements were common across all technology industries, most of which were accompanied by price *decreases*, not price increases. Table 19, for example, illustrates typical price and capacity changes in recent years for internal hard disk drives, whose prices have fallen and whose capacities have mushroomed.

Table 19

HARD DISK DRIVE PRICE MOVEMENTS 2004-2014

Date	Typical Commonly Available Maximum Hard Disk Drive Storage Capacity	Typical Price
July 2004	200 GB	$135.88
June 2005	200 GB	$ 99.99
September 2006	320 GB	$ 69.99
July 2007	400 GB	$ 84.99
August 2008	640 GB	$ 84.99
July 2009	1.5 TB	$129.99
July 2010	2 TB	$109.99
May 2011	2 TB	$ 79.99
August 2012	3 TB	$159.27
May 2013	3 TB	$129.99
June 2014	3 TB	$104.99

Source: Disk Drive Prices (1955-2014) http://www.jcmit.com/diskprice.htm (Last accessed December 2, 2014.)

The Joint Applicants are currently exploiting their market power in broadband both to recover competitive losses as well as to inhibit competition in those segments of their business where they do confront actual competition – MVPD cable television – and their ability to effectively pursue such tactics will be enhanced by the proposed merger.

76. The Joint Applicants do face competition for their multichannel video program distribution ("MVPD") cable television services. Customers now have several alternate sources of video entertainment, even including live sports. In addition to cable TV, most of the same video content can be obtained via direct broadcast satellite services, such as those offered by of video entertainment, even including live sports. In addition to cable TV, most of the same video content can be obtained via direct broadcast satellite services, such as those offered by DirecTV and Dish Network. Over-the-air ("OTA") broadcast TV is also an option. OTA does not, however, offer the full suite of content that is available via cable, satellite, or some telco-provided broadband facilities (e.g., Verizon's *FiOS*). A recent study by Experian Marketing finds that "[a]n estimated 6.5% of U.S. households (7.6 million homes) today are considered "cord-cutters," meaning they have high speed Internet but no cable or satellite television service."[117] Experian defines a "cord cutter" as "a household [that] had a cable or satellite TV subscription that was cancelled."[118] Moreover, the study found that for younger households (ages 18-34) and for those with Netflix or Hulu accounts, the percentages of cord-cutters was

117. Experian Marketing Services, "Cross-device video analysis: Engaging consumers in a multi-screen world" (2013), at 6. http://www.experian.com/assets/marketing-services/brochures/cross-device-video-analysis-2014.pdf (last accessed 12/3/14).

118. *Id.*

3considerably greater, at 12.4% and 18.1%,, respectively.[119] In recent years, a great deal of programming – including many network TV as well as cable channel programming – is being made available for streaming over the Internet. All of the major TV networks have websites offering current and recent episodes of prime time programming, with availability usually delayed by one or two days following the initial broadcast of the current week's episode, and in most cases free of charge to the viewer.[120] Some of this content is also available via Internet set-top devices such as AppleTV and Roku, sometimes free, sometimes at a per-use or a monthly subscription charge. And while most live sports broadcasts have been confined largely to cable and satellite, in early October, the National Basketball Association (NBA) announced a deal with ESPN and TWC whereby NBA games would be available for streaming over the Internet on a pay-per-view basis.[121] For about $25/month, Major League Baseball offers "mlb.tv" providing live streaming of all baseball games via mobile or set-top devices (such as Roku) subject to blackouts in each Club's home local market area.[122]

119. *Id.*

120. See, e.g., www.abc.com; www.cbs.com; www.nbc.com

121. "NBA Reaches Long-Term Rights Deals With Disney, Time Warner," *The Wall Street Journal*, October 5, 2014, available at http://online.wsj.com/articles/nba-reaches-long-term-rights-deals-with-disney-time-warner-1412557587 (accessed 11/18/14 [subscription may be required]).

122. See, http://mlb.mlb.com/mlb/subscriptions/index_streaming.jsp?c_id=mlb&affiliateId=mlbMENU

Although the Joint Applicants' cable television (MVPD) services do confront several competitive alternatives, they still have experienced substantial price increases.

77. Despite the presence of competition for cable TV and the growing number of "cord-cutters" who turn instead to OTA and Internet-based content, monthly rates for cable TV have been steadily rising over an extended period of time.[123] It is claimed that these price hikes have been driven, to a very large extent, by increases in broadcast station retransmission consent fees and other content license fees that apply also to some of the competing distribution media, such as satellite and streaming video.[124] Both Comcast and TWC report total subscription revenues for residential video and broadband internet service, as well as the number of subscribers to each of these services during the year. Total revenues, divided by annual subscriber counts, divided by twelve results in monthly average revenue per unit ("ARPU"). Notably, each of the Joint Applicants have also been experiencing growth in ARPU for their video services; however, when the gross ARPU for video serivces is offset by the costs associated with retransmission and other content license fees, the *net ARPU* has actually been decreasing in recent years. Meanwhile, the Joint Applicants' are seeing a succession of *increases* in ARPU for their broadband Internet access services over the same time period. See Table 20 below. Changes in ARPU are not necessarily indicative of price movements, since ARPU is affected both by price and by the specific mix of services and features to which customers subscribe. However, the

123. *FCC Cable Report*, at Table 3. Between 2009 and 2013, Basic Cable rates increased 28.2%, and Expanded Basic rates rose 23% over the same period. The CPI for the US economy overall rose only 9.1% from 2009 to 2013.

124. "Cable TV Model Not Just Unpopular But Unsustainable," *Forbes*, October 14, 2013, available at http://www.forbes.com/sites/amadoudiallo/2013/10/14/cable-tv-price-hikes-unsustainable/ (accessed 11/18/14).

fact that net ARPU for video has been decreasing while ARPU for broadband has been on the rise is certainly consistent with the competitive conditions confronting each of these sectors.

Table 20

COMCAST AND TIME WARNER CABLE
AVERAGE REVENUE PER UNIT – VIDEO AND INTERNET
2009-2014

	2009	2010	2011	2012	2013
Comcast					
Video ARPU	$ 68.19	$ 70.80	$ 76.63	$ 75.59	$ 74.78
Content exp per unit	$ 27.84	$ 30.66	$ 29.30	$ 31.77	$ 34.99
Net Video ARPU	**$ 40.35**	**$ 40.14**	**$ 47.33**	**$ 43.82**	**$ 39.79**
Internet ARPU	**$ 38.09**	**$ 39.04**	**$ 40.16**	**$ 41.07**	**$ 41.68**
Time Warner Cable					
Video ARPU	$ 68.96	$ 71.91	$ 74.22	$ 75.62	$ 78.00
Content exp per unit	$ 26.24	$ 28.64	$ 30.43	$ 32.01	$ 35.59
Net Video ARPU	**$ 42.72**	**$ 43.27**	**$ 43.79**	**$ 43.61**	**$ 42.41**
Internet ARPU	**$ 36.39**	**$ 36.27**	**$ 37.47**	**$ 38.79**	**$ 43.75**

Source: Comcast 10-K Annual Reports, 2009-2013 (revenue figures are residential only, subscriber counts include small business customers); TWC 10-K Annual Reports, 2009-2013 (revenue and subscriber counts are residential only).

78. The steady pace of rate increases for cable TV parallels that for broadband access. In recent years, the increased availability of online video streaming over the Internet offered by Online Video Distributors ("OVDs") such as Netflix, Amazon Prime, Hulu and others has posed an increasingly important challenge to traditional broadcast television and cable TV operators. All of the major TV networks maintain websites that offer users the ability to stream current and recent episodes of most network TV programs, usually at no charge, although typically delayed at least one day following the show's original broadcast. Services like *Hulu Plus* support

1 streaming of both current and classic TV programs via set-top boxes such as Roku, Apple TV,
2 and Sony's X-Box, as well as over mobile devices or various sorts, for a small monthly fee
3 (usually under $10). Netflix, Amazon, and Apple's iTunes Store offer online streaming of
4 movies, network TV shows, and "cable" programming (e.g., *Homeland*, *Breaking Bad*, *Mad*
5 *Men*, *Game of Thrones*) on a pay-per-view basis, priced either by-the-episode (usually around
6 $3) or for the entire season of a particular series. Such programming may not be available on the
7 date at which the initial cable broadcast occurs, but are often available for PPV purchase shortly
8 thereafter, sometimes as soon as the following day. A more recent phenomenon is the
9 appearance of programming produced by or for the OVD itself. Netflix has offered several such
10 series – *House of Cards*, *Orange is the New Black*, and *Lilyhammer*; Amazon has produced
11 *Alpha House*, *Transparent*, and *Betas*. These programs are not even available on traditional
12 cable TV until long after their initial appearance on the OVDs, if at all. And HBO, long a
13 holdout regarding its availability via streaming media, has just announced that it will offer its
14 service over broadband connections beginning in 2015.[125] Nationally, there are some 10-million
15 broadband customers who do not also subscribe to any cable TV (MVPD) service,[126] even more
16 than the 7.6-million "cord cutters" identified in the Experian study as those who previously had
17 subscribed to an MVPD service but who no longer do so. By not offering its content via
18 streaming, HBO has been essentially conceding that large segment to rivals such as Netflix and
19 Hulu. Offering HBO to these "cord-cutters" via streaming opens up these 10-million potential

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125. "HBO to Launch Stand-Alone Streaming Service, Time Warner Aims at 'Cord Cutters' Who Don't Subscribe to Pay TV ", *The Wall Street Journal*, October 15, 2014. Available at http://online.wsj.com/articles/hbo-to-launch-standalone-streaming-service-1413385733 (accessed 11/18/14 [subscription may be required]).

126. *Id.*

1 customers to HBO; at the same time, the availability of HBO via broadband may well accelerate
2 the pace of cord-cutting. And one day following HBO's announcement, CBS launched its own
3 streaming service, providing fee-based and commercial-free access to both prime-time CBS
4 programming as well as to past seasons of current and classic TV shows.[127]
5
6 79. OVDs offer the added benefit of *à la carte* pricing. Although cable TV services offer
7 various Video on Demand ("VOD") programming on a pay-per-view basis, for the most part
8 customers are required to subscribe to a "service tier" or "bundle" that includes multiple
9 premium channels many of which the consumer may not want, all priced on a monthly
10 subscription basis.
11
12 80. In 2013, a streaming service called Aereo was introduced, posing an even more direct
13 challenge to traditional cable TV. Aereo enabled its users to stream most TV programs
14 concurrently with their appearance over local broadcast TV stations, and also provided its users
15 with a cloud-based digital video recorder (DVR) capability. Aereo took the position that it was
16 capturing over-the-air television signals using individual antennas assigned to specific Aereo
17 customers, and was using the Internet as a transmission medium to deliver over-the-air program-
18 ming selected by its customers to them. Broadcasters took the position that Aereo was providing
19 its customers with copyrighted material without the consent of, and without compensating, the
20 copyright holder, and sought to enjoin Aereo from providing its service. Aereo argued that since
21 its customers were themselves lawfully permitted to receive over-the-air TV via their own

127. http://news.yahoo.com/cbs-launch-video-streaming-132718487--sector.html

antennas, all that Aereo was doing was providing an alternate antenna and transmitting the signal that its customers were entitled to receive directly, and thus it was not required to pay retransmission fees to local broadcasters, which cable TV services are required to pay. Aereo's position was challenged by broadcasters and TV networks and, after several lower court rulings favorable to Aereo, the US Supreme Court in June reversed,[128] putting Aereo out of business.[129] However, on September 29, 2014, *Multichannel News*, a cable TV industry trade publication, reported that "the FCC is working on an item that would define an online video provider (OVD) that delivers a linear stream of programming as an MVPD, similar to a cable or satellite operator. That means it would have access to content through the FCC's program access rules, but also have to negotiate retransmission-consent with broadcasters. The idea is that over-the-top providers would have an FCC-enforced access to vertically integrated programming."[130] If adopted, this would enable Aereo to resume operations, subject to the same "must carry" and "retransmission consent" rules as apply to cable TV operators such as the Joint Applicants here.

81. Expansion of OVD offerings provides new and potentially disruptive sources of competition and, by expanding consumer choice with respect to content, has the potential to produce

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128. *Amer. Broadcasting Cos., Inc., et al. v. Aereo, Inc., f/k/a Bamboom Labs, Inc.*, No. 13-461, decided June 25, 2014, 573 US ____ (2014), *slip op.*

129. Aereo suspended its service on June 28, 2014, three days following the Supreme Court ruling. "Aereo to Suspend Operations Following Supreme Court Ruling," *The Wall Street Journal*, June 29, 2014. Available at http://online.wsj.com/articles/aereo-to-suspend-operations-following-supreme-court-ruling-1403965940 (accessed 11/18/14 [subscription may be required]). On November 20, 2014, Aereo filed for Chapter 11 bankruptcy protection in Manhattan US District Court. *New York Times*, November 21, 2014, available at http://www.nytimes.com/2014/11/22/business/aereo-files-for-bankruptcy.html?ref=business (accessed 11/21/14).

130. "FCC Proposes Defining 'Linear' OVDs as MVPDs," *Multichannel News*, Sept. 29, 2014, available at http://www.multichannel.com/news/content/fcc-proposing-defininglinear-ovds-mvpds/384279 (accessed 10/1/14).

lower prices overall. However, in order to utilize an OVD service, the end user must purchase broadband access offering a relatively high download speed, especially if several household members are to be able to stream different programs at the same time. Actions by Joint Applicants to exploit their market power with respect to broadband access – without which end users cannot utilize OVD alternatives – or to recover competitive "cord cutter" losses in their MVPD services by increasing broadband access prices, operate to limit competitive choice and increase consumer access and content prices overall.

The Joint Applicants are able to exploit their market power in broadband to protect their MVPD cable television and content markets from competing services because those services require the use of the Joint Applicants' broadband services.

82. For many years, as the demand for and availability of, broadband Internet access services was ramping up, broadband was being provided to only a fraction of the cable MSOs' cable TV subscribers. That condition no longer holds: As shown in Table 21 below, Comcast and TWC cable TV subscribership has been decreasing, while broadband Internet access subscribers are on the rise.

Table 21

CHANGE IN CABLE TV AND INTERNET SUBSCRIBERS
2009-2013

Comcast Subscribers					
	2009	2010	2011	2012	2013
Video subscribers	23,559	22,790	22,331	21,995	21,690
Internet subscribers	15,930	16,985	18,144	19,367	20,662
TWC Subscribers					
	2009	2010	2011	2012	2013
Video subscribers	12,699	12,257	11,889	12,030	11,197
Internet subscribers	8,994	9,469	9,954	10,935	11,089

Source: Comcast 10-K Reports, 2009-2013; TWC 10-K Reports, 2009-2013

As I noted above, it has been estimated that some 10-million residential broadband subscribers do not also subscribe to cable television MVPD service. These include "cord cutters" who have discontinued their cable TV service because they are able to obtain most, if not substantially all, of the content they want over the Internet, content that had previously been provided via their cable TV service. These "Over-the-Top" ("OTT") Online Video Distribution ("OVD") services are accessed via the subscriber's broadband access service. However, since broadband access and MVPD services are typically provided by the same company (e.g., Comcast, TWC, Verizon) it would be incorrect to think of "broadband" as a "competitor" to MVPD, although it certainly offers customers an alternative means of obtaining the same end result. When an MVPD subscriber "cuts the cord" even while retaining broadband access service, the MSO loses only the video service revenue.

Although the availability of Over-the-Top Online Video Distribution ("OVD") services represents a significant competitive challenge to the Joint Applicants' core cable TV business, the Joint Applicants' near-monopoly control of the broadband Internet access market provides both the incentive and the ability for the Joint Applicants to inhibit or entirely foreclose OVD competition.

83. Although the availability of OVD content presents a direct competitive challenge to the Joint Applicants' core MVPD business, they still control the critical gateway through which their principal OVD rivals must pass. The Joint Applicants' control of that gateway makes it possible for them to limit, or even foreclose, their OVD rivals' ability to compete against the Joint Applicants' core cable TV business. And there is evidence that, in fact, they are already engaged in such practices.

84. In an ongoing dispute, Netflix has accused Comcast (and other ISPs) of deliberately throttling the download speed at which Netflix content was being delivered to Comcast end user customers,[131] to the point where it interfered with the quality of the overall customer experience with Netflix-provided content. The slowdowns appears to have arisen at the point where Netflix content was being handed-off by its CDN to Comcast. There was finger-pointing on both sides, with Netflix claiming that Comcast was deliberately creating congestion at the handoff point by limiting the capacity of the interconnection, while Comcast claimed that Netflix's CDN had not arranged for sufficient capacity at the handoff to Comcast to accommodate all of the Netflix

131. See, e.g., http://blog.netflix.com/2014/03/internet-tolls-and-case-for-strong-net.html (last accessed November 6, 2014).

traffic.[132] Similar disputes arose with respect to other broadband access providers.[133] That notwithstanding, in March of this year Netflix acceded to Comcast's demands, and agreed to pay Comcast what amounted to an "access charge" for the ability to reach Comcast end users.[134] While Comcast seeks to characterize these charges as a fee-based peering arrangement, the operative effect is to increase OVDs' costs and in so doing limit or perhaps even foreclose their ability to compete, while at the same time affording Comcast the ability to recover a portion of its "cord cutter" competitive losses to OVDs.

85. Raising its rivals' costs is not the only device available to the Joint Applicants to forestall OVD competition. Users of OVD streaming services have several options for viewing the downloaded content. They can typically access it via a web browser, such as Internet Explorer, Firefox, or Chrome on their desktop PC or Mac. They can also view this material on tablets or other mobile devices using provider-specific apps typically offered without charge by the OVD. Or they can access the content via a set-top video streaming device, such as a Roku box, an Apple TV unit, a Sony Playstation, or other such hardware. When connected to a TV set, these devices offer virtually the same viewing experience as the end user would obtain via

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132. See, e.g., http://corporate.comcast.com/comcast-voices/comcast-response-to-netflix (last accessed November 6, 2014).

133. See, e.g., http://publicpolicy.verizon.com/blog/entry/why-is-netflix-buffering-dispelling-the-congestion-myth (last accessed November 6, 2014); http://blog.level3.com/open-internet/verizons-accidental-mea-culpa/ (last accessed November 6, 2014).

134. "Netflix to Pay Comcast for Smoother Streaming," The Wall Street Journal, February 23, 2014. Available online at http://online.wsj.com/articles/SB10001424052702304834704579401071892041790 (last accessed November 6, 2014 [may require subscription]).

cable TV service connected to the same TV set. Roku claims to have sold more than 10-million of its set-top units,[135] and AppleTV sales have exceeded 20-million.[136]

86. Reinforcing its strategy for undermining OVD competition by imposing access fees, Comcast also undermines the OVD user experience by expressly *preventing* the use of certain set-top devices like Roku and Sony Playstations to stream *HBO Go* over Comcast broadband service.[137] *HBO Go* is HBO's "TV Everywhere" ("TVE") service that allows current HBO cable or satellite subscribers to stream HBO content on a desktop or mobile device, but which will become generally available to any broadband customer sometime in 2015. Even if this condition is the result of a software problem or some other mechanical issue, its occurrence underscores the enormous potential available to any broadband access provider to protect its core cable TV business.

87. The devices that Comcast is employing to frustrate OVD competition also provide a mechanism for Comcast to expressly advantage its own content production and distribution services *vis-à-vis* non-affiliated rivals. And it is in this regard that the proposed merger presents the greatest risks. With a post-merger Comcast serving more than 33% of the US MVPD

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135. https://www.roku.com/10million (accessed 11/18/14).

136. "Apple CEO Tim Cook Interview: Apple TV, Celebrity Hack and Amazon," The Wall Street Journal, September 12, 2014, available online at http://blogs.wsj.com/digits/2014/09/12/apples-cook-tackles-apple-tv-maps-celebrity-nudes-and-amazon/ (last accessed December 1, 2014 [subscription may be required]).

137. https://www.techdirt.com/articles/20140305/14254626446/comcast-still-blocking-hbo-go-roku-now-playstation-3-incapable-explaining-why.shtml

market,[138] competitive foreclosure targeted at so large a segment of the national OVD market would make it difficult, if not impossible, for rival content providers to compete even in areas not served by the post-merger Comcast entity.

Unlike their cable TV MVPD services, the Joint Applicants' high-speed broadband access service does not confront significant price-constraining competition, thereby enabling the Joint Applicants to extract economic rents at both ends of this two-sided market and in the process inhibit competition in the Online Video Distribution (OVD) market.

88. At a superficial level, the availability of these alternative sources of video entertainment might be seen as working to constrain the market power of cable TV operators such as the Joint Applicants here – that high cable TV rates might induce more customers to substitute Internet-based streaming services for premium cable TV channels like HBO and Showtime, or perhaps to discontinue their cable TV service altogether (i.e., "cut the cord") and use Internet-based content exclusively. That is already happening. However, because cable TV and broadband Internet access are being furnished by the same provider, one with substantial market power in broadband access, the pricing of these two potentially substitute services can be, and are coordinated so as to limit the extent to which such substitution is actually taking place. It is precisely because cable TV operators like Comcast and TWC provide both the core cable TV MPVD service as well as the substitute-enabling broadband Internet access service, and thus have the ability to set prices for both, that they are able either to discourage "cord cutting" away from cable or, for those cable TV customers that do migrate to Internet-based services, capture at

138. Fn. 14, *supra*..

least some of the economic rent that these same customers had been paying via their cable TV billing over to their Internet access billing. Put differently, chicken and beef might be sufficiently close substitutes that the price of one will influence the demand for the other (i.e, the two products are said to exhibit *cross-elasticity*). In such a case, and assuming that their prices are set independently of one another, the price of chicken will tend to limit increases in the price of beef, and vice versa. However, if the market for both chicken and beef is controlled by a single monopoly entity, prices for both can be raised in lock-step, thus overcoming such cross-elasticity effects, and the financial impact of competitive losses from one sector can be readily recovered through increased sales of the substitute.

As an economic matter, the Joint Applicants have the ability to extract monopoly rents at both ends of their two-sided broadband market – from end user "eyeballs" as well as from OVDs and other content providers whose access to customers is subject to the monopoly control of the Joint Applicants.

89. The Joint Applicants operate a "two-sided platform" serving both end users ("eyeballs") and content providers whose customers must traverse a gateway that is subject to the monopoly control of the Joint Applicants. The "platform" here consists of both the Joint Applicants' MVPD cable TV operations as well as their broadband Internet access services. At the "eyeball" side of the platform, end users are able to view broadcast TV and any of a number of "premium" cable channels via their MVPD service, or download content from and upload content to the Internet. On the content provider side of the Joint Applicants' platform, OVDs are provided the means for transporting and delivering their content, applications, social media, transactional services, and myriad other Internet applications and services to the Joint Applicants' end users,

and receiving content initiated by those end users. The two sides of this platform are mutually interdependent, and each derives benefit from its ability to interact with the other. Thus, end users benefit as additional source of content become available to them via the Joint Applicants' platform, and content providers benefit from their ability to reach a potentially large block of end users. This interdependence operates to stimulate demand on both sides of the market – end user demand is stimulated by the presence of multiple content choices, and content providers' demand is stimulated by the ability to access large numbers of end users. These interactions and interdependencies are known as "network externalities" because the addition of each new member (end user or content provider) operates to increase the overall value of membership in the network to other members (end users and content providers). The function of the "platform" is to facilitate the interactions among network members and, in the case of two- or multi-sided markets, to facilitate the interactions between and among network members on each of the two or multiple sides.

90. Even if one were to view the end user side of the market as geographically limited to the area being served by each of the Joint Applicants (on the theory that it would be economically infeasible for any one of them to overbuild in another provider's service area), the *content provider* side of the market is clearly *national* in scope. The cost of producing content is relatively fixed across a broad range of audience size.[139] Thus, to minimize the cost per viewer

139. Technically, as audience size increases, participants in the production of content (i.e., performers, athletes, writers, directors, etc.) will demand increased compensation, and producers may be willing to adopt larger budgets so as to attract an even larger audience. While this may make the overall *accounting* cost of producing content somewhat of a function of audience size, the effect may be thought of as a form of profit-sharing among those

(continued...)

1 and maximize potential revenue which often varies directly with overall audience size, the
2 content provider must necessarily seek out the largest possible geographic reach.
3
4 91. Although the Joint Applicants' distribution platform serves end users and content
5 providers and thus creates the opportunity for the Joint Applicants to derive revenue from both
6 sides of the market, the precise means by which each side will be charged for access is highly
7 complex and dynamic, and is dependent upon a number of interacting conditions. In some cases,
8 the platform owner may maximize its overall profits by giving free access to one side while
9 recovering all of its costs from the other. Commercial broadcast radio and television broad-
10 casters have long adopted this approach, not charging viewers and listeners to receive the
11 content, while obtaining all of their revenues from advertisers. Since advertisers are willing to
12 pay more for larger audiences, by encouraging additional viewership this "free TV" model still
13 results in revenue growth as the size of the audience grows. Google, Yahoo, Facebook, Twitter
14 and any number of other Internet content providers have adopted a similar "advertiser-
15 supported" business model, with the pricing arrangement applicable to advertisers ("pay-per-
16 click") bearing an even more direct relationship with audience size than for broadcast TV.
17 Newspapers impose charges on both readers and advertisers, although the price paid by readers
18 is only a fraction of the total cost of producing the newspaper. In all of these examples, if the
19 price charged to "eyeballs" is set too high, fewer will access the service, thereby limiting the
20 amount that advertisers will be willing to pay. Some newspapers and magazines – such as those

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139. (...continued)
involved in the production activity, in that, like the *owner* of the content, those involved in its production have a similar incentive to maximize audience reach so as to maximize the content's overall value.

targeting specialized audiences in vacation areas or in local real estate markets – are basically forced to give their publication away for free, because few consumers would be willing to pay any non-zero price for what are viewed as mainly advertising circulars or "throw-aways." "Pay-TV" services, such as HBO, Netflix and Showtime, as well as "video on demand" ("VOD") services offered on a pay-per-view basis by most cable TV operators, provide content without interruptions for commercials and that is often not available at all over traditional advertiser-supported broadcast television (e.g., recent first-run movies or made-for-cable TV series) for a fee, thus deriving 100% of their revenue from the end user. There are various hybrid arrangements as well, such as cable channels like ESPN and various Regional Sports Networks ("RSNs") that derive revenue both from end user subscription and/or per-per-view fees as well as from advertisers. The determination as to the optimum mix of end user vs. advertiser revenues will depend upon, among other things, the relative attractiveness of the provider's content and the willingness of end users to pay a fee to view it. As Netflix has explained:

> Multi-sided platforms have the ability to impose charges on both sets of economic agents that use their platforms. Economists have shown that multi-sided platforms may set prices below incremental cost, at zero, or below zero to maximize their profits; it may make sense to price one side low to provide value and earn profits from the other side. Many multi-sided platforms, in fact, do so, including shopping malls (shoppers get in for free), physical newspapers (often distributed at less than the cost of printing and distributing), and many Internet-based platforms (search platforms do not charge websites and searchers, typically). A price of zero is a common equilibrium for one side of the platform.[140]

140. David S. Evans, "Economic Analysis of the Impact of The Comcast/time Warner Cable Transaction On Internet Access to Online Video Distributors," August 25, 2014, attachment to *Netflix Petition to Deny*, August 27, 2014, at para. 39.

92. While the precise choice of business model may be aimed at optimum cost recovery, there is no specific economic reason why the owner of a platform could not extract revenues from both sides of its market that far exceed its total costs of operation, thereby producing perhaps substantial monopoly rents. It is precisely because the content market is national in scope that the ability of a platform provider such as the Joint Applicants here to extract monopoly rents from OVDs will be driven, in large part, by the aggregate numbers of "eyeballs" that lie within the platform provider's control, access to whom can either be made available, or denied, to any individual content provider. And in that regard, the extent to which a platform provider will be in a position to dictate terms to, and extract rents from, a content provider is directly related to the number of "eyeballs" connected to its network.

93. Because the availability of content on any given platform provides economic benefits to both the OVD and the platform owner, the negotiation of terms as between the two will be heavily dependent upon the relative extent of economic power each wields against the other. For example, where consumers are able to choose among several competing broadband service providers, a unilateral action by one of them to cut off any particularly popular content source (e.g., Netflix) could work to encourage that ISP's end user customers to switch to the other provider, thus limiting the ISP's market power *vis-à-vis* that of the OVD. But where there is only one broadband platform available and end users are thus unable to switch to a competitor, the platform provider may be in a position to dictate the terms of access to its customers. From the OVD's perspective, the larger the block of end users under the control of a given ISP, the greater is its dependency on that provider – even in areas where some degree of access

1 competition may be present. If the proposed merger is allowed, the post-merger Comcast entity
2 will control roughly 36% of the entire US residential broadband Internet access market [141]– and
3 an even larger percentage of those who take services at download speeds capable of supporting
4 high-definition video streaming.[142] If a content provider such as Netflix were denied access to
5 this huge block of potential customers or forced to pay high "rents" for such access, or if its
6 access to those end users was degraded to the point where the customer experience would be
7 adversely impacted, the OVD would be unable to recover its own content and other fixed costs
8 and would likely be forced out of business altogether. On the other hand, if a relatively small
9 ISP, say one with only a few hundred thousand subscribers, were to attempt to engage in the
10 same practice, it would be considerably easier for Netflix or any other OVD to withdraw from
11 serving that provider's customers rather than accede to its financial demands. Faced with that
12 prospect, the smaller ISPs are far less likely even to attempt to impose such access fees on OVDs
13 because they are far more likely to suffer backlash from their own customers than to force the
14 OVD to meet their payment demand. Put differently, while both the large and the small
15 broadband access provider possess the same *technical ability* to degrade their end users' ability
16 to access OVD content, that action when taken by a large access provider, even one of the pre-
17 merger Joint Applicants and certainly by a post-merger Comcast, would likely put the OVD out
18 of business, whereas the same attempt by a small ISP, while perhaps cutting off a small

141. See fn. 13, *supra*.

142. By one estimate (Mark Cooper, *Buyer and Bottleneck Market Power Make Comcast-Time Warner Merger "Unapprovable"*, Consumer Federation of America, April 8, 2014, at 6-7), a post-merger Comcast will control 49% of the "True Broadband" market, which "include[s] cable modem service, Verizon FIOS and ATT U-verse" but "do[es] not include telephone company DSL in the product market" because DSL cannot "deliver large amounts of high quality video to consumers." http://consumerfed.org/pdfs/CFA-Comcast-TW-Merger-Analysis.pdf (visited 11/11/14).

1 percentage of the OVD's customer base, would not result in any fatal harm to the OVD. It is
2 thus hardly surprising that the only broadband service providers that have been successful in
3 extracting rents from Netflix under the threat of severe service degradation are those with the
4 largest end user customer base – specifically, Comcast, TWC, Verizon and AT&T. Smaller
5 access providers receive Netflix traffic on a settlement-free basis using Netflix's *Open Connect*
6 content delivery network ("CDN").[143] According to Netflix, "Globally, Netflix delivers its
7 traffic without payment to 99 percent of terminating access networks. In the United States alone,
8 Netflix exchanges traffic on a settlement-free basis with [[REDACTED]] networks. ... By
9 placing popular Netflix content closer to those ISP subscribers who are seeking access to it
10 (either through embedded cache servers or by interconnecting at public Internet exchange points)
11 Netflix can help terminating access networks avoid creating unnecessary traffic 'up the chain' –
12 either over the middle-mile or at the ISP's interconnection points."[144]
13
14 94. In its 2010 *Open Internet Order*, the FCC observed that "broadband providers may have
15 incentives to increase revenues by charging edge providers, who already pay for their own
16 connections to the Internet, for access or prioritized access to end users. ... A broadband provider
17 could force edge providers to pay inefficiently high fees because that broadband provider is
18 typically an edge provider's only option for reaching a particular end user. Thus broadband

143. *Netflix Petition to Deny* (redacted public version), at 49.

144. *Id.*

providers have the ability to act as gatekeepers."[145] Comcast's ability to act as a gatekeeper between its end user subscribers and edge providers enables it to extract rents at both sides of the broadband access market. However, as a content provider itself, Comcast possesses an additional incentive to degrade rival content providers' customer experience and/or to increase their costs of accessing their own "eyeball" customers via the Comcast broadband access network. Comcast's involvement in the content business arises in two separate areas:

(1) Comcast owns NBCU, which controls, in addition to the NBC television network, a large portfolio of cable services, including MSNBC, CNBC, Telemundo, The Weather Channel, E!, USA Network, Oxygen, TVOne, and Bravo, among others. NBCU owns and operates TV stations in the three largest California markets – KNBC (Channel 4, Los Angeles); KNSD (Channel 39, San Diego); and KNTV (Channel 11, San Jose/San Francisco/Oakland). Telemundo also owns and operates three California TV stations – KNSO (Channel 51, Fresno); KVEA (Channel 52, Corona/Los Angeles); and KSTS (Channel 48, San Jose/San Francisco). NBCU also owns Universal Studios, a major producer of movies and television programming. Through its ownership of these properties, Comcast produces (and a post-merger Comcast will produce) a broad range of video content, including motion pictures, network television, and numerous cable channels that are primarily distributed either over-the-air ("OTA") or via MVPD cable

145. *Preserving the Open Internet, Report and Order*, GN Docket No. 09-191, FCC 10-201 {"*2010 Open Internet Order*"), at para. 24, footnote references omitted.

TV services, including those provided by the Joint Applicants and numerous other cable TV MSOs nationwide, and to a far lesser extent via streaming video over the Internet.

(2) As an MVPD itself, Comcast competes directly with OVDs that provide similar and in many cases identical content for streaming over the Internet. The availability of these OVD servies has made it possible for many consumers to "cut the cord" and either downgrade or discontinue altogether their MVPD service, retaining only broadband Internet access. Additionally, Comcast and the other Joint Applicants provide Video on Demand ("VOD") services offering MVPD subscribers free or pay-per-view access to a large library of movies, TV shows, and other video content, making them direct competitors to OVD services such as Netflix, Hulu, Apple iTunes, Amazon Prime, and HBO Go, among others.

The fixed channel and VOD MVPD services being provided by Comcast share the same *physical* broadband distribution infrastructure with Comcast's broadband Internet access service, but utilize entirely separate and isolated bandwidths that neither interfere nor compete for capacity with the IP-based broadband services. Degrading OVD transmissions over the Internet portion of the Comcast infrastructure has no effect upon the performance of the bandwidth that has been allocated to and reserved for MVPD use. And even if or when Comcast ultimately migrates its MVPD operations over to an IP-based platform, it will still be able to maintain the same strict isolation between MVPD and broadband access services.

95. When Comcast degrades and/or imposes rents on OVD content provider access while doing neither with respect to its own MVPD services, it is able to competitively disadvantage rival content providers either by degrading their product or by increasing the costs relative to the directly competing services offered by Comcast.

Broadband access providers are "terminating monopolies" and operate as "gatekeepers" through which all content providers must pass in order to access end user "eyeballs," enabling them to extract monopoly rents from content providers that will ultimately be flowed through to consumers.

96. The Joint Applicants' market power in the provision of broadband Internet access is derived from two key attributes of this service. First, the presence of a competing provider offering broadband access at comparable maximum download speeds is far from universal; in many communities, the Joint Applicants are the sole source of broadband access at speeds that customers are demanding now and in the near future. Second, even where consumers do confront some competitive choice at the point where they are initially selecting a broadband service provider, or might be willing to switch providers despite the need to incur switching costs, once the provider has been selected and its service has been installed at a customer's home, that provider maintains an absolute monopoly with respect to broadband communications to and from its customer's household. With the exception of wireless broadband, which presents a number of severe limitations as will be discussed in more detail below, the selected fixed broadband provider will serve as a gatekeeper with respect to all broadband communications between the customer's household and other sites on the public Internet. The term "terminating

monopoly" has been used to describe an Internet service provider's status *vis-à-vis* its end user customer. "Because all end users generally access the Internet through a single broadband provider, that provider functions as a "'terminating monopolist,'" with power to act as a "gatekeeper" with respect to edge providers that might seek to reach its end-user subscribers."[146] Any content that the customer requests via the public Internet will necessarily have to be routed via the customer's fixed broadband service provider. Whether a movie to be downloaded from Netflix, Amazon, Hulu, or any other source, other video and audio downloads, or any number of transactional requests (e.g., making a purchase from Amazon or any of the thousands of e-commerce sites, online banking, airline and hotel reservations), social media of all types, and even peer-to-peer communications (e-mail, Skype, VoIP telephone calling, and Virtual Private Network ("VPN") connections), must all pass through the provider's gateway to the end-user customers ("eyeballs"). Since many content and transactional services profit from these interactions with these consumer "eyeballs" and some even compete directly with other services that the consumers' broadband provider itself offers, the broadband provider has both the incentive and the ability to extract monopoly rent from the content/transaction ("edge") provider for the ability to communicate with those end users. The D. C. Circuit was explicit in recognizing this potential in its ruling in *Verizon v. FCC* earlier this year:

> ... nothing in the record gives us any reason to doubt the Commission's determination that broadband providers may be motivated to discriminate against and among edge providers. The Commission observed that broadband providers – often the same entities that furnish end users with telephone and television services – "have incentives to interfere with the operation of third-party Internet-

146. *Verizon v. FCC*, DC Circuit No. 11-1355 (2014), *slip. op*. at 37, citations omitted.

> based services that compete with the providers' revenue-generating telephone and/or pay-television services." As the Commission noted, Voice-over-Internet-Protocol (VoIP) services such as Vonage increasingly serve as substitutes for traditional telephone services, and broadband providers like AT&T and Time Warner have acknowledged that online video aggregators such as Netflix and Hulu compete directly with their own "core video subscription service," (see Austan Goolsbee, *Vertical Integration and the Market for Broadcast and Cable Television Programming*, Paper for the Federal Communications Commission 31–32 (Sept. 5, 2007), "provides empirical evidence that cable providers have acted in the past on anticompetitive incentives to foreclose rivals"). Broadband providers also have powerful incentives to accept fees from edge providers, either in return for excluding their competitors or for granting them prioritized access to end users. Indeed, at oral argument Verizon's counsel announced that "but for [the *Open Internet Order*] rules we would be exploring those commercial arrangements."[147]

97. Comcast has imposed such rents upon Netflix and other OVDs, threatening to throttle or otherwise degrade the transmission speed at which Netflix content is sent on to Comcast's end user customers.[148] In February 2014, Comcast and Netflix entered into a "Master IP Backbone Services Agreement."[149] [**BEGIN HIGHLY CONFIDENTIAL**] ."[150]

147. *Id.*, at 37, citations omitted.

148. "Comcast has a multiplicity of other agreements just like the one Netflix approached us to negotiate." http://corporate.comcast.com/comcast-voices/comcast-response-to-netflix (last accessed November 6, 2014).

149. *Comcast Master IP Backbone Services Agreement*, FCC GN Docket No. 14=57 Comcast Highly Confidential Response to FCC Staff Data Request, at Bates COMC-TIB-00003265-3285. ORA is uncertain as to whether the entire Agreement, with all attachments, was included in the materials disclosed by Comcast to ORA.

150. *Id.*, at COMC-TIB-00003278, emphasis supplied.

. [**END HIGHLY CONFIDENTIAL**] In 2013, Netflix posted pre-tax net income of $171.1-million.[151] At a minimum, the Comcast agreement constitutes more than [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of Netflix's total pre-tax net income, ranging up to [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] if Netflix requires additional capacity at the highest tier level. Assuming that pre-merger Comcast currently serves roughly 25% of the US broadband market and that Netflix's customers are evenly distributed among ISPs, these interconnection deals, if imposed market-wide, have the potential to eat up between [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] and nearly [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of Netflix's total pre-tax profit. Comcast's ability to dictate the terms of such "interconnection" arrangements with OVDs affords Comcast the ability to literally control the pace and extent of OVD

151. Netflix Inc., 2013 10-K Annual Report filed with the US Securities and Exchange Commission, filed February 3, 2014 (estimate based upon Netflix post tax net income plus income tax obligations).

entry into the video content market. Claims by Comcast and its experts that OVDs represent "competition" for Comcast's own MVPD business are clearly devoid of legitimacy.

98. Netflix and others have characterized such arrangements as "paid prioritization," "pay-for-priority," or the creation of a "fast lane" on the Internet for whose use the entity sending the traffic will be made to pay.[152] Comcast dismisses such claims, arguing instead that its contract with Netflix is a "peering arrangement" for the exchange of traffic under which the sender of more traffic than it receives (i.e., "out-of-balance" traffic) is required to pay the recipient for termination to its end users. Comcast is thus attempting to engraft an intercarrier "reciprocal compensation" regime onto the process of exchanging traffic over the Internet. Comcast's position is at odds with current FCC initiatives with respect to intercarrier compensation, and is a throwback to a regime that the FCC has been in the process of dismantling for the past several years.

99. Payment arrangements between service providers, such as the intercarrier compensation payments between ILECs and CLECs, access charge payments by IXCs to LECs, and the kinds of payments being demanded by Comcast from content providers such as Netflix, operate to increases the paying entity's costs and, ultimately, the prices it charges to its end user customers. If the recipient entity were subject to legacy-type price and earnings regulation list that which

152. *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, *Comments of Netflix, Inc.*, July 15, 2014, at 5.

had been applied to ILECs prior to the mid-1990s,[153] the amounts paid to the recipient entity (e.g., the ILEC) would be used to offset rates for other services. In this way, revenues from carrier access charges that were set well in excess of cost were flowed through to ILEC rate-payers in the form of lower rates for other services, such as residential local exchange telephone service, which could then be priced below cost. Because charges for broadband Internet access are not subject to any regulatory constraints *and* because the ability of the ISP to extract such payments from content providers arises directly from its position as a terminating monopolist, there is no corresponding flow-through of such payments to end users. Thus, the consumer will be forced to compensate the (competitive) content provider for the added costs it must incur to deliver its service to the end user, but will receive no offsetting benefit in the form of lower broadband access prices from the (monopoly) ISP.

100. The FCC's legacy approach to intercarrier compensation was developed under a retail pricing arrangement known as "sender pays," the prevailing pricing model in use for local and long distance telephone service for more than a century. Here, the individual placing a telephone call would pay its service provider for the entire end-to-end call, such that the call would be delivered to the recipient at no charge.[154] Where the call involved more than one carrier, the carrier that had collected the revenue for the call from its end user customer would pay over a

153. The California PUC began to phase out "pure" rate-of-return type price and earnings regulation beginning in 1990 under its *New Regulatory Frameworks* ("*NRF*") decision (D.89-10-031), adopting in its place a form of "price cap" regulation under which "excess" earnings were still shared and ultimately capped. After a series of periodic reviews of the *NRF*, prices and earnings were entirely de-linked for all large ILECs in the state.

154. The exception to this was the case of "toll-free" 800-type services, where the *recipient* had agreed to pay for the entire call. In all other respects, however, the treatment of sender-paid and recipient-paid calling was identical, except as to the direction of payments.

portion of the full amount collected to other carrier(s) involved in completing the call. For local calls, the participating incumbent local carriers would typically exchange traffic on a "bill-and-keep" basis, whereby each would agree to complete inbound calls for the other without payment as long as the volumes of traffic sent by each LEC to the other were relatively equal – i.e., the traffic would be "in balance," such that the in-kind reciprocal arrangement was economically fair and efficient for both carriers. This was the usual case prior to the entry of competitive local exchange carriers ("CLECs"), because ILECs typically served non-overlapping areas. Where traffic is not in balance or out-of-balance by a sufficiently large amount – a condition that frequently arises in the case of ILEC-CLEC traffic exchanges, a net payment by the carrier sending more traffic than it received would be made to the other carrier using a local call termination charge.[155] In the case of long distance calling, the sender (the end user placing the call or, in the case of toll-free services, the toll-free service customer) would pay his inter-exchange carrier (IXC) for the entire call, the IXC would in turn pay "access charges" to both the originating and terminating local carriers for the connections between the end users at each end of the call and the IXC. This arrangement is depicted in Figure 10 below.

155. Initially, local reciprocal compensation call termination charges were set out in bilateral interconnection agreements negotiated between the interconnecting local carriers or as adopted following a Sec. 252(c) arbitration proceeding. In 2001, however, the FCC capped the local call termination charge for out-of-balance presumptively ISP-bound traffic at $0.0007 per minute. *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, *Order on Remand and Report and Order*, FCC 01-131, Rel. April 27, 2001, at para. 8.

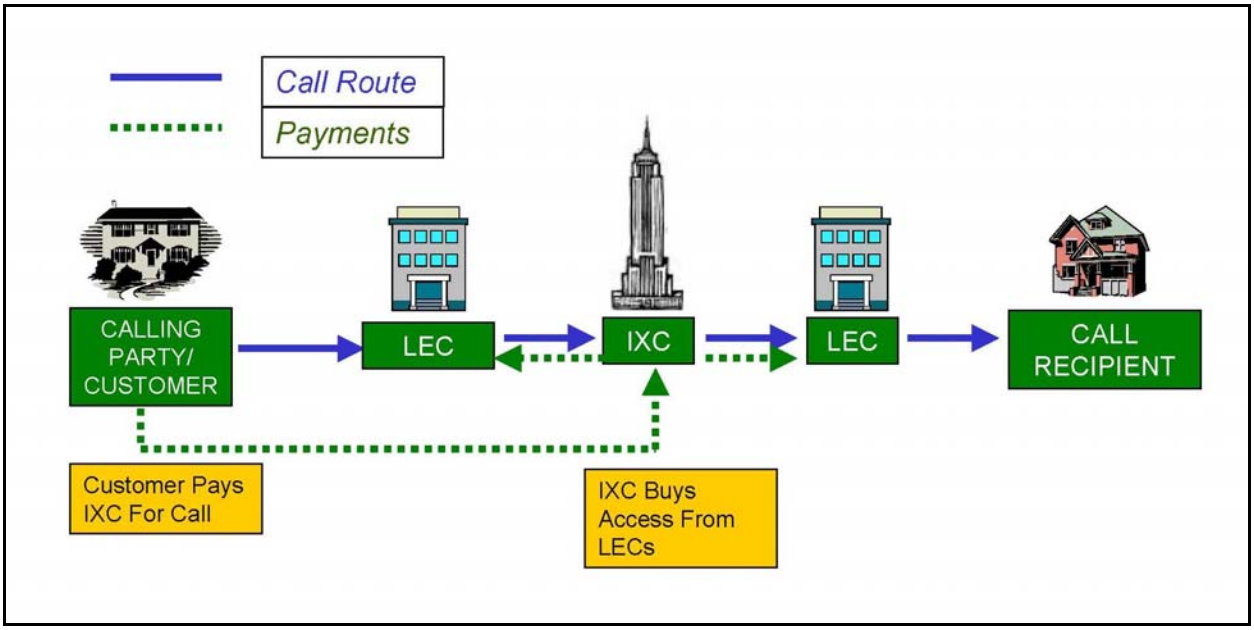

Figure 10. FCC Switched Access Charge model: Flow of traffic and revenues on a typical long distance telephone call.

101. The determination as to whether any particular call should be subject to local "reciprocal compensation" or to interexchange carrier "switched access charges" was determined by the geographic locations of the calling and called parties, based upon their respective 10-digit North American Numbering Plan ("NANP") telephone numbers. Where both ends of the call were located within the same local calling area, local reciprocal compensation treatment was applied; where different (non-local) exchanges were involve (i.e., where the call was considered a "toll call"), the FCC access charge model was applied.[156] This required, of course, that the

156. The specific access charges differed for interstate vs. intrastate calling, but the payments model was common for all federal and state jurisdictions.

NANP telephone numbers provide a definitive indication as to each's precise geographic location. This has become increasingly difficult because that linkage is fast eroding.

102. Rates set under both of these intercarrier compensation regimes were often arbitrary and unrelated to the actual costs involved; in many cases – particularly for access charges applicable to toll calls – rates were many multiples of cost. The resulting economic distortions engendered highly inefficient serving arrangements, gaming, and literally several decades of regulatory proceedings at both the federal and state levels and appellate litigation. In 2011, the FCC adopted a plan for "Comprehensive Intercarrier Compensation Reform" under which usage-based and above-cost switched access charges are phased out and replaced by fixed monthly payments imposed directly upon the end user for the ability to both place outgoing calls and to receive inbound calls.[157] Pursuant to the 2011 ruling, the legacy "access charge" and local "reciprocal compensation" regime is in the process of morphing into a so-called "bill-and-keep" approach under which both the originating and terminating parties pay their own local service provider for the switched access connections between their end user access line and the IXC. Under this arrangement, the originator of a long distance call pays the IXC only for the interexchange portion of the call, with the two local exchange portions (one at each of the originating and terminating ends of the call) paid directly by their respective end user local service customers to their respective LECs, as illustrated in Figure 11.

157. *Developing an Unified Intercarrier Compensation Regime*, FCC CC Docket No. 01-92 *et seq.*, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 11-161, Adopted October 27, 2011, Rel. November 18, 2011, ("*Unified Intercarrier Compensation Order*"), at paras. 736-846.

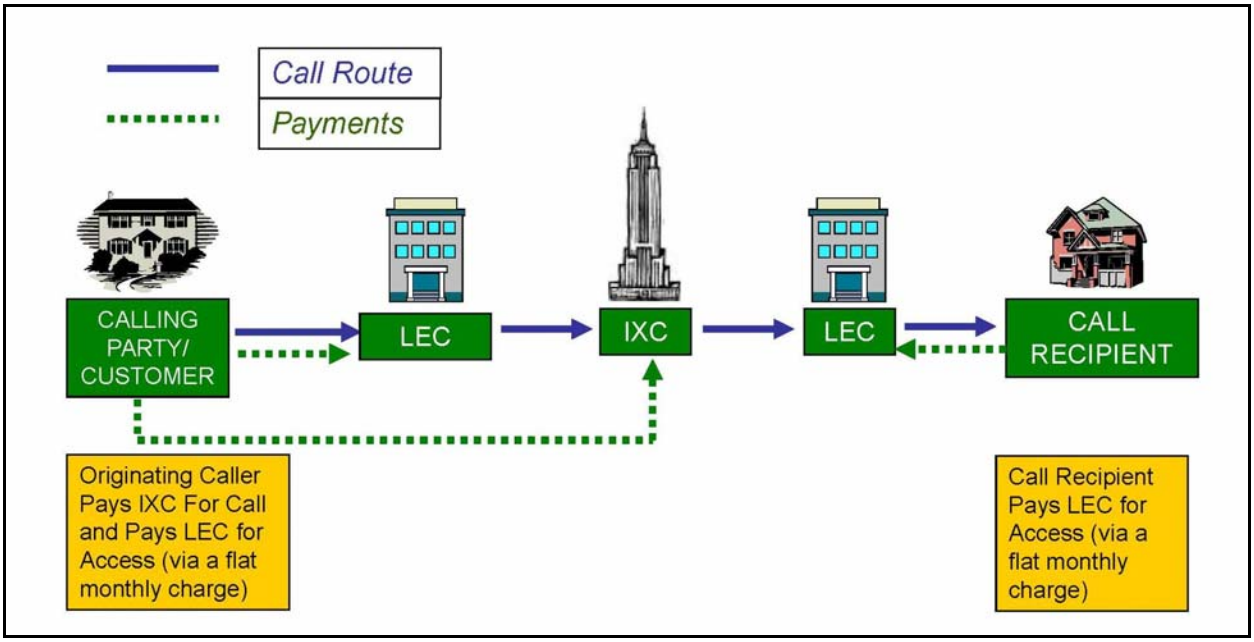

Figure 11. FCC "Comprehensive Intercarrier Compensation Reform" bill-and-keep payments model.

103. The migration to this "bill-and-keep" end user pays regime was adopted as a solution to the disparate compensation schemes that were being used for different technology platforms and to eliminate the economic distortions and inefficiencies that had arisen under the prior regime. The legacy Switched Access Charge approach had been developed to deal with circuit-switched long distance calls carried over the Public Switched Telephone Network ("PSTN"). However, the arrival of Voice over Internet Protocol (VoIP) technology altered the role of the local carriers and created an ambiguity as to whether the local "reciprocal compensation" approach or the interexchange "access charge" treatment was applicable for any given call. Moreover, because the linkage between physical geographic location and the calling or called party's telephone number was irrevocably severed by both VoIP and mobile wireless services, the ability to apply

differential charges based upon the geographic locations of the two parties become difficult, and often impossible.

104. The FCC explained the rationale for transitioning away from legacy usage-based switched access charges to bill-and-keep:

> 736. Consistent with the National Broadband Plan's recommendation to phase out regulated per-minute intercarrier compensation charges, ... we adopt bill-and-keep as the default methodology for all intercarrier compensation traffic. We believe setting an end state for all traffic will promote the transition to IP networks, provide a more predictable path for the industry and investors, and anchor the reform process that will ultimately free consumers from shouldering the hidden multi-billion dollar subsidies embedded in the current system.
>
> 737. Under bill-and-keep arrangements, a carrier generally looks to its end-users – which are the entities and individuals making the choice to subscribe to that network – rather than looking to other carriers and their customers to pay for the costs of its network. ... Wireless providers have long been operating pursuant to what are essentially bill-and-keep arrangements, and this framework has proven to be successful for that industry. *Bill-and- keep arrangements are also akin to the model generally used to determine who bears the cost for the exchange of IP traffic, where providers bear the cost of getting their traffic to a mutually agreeable exchange point with other providers.*[158]

As the FCC here notes, the pricing and compensation paradigm that has developed *ad hoc* in the Internet world closely approximates the *target regime* that the FCC has adopted for intercarrier compensation among voice telephone companies. In the case of broadband Internet access, each network participant – end user "eyeball," host website, content provider – arranges for, purchases, and pays for the broadband connection into the Internet "cloud," in each case

158. *Id.*, at paras. 736-737, footnote references omitted, emphasis supplied.

selecting the bandwidth (speed) of the connection and its total traffic-carrying capacity in each direction – inbound and outbound. Thus, the end user's broadband access provider – Comcast in this instance – is already being compensated *by its own end user customer* for carrying traffic requested by the end user customer from Netflix or other edge providers *at the data rate being purchased and paid for by the end user customer* between the point at which the OVD or its CDN – the Internet counterpart of an IXC – hands off the traffic to Comcast (at the "edge" of a Comcast local broadband distribution network) for routing to the Comcast end user "eyeball" (Figure 12).

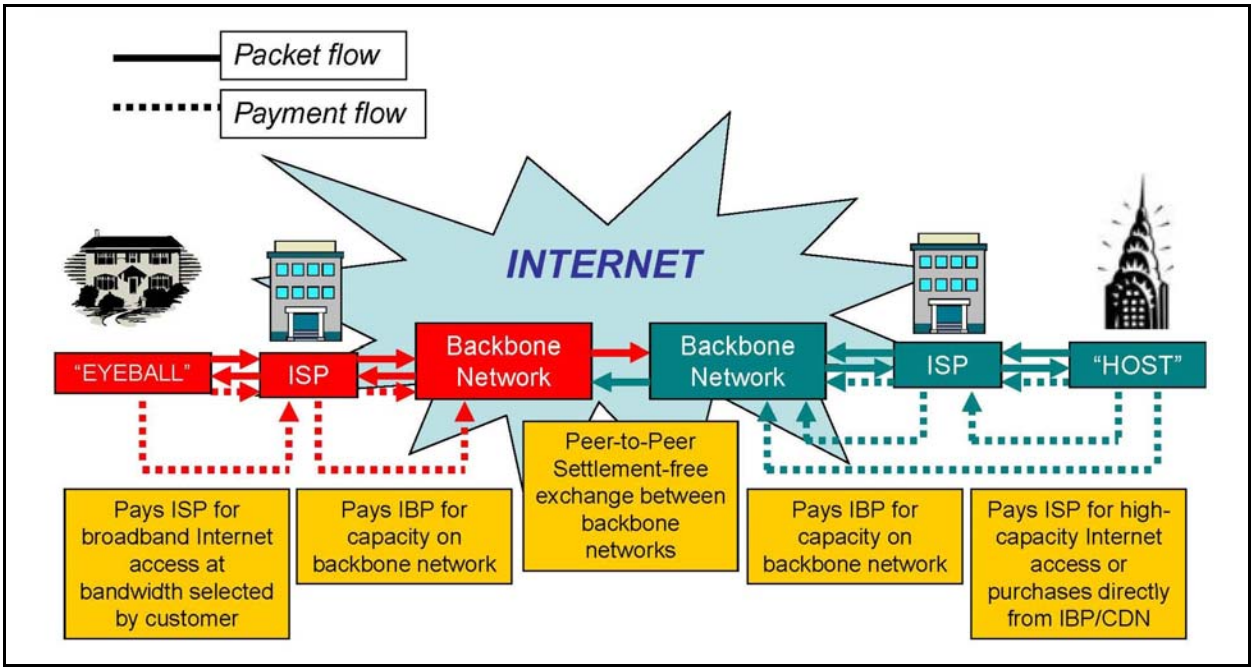

Figure 12. IP payment model. Host or content provider purchases and pays for required backbone capacity either from an ISP or, for larger content providers, directly from Internet backbone provider (IBP) or from content delivery network (CDN).

105. This type of routing is best suited to handling relatively small amounts of traffic from and to each of a large number of different host websites and other non-web IP applications. It is not, however, particularly well-suited for handling large quantities of traffic between large ISPs (such as Comcast and TWC) and heavily-accessed individual websites such as Google, Facebook, Amazon and Netflix, and other high-traffic hosts, such as those supporting video chat, VoIP, and other high-traffic applications. For these, the most efficient method (both technologically and economically) for routing traffic to and from high volume sources is for each to establish its own dedicated transport links from one or more host locations to each large ISP local network handoff point, thereby bypassing the public Internet backbone in the same way that a traditional leased voice-grade private telephone line, such as a tie-line between two locations of the same company, bypasses the PSTN. Such arrangements not only avoid the potential for congestion that can occur at points of interconnection but, by diverting this traffic away from the various interconnection handoff points between Comcast and the public Internet backbone, it also avoids the additional costs of routing via multiple third-party Internet backbone networks.

106. Dedicated transport and interconnection arrangements like these are widely used by many large-volume content and edge providers for many types of traffic in addition to streaming video. Because such arrangements require a *dedicated* point of interconnection with Comcast, their existence provides a convenient location for Comcast to establish what amounts to a "toll booth" that can be earmarked to specific edge providers while allowing others to deliver traffic, via the public Internet backbone, without having to incur such additional "access charges" for

the privilege of using an interconnection arrangement that is more efficient (both technologically and economically) for *all* involved – the content provider, Comcast, and the ultimate end user customer. Figure 13 illustrates the traffic and payment flows under this type of dedicated transport arrangement.

107. Under the agreement entered into between Comcast and Netflix, and even though Comcast is being paid by its own end user customers for the broadband services it furnishes to them, Netflix is also being required to pay Comcast for carrying Netflix's own traffic to the same Comcast end users. The payments by Netflix are in addition to the payments that Comcast receives directly from its own same end users, who have selected and paid for bandwidth fully sufficient to carry the Netflix streaming video traffic. These duplicative payments are diagrammed in Figure 13 below.

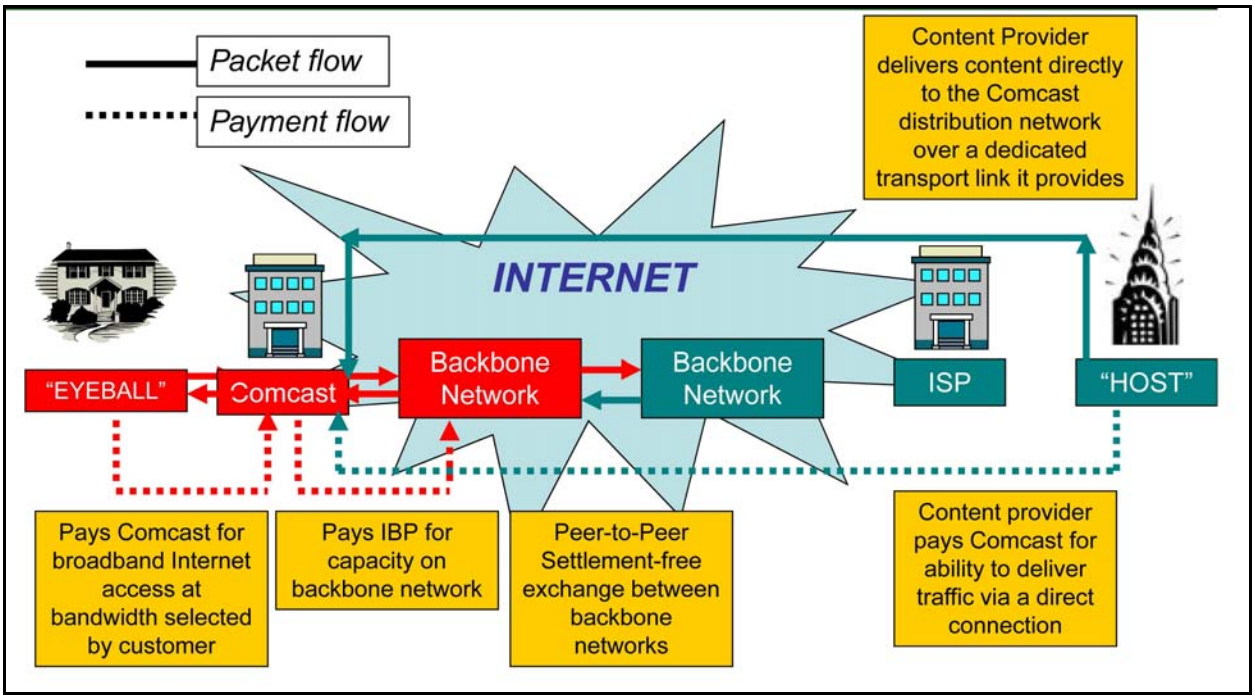

Figure 13. Under the type of arrangement established between Comcast and Netflix, instead of sending its streaming content via the Internet "cloud" commingled with other Comcast-bound Internet traffic, the content provider establishes a dedicated transport link between it and a Comcast local distribution network, and is charged an access fee by Comcast for the direct interconnection arrangement.

108. Comcast describes the payments being made by Netflix as a traffic exchange arrangement involving "paid peering."[159] However, Netflix and others have characterized this type of arrangement as "paid prioritization" or "pay-for-priority" and have argued that the imposition of such charges is inconsistent with the "Open Internet" principle and have asked the

159. See, e.g., "Competition in the Video and Broadband Markets: The Proposed Merger of Comcast and Time Warner Cable," Joint Written Statement of David L. Cohen, Executive Vice President, Comcast Corp., and Robert D. Marcus, Chairman & Chief Executive Officer, Time Warner Cable Inc., at the Oversight Hearing Before the Subcommittee on Regulatory Reform, Commercial and Antitrust Law of the H. Comm. on the Judiciary, May 8, 2014, at 41-43.

FCC to adopt rules expressly prohibiting such arrangements.[160] US Senator Patrick Leahy, Chairman of the Senate Judiciary Committee, on October 20, 2014 sent a letter to David L. Cohen, Executive Vice President, Comcast Corporation asking that:

> As the antitrust regulators continue to evaluate Comcast's proposed transaction with Time Warner Cable, and regardless of whether it is approved, I ask Comcast to pledge that it will not engage in paid prioritization. I also ask that Comcast pledge not to engage in any activity that prioritizes affiliated content or services over unaffiliated content or services, helping to ensure that vertical integration does not threaten competition online.[161]

Mr. Cohen insists that "To be clear, Comcast has never offered paid prioritization, we are not offering it today, and we're not considering entering into any paid prioritization creating fast lane deals with content owners."[162] Comcast's characterization of the additional charges it imposes upon Netflix as some sort of a "traffic exchange arrangement" involving "paid peering" is the basis for Comcast's contention that the fees fall outside of the scope of the Commission's Net Neutrality rules that Comcast had committed to accept as a condition for approval of the

160. *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, *Framework for Broadband Internet Services*, GN Docket No. 10-127, Comments of Netflix, Inc., July 15, 2014, at 5.

161. www.leahy.senate.gov/press/senator-patrick-leahy-urges-comcast-to-take-a-stand-against-internet-fast-lanes

162. "Clarifying Data Caps & Prioritization," David L. Cohen, Executive Vice President and Chief Diversity Officer in Public Policy, May 15, 2014, available at http://corporate.comcast.com/comcast-voices/clarifying-data-caps-prioritization (accessed 12/1/2014).

1 Comcast/NBCU merger,[163] and argues that that status should not be modified.[164] Comcast
2 argued that "[t]hese economic arrangements concern the business relationships for transporting
3 Internet traffic across the increasingly complex and dynamic 'backbone' architecture of the
4 Internet, and are negotiated based on the exchange of traffic – not the type, content, or source of
5 traffic – between the parties' networks."[165] Semantics aside, according to Netflix, it is being
6 required to pay Comcast for the ability to avoid a chokepoint at each point of entry to Comcast
7 local cable distribution networks where Netflix chooses to hand off traffic, a checkpoint whose
8 technical attributes, Netflix claims, are entirely within Comcast's control.
9
10 109. But Comcast does *not* operate an Internet backbone network; Comcast is a broadband
11 Internet *access* provider that sends and receives Internet traffic at handoff points where its local
12 access network interconnects with one or more Internet backbone networks. Comcast seeks to
13 characterize this handoff point where it picks up the Netflix stream as a "peering point," but that
14 characterization is not correct. Similarly, Comcast seeks to characterize its relationship with
15 Netflix or a CDN as a "peering arrangement," but that is also wrong and self-serving. The
16 concept of "peering" as it developed (without any regulatory involvement or intervention)
17 contemplated fee-free exchange of roughly equal amounts of traffic between interconnecting
18 *backbone* networks. Indeed, individual backbone networks typically publish their specific

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163. *Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licensees*, FCC MB Docket No. 10-56, *Memorandum Opinion and Order*, FCC 11-4, Rel. January 20, 2011, at para. 94.

164. *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Comments of Comcast Corporation, July 15, 2014, at 31-32.

165. *Id.*, at 32.

1 "peering policies" delineating the conditions under which they are prepared to enter into fee-free
2 peering arrangements for the exchange of balanced volumes of traffic. A broadband Internet
3 access provider's relationship to an Internet Backbone network or Content Delivery Network
4 provider is directly analogous to the relationship between a local exchange carrier and an
5 interexchange carrier. And under the current FCC approach to intercarrier compensation, the
6 *end user* pays for access between his or her premises and the handoff point between the access
7 and backbone networks. Comcast is applying a "pay for priority" paradigm in its relationship
8 with Netflix and other content providers under the guise of "peering." As is the case with the
9 current intercarrier compensation regime, there is no justification for any sort of "access charge"
10 being imposed by a broadband access provider upon a CDN or its client for delivery of content
11 across the Comcast network to the end user. And the imposition of what amounts to an "access
12 charge" is entirely duplicative of revenues that Comcast is already receiving from its own end
13 user customer.
14
15 110. A broadband access provider's ability to impose such duplicative "access charges" on
16 inbound traffic is a direct result of (1) its monopoly relationship with each of its end user
17 "eyeballs," and (2) the "two-sided" nature of the broadband Internet access market. Broadband
18 Internet access is a two-sided market in that end users ("eyeballs") as well as content and
19 transactional providers ("edge providers") both derive value from the interaction that is
20 facilitated by the broadband access provider, and can be made to pay for the ability to derive
21 such value. In a two-sided market, a seller is able to extract rent from several different
22 categories of customers whose interactions are mutually beneficial. There are numerous

instances of such "two-sided" markets throughout the economy. Two-sided markets are typically subject to "network effects," where the value any one customer (network member) derives from the service is a function of the number of *other members* of the same "network." Newspapers are good examples of two-sided markets. Readers purchase newspapers both for editorial content and for advertisements (e.g., want ads). Advertisers purchase advertising space with the objective of reaching a large audience. Thus, the more readers who purchase newspapers, the more attractive the newspapers is to potential advertisers, and the more ads that the newspaper carries, the more attractive it is to potential readers. The prices that a newspaper can charge each set of potential customers (i.e., readers and advertisers) is a function of many factors, including the relative price-elasticity exhibited by each group. For example, where readers exhibit a very high price elasticity and hence a very low willingness-to-pay for a particular publication, the publisher may give the paper away for free so as to maximize readership, thereby enabling it to sell more advertisements and, potentially, at higher prices. Broadcast television stations follow a similar business model – they do not charge viewers for watching TV programs so as to maximize audience size, which then allows them to charge high prices for airing commercials during the most popular shows. An alternate business model might be to charge viewers, but carry no advertising. This is typical for many "premium" cable TV channels (e.g., HBO, Showtime) and for some streaming services (e.g., Netflix). Some services have adopted a combination of these two approaches, charging both viewers and advertisers. There is no precise formula dictating how each group should be charged. In relatively competitive markets, a provider's ability to extract monopoly rents from one group or the other is constrained by the presence of rivals. Where a provider has substantial market

power, it has the potential to extract rents from one or both sides of the market. This is likely the case with broadband Internet access providers such as a post-merger Comcast/TWC.

In a ruling addressing analogous "terminating access" type services, the FCC recognized the market distortions created when the person ultimately responsible for paying for terminating access is not the one selecting the terminating access provider.

111. The position in which OVDs find themselves *vis-à-vis* the end user's broadband access provider is directly analogous to the relationship that exists between an interexchange long distance telephone carrier and the local exchange carrier serving the recipient of an inbound long distance call. In both situation, the end user's access provider (ISP or LEC) has a monopoly with respect to all traffic to or from that end user. In a 2001 ruling known generally as the *CLEC Access Charge Order*,[166] the FCC addressed the potential for excessive prices by entities acting as terminating monopolists – and, importantly, has recognized that a terminating monopolist has the ability to impose high prices on "captive" customers even where its overall share of the market is relatively low.

112. Shortly after the 1984 break-up of the former Bell System, the FCC adopted so-called "switched access charges" whereby long distance (interexchange) carriers would be required to pay a fee to the local exchange carrier at both the originating and terminating end of a long distance call as compensation for providing the switched connection to route the call between its

166. *Access Charge Reform; Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, CC Docket No. 96-262, *Seventh Report and Order and Further Notice of Proposed Rulemaking*, FCC 01-146, 16 FCC Rcd 9923; 2001 FCC LEXIS 2336, Adopted April 26, 2001, Rel. April 27, 2001 ("*CLEC Access Charge Order*").

end user subscriber and the long distance carriers local "point of presence." Access charges were to be based upon cost, and were subject to FCC regulation. (For intrastate long distance calls, access charges were regulated by state public utilities commissions ("PUCs").) Competition in the local exchange service market emerged slowly, but following passage of the *Telecommunications Act of 1996* ("TA96" or "96 Act"), a number of competitors entered the local telephone service market. These "Competitive Local Exchange Carriers" ("CLECs") were allowed to impose access charges in the same manner as had been done by "Incumbent Local Exchange Carriers" ("ILECs") since 1984, except that unlike ILEC access charges that were subject to FCC and state PUC regulation, CLEC access charges "have been largely free of the other regulations applicable to incumbent LECs" and could be set at any level at the discretion of the CLEC.[167] The assumption, at the time, was that CLEC prices would be constrained by those being charged by ILECs and by other CLECs, such that regulation of CLEC prices was unnecessary. This assumption, however, proved to be seriously flawed.

113. FCC rules require interexchange carriers to terminate all long distance calls placed by the IXCs' customers to any local exchange carrier (ILEC or CLEC), so long as the LEC's access charges are within a zone of reasonableness.[168] IXCs are also subject to geographic rate averaging and may not charge higher rates to customers who originate or terminate calls using a

167. *CLEC Access Charge Order*, at para. 8.

168. *Access Charge Reform; Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, CC Docket No. 96-262, 16 FCC Rcd 9923, 9938 (paras. 38-40) (2001).

1 LEC (such as a rural ILEC or CLEC) that has higher-than-average access charges.[169] IXCs were
2 also required to adopt uniform long distance rates that did not differentiate as between calls
3 directed to ILECs subject to FCC-regulated access charges or to CLECs whose access charges
4 were not subject to regulation, and which might have been higher. By the late 1990s, many
5 CLECs had set their terminating switched access charges – those applicable to inbound calls sent
6 by IXCs to CLEC end-user subscribers – in excess of the comparable (regulated) ILEC access
7 charge. Significantly, these terminating switched access charges were *not* being charged to or
8 paid by any of the CLECs' end user customers; instead, they were being paid by the IXC and
9 indirectly by the IXC's customer who had originated the long distance call, but only then to the
10 extent that the IXC could recover the CLEC-imposed terminating switched access charge in the
11 IXC's broadly averaged charge to the IXC's customer who had originated the call. Since the
12 CLEC was obligated to terminate the inbound call and was allowed to charge whatever it wanted
13 to the IXC, and the IXC was not allowed to explicitly recover the CLEC's higher switched
14 access charge in the IXC's own end user prices, the CLEC's own end-user local service
15 subscribers were oblivious to, and unaffected by, these excessive access charges. Put differently,
16 the individual who had chosen to take service from the CLEC – the local service end-user
17 customer – was *not* the one paying the excessive access charges.
18

169. See, *Policy and Rules Concerning the Interstate, Interexchange Marketplace Implementation of Section 254(g) of the Communications Act of 1934, as amended*, CC Docket No. 96-61, 11 FCC Rcd 9564, 9582 (para. 38) (1996).

114. By the end of 2000, CLECs were only serving roughly 8.5% of the local exchange service market nationally.[170] Yet with respect to those customers, each CLEC was a terminating monopolist, controlling the sole means of reaching its customers and thus acting as a gatekeeper through which any long distance carrier must pass. In 2001, the FCC addressed this situation and adopted measures to limit the CLECs' ability to exploit their terminating monopoly status. The FCC explained the unique circumstances confronting the market for *terminating* switched access service:

> 10. ... In the *Access Reform NPRM*, the Commission sought comment on whether CLECs can exercise market power with regard to terminating access services and whether and how the Commission should regulate those services. The Commission noted the differences between the originating and terminating access markets. For example, with *originating* access, the Commission recognized that the calling party chooses the service provider and decides whether to place a call, and it has the ultimate obligation to pay for the call. The calling party also is the customer of the IXC that purchases the originating access service. The Commission tentatively concluded, that, as long as IXCs could influence the calling party's choice of the access provider, a LEC's ability to charge excessive originating access rates would be limited, because IXCs likely would create incentives for their end users to move to competing, less expensive access providers. On the other hand, the Commission recognized that, with *terminating* access, the called party chooses the access service provider, while the decision to make the call and the ultimate responsibility to pay for the call reside with the calling party, and the calling party's IXC must pay for the terminating access service. Because of this disjunction implicit in terminating access, neither the party placing a long distance call, nor that party's IXC, can easily influence the called party's choice of service provider. The Commission noted that this

170. Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, *Local Telephone Competition: Status as of December 31, 2001*, issued June 23, 2002 ("FCC *2001 Local Competition Report*, at Table 1.

> may give CLECs the incentive to charge excessive rates for terminating access service.[171]

The parallel between the condition confronting IXCs with respect to terminating switched access charges imposed by CLECs for the ability of the IXC to deliver an inbound call to a CLEC end user customer, and that confronting content providers required to pay the end user's broadband access provider for the ability to send that traffic to the end user, is striking. Like the IXC, the content provider does not choose the end user's broadband access provider, but is being forced to pay whatever charges may be imposed by that access provider for the ability to send traffic to the end user. To resolve this problem, the FCC determined that:

> ... Given the unique nature of the market in which the IXCs purchase CLEC access, however, we conclude that it is necessary to constrain the extent to which CLECs can exercise their monopoly power and recover an excessive share of their costs from their IXC access customers – and, through them, the long distance market generally. On the other hand, we continue to abstain entirely from regulating the market in which end-user customers purchase access service. Accordingly, CLECs remain free to recover from their end users any greater costs that they incur in providing either originating or terminating access services. When a CLEC attempts to recover additional amounts from its own end user, that customer receives correct price signals and can decide whether he should find an alternative provider for access (and likely local exchange) service. This approach brings market discipline and accurate price signals to bear on the end user's choice of access providers.
>
> 40. Under the regime we adopt in this order, CLECs will be restricted only in the manner that they recover their costs from those access-service consumers that have no competitive alternative. ...[172]

171. *CLEC Access Charge Order*, at para. 10, emphasis in original, footnote references omitted.

172. *Id.*, at paras. 39-40.

115. In one very critical respect, the potential for price gouging and discriminatory conduct on the part of broadband access providers is far greater than for the CLECs that were the object of the FCC's 2001 ruling. CLECs – *Competitive* Local Exchange Carriers – by definition had at least one major rival in the local telephone service market – the *incumbent* LEC. A CLEC that attempted to impose excessive access charges on *originating* access might find itself in a position where IXCs would simply decline to offer long distance calling service to the CLEC's own end users which, in turn, would cause many of those end users to look elsewhere for their local service. Moreover since in 2001 the incumbent LEC's services were still subject to either cost-based or price cap type regulation, a CLEC's ability to increase prices *to its own end user customers* was constrained by the (regulated) ILEC rates. In the case of broadband access, and as I have discussed at considerable length here, end user customers may have few or no competitive choices, and even where such choices are present, there is no externally-imposed upward constraint on broadband access prices. Broadband access rates are not set on the basis of cost, and may be set well in excess of the provider's actual costs. Any terminating access type charges that the provider might impose upon content providers such as Netflix would be *in addition to* and thus duplicative of the revenues it received from end users.

116. Even though CLECs *in toto* controlled only about 10.2% of the local exchange service market at the time that the FCC issued its *CLEC Access Charge Order*, and no single CLEC's share at that time exceeded 2.7%,[173] even the smallest among them was able to exploit its terminating monopoly and impose excessive access charges upon inbound IXC traffic. The Joint

173. *FCC 2001 Local Competition Report*; *CLEC Report, 17th Edition*, New Paradigm Research Group, 2003.

Applicants together pass census blocks containing roughly 10.6-million homes out of the total 12.6-million households in California, and are currently providing broadband Internet access service to roughly 4.9-million residential customers across the state.[174]

The merged entity would have enhanced incentives and opportunities to use its vertical relationships to disadvantage rivals and increase the profitability of its services

117. In response to the myriad criticisms of the proposed merger, the Joint Applicants submitted an 846-page "Opposition to Petitions to Deny and Response to Comments" to the FCC on September 23, 2014, including five additional expert declarations ("Opposition filing"). In their Opposition filing, the Joint Applicants reiterate and expand upon their initial arguments, and respond to specific challenges raised by opponents of the merger.[175] The primary defense that the Joint Applicants use repeatedly in response to concerns about potential anticompetitive conduct is their claim that it is not in their interest to degrade users' experience, as this would cause users to leave Comcast for its competitors.

118. This argument rings hollow. Customers who observe the degradation of service and decide to abandon Comcast/TWC would first have to identify an actual equivalent service that is available at their location and that is not itself engaging in similar degradation of OVD content.

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174. See para. 13, Table 1, *supra.*

175. DISH characterized the Opposition as one setting forth new material, and argued that Comcast should have made this showing in its initial application. The FCC Media Bureau agreed, and modified the procedural schedule to allow for responsive comments by other parties. *Public Notice Extending Time to File Replies to Responses and Oppositions*, October 3, 2014, at 2.

As discussed previously in this declaration, in the majority of the census blocks that Joint Applicants serve in California, there is no competition at the speeds that most of Joint Applicants' customers are currently receiving. Even if there was a competitor offering equivalent service, a customer seeking to switch to the rival provider would then need to overcome various economic and other barriers to switching, such as costs and inconveniences associated with the physical installation of an alternate service, the possible need to purchase new equipment, early termination fees that may apply to the cancelled service, the possible need to change e-mail addresses where the customer had been using the service provider's e-mail domain, among others. It may also be the case that the customer does not directly associate the service degradation with the ISP but rather assumes that the problem arises with a particular content provider, and responds by cancelling that provider's service rather than by switching to an alternate supplier of broadband access. As the competing salvos from the Joint Applicants and Netflix/Cogent reveal,[176] it is highly unlikely that the average consumer will have the technical knowledge (assuming undisputed facts) to assess whether degraded content delivery is attributable to the content provider, the ISP, or some intermediary player. Finally as Dr. Joseph Farrell points out in his declaration on behalf of Cogent, a content provider who identifies that a particular ISP is offering sub-standard delivery of its content to the ISP's end users has limited ability to influence those consumers to defect from that ISP:

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176. See, e.g., "Cogent Offers to Pay Capital Costs Incurred by Major Telephone and Cable Companies Necessary to Ensure Adequate Capacity" http://www.cogentco.com/en/news/press-releases/631-cogent-offers-to-pay-capital-costs-incurred-by-major-telephone-and-cable-companies-necessary-to-ensure-adequate-capacity (last accessed December 2, 2014); "Netflix CDN v. The Cable Guys or "Comcast v. Level 3 Part Deux—Peering Payback!" https://www.publicknowledge.org/news-blog/blogs/netflix-cdn-v-cable-guys-or-comcast-v-level-3 (last accessed December 2, 2014) citing "Netflix Content Delivery" presentation; footnotes 123, 124 *supra.*

> Unless content providers are able to convince consumers to switch their choice of ISP in response to differences among ISPs in their treatment of content providers, each ISP could act as a monopolist over access to its subscribers. Although a content provider could try to persuade its customers (who may or may not be paying for the content) to switch to a different ISP by setting an ISP-specific price, such a strategy is unlikely to be widely tried and still less likely to succeed."[177]

119. In their Opposition filing, the Joint Applicants cite the results of a survey that they had themselves commissioned as providing evidence showing that, so they claim, consumers *said* that they "*would likely*" switch providers, "including to a DSL or wireless provider, *or even to an ISP with slower speeds*," if their ISP blocked or degraded content.[178] However, as Dr. Farrell notes and consistent with my analysis described earlier, what consumers *say* they *might do* and what they *actually* do are not the same thing. Other than their own survey, the Joint Applicants present no evidence that consumers have *actually* chosen to substitute slower options, such as satellite, terrestrial fixed wireless, and overbuilders[179] irrespective of what they *say* they *might do* when responding to an industry-sponsored market research survey conducted over the telephone. Dr. Farrell proposes that the FCC collect data to evaluate price elasticity for Comcast's service and (actual) switching in response to degradation of content delivery.[180] Clearly, the actual behavior of consumers deserves far more credence than the kind of survey responses upon which

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177. Declaration of Joseph Farrell on behalf of Cogent, MB Docket No. 14-57, August 25, 2014 ("Farrell decl."), at para. 9, see also paras. 126-129.

178. Joint Applicants' FCC Rebuttal Filing at 21-22 (emphasis supplied in part [words "or even an ISP with slower speeds" italicized in original]).

179. Farrell decl., at para. 66.

180. *Id.*, at para. 67.

Comcast bases its claim. Examining the possibility that content providers could leverage customers' dissatisfaction about degraded Internet speeds as a way of countering the market power of large ISPs, Dr. Farrell describes how,

> Faced with slowed delivery of its content to customers of certain ISPs, Netflix responded in certain ways that one would expect to strengthen end-users' willingness to substitute away from those ISPs. ... Netflix publishes a speed index for each ISP that offers subscribers information on the average speed that they can expect from a particular ISP....
>
> While the Netflix speed index was widely reported on, it does not appear to have deterred a number of ISPs, including Comcast and TWC, from both declining to join Netflix's Open Connect and then allowing the interconnection points employed by Netflix to become congested.[181]

The argument that consumers would discontinue Comcast broadband service were Comcast to degrade the user experience would hold only where the Joint Applicants' broadband customers actually confront a competitive alternative *and* where the competitor, in what is at best a duopoly market with each incumbent enjoying *de facto* terminating monopoly status, does not itself possess precisely the same incentives and opportunity to engage in similar practices *vis-à-vis* edge providers. In fact, Netflix has entered into the same type of agreement with Verizon as it has with Comcast in order to overcome similar congestion and service degradation.[182] As long

181. *Id.*, at paras. 128-129.

182. "Netflix Reaches Interconnection Deal With Verizon," *The Wall Street Journal*, April 28, 2014, available at http://online.wsj.com/articles/SB10001424052702304163604579530321917846620 (accessed November 4, 2014). "Netflix Inc. said it reached a commercial deal for direct access to Verizon Communications Inc. 's network, a step that will likely improve the streaming-video service's performance even as its chief executive complains publicly about having to pay for such connections. A Verizon spokesman confirmed the deal. The terms weren't disclosed. The agreement follows a similar arrangement Netflix reached with Comcast Corp. in February. Netflix said it paid Comcast for connections for the first time, because its existing routes were congested and slowing service for its

(continued...)

as Comcast *and* its principal rival are pursuing comparable service degradation practices in the absence of receiving what amount to access charge payments from Netflix and other OVDs, there would not seem to be any point in a consumer switching to *FiOS* in response to a service degradation by Comcast. Thus, even where a competing high-speed broadband service is available, as long as the competitor mirrors Comcast's practices with respect to OVDs, it can degrade its customers' experience without fear of widespread defections.

120. That Comcast's principal competitors, as well as other MSOs whose service areas do not overlap with any of the other Joint Applicants, are degrading download speeds for OVD traffic in the absence of OVD access payments is demonstrated by data regularly maintained and provided by Netflix. Figure 14 below provides download speeds (mb/sec) for Netflix content streamed over various broadband access providers for the period January 2013 through September 2014. As the chart shows, Netflix download speeds were in the range of 2 Mbps through about September 2013, at which point they began a steady deterioration over Comcast, AT&T and Verizon broadband services, although this did not occur with Google Fiber, Cox and Cablevision, where Netflix download speeds increased steadily from around 2 Mbps to over 3 Mbps over the same period. The situation with Comcast improved dramatically by the end of March, immediately following Netflix's agreement to pay Comcast, and several months later following completion of Netflix agreements with other providers.

182. (...continued)
subscribers."

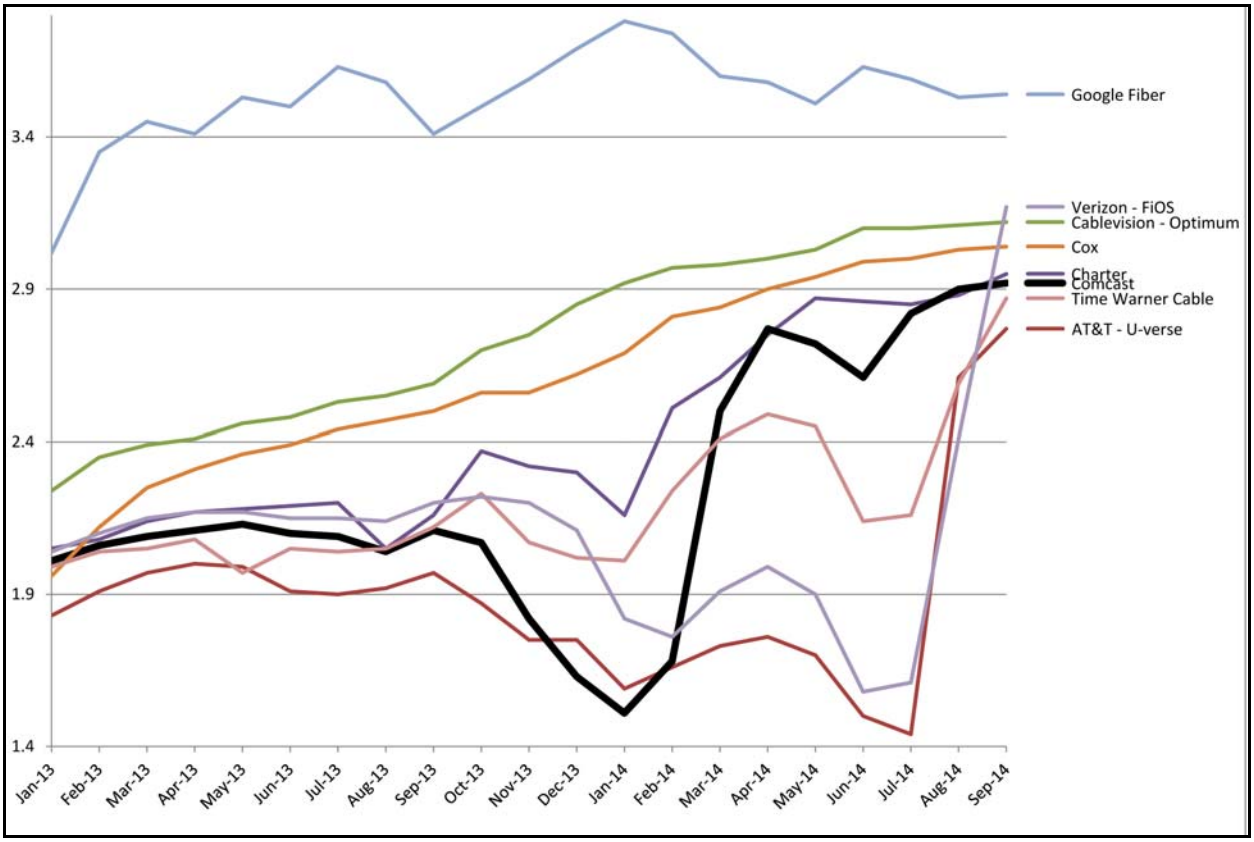

Figure 14. Netflix download speeds via major broadband access providers over the period January 2013 through September 2014, showing effects of Netflix agreements to pay the providers for access to the providers' end user customers. Source: Netflix data http://ispspeedindex.netflix.com/ (last accessed December 3, 2014).

One can readily – and I believe correctly – infer, from the fact that the improvement occurred so quickly for Netflix immediately after signing the contract with Comcast, that the slowdown had been manufactured by Comcast and was not due to a lack of transport or interconnection capacity being provided by Netflix. If, as Comcast has claimed publicly, the problem lay with lack of sufficient backbone infrastructure/capacity being provided by Netflix, it would have taken months, not days, to remedy that type of problem. That comparable improvements for

customers of other ISPs also occurred shortly after Netflix agreed to similar payment arrangements works to confirm this assessment.

121. In a letter submitted to the FCC on October 20, 2014, a group of 30 professors from leading academic institutions with expertise in the fields of antitrust law or economics have expressed concern with the likely competitive effects of the merger on OVDs who must access their customers over the merged entity's combined network.[183] Alluding to the Netflix/Comcast dispute, they observe:

> But whether or not Comcast has already exercised the power to congest interconnection point, Comcast has a monopoly over access to customers. ... The merger would increase Comcast's share of residential broadband customers to nearly forty percent, and this added size would give Comcast the power to increase the price for interconnection, and in so doing to raise the costs of its online video rivals.[184]

122. "Paid prioritization" is a euphemism for an "access charge" or, more colloquially, is directly analogous to "protection money" that is extorted from a victim with the promise of refraining from doing the victim bodily and/or economic harm. But the imposition of "pay-for-priority" fees is only one of the various ways that a larger post-merger Comcast could extract higher profits from customers (end users or content providers). Comcast continues to show

183. October 20, 2014 letter from professors of antitrust law and economics to FCC Chairman Tom Wheeler *et al*, MB Docket no. 14-57.

184. *Id.*, at 8.

interest in adopting data caps or usage-based billing,[185] an approach that, according to a recent paper by Economides and Hermalin, would "cause content providers to lower their prices, raising consumer surplus and, thus, increasing what the platforms can capture." Under this theory, the use of data caps imposed upon end users would allow the provider to raise its broadband prices (via overage charges or increased base rates for higher-volume tiers) while forcing competing OVDs (and other content providers) to drop their own prices.[186] The existence of two-sided market effects and vertical products that confront varying degrees of competition make it harder to predict which of the various opportunities even a pre-merger Comcast might select so as to disadvantage its competitors. But one thing is clear: in a world where a post-merger Comcast controls an even larger share of households both nationwide and in California, its opportunities to engage in such tactics will assuredly be enhanced.

A more extensive footprint increases the opportunities for Comcast to leverage its control of content to raise rivals' costs and/or diminish the value of their competing services

123. The Joint Applicants argue that because they serve non-overlapping geographic areas and thus do not compete with one another, their combination would have no adverse effect upon competition within each of their respective existing footprints. Joint Applicants' claim is without merit both as to the consumer side and the content side of the Joint Applicants' two-

185. See, e.g., http://customer.comcast.com/help-and-support/internet/data-usage-trials/
http://customer.comcast.com/help-and-support/internet/data-usage-trials-what-are-the-different-plans-launching
http://customer.comcast.com/help-and-support/internet/exp-fdo-data-plan/
(last accessed November 6, 2014).

186. Nicholas Economides and Benjamin E. Hermalin, "The Strategic Use of Download Limits by a Monopoly Platform," at 1.

sided market. The FCC's so-called "must carry" rule requires cable TV operators to carry the signal of any local TV station (i.e., one whose primary broadcast coverage overlaps part or all of the cable TV operator's serving area) that elects "must carry" status.[187] If the TV station forgoes "must carry" treatment, it is then free to negotiate a "retransmission" agreement with the local cable TV operator(s) under which the latter will pay the broadcast station for the right to retransmit its signal. In this instance of a two-sided market, both the cable TV operator and the broadcast station benefit from such retransmission – the broadcaster gains access to the cable TV operator's customers and hence to a larger potential audience, and the cable TV operator is able to offer its customers the ability to receive the broadcast station over the cable service, thereby making the cable service more attractive. Since the outcome of any such agreement is a win-win for both parties, one might ordinarily expect that reaching such agreements would be simple and straightforward. In practice, however, retransmission negotiations involving local broadcast TV stations or other high-value content are often difficult and protracted, and occasionally result in economic warfare whereby one of the parties attempts to pressure the other by unilaterally cutting off, or threatening to cut off, access (i.e., either the station refuses to allow its signal to be carried by the cable operator, or the cable operator refuses to carry the signal at issue). CBS and satellite TV provider Dish Network have been engaged in precisely this type of showdown for the past several months.[188] Another recent case in point involves the broadcast rights to the LA Dodgers.

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187. See 47 U.S.C. Part II §§531-537; see also 47 CFR 76.56.

188. "CBS Says Dish Poised to Black Out Network in Fee Dispute," *Bloomberg*, November 18, 2014, at http://www.bloomberg.com/news/2014-11-18/cbs-says-dish-poised-to-black-out-network-in-fee-dispute.html (accessed 12/3/14).

124. A recent *Bloomberg* report explains the situation. TWC has exclusive rights for local distribution of Los Angeles Dodgers games on behalf of SportsNet LA, an entity created by the Dodgers ownership. TWC customers have access to Dodgers games over their (TWC) cable service, but in order for customers of other video services with which TWC directly competes (e.g., DirecTV, Dish Network, AT&T U-Verse) to view Dodgers games, their video service must negotiate an agreement with TWC. TWC has offered such agreements, but at prices that the other video providers view as exorbitant, and have refused to pay.[189] As a result, with the exception of TWC cable subscribers, Dodgers games have been blacked out for the majority of the Los Angeles market. The tactic has operated to severely disadvantage TWC's competitors either by increasing their costs (if they agree to pay the price being asked) or by degrading their service (by preventing their customers from watching Dodgers games).[190]

125. Extrapolate the LA Dodgers situation to a post-merger Comcast, an entity that will pass more than 84% of all households in California. Comcast owns NBCU, which controls, in addition to the NBC television network, a large portfolio of cable services, including MSNBC,

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189. Due to the ongoing discovery disputes relating to GN Docket No. 14-157 at the FCC, ORA does not have access to the confidential documents that discuss the price and terms that TWC was demanding of its competitors to carry LA Dodgers games. It is my understanding that such agreements are part of the Video Programming Confidential Information (VPCI) documents that are currently the subject of an appeal to the DC Circuit. I had hoped to be able to review these documents, consistent with a discussion at the October 16, 2014 hearing at the CPUC, but because of the timing of when this declaration must be filed, the DC Circuit has still not resolved this issue and therefore, ORA does not have access to those documents at this time.

190. The Joint Applicants have defended TWC in its mammoth rebuttal filing to the FCC, claiming that the alleged unwillingness of rival MVPDs to accept TWC's invitation to engage in binding arbitration suggests that their claims are without merit. FCC MB Docket No. 14-57, *Comcast Corporation and Time Warner Cable, Inc. Opposition to Petitions to Deny and Response to Comments*, September 23, 2014, at 244-245. The filing does not, however, directly disclose, explain or justify TWC's offer to the rival MVPDs with respect to the retransmission rights at issue.

CNBC, Telemundo, The Weather Channel, E!, USA Network, Oxygen, TVOne, and Bravo, among others. NBCU owns and operates TV stations in the three largest California markets – KNBC (Channel 4, Los Angeles); KNSD (Channel 39, San Diego); and KNTV (Channel 11, San Jose/San Francisco/Oakland). Telemundo also owns and operates three California TV stations – KNSO (Channel 51, Fresno); KVEA (Channel 52, Corona/Los Angeles); and KSTS (Channel 48, San Jose/San Francisco). NBCU also owns Universal Studios, a major producer of movies and television programming. In a manner entirely analogous to TWC's actions *vis-à-vis* LA Dodgers broadcast rights, a post-merger Comcast/NBCU/TWC can easily exploit its extensive content portfolio and sources to disadvantage competitors to its extensive cable TV holdings in the state. It is unlikely that any of the three major market NBC-TV network stations (KNBC, KNSD and KNTV) currently invoke "must carry;" all three likely impose retransmission fees on cable TV operators in their service areas. Retransmission payments made by a Comcast cable TV system to an NBC-owned broadcast TV station are "left pocket-to-right pocket" transactions that have no net effect upon the parent company's bottom line. However, by raising such fees to affiliated cable TV systems, the parent company can raise the costs of rival video distributors' (like AT&T, Verizon, Dish Network, DirecTV and, potentially, Aereo or a similar streaming video provider if allowed by the FCC) and/or degrade the quality of their retail service (i.e., withholding content desirable to customers) should these competitors refuse to pay such elevated retransmission charges.

126. A pre-merger Comcast, whose cables (based upon California Broadband Availability Data) pass census blocks containing only about 33.7% of California households, is far more

constrained insofar as its retransmission fees are concerned. Comcast's NBC stations and other content services can, of course, impose high retransmission fees on Comcast's cable operations without affecting the parent company's bottom line. However, while this strategy may adversely affect Comcast's video distribution rivals in the portions of the state served by Comcast cable, it would also have the effect of discouraging cable operators serving areas outside the Comcast cable footprint – such as TWC, Charter and Bright House – from paying those fees and carrying the NBC and other Comcast-owned content. Thus, under pre-merger conditions, in order to disadvantage its rivals in areas served by Comcast cable, the company would need to make its retransmission fees more expensive and thus less attractive to cable operators that currently represent the roughly 66.3% of California households in census blocks that pre-merger Comcast does not pass. Post-merger, the percentage of households in census blocks passed by the combined Comcast-TWC system would jump to 84%, and any transmission charges related to these customers would now become a "left pocket-to-right pocket" payment. At the same time, the percentage of households that a Comcast/TWC entity might conceivably sacrifice by overcharging for retransmission would drop from the current 66% to 16%. This would significantly alter Comcast's incentives to use its leverage over retransmission prices to disadvantage rivals within its footprint, since the benefits associated with raising rivals' costs or diminishing the value of their services in the market would now easily outweigh the possibility of forgoing revenues in the relatively small out-of-footprint portion of California.

127. There are other ways in which a post-merger Comcast can leverage its content portfolio to disadvantage rivals. Negotiated retransmission agreements may, and often do, include volume

discounts or other volume-based pricing arrangements that result in lower unit costs to larger operators than are applicable to smaller ones. Nationally, a post-merger Comcast entity will have 65% more MVPD subscribers than the next largest video distributor.[191] It would be a trivial matter for Comcast to design a retransmission fee schedule with volume pricing that would effectively be available solely to Comcast-owned cable systems, forcing smaller rivals within the same markets to pay more for equivalent content.

The proposed merger will harm residential voice telephone service customers in California.

128. The Joint Applicants claim that their merger will not harm competition for residential customers of voice telecommunications services in California or result in higher rates. While nominally offering customers voice services outside of bundles that include Internet access and/or video programming, cable companies, including the Joint Applicants, make no real effort to sell services on this basis. ILECs are similarly losing interest in providing voice telecommunications service to customers on a stand-alone basis and have gone so far as to justify recent price hikes as "beneficial" to promoting broadband adoption.[192] This increasing

191. See fn. 13, *supra.*

192. For example, Debra J. Aron, testifying on behalf of AT&T California, recently opined that "perhaps most important, suppressing basic local service rates artificially discourages broadband adoption." Her reasoning is that "In the case of broadband, consumers face a variety of bundled and packaged offerings that include voice and broadband service. A consumer who is facing the option of purchasing either a bundle that includes broadband and voice service, or a stand-alone voice offering, will be more likely to purchase the stand-alone offering the lower is its price relative to the bundle, all else equal." Opening Testimony of Dr. Debra J. Aron on behalf of AT&T California [PUBLIC/REDACTED VERSION], filed August 22, 2014 in TURN v. Pacific Bell, Defendant.Case No. 13-12-005, In other words, the lower the price differential between stand-alone voice telephone service and a voice/broadband bundle, the more likely a customer is to select the bundle. Under this reasoning, if the prices of stand-alone voice and a voice/broadband bundle were equal, customers would perceive the *diffferential* in price as zero. One could
(continued...)

disinterest in providing affordable voice services has already contributed to a less-than-competitive market for stand-alone voice services in California, and the potential for coordinated marketing by the state's major cable providers will only exacerbate this problem, leading to a continued escalation in prices for voice services. As I have discussed at paras. 61-68 *supra*, low-income customers appear to have a lower propensity to purchase broadband service than do the more affluent. Thus, the escalation in stand-alone voice service prices would seem to disproportionately affect those at the lowest end of the economic spectrum.

129. Of course, the "price" of voice service when it is part of a bundle is not clear, since the providers are not subject to any costing or pricing disclosure, but the price of cable services, including services provided in a bundle, has increased steadily and disproportionately to the economy as a whole, despite claims of beneficial efficiencies resulting from prior mergers. When Comcast, Time Warner and the other Applicants search for the "best" in their common portfolio, one can expect that they will pick the offerings and price points that are profit-maximizing.

The numerous vertical elements associated with the Comcast/TWC merger raises the potential for competitive harms that were not at issue with the (primarily horizontal) large ILEC mergers that occurred between 1996 and 2006.

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192. (...continued)
even imagine charging *more* for the stand-alone service, and AT&T is doing just that: It is offering stand-alone "Max Plus" "Up to 18Mbps" broadband Internet access for $44.95 a month, or a bundle consisting of "Max Plus - Up to 18Mbps + TV with HBO" for $39 a month – $5.95 *less*!

130. The arguments regarding the benign effects of horizontal expansion and the purported benefits of combining the already very large providers are not new, of course. These same positions with respect to non-overlapping service areas and resulting non-diminution of competition – were advanced, with success, by the regional Bell operating companies that had used them to effect the recombination of the seven "Baby Bells" plus the largest independent ILEC (GTE), and the two largest interexchange carriers (AT&T and MCI), into two mega-ILECs – what are now AT&T (the adopted name of SBC) and Verizon – with number three CenturyLink a distant third. And yet, even with the enormous scale and scope that AT&T and Verizon have achieved through territorial combinations, they have been unwilling or unable to make the investment in a ubiquitous fiber-based infrastructure that would be necessary to challenge Comcast and Time Warner for state-of-the-art wired broadband services. Indeed, having advanced various "economies of scale and scope" claims similar to those being reiterated by the Joint Applicants here, both AT&T and Verizon proceeded to divest large swaths of their respective operating areas to small independent operators that are even less likely to commit the resources necessary to provide a serious broadband challenge to the incumbent cable Multi-System Operator ("MSOs").[193]

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193. In 2008, Verizon sold off all of its northern New England operations (in Maine, New Hampshire and Vermont) to a small North Carolina independent telco, Fairpoint Communications, a firm whose (pre-northern New England) acquisition was only 17% of its post-acquisition size. In 2010, Verizon sold off large portions of its former GTE operating areas together with all of its West Virginia (formerly Bell Atlantic) operations, to Frontier Communications. In 2004, Verizon sold off the former GTE Hawaiian Telephone Company to the Carlyle Group. Prior to the GTE sell-off, Verizon had commenced a *FiOS* build-out in its Washington State operating areas north of Seattle. After the territory was acquired by Frontier, the acquiring company decided not only to cease any further FTTH roll-out, but actually sought to encourage its then-existing *FiOS* subscribers to abandon the service by increasing prices by 50%, and offering to pay for a full year of DirecTV for *FiOS* customer who agreed to switch. See, e.g., http://www.theheraldbusinessjournal.com/article/20110106/BIZ/701069929 (last accessed November 6, 2014).

131. Beyond this cautionary tale, there are additional important differences that distinguish the mega-cable incumbents such as Comcast and TWC from the large ILECs at the time of their mergers. At the time that SBC merged with Pacific Telesis, SNET, Ameritech – and even as recently as its final ILEC acquisition, BellSouth – most state public utility commissions ("PUCs") maintained some level of regulatory oversight with respect to these companies' rates, service quality, and basic consumer protection. For example, ILECs were required to provide unbundled access to their local distribution and switching networks as so-called "Unbundled Network Elements" ("UNEs"), to interconnect their networks with those of rival local carriers, and to negotiate interconnection agreements in good faith and, failing that, to submit to arbitration. These provisions were intended to enable rivals to compete with the incumbent at retail by obtaining some (or in some cases all) of the underlying facilities from the ILEC itself.[194] ILECs were also subject to so-called *Computer Inquiry II* rules, requiring that any telecommunications network component that they utilized to provide their information service (originally referred to as "enhanced" services) – including Internet access – be made available on an unbundled basis to competitive providers for similar competing retail uses.[195] Cable MSOs

194. See, generally, 47 U.S.C. §251. In March of 2004, after all of the major horizontal ILEC mergers had long since been completed, the D.C. Circuit limited certain of the unbundling requirements at 47 U.S.C. 251(c)(3), effectively elevating the cost of competing in the local exchange market to economically unsustainable levels. *United States Telecom Association v. FCC*, 359 F.3d 554 (D.C. Cir. 2004)("*USTA II*"). Months later, the two largest CLECs – AT&T Inc. and MCI – abandoned their own competitive local exchange service operations and pursued mergers with regional Bells SBC Communications and Verizon, respectively.

195. Under the *Computer Inquiry II* framework, the FCC required AT&T and GTE affiliates to offer their enhanced services through a separate subsidiary; regardless of whether they were subject to a structural separation requirement, ILECs were required to acquire the communications service inputs from their regulated telecommunications operating companies under tariff. *Amendment of Section 64.702 of the Commission's Rules and Regulations*

(continued...)

are not subject to similar unbundling requirements or *Computer II* type rules – a point that was affirmed by the United States Supreme Court in the *Brand X* case,[196] nor are they subject to any form of rate regulation with respect to their broadband service offerings. The Commission's authority to regulate VoIP-based voice telephone services has been limited by the recent adoption of PUC Code § 710.[197] Thus, TWC's existing circuit-switched voice services, which are currently regulated by the CPUC, if converted to VoIP-based services to conform to the rest of Comcast's voice service offerings, may cease to be subject to CPUC *regulation.*

The proposed combination of the Joint Applicants into a single entity will enhance and extend vertical relationships that adversely affect competition and consumer welfare

132. While the Joint Applicants largely attempt to focus attention on the horizontal impacts of the merger, there are many serious concerns that involve the enhanced opportunities and incentives for the combined entity to use its broader footprint and expanded subscriber base to inflict harm on competitors and reduce consumer choice in various vertical markets. As summarized by Free Press in its Comments on the proposed merger as submitted to the FCC:

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195. (...continued)
("*Second Computer Inquiry*"), Docket No. 20828, 77 FCC2d 384, 474-5 (paras. 229-231) (1980). The fact that the basic service was offered under tariff ensured that it was available to competitors on reasonable and nondiscriminatory terms. *Id.* When the FCC dropped the separate subsidiary requirement, under its *Computer Inquiry III* decision, it adopted rules intended to preserve competitors' nondiscriminatory access to unbundled inputs. *Amendment of Sections 64.702 of the Commission's Rules and Regulations* ("*Third Computer Inquiry*"); and *Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Thereof*; *Communications Protocols under Section 64.702 of the Commission's Rules and Regulations*, CC Docket No. 85-229, 104 FCC2d 958, 964 (para. 4) (1986).

196. *Nat'l Cable &Telecomm. Ass'n v. Brand X Internet Servs.*, 545 US 967 (2005) ("*Brand X*").

197. Counsel advises that Section 706 of the federal Telecommunications Act of 1996 does provide the CPUC with some authority over VoIP services, however.

> This transaction impacts multiple product markets, including the pay-TV market, the market for pay-TV content distribution, the customer premises equipment market, the market for retail broadband access services, the market for retail advanced broadband access services, and the market for online content distribution. In assessing the competitive impact of this transaction, the Commission should focus on each of these product markets, and how they interact."[198]

133. One obvious area for concern involves how Comcast, post-merger, can be expected to deal with edge providers including, in particular, providers of streaming video content that competes with its video programming distribution services. The Joint Applicants have assured the FCC that "[t]he characteristics of the Internet – including the valuable services offered by edge providers, the range of ISP options, and the nature of Internet interconnection – substantially limit ISP power vis-à-vis edge providers," and that, even if there were to be a relative shift in bargaining power between the merging ISPs and edge providers, "[t]here 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."[199]

134. Edge providers and consumers strongly disagree. As Netflix states in its *Petition to Deny the Application*, "the cold, hard economic facts and Comcast's past behavior prove

198. *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Assign or Transfer Control of Licenses and Authorizations*, FCC MB Docket No. 14-57, *Petition to Deny of Free Press*, August 25, 2014, at 10.

199. *Comcast/TWC FCC Application*, MB Docket No. 14-57, April 8, 2014, at 162, citing Mark Israel decl., at para. 14.

otherwise."[200] While Netflix has built an impressive base of some 37.2-million domestic streaming video service subscribers,[201] Netflix must, in each case, transit its customer's local ISP network in order for the customer to gain access to the Netflix service. Thus, Comcast controls a vital chokepoint between Netflix and each Netflix customer using Comcast broadband access. Comcast's response has been to impose what amounts to an "access charge" upon Netflix for the ability to reach Comcast end user "eyeballs" *notwithstanding the fact that each of those end users are already paying directly for his or her broadband access service.*

135. Contrast this type of "access charge" with the access charges that have been applied by ILECs upon interexchange carriers (IXCs) for the latter's ability to transit the ILEC's network to reach individual end user subscribers. As discussed above, ILEC access charges were introduced in 1984 as a *replacement* for long distance revenues that had previously been collected by ILECs but which were no longer available due to the break-up of the former Bell System together with the onset of competition in the long distance market. Because these access charges were regulated along with the other rates being charged by ILECs for all of their various service offerings, there was no double-recovery of the same cost – indeed, ILEC access charges were offsets against the "revenue requirement" that would still need to be collected from other services.

200. Netflix *Petition to Deny*, at 2.

201. In total, including its international footprint, Netflix serves some 53-million streaming customers. Netflix, Inc., 10-Q Quarterly Report filed with the SEC, October 20, 2014.

136. Over the years since 1984, the FCC has taken steps to reduce the magnitude of ILEC switched access charges through a process known as "rate rebalancing" whereby certain fixed monthly rates were increased enabling commensurate reductions in switched access charges and other usage-sensitive price elements. The FCC's recently initiated transition to a "bill-and-keep" intercarrier compensation regime shifts responsibility for full recovery of the costs associated with providing long distance carrier access to the end user, thus eliminating the need for any access charge imposed upon the interexchange carriers themselves.[202] Of course, this has long been the situation for broadband access, that is, the end user "eyeball" customer already pays a price for the desired bandwidth level *end-to-end*, such that an "access charge" of the type being imposed by Comcast upon edge providers such as Netflix is redundant and duplicative. Comcast has the incentive *and the ability* to pursue this type of charge precisely because Comcast has the market power – the "terminating monopoly" – that enables it to impose such fees without concern about potential customer defections to rival providers.

137. Remarkably, Comcast's expert Dr. Israel appears to challenge the possibility of a double recovery (i.e., via payments received from both the end-user and edge provider sides of the market) by suggesting that the revenues received from edge providers for access to end users

202. *Unified Intercarrier Compensation Order*, at para. 742. ("Bill-and-keep brings market discipline to intercarrier compensation because it ensures that the customer who chooses a network pays the network for the services the subscriber receives. Specifically, a bill-and-keep methodology requires carriers to recover the cost of their network through end-user charges, which are potentially subject to competition. Under the existing approach, carriers recover the cost of their network from competing carriers through intercarrier charges, which may not be subject to competitive discipline. Thus, bill-and-keep gives carriers appropriate incentives to serve their customers efficiently." Footnote references omitted.)

would be used by Comcast to set its end user prices below those that would otherwise prevail in the "but for" world where no edge provider charges were applied:

> *Even if prices to edge providers (or their agents) were to increase further, this would be beneficial to broadband customers and economically efficient.* An ISP's broadband platform is a classic example of a "two-sided market" that facilitates interaction between edge providers and broadband customers, with charges potentially being paid by either side of the market. The economics of two-sided markets provides several reasons why additional charges on the edge provider side of the market would be beneficial to broadband customers and economically efficient. These reasons include: (I) the "seesaw" principle [which] says that higher prices to edge providers would result in lower prices to broadband customers, which would benefit customers directly and also reduce cross-subsidization of heavy OVD users by light or non-OVD users ...[203]

That property of access charges – i.e., earmarking the access revenues to reduce end-user monthly rates – was a key goal of the FCC's switched access charge regime that became operative in 1984. However, this outcome was only achieved via affirmative regulatory mandate – i.e., the FCC, and later the various state PUCs that adopted a similar access charge model, *prescribed* the flow-through of access charge revenues in the form of lower end user monthly local exchange access rates *because in the absence of effective competitive marketplace forces could not be relied upon to accomplished this same result*. In the case of the types of access charges implicit in the Comcast/Netflix and similar "direct interconnection" agreements, the same lack of competitive marketplace forces as existed in the 1980s local phone market is still

203. Mark Israel, September 23, 2014 Declaration, MB Docket No. 14-57, at 21-22, emphasis in original, footnote references omitted. In a footnote, Dr. Israel explains that "Throughout the declaration, when I refer to lower prices, this should be taken as a comparison to the "but-for" world absent the transaction, meaning that the lower prices might manifest themselves as a slowed rate of price increase rather than a reduction in the price level. In either case, the key implication is that prices are lower with the transaction than without it."

present but, unlike the 1980s local phone market, *there is no regulator or regulatory prescription to assure the competitive outcome that Dr. Israel claims will arise*. And underscoring this point, there have been no rate decreases or other downward adjustments in Comcast broadband access rates triggered by the additional revenues being paid to Comcast by Netflix.

The broadband access services being furnished in California by the Joint Applicants are being used by their subscribers almost exclusively for the transmission of telecommunications traffic without modification between the end user and Internet locations of the user's choosing.

138. The broadband Internet access services being offered by the Joint Applicants provide for the transmission of content specified by the user without modification, is being provided to the public for a price and, as a technical matter (if not necessarily as a legal matter under current FCC treatment[204]), qualifies as "telecommunications" as the terim is defined in the statute. The very definition of "telecommunications" under the *Telecommunications Act of 1996* reflects modern consumers' expectation of Internet access as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or

204. In 2002 and again in 2004, the FCC determined that, because broadband Internet access constituted a "bundle" of telecommunications and information services that were being offered on an fully integrated basis to end user subscribers, the "bundle" constituted an "information service" even though it included a "telecommunications" component. Broadband internet access is thus currently considered by the FCC to be an "information service" subject to Title I of the *Communications Act*. *See*, *Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking*, 17 FCC Rcd 4798 (2002) ("*Cable Modem Declaratory Ruling*"), *aff'd sub nom. Nat'l Cable &Telecomm. Ass'n v. Brand X Internet Servs*., 545 US 967 (2005).; *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking*, 20 F.C.C.R. 14853 (2005) ("BWIA Order").

content of the information as sent and received"[205] and the term "telecommunications service" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, *regardless of the facilities used*.'[206]

139. Prior to the introduction of broadband Internet access, most residential consumers gained access to the Internet on a dial-up basis via switched voice-grade telecommunications connections routed by one or more local exchange carriers.[207] They purchased the local dial telecommunications service used to access their ISP from local telephone companies, and separately purchased Internet access from any of a number of ISPs, such as AOL, Earthlink, and NetZero. To stimulate demand for their Internet access services, dial-up and broadband ISPs typically offered a variety of proprietary content and layered applications that were available exclusively to their Internet access subscribers. These "information services" included such things as news stories, sports scores, stock price quotes, airline reservations, games, and e-mail, among others. AOL, which began offering "online services" to consumers years before widespread commercial use of the public Internet had materialized, continued to offer these same "information services" over the Internet when it morphed into an ISP. Most of these applications and content were available through proprietary "web portals" maintained by the ISP for their customers' use. ISPs used such proprietary content and layered applications to

205. 47 U.S.C. §153(48).

206. 47 U.S.C. §153(51), emphasis supplied.

207. An intercarrier connection would be required where the end user – the "calling party" – subscribed to local telephone service from a LEC different from the LEC that served the ISP – the "called party."

differentiate their service from those of rival providers and to stimulate usage of their services, much as the 19th century railroads had offered land adjacent to their rights-of-way for the construction of factories as a means of creating demand for their freight services, and had built hotels and other tourist facilities along their rights-of-way as a means to stimulate passenger traffic.

140. With the introduction of broadband Internet access beginning in the late 1990s, ISPs combined these two separate functions (telecommunications and Internet access) into a single integrated service. The broadband access providers (cable and telco) did not offer the broadband "telecommunications" component on a stand-alone basis, something that would have been required under prior *Computer II* rules.[208] However, the FCC did not require that the "telecommunications" component of the broadband Internet access "bundle" be offered on a stand-alone basis, a position that was subsequently upheld by the United States Supreme Court.[209]

141. The nature of broadband Internet access as it existed in 2002 has undergone significant change to what exists today. Just as the railroads and the demands for their services eventually developed to the point where their various demand-stimulation activities were no longer

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208. *Amendment of Section 64.702 of the Commission's Rules and Regulations* ("Second Computer Inquiry"), Final Decision, 77 FCC2d 384 (1980), modified, 84 FCC2d 50 (1980), reconsidered in 88 FCC2d 512 (1981), *aff'd sub nom. Computer and Comm. Indus. Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, *Louisiana Pub. Serv. Comm'n v. FCC*, 461 U.S. 938 (1983)).

209. *Brand X*, at 987-988.

1 necessary, broadband Internet access providers such as the Joint Applicants here similarly no
2 longer need to stimulate demand by bundling content with access. The plethora of content,
3 applications and services that are now available from and offered by third-party information
4 service providers not affiliated with providers of broadband Internet access demonstrates that the
5 bundled "information services" being provided by the broadband ISPs have become an
6 inconsequential component of their service offerings, and further highlights the difference
7 between broadband access providers and the third-party content that consumers can obtain
8 through that access.
9
10 142. The distinction between transmission and information is highlighted by the fact that the
11 "information services" that are still being bundled with broadband access today go virtually
12 unused by most Internet access customers. Consumers can still choose to use the ISP's bundled
13 e-mail, web portal, search engine, or other functions, but very few consumers actually avail
14 themselves of these services.[210] A variety of statistics regarding end-user access to individual
15 websites bears this out. The website trafficestimate.com, for example, provides data on the
16 number of individual webpage visits to specific websites over a 30-day period. During the
17 period covered by this data, and limiting the analysis to the top-250 websites in terms of page
18 visits, access provider web portals represented only about 0.13% of page visits for the top-250
19 websites – i.e., fully 99.87% of the web pages visited were not associated with any "information

210. Many access provider web portals are also available to non-subscriber users at no charge, a condition that operates to undermine the "bundling" claim. AOL, in fact, has all but dropped out of the Internet access business, but still offers aol.com to anyone without a subscription fee or charge.

services" bundled with broadband Internet access. If we were to extend this analysis to all websites, that percentage would be even higher. This analysis is summarized in Attachment 3.

143. Significantly, this data refers solely to web pages accessed via web browsers such as Internet Explorer, Chrome, Firefox, or Safari. It does not include many other major categories of Internet use, such as streaming video (e.g., Netflix, Hulu, Amazon Prime), streaming audio, such as Pandora, Spotify and Grooveshark, as well as any of the 50,000 or so Internet Radio streaming services. Further, it does not include e-mail traffic, mobile app traffic including music downloads from iTunes or similar services, the ever-expanding array of cloud-based services, VoIP telephone use, video chat use (e.g., Skype, FaceTime), or any "Internet of Things" types of transmissions (e.g., Nest thermostats, security cameras, home monitoring systems). In the case of commercial (i.e., non-residential) Internet use, access provider "information services" are for all practical purposes altogether nonexistent. Businesses (except perhaps for the very smallest) do not use provider e-mail services. They do not use provider web portals. They do use Virtual Private Network ("VPN") "tunnels" for intercommunication between remote sites and principal network servers, Session Initiation Protocol ("SIP") for virtual PBX telephone systems, and any number of other specialized applications whose use of the public Internet is solely for purposes of telecommunications transport. With the exception of e-mail, none of the broadband access providers have any consequential presence in any category of traffic or use. And even access provider e-mail, which is typically bundled with broadband Internet access, is dwindling in importance as end users migrate away from those access provider e-mail domains to services such as Gmail, Yahoo mail, AOL mail and Apple's iCloud or to any number of other e-mail

services specifically to avoid being locked into to an access provider e-mail address that they will lose in the event that they decide or need to change their broadband access provider. Notably, most if not all of the few "information services" that the broadband ISPs continue to offer require minimal bandwidth – i.e., they do not even require or utilize the "broadband" access with which they are bundled.

144. The extent of non-ISP web portal "information service" traffic is confirmed in Sandvine's *Global Internet Phenomena Report*.[211] That report estimates that for the first half of 2014, web browser traffic accounted for only 13.06% of all North American fixed (i.e., non-mobile) access Internet use.[212] Thus, non-web Internet traffic, virtually none of which is associated with any access provider "information services," represents some 87% of total fixed access Internet use. For example, it has been estimated that Netflix alone accounts for some 31% of all residential Internet use.[213] Taking all of this other non-provider "information service" use into account, it is apparent that both the quantity and, from the customer's standpoint, the *value* of any "information services" that are still being "bundled" with access is immeasurably small, to the point where it has diminished to near-nonexistence. There can thus be no doubt that, from the *customers'* perspective, these services provide an advanced broadband

211. Sandvine Corp., *Global Internet Phenomena Report 1H 2014*, available online at https://www.sandvine.com/downloads/general/global-internet-phenomena/2014/1h-2014-global-internet-phenomena-report.pdf (last accessed on September 8, 2014).

212. *Id.*, at 5 (Table 1).

213. See *id.,* showing Netflix at 31.09% of aggregate traffic.

telecommunications *capability* as expressly contemplated at §706(a) of the *Telecommunications Act of 1996*:

> The Commission and each State commission with Regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of *advanced telecommunications capability* to all Americans ... by utilizing, in a manner consistent with the public interest, convenience and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.[214]

Separate and apart from the matter of common carrier regulation and treatment of the broadband services being offered by the Joint Applicants, Congress has delegated to state Commissions the express authority to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans ..." It is thus entirely reasonable and appropriate for the Commission, in reviewing the efficacy of the proposed merger, to determine whether the combination of California's two largest broadband Internet access providers has the potential to undermine or diminish competition and/or create barriers to infrastructure investment in the California broadband access market.[215] As shown in Table 10 above, a post-merger Comcast/TWC entity will be the sole provider of broadband Internet access service offering download speeds of at least 25 Mbps to more than 75% of households within the Joint Applicants' post-merger footprint. Absent competitive market or regulatory constraints, the *de facto* monopoly over this vast segment of the California broadband market will enable the post-

214. 47 U.S.C. § 1302(a), *et seq*., emphasis supplied.

215. *Scoping Memorandum*, at 11, citing *Verizon v. FCC*, 740 F. 3d 623, 638 (D. C. Cir 2014).

merger entity an unfettered ability to raise prices, degrade service, and block competitive entry across large swaths of the state.

The benefits of the proposed merger for the Joint Applicants' ability to compete for business customers are overstated

145. The Joint Applicants claim that a broader geographic scope will enable them to vie more successfully for business customers.[216] For example, in his declaration to the FCC, Dr. Mark Israel opines that, "in the case of businesses whose locations span the footprints of multiple cable operators ("super-regional" businesses), the transaction helps to alleviate the coordination problems … that currently plague efforts by cable operators to serve those businesses."[217] This argument, as well as the general claims Applicants make about how the merger will enhance their service to businesses, misses the mark.

146. While cable companies have had a relatively easy time competing for small businesses located within their standard cable operating footprint, they have had much less success with the small-to-medium business segment and virtually no success with enterprise customers. Using their standard coaxial cable plant, cable companies cannot deliver either the security or the guaranteed performance levels that most businesses require. Because of these characteristics,

216. Joint Applicants' CPUC Application, at 17.

217. Mark Israel FCC decl., April 8, 2014, at para. 135. He also repeats, in this context, general claims regarding the benefits of combining the two companies, i.e., that the proposed transaction 1) "combines the complementary skills and products of the two companies and facilitates the provision of higher quality business services," and allows the combined firm to "spread fixed cost investments." over a larger group of current and potential business customers, thereby incentivizing new investment and innovation that benefits those business customers. *Id.*

cable company business services are referred to as "best efforts" services. In comments to the FCC last year, the Ad Hoc Telecommunications Users Committee, representing large enterprise customers, made clear why best efforts business broadband Internet access services are utterly unsuitable as a substitute for the special access services large businesses purchase from ILECs or CLECs:

> All special access services have two definitional characteristics which distinguish them from best efforts business broadband Internet access services – special access connections are, by definition, dedicated to the exclusive use of the customer and they originate and terminate at locations designated by the customer, not the carrier.[218]

The Ad Hoc Telecommunications Users Committee goes on to explain:

> First, as dedicated services (or "private line" services, as they were known historically), special access offers customers a higher reliability option and higher capacities than traditional switched services provided over shared loop plant and shared end office facilities. Carriers sell special access at specified capacities or speeds (DS1, DS3, Ethernet, etc.) and customers buy them in order to obtain fixed capacity transmission links that are dedicated to their exclusive use, guaranteeing that the minimum bandwidth they purchase will always be available when they want to use it. There are no busy signals when special access is used for voice service. ILECs commit to provide a specified capacity level that does not fluctuate when they sell special access to their customers. By comparison, best efforts business broadband Internet access services are, well, best efforts – the antithesis of special access and the modern day equivalent of traditional switched voice service which may or may not be available (or too slow) when the network is busy.

218. Comments of The Ad Hoc Telecommunications Users Committee in WC Docket No. 05-25, RM-10593, *Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, filed February 11, 2013, at 11.

> Second, special access services are services for which the customer, rather than the carrier, specifies the end points. Theoretically, a customer could choose an Internet access point as the terminating end of a special access connection. But the choice is the customer's. By definition, best efforts business broadband Internet access services take customers to the Internet and only to the Internet, via the carrier's choice of Internet access point; they cannot provide a dedicated connection between two premises designated by the customer, such as a bank ATM machine, a merchant's point-of-sale terminal, a secure data storage facility, or a cellular service tower.[219]

147. The unsuitability of standard coaxial cable distribution systems for business services is a condition that cannot be overcome by widening the geographic reach of these facilities. As the geographic scope of operations is not the primary obstacle that cable companies face in increasing their ability to attract business customers, a larger footprint alone will not significantly improve their competitive presence in this market.

148. Cable companies that seek to attract multi-location business customers have to provision their services much like any other CLEC – either over fiber they must install to the customer premises or by relying on special access services. The economics of deploying dedicated facilities to a customer's premises have proved challenging for CLECs,[220] but it is typically determined on a location-specific basis. The costs and revenues associated with serving any particular building are not likely to change significantly simply because the entity considering the investment has a larger footprint. In fact, as CLECs, including the now wholly

219. *Id.*, at 11-12.

220. Specific information regarding the extent of cable companies' ownership of dedicated facilities deployed at commercial buildings should be forthcoming as a result of the FCC's pending special access data collection effort, responses to which are due on December 15, 2014.

separate twtelecom have learned, there are many locations where the deployment of competitor facilities remains uneconomic (including the very large number of business sites where customer demand is limited to the DS-1 or DS-3 level).[221]

149. There is nothing about sharing fixed costs that changes this equation significantly. There is also no evidence that the combined resources available to the larger entity would be so proportionally higher than those available to either entity (to cover its original smaller footprint) as to guarantee an accelerated ability to undertake construction of dedicated connections to particular buildings where the projected revenues were considered to be sufficient to cover costs, notwithstanding the fact that they are "passed" by the cable CLECs existing fiber.

150. The claim by the Joint Applicants that the merger is vastly superior to any multi-firm collaboration in which they might individually participate with other CLECs in making them better competitors in the business market is also without merit. As CLECs, cable companies don't have to "collaborate" in the sense that Dr. Israel suggests in order to access customers' out-of-region locations. They would simply have to purchase special access from the local ILEC (or other special access provider) – much as AT&T and Verizon do when they serve customers who have locations outside of their footprints.

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221. See, e.g., *Special Access Rates for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, WC Docket No. 05-25, RM-10593, *Comments of BT Americas, Cbeyond, Earthlink, Integra, Level 3 and twtelecom*, filed February 11, 2013, at 14-19 ("Incumbent LECs Possess Overwhelming Market Shares, and Competitors Face High Barriers -to Entry, in the Provision of DS1 and DS3 Special Access Services") and 74-75 ("There is No Reliable Basis for the Commission to Predict That Significant Competitive Entry Will Occur in Any Relevant Special Access Market").

151. Ultimately, however, although there is no basis to conclude that they require more scale to be successful, it remains unclear why the largest and most well-financed cable companies haven't made a more credible entry into the business market. What is clear it that the merger of Comcast and TWC forever forecloses the possibility for them to individually develop as strong independent competitors in this market.[222]

There are compelling reasons why the Commission should find that the proposed merger does not satisfy the requirements of PU Code §854 or of §706(a) of the federal *Telecommunications Act of 1996*, or otherwise serve the public interest.

152. Section 706 of the *1996 Act* provides that '... each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans ... by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." Although the FCC's current classification of broadband Internet access as an "information service" may operate to preclude the Commission from regulating the provision of broadband Internet access as a common carrier service, Section 706 appears to parallel the explicit

222. Notably, until TWC was spun off by Time Warner Corporation in 2009, TWC and twtelecom were affiliates. twtelecom was then, and still is, in the business of providing dedicated services to enterprise customers. Whatever efficiencies in this segment are being ascribed to the integration of TWC and Comcast, those same efficiencies – perhaps even greater ones – would have been available to a previously combined TWC/twtelecom collaboration. Clearly the importance of such efficiencies were not apparent to the parent company, or if they were, they were not viewed as of sufficient importance to justify retention of the two companies under a common parent company umbrella.

requirements at PU Code Section 854, which requires the CPUC to find that the proposed merger will "[n]ot adversely affect competition" [§854(b)(3)] and that it "[b]e beneficial on an overall basis to state and local economies, and to the communities in the area served by the resulting public utility" [§854(c)(6)].

153. With respect to Section 854(a), the Joint Applicants appear to view Section 854(a) as a sort of "do no harm" standard. They state that "[t]he primary standard used by the Commission to determine if a transaction should be approved under Section 854(a) is whether the transaction will be 'adverse to the public interest.'"[223] They argue that "[t]his transaction will generate substantial public interest benefits, with no countervailing harms ..." and that "[b]y permitting Comcast Corporation and Time Warner Cable to combine the best aspects of their robust and innovative voice services, and by adding scale to Comcast Corporation's overall business that will encourage more network investment in California, 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."[224] Limiting their focus solely to "voice services," the Joint Applicants posit that the Time Warner Cable CLEC operation in particular "will directly benefit from the increased size and scope of the combined company and the more robust Internet Protocol ('IP') network" that will become available to it following the merger.[225] "Across its footprint, Comcast Corporation offers its XFINITY Voice customers several enhanced features,

223. CPUC Application, at 14.

224. *Id.*

225. *Id.*, at 15.

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 Corporation also offers customers the ability to send and receive unlimited text messages to and from their XFINITY Voice telephone numbers."[226] Of course, there is nothing so unique about any of these "features" that they could not be readily adopted by a stand-alone TWC; indeed, start-up "over-the-top" VoIP providers, such as Vonage, have been offering many of these same capabilities – and others not mentioned – for a number of years. The 2010 *Horizontal Merger Guidelines* require that "[c]ognizable efficiencies are merger-specific efficiencies that have been verified and do not arise from anticompetitive reductions in output or service."[227] Efficiencies that the merging parties are capable of achieving in the absence of the proposed merger cannot be included in the merger evaluation. Moreover, any merger-specific gains cannot be the result of anticompetitive conduct, such as cost savings arising from reduction in rivalrous conduct. None of the claimed service improvements or operating efficiencies associated with voice telephone services require the merger or could not be accomplished by either company in its absence, and the Joint Applicants have offered no verifiable evidence to the contrary.

154. Section 854(b) requires the CPUC to find that the merger "[p]rovides short and long-term economic benefits to ratepayers" and does not "adversely affect competition." The transaction has the potential to adversely affect competition in the California broadband market and

226. *Id.*

227. *HMG*, at § 10.

1 to result in higher prices for the merged company's customers across all of its voice, broadband
2 and video service offerings. TWC and Comcast assert that they do not currently compete with
3 one another in the same geographic territories, but that is by their own affirmative choice.
4 Certainly other "overbuilders" have emerged in the cable and broadband space; where Verizon
5 does offer *FiOS*, it competes directly with whatever cable MSO(s) happen to serve the same
6 area. RCN has overbuilt incumbent cable MSOs in limited portions of several cities, including
7 New York, Boston, Washington, Chicago, San Francisco, and Los Angeles.[228] TWC and
8 Comcast claim that these tacit not-to-compete policies result from the fact that the presence of
9 multiple providers that would result from their respective entry into each other's operating areas
10 would be impractical as an economic matter due to the presence of extreme economies of scale
11 and scope in the cable TV and broadband markets. Yet the Joint Applicants also claim to
12 confront extensive competition at all levels, and argue that the merger is necessary to improve
13 their own competitive position. These conflicting claims clearly do not mesh – if their own entry
14 into each other's geographic footprint is not practical as an economic matter *for them*, how could
15 it possibly be practical for anybody else?
16

228. http://www.viamediatv.com/Partner_RCN.htm (accessed 12/3/2014). RCN sold its San Francisco operation, which covered only a small part of the City, to Astound in 2007. http://files.shareholder.com/downloads/RCNC/0x0x235924/9c7ec69a-356f-4f97-8666-556ce66ab94f/RCNI_News_2007_3_14_General.pdf (accessed 12/3/2014). RCN is no longer operating in Los Angeles, although the current status of whatever infrastructure it had constructed there is unclear.

Conclusion

155. Based upon my review and analysis of the evidence provided by the Joint Applicants both before the CPUC and the FCC, I do not believe that the proposed merger satisfies the public interest and public benefit requirements of PU Code §854. Moreover, by increasing concentration and market power in the provision of broadband Internet access to residents of California, the proposed merger will produce results that are at odds with the specific requirements of §706 of the 1996 federal *Telecommunications Act*, which provides that '... each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans ..." There are thus substantial risks of consumer and competitor harm as a result of the proposed merger, including:

- The post-merger Comcast will become the single dominant provider of last-mile broadband access in California. Its broadband distribution network will "pass" some [**BEGIN HIGHLY CONFIDENTIAL**] % [**END HIGHLY CONFIDENTIAL**] of all California housing units – a far greater percentage than the 60% of housing units that a post-merger Comcast will pass nationwdie. As the HHI calculation presented in Table 1 demonstrates and although necessarily calculated in terms of "homes passed" rather than total market share of subscribers, the increase in the HHI of the California residential broadband Internet access market that would result from the proposed merger is many multiples of the 200-point threshold set out in the *HMG*, which considers that "[m]ergers resulting in highly concentrated markets that involve an increase in the HHI

of more than 200 points will be presumed to be likely to enhance market power." Whatever the *national* impact of a Comcast/TWC merger, the resulting impact of the merger upon the California broadband market will be far greater;

- The Joint Applicants have individually been able to exploit their already-substantial market power with respect to residential broadband services by initiating a steady increase in prices, thus bucking the downward trend in prices for other technology-impacted markets. Moreover, the Joint Applicants have used their ability to raise broadband prices to offset losses from "cord cutters" in their MVPD business, since most alternatives to MVPD services still require high-speed broadband access that, for most California customers, is available only from one of the Joint Applicants. The increase in the Joint Applicants' combined market power over residential broadband access that would result from the merger will enhance and expand their opportunities to effect even larger price increases going forward;

- As the incumbent local exchange carriers' interest in providing stand-alone wireline voice telephone servide wanes and participants in what will become an even more concentrated post-merger market seek to bundle voice with broadband and other services, prices for stand-alone residential telephone service will necessarily rise, an outcome whose greatest impact will be felt by low-income households that, due to limited disposable income, may choose not to purchase douple- and triple-play bundles;

- Despite the Joint Applicants' claims, they have failed to demonstrate that the merger will produce efficiencies that each of the Joint Applicants could not otherwise achieve on their own and, moreover, that even if such efficiencies or cost savings were actually realized as a result of the merger, that any of these will flow through to consumers in the form of lower prices;

- Notwithstanding general claims as to the importance of the proposed merger in providing incentives for the Joint Applicants to continue to invest in their California broadband infrastructure, from their individual responses to ORA data requests it is apparent that there are no specific investment initiatives that are actually predicated upon the merger's approval. Indeed, the absence of post-merger competition and competitive discipline would likely reduce incentives for, and thus reduce the likelihood of, further build-out by the Joint Applicants or anyone else of advanced telecommunications network facilities in areas where such facilities do not presently exist; and

- Approval of the merger will work to expand opportunities for the post-merger entity to engage in even more aggressive leveraging of its market power in residential broadband and MVPD services into the potentially more competitive content markets, including increased opportunity and incentive for discriminatory treatment of competing online video distributors ("OVDs") both to frustrate their entry as well as to capture economic rents that would replace the post-merger entity's competitive losses from "cord cutters"

who seek to replace MVPD services with those available from OVDs for streaming over the customer's broadband access service.

These risks, individually and collectively, far outweigh any putative benefits. Overall, allowing the transaction to proceed will be "adverse to the public interest" and will not "[b]e beneficial on an overall basis to state and local economies, and to the communities in the area served" by the merged entity. For these and the various other reasons set forth in this report, I conclude that the proposed merger of Comcast and Time Warner Cable is not in the public interest, and that it should not be permitted to go forward.

VERIFICATION

I declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge, information and belief, and if called to testify thereon I am prepared to do so.

LEE L. SELWYN

Executed at Boston, Massachusetts

this 10th day of December, 2014.

Attachment 1

Statement of Qualifications
Dr. Lee L. Selwyn

ECONOMICS AND
TECHNOLOGY, INC.

Statement of Qualifications

LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the telecommunications field for more than forty years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, competitive local exchange carriers, interexchange carriers, wireless services providers, and specialized access services carriers.

Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance and before the U.S. Senate Judiciary Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute, the Harvard University Program on Information Resources Policy, the Columbia University Institute for Tele-Information, the Massachusetts Institute of Technology Alfred P. Sloan School of Management, the National Association of State Utility Consumer Advocates (NASUCA), the National Conference of Regulatory Attorneys, as well as at numerous conferences and workshops sponsored by individual regulatory agencies. Dr. Selwyn is an elected Town Meeting Member for the Town of Brookline, Massachusetts, and serves on the Town's Advisory and Finance Committee and its Subcommittee on Planning and Regulation, on the Town's Audit Committee, and on its Tax Override Study Committee.

Publications

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"Is Equal Access an Adequate Justification for Removing Restrictions on BOC Diversification?" *Presented at the Institute of Public Utilities Eighteenth Annual Conference*, Williamsburg, VA, December 8-10, 1986.

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"Market Power and Competition Under an Equal Access Environment," *Presented at the Sixteenth Annual Conference, "Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation," Institute of Public Utilities, Michigan State University*, Williamsburg, VA, December 3-5, 1987.

"The Sources and Exercise of Market Power in the Market for Interexchange Telecommunications Services," *Presented at the Nineteenth Annual Conference, "Alternatives to Traditional Regulation: Options for Reform," Institute of Public Utilities, Michigan State University*, Williamsburg, VA, December, 1987.

"Assessing Market Power and Competition in The Telecommunications Industry: Toward an Empirical Foundation for Regulatory Reform," *Federal Communications Law Journal*, Vol. 40 Num. 2, April 1988.

"A Perspective on Price Caps as a Substitute for Traditional Revenue Requirements Regulation," *Presented at the Twentieth Annual Conference, "New Regulatory Concepts, Issues and Controversies," Institute of Public Utilities, Michigan State University*, Williamsburg, VA, December, 1988.

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RECORD OF EXPERT TESTIMONY

DR. LEE L. SELWYN

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Pennsylvania Public Utilities Commission, *Pennsylvania Bell*, Docket No. R-80061235, on behalf of Business Users Group, Direct Testimony filed December 5, 1980, cross-examination December 16, 1980.

Missouri Public Service Commission, *Filing by Southwestern Bell Telephone Company of New Intrastate Rates, Tolls, and Charges Applicable to Intrastate Telecommunication Services Furnished Within the State of Missouri*, Docket No. TR-80-256, on behalf of Missouri Retailers Association, Missouri Hotel and Motel Association, Armco, Inc., Direct Testimony filed October 31, 1980.

Minnesota Public Utilities Commission, *Petition of Northwestern Bell Telephone Company Minneapolis Minnesota for Authority to Change its Schedule of Private Line Telephone Rates for Customers within the state of Minnesota,* Docket No. P-421/M-80-306, on behalf of Minnesota Department of Public Services, Direct Testimony filed October 31, 1980, Surrebuttal Testimony filed December 10, 1980, cross-examination December 18, 1980.

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Texas Public Utilities Commission, *Application of Southwestern Bell Telephone Company for Authority to Change Rates Statewide*, Docket No. 3340, on behalf of Texas Retailers Association State Purchasing and General Services Commission, Direct Testimony filed September 9, 1980, cross-examination October 20, 1980.

Alabama Public Service Commission, *Application of South Central Bell Telephone Company for a Rate Change*, Rehearing Docket No. 17743, on behalf of Attorney General of Alabama, Direct Testimony filed September 1980, cross-examination January 21, 1981.

Illinois Commerce Commission, *Illinois Bell Telephone Company*, Docket No. 80-0010, on behalf of Illinois Retail Merchants Association, Direct Testimony filed July 1980, cross-examination, July 28, 1980.

New York Public Service Commission, *Proceeding on motion of the Commission as to the rates, charges, rules and regulations of the New York Telephone Company for telephone service*, Case No. 27710, on behalf of ABC, Inc., General Electric Company, New York State Council of Retail Merchants, Direct Testimony filed July 9, 1980, Rebuttal Testimony filed August 4, 1980, cross-examination July 24, 1980.

Texas Public Utilities Commission, *Inquiry by the Public Utility Commission of Texas into Certain Cost Studies of Southwestern Bell Telephone Company*, Docket No. 2944, on behalf of Texas Retailers Association, Texas Alarm and Signal Association, Direct Testimony filed June 23, 1980.

Texas Public Utilities Commission, *Petition of Mountain States Telephone and Telegraph Company for Authority to Change Rates*, Docket No. 3040, on behalf of Texas Retailers Association, Direct Testimony filed March 31, 1980, cross-examination May 28-29, 1980.

Ohio Public Utilities Commission, *Complaint of the Ohio Bell Telephone Company Concerning Certain of its Filed Rates and Charges*, Docket No. 79-1185-TP SLF, on behalf of Ohio Council of Retail Merchants, Armco, Inc., General Electric Company, Direct Testimony filed March 17, 1980, cross-examination March 26, 1980.

Michigan Public Service Commission, *Application of Michigan Bell Telephone Company for authority to file Tariff MPSC No. 80 to provide for the offering of Republican National Convention Service and for the authority to withdraw Tariff MPSC No. 80 on or before October 1, 1980*, Docket No. U-6327, on behalf of Committee of Arrangement of the Republican National Convention, ABC, Inc., CBS, Inc., NBC, Inc., Direct Testimony filed January 25, 1980.

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Arizona Corporation Commission, *Mountain States Telephone and Telegraph Company*, Docket No. 9981-E-1051, on behalf of Sears, Roebuck and Company, filed December 7, 1979, cross-examination March 16, 1980.

Minnesota Public Service Commission, *Petition of Northwestern Bell Telephone Company Minneapolis Minnesota for Authority to Change its Schedule of Telephone Rates for Customers within the state of Minnesota,* Docket No. P-421/GR-79-388 (Rate Design), on behalf of Participating Department Staff of the Minnesota Department of Public Services, Direct Testimony filed August 28, 1979.

Texas Public Utilities Commission, *Application of Southwestern Bell Telephone Company for a Statewide Rate Increase,* Docket No. 2673, on behalf of Texas Retailers Association, Direct Testimony filed August 27, 1979, cross-examination September 19, 1979.

Minnesota Public Service Commission, *Petition of Northwestern Bell Telephone Company Minneapolis Minnesota for Authority to Change its Schedule of Telephone Rates for Customers within the state of Minnesota,* Docket No. P-421/GR-79-388 (Business Information Systems), on behalf of Participating Department Staff of the Minnesota Department of Public Services, Direct Testimony filed August 24, 1979, Surrebuttal Testimony filed October 10, 1979, cross-examination September 12, 1979.

Maryland Public Service Commission, *Application of the Chesapeake and Potomac Telephone Company of Maryland for Authority to increase and restructure its schedule of rates and charges*, Case Nos. 7305/7335, on behalf of Banking and Savings Institute, Mayor and City Council of Baltimore, Hospital Association, Maryland Industrial Business Group, Maryland Association of Realtors, Greater Balto Board of Realtors, Montgomery, Anne, Arundel Harford, Howard, Prince George's County Board of Realtors Inc., Direct Testimony filed August 20, 1979, cross-examination September 4, 1979.

Pennsylvania Public Utilities Commission, *Pennsylvania Public Utility Commission et al v. The Bell Telephone Company of Pennsylvania*, Docket No. 719, on behalf of Pennsylvania Retailers Association, et al., General Electric Company, Westinghouse Electric Corporation, Manufacturers Association of Beaver County, Bethlehem Steel Corporation, Statement filed June 15, 1979, cross-examination June 21, 1979.

New York Public Service Commission, *Proceeding on motion of the Commission as to the rates, charges, rules, and regulations of the New York Telephone Company for telephone service*, Case No. 27469, on behalf of CBS, Inc., ABC, Inc., General Electric Company, New York State Council of Retail Merchants, Direct Testimony filed May 1, 1979, Rebuttal Testimony filed May 22, 1979, Surrebuttal Testimony filed June 6, 1979, cross-examination May 18, 1979, June 4 and 12, 1979.

Michigan Public Service Commission, *Application of Michigan Bell Telephone Company for authority to revise its tariff MPSC No.2 to provide for the offering of the Dimension 100 PBX System, Dimension 2000 PBX System, Dimension 100 PBX Service, Dimension 400 PBX Service, and Dimension 2000 PBX Service,* Docket Nos. U-5197, U-5330, U-4742, U-5753, U-5754 , on behalf of Michigan Telephone Users Committee, Direct Testimony filed March 2, 1979.

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Federal Communications Commission, *American Telephone and Telegraph Company, Revisions to Tariff FCC Nos. 258 and 267, Transmittal No. 12478, Revisions to Tariff FCC No. 268, Transmittal No. 12500, Revisions to Tariff FCC No. 267, Transmittal No. 12853*, Docket No. 20690, on behalf of Hearing Division of the Common Carrier Bureau, filed November 6, 1978, cross-examination January 29-31, 1979.

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New York Public Service Commission, *Proceeding on motion of the Commission as to the rates, charges, rules and regulations of the New York Telephone Company for telephone service.*, Case No. 27350, on behalf of ABC., Inc., CBS, Inc., General Electric Company, New York State Council of Retail Merchants, Direct Testimony filed September 8, 1978, cross-examination September 26, 1978.

New Jersey Department of Energy, *Petitions of New Jersey Telephone Company for Approval of Increases in Rates for Telephone Services*, Docket Nos. 7711-1136, 784-278, 784-279, on behalf of New Jersey Retail Merchants Association, Direct Testimony filed August 10, 1978.

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California Public Utilities Commission, *Investigation on the Commission's own motion into the rates, tariffs, costs, and practices of Centrex service by any or all of the telephone corporations listed in the investigation,* Application No. 10191, on behalf of California Retailers Association, California Manufacturers Association, Direct Testimony filed July 8, 1977, cross-examination July 26-27, 1977; Supplemental Direct Testimony filed February 1, 1978, cross-examination February 9, 1978; Second Supplemental Direct Testimony filed June 19, 1978, cross-examination October 24 and 26, 1978.

Illinois Commerce Commission, *Illinois Bell Telephone Company Proposed general increase in telephone rates applicable in all exchanges of the Company in Illinois*, Docket No. 78-0034, on behalf of Illinois Retail Merchants Association, Direct Testimony filed June 9, 1978, cross-examination July 10, 1978.

Minnesota Public Service Commission, *Petition of Northwestern Bell Telephone for Authority to Change Certain of its Rates for the Telephone Service Furnished to Customers in the State of Minnesota*, Docket No. P-421/GR-77-1509, on behalf of Participating Department Staff of the Minnesota Department of Public Services, Direct Testimony filed June 2, 1978, Supplemental Direct Testimony filed July 17, 1978, cross-examination June 20, 1978, July 27, 1978.

Michigan Public Service Commission, *Application of Michigan Bell Telephone Company for Authority to Revise its Tariff MPSC Nos. 1, 3, and 5*, Docket No. U-5719, on behalf of Michigan Business Telecommunication Users Committee, Direct Testimony filed May 22, 1978, cross-examination June 1, 1978.

Texas Public Service Commission, *Application of Southwestern Bell Telephone Company for a Statewide Rate Increase*, Docket No. 1704, on behalf of Texas Retailers Association, Direct Testimony filed May 12, 1978, cross-examination June 2, 1978.

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Illinois Commerce Commission, *Illinois Bell Telephone Company Proposed rates and regulations for Direct Inward Dialing Service for the Company-owned or Customer-provided PBX dial switchboards, applicable to all exchanges of the Company,* Docket No. 77-0511, on behalf of Spiegel, Inc., Sears, Roebuck and Company, Carle Foundation Hospital, Brunswick Corporation, Lord, Bessell & Brook, Direct Testimony filed March 23, 1978, cross-examination April 5, 1978.

Federal Communications Commission, *American Telephone and Telegraph Company (Long Lines Department), Wide Area Telecommunications Services (WATS),* Docket No. 21402, on behalf of National Retail Merchants Association, filed January 17, 1978.

1977

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Nevada Public Service Commission, *Nevada Bell Telephone Company*, Docket No. 1180, on behalf of J C Penney, Direct Testimony filed October, 1977, cross-examination October 6, 1977.

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California Public Service Commission, *Application of the Pacific Telephone and Telegraph Company, a corporation, for telephone service rate increases to cover increased costs in providing telephone service*, Application No. 55492, on behalf of California Retailers Association, California Manufacturers Association, Direct Testimony filed October 11, 1976, cross-examination October 27, 1976.

Michigan Public Service Commission, *Application of Michigan Bell Telephone Company for Authority to Revise its Schedule of Rates and Charges*, Docket No. U-5125, on behalf of Michigan Business Telephone Users Committee, Direct Testimony filed October 11, 1976, cross-examination November 4-5, 1976.

Illinois Commerce Commission, *Illinois Bell Telephone Company Proposed rate increase for Private Line and Mileage Services, revisions and increases for Telephone Answering Service Equipment and Services applicable to all exchanges of the company in Illinois*, Docket No. 76-0200, on behalf of Illinois Retail Merchants Association, Direct Testimony filed October 1976, cross-examination November 10, 1976.

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Ohio Public Service Commission, *Application of the Ohio Bell Telephone Company for authority to increase and adjust its Rates and Charges and to Change Regulations and Practices Affecting its Rates and Charges in each of its Duly Filed Intrastate Tariffs*, Docket No. 74-761-TP-AIR, on behalf of Ohio Counsel of Retail Merchants, Direct Testimony filed March 5, 1976, cross-examination March 18, 1976.

1975

Florida Public Service Commission, *Petition of Central Telephone Company of Florida and Florida Central Telephone Company for Authority to Increase their Rates and Charges to Rates and Charges that are Fair and Reasonable*, Docket No. 750320-TP, on behalf of State of Florida, Direct Testimony filed November 21, 1975, cross-examination December 17, 1975.

New Mexico State Corporation Commission, *Mountain States Telephone and Telegraph Company,* Docket No. 673, on behalf of New Mexico Retail Association, Direct Testimony filed October 30, 1975, cross-examination November 3-4, 1975.

North Carolina Utilities Commission, *Application of Southern Bell Telephone and Telegraph Company for Authority to Increase its Local Exchange Rates and Charges Throughout its Franchised Areas in North Carolina*, Docket No. P-55 Sub 742, on behalf of North Carolina Retail Merchants Association, Direct Testimony filed September 23, 1975, cross-examination October 16, 1975.

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Florida Public Service Commission, *Petition of General Telephone Company of Florida under Section 364.05, Florida Statutes, that Consent be Given to the Placing in Effect of the New Rate Scheduled filed herewith to Accomplish an Increase in the Rates and Charges for Intrastate Telephone Services Rendered by Said Company to the Level of Reasonable Compensation for such Services and in the Alternative for Partial Relief on an Interim Basis,* Docket No.74792-TP , on behalf of Florida Retail Federation, Direct Testimony filed June 18, 1975, July 18, 1975, cross-examination June 30, 1975, July 29, 1975.

Massachusetts Department of Public Utilities, *Investigation by the Department on its own motion as to the Propriety of the Rates and Charges set forth in Revised Pages of its Tariffs Filed by the New England Telephone and Telegraph Company*, Docket No. 18210, on behalf of The Foxboro Company, Sears, Roebuck and Company, Jordan Marsh Company, Position Paper submitted May 29, 1975, Direct Testimony filed July 18, 1975, cross-examination August 29, 1975.

Arizona Corporation Commission, *Request of Mountain States Telephone and Telegraph Company for the Commission to Determine the Earnings of the Company and the Valuation of all of the Company's Properties and a Fair Rate of Return,*, Docket No. 9981-E-1051, on behalf of Sears, Roebuck and Company, J C Penney Company, Inc., Montgomery Ward and Company, Carter Hawley Hale Stores, Inc., Levy's, Direct Testimony filed February 11, 1975, cross-examination February 20, 1975.

Missouri Public Service Commission, *Filing by Southwestern Bell Telephone Company of New Intrastate Rates, Tolls, and Charges Applicable to Intrastate Telecommunication Services Furnished Within the state of Missouri,* Docket No. 18138, on behalf of Missouri Retailers Association, Direct Testimony filed January 21, 1975.

1974

Colorado Public Utilities Commission, *Mountain States Telephone and Telegraph Company*, Docket No. 867, on behalf of Sears, Roebuck and Company, J C Penney Company, Inc., filed November, 1974, cross-examination November 18, 1974.

Georgia Public Service Commission, *Application for an adjustment in the Scheduled of Rates and Charges for the Intrastate Service Furnished by Southern Bell Telephone and Telegraph Company of Georgia*, Docket No. 2632U, on behalf of Georgia Retailers Association, Direct Testimony filed October 2, 1974, cross-examination October 30, 1974.

District of Columbia Public Service Commission, *Complaint and Application of the Chesapeake and Potomac Telephone Company for Hearing and Investigation Regarding Its Current Level of Earnings and Level of Rates*, Docket No. 595, on behalf of General Services Administration and the District of Columbia Department of Highways and Traffic, Direct Testimony filed September 5, 1974, cross-examination September 12, 1974.

Oklahoma Corporation Commission, *Southwest General Telephone Company*, Docket No. 25048, on behalf of Oklahoma Retail Merchants Association, Direct Testimony filed February 18, 1974, cross-examination February 20, 1974.

1973

New Mexico State Corporation Commission, *Application of Mountain States Telephone and Telegraph Company for an Adjustment in Rates and Charges for Intrastate Telephone Service Furnished by it Within the State of New Mexico*, Docket No. 567, on behalf of New Mexico Retailers Association, Direct Testimony filed October 3, 1973, cross-examination October, 1973.

New Mexico State Corporation Commission, *Review of General Telephone Company of the Southwest Proposed Rates and Tariff,* Docket No. 533; *and Complaint of JC Penney Company and Sears Roebuck and Company Re: General Telephone Company of the Southwest's General Exchange Tariff Section 40- Access Charge Service*, Docket No. 566, on behalf of J C Penney Company, Inc., Sears, Roebuck and Company, Direct Testimony filed July 25, 1973, Supplemental Direct Testimony filed December 19, 1973, cross-examination January 8, 1974.

Attachment 2

Modeling the Relationship Between Broadband Penetration Rate and Household Income

ECONOMICS AND TECHNOLOGY, INC.

ATTACHMENT 2

MODELING THE RELATIONSHIP BETWEEN BROADBAND PENETRATION RATE AND HOUSEHOLD INCOME

In order to further examine the relationship between household income and broadband penetration, I performed several different multiple linear regression analyses using *Penetration Rate* as the dependent variable, with *Median Household Income* as the principal explanatory variable. The analysis was necessarily limited to examining the penetration experience specific to three of the four Joint Applicants (Comcast, TWC and Charter), since we do not have any penetration data for competing providers or from Bright House. The *Penetration Rate* variable was calculated using data from each of the Joint Applicants' individual responses to ORA Data Requests,[1] and is simply defined as the number of homes served by the Joint Applicants in each Census Block Group ("CBG") divided by the number of homes passed by the Joint Applicants in that CBG.[2]

Census data collected by the United States Department of Labor, Bureau of Labor Statistics ("BLS") reports Median Household Income for each CBG in California. Since the data provided by the Joint Applicants was reported at the individual Census Block level, data for all Census Blocks within a CBG was aggregated and was input to the regression model at the CBG level. Because the number of homes passed varies across different CBGs, it was appropriate to weight each regression by the number of homes passed in each CBG. However, the differences between weighted and unweighted versions of the regressions are small. Additionally, a visual inspection of the data indicated that the relationship between *Median Household Income* and *Penetration Rate* was heteroskedastic in nature.[3] Thus, the regression models below are estimated with

1. ORA Data Requests, Set 1, nos. 3 and 4.

2. For certain (although very few) CBGs where the reported Penetration Rate exceeded 100%, the Penetration Rate was rounded down to 100% as it is not logical for the number of homes served to exceed the number of homes passed.

3. The term *heteroskedasticity* refers to the circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it. A scatterplot of these variables will often create a cone-like shape, as the scatter (or variability) of the dependent variable widens or narrows as the value of the explanatory variable increases. For example, annual income might be a heteroskedastic variable when predicted by age, because most teenage workers earn close to the minimum wage, so there isn't a lot of variability during the teen years. However, as teens turn into 20-somethings, and 20-somethings into 30-somethings, some will tend to shoot-up the tax brackets, while others will increase more gradually (or perhaps not at all).

White's heteroskedasticity-consistent standard errors.[4] Finally, several robustness checks were performed by running the fully specified model using each provider's *Penetration Rate* data separately, to verify that the magnitude and algebraic signs of the estimated coefficients are consistent across providers. Overall, the results were consistent for the estimated effect of income on the penetration rate using several different permutations of the basic regression model.

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Table A2-1

REGRESSION ANALYSIS: JOINT APPLICANTS SUBSCRIBER PENETRATION, MEDIAN HOUSEHOLD INCOME, AND SERVICE PROVIDER

Specification	(1) Penetration Rate as a function of Median Household income	(2) Penetration Rate as a function of Median Household Income and Service Provider
Explanatory Variable	Coefficient	
Median Household Income (Thousands of Dollars)	***	***
Charter		-***
Time Warner		-***
Constant	***	***
Observations		
Adjusted R-squared		

Note 1: Regression models are estimated using White's heteroskedasticity-consistent standard errors.
Note 2: Regressions are weighted by the Number of Households Served in each Census Block Group using A-Weights.
Note 3: Single, double, and triple asterisks (*,**,***) denote statistical significance at 90%, 95%, and 99% confidence levels, respectively.
Source: Response to ORA Data Requests Set 1, Nos. 3-4 and CPUC California Broadband Availability Database, Round 10 data as of June 30, 2014. See Table A2-4 for complete regression results.

[**END HIGHLY CONFIDENTIAL**]

4. Commonly referred to as "robust standard errors," White's heteroskedasticity-consistent standard errors are implemented in regression analysis when the relationship between the dependent variable and the main independent variable of interest is heteroskedastic. Conventional standard errors rely upon the assumption that the relationship of interest is homoskedastic and will overstate statistical significance (i.e.. t-statistics, etc.) in cases where this assumption does not hold – robust standard errors make no such assumption. Halbert White, "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity," *Econometrica*, **48**:4 (May, 1980), at 817-838.

In order to isolate and estimate the causal effect of income on penetration – rather than simply estimating the association between the two conditions being examined – it was necessary to include several control variables known as "dummy variables." Table A2-1 displays the results of two regression models, a simple univariate regression of penetration rate on income and a second multivariate regression, which includes Joint Applicant dummy variables for two of the three service providers – Charter and TWC. These dummy variables are important to include because we would expect differences across the Joint Applicants (i.e.. service, brand, etc.) to influence the decision of consumers within each CBG to purchase broadband service. When these dummy variables are added to the regression model, we see that the estimated relationship between the Penetration Rate of the CBG and the Median Household Income of the CBG falls from [**BEGIN HIGHLY CONFIDENTIAL**] to [**END HIGHLY CONFIDENTIAL**]. This decrease, coupled with the fact that a joint test of the dummy variables (known as an *F*-test) finds their inclusion to be statistically significant at the 99 percent level, indicates that it is indeed necessary to control for differences across the four Joint Applicants. The results of this second regression model are properly interpreted as follows: A $1,000 increase in the *Median Household Income* of a CBG is expected to increase the *Penetration Rate* for that CBG by [**BEGIN HIGHLY CONFIDENTIAL**] [**END HIGHLY CONFIDENTIAL**] percentage points, all else equal. The additional regression models discussed below should be interpreted in the same manner.

Because this analysis was limited to the experience of three of the Joint Applicants and thus does not examine *total* broadband penetration across all service providers, each provider's penetration experience is affected not only by household income but also by the availability of a competitive alternative to one of the Joint Applicant's service in a given CBG. To account for this, the initial model specification was modified by including several control variables to account for variation in competition across CBGs. Three types of competitive availability dummy variables were defined and estimated:

(1) Competitive service at any download speed (=1 if present, =0 if not);

(2) Competitive service at a download speed of at least 25 Mbps (=1 if present, =0 if not); and

(3) a pair of interrelated competitive dummy variables, (a) competitive service at a download speed less than that being offered by Comcast, TWC or Charter (=1 if present, =0 if not) and (b) competitive service with a download speed equal to that being offered by Comcast, TWC, or Charter (=1 if present, =0 if not).[5]

5. Coefficients for collections of category variables (Speed, Company) are interpreted as the penetration rate above or below the reference variable for that category. E.g., each of the coefficients for the Companies represent that company's additional penetration rate above or below Comcast's, the category reference variable for Company.

Results of regressions that control both for the specific service provider and the degree competition within each CBG are displayed in Table A2-2.

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Table A2-2

REGRESSION ANALYSIS: SUBSCRIBER PENETRATION, MEDIAN HOUSEHOLD INCOME, SERVICE PROVIDER, AND COMPETITIVE AVAILABILITY

Specification	(3) Penetration Rate as a function of Median Household Income, Service Provider, and Service Provider Faces Competition	(4) Penetration Rate as a function of Median Household Income, Service Provider, and Service Provider Faces Competition 25 Mbps and Above	(5) Penetration Rate as a function of Median Household Income, Service Provider, and Competitive Speed is, Greater, Equal to, or Less than Service Provider Speed	(6) Penetration Rate as a function of Median Household Income, Service Provider, Service Provider Faces Competition 25 Mbps and Above, and Competitive Speed is, Greater, Equal to, or Less than Service Provider Speed
Explanatory Variable	Coefficient			
Median Household Income (Thousands of Dollars)	***	***	***	***
Charter	-***	-***	-***	-***
Time Warner	-***	-***	-***	-***
Has Competition	-***			
Speed of Competitor is 25 Mbps or Above		-***		-***
Joint App Speed is Greater than Competitor			***	***
Joint App Speed is Equal to Competitor			-***	-***
Constant	***	***	***	***
Observations				
Adjusted R-squared				

Note 1: Regression models are estimated using White's heteroskedasticity-consistent standard errors.

Note 2: Regressions are weighted by the Number of Households Served in each Census Block Group using A-Weights.

Note 3: Single, double, and triple asterisks (*,**,***) denote statistical significance at 90%, 95%, and 99% confidence levels, respectively.

Source: Response to ORA Data Requests Set 1, Nos. 3-4 and CPUC California Broadband Availability Database, Round 10 data as of June 30, 2014. See Table A2-4 for complete regression results.

[**END HIGHLY CONFIDENTIAL**]

The regression analysis reveals a consistent and statistically significant relationship between household income and the propensity to subscribe to high-speed broadband access. Moving to the right across the top row of Table A2-2, we see that the coefficient on Median Household Income remains very consistent as different combinations of control variables are included in the model – settling somewhere around [**BEGIN HIGHLY CONFIDENTIAL**] [**END HIGHLY CONFIDENTIAL**], which suggests that the model is correctly controlling for potential biases caused by differences among the Joint Applicants as well as for variation in the level of competition that the Joint Applicants face. All else equal, we would expect that sales of broadband by one of the Joint Applicants would be lower where a competitive alternative of equal or greater speed is available than where it is not; we observe that apart from one variable ("Joint Applicants' Speed is Equal to Competitor") the algebraic sign of each covariate is consistent with economic theory: In CBGs where the Joint Applicants face competition, their own *Penetration Rate* is lower, since some potential customers are taking service from a rival provider. In CBGs where the Joint Applicant's speed is greater than that being offered by a competitor, the positive algebraic sign on the *Competitive service at a download speed less than that being offered by Joint Applicant* dummy variable suggests that the presence of a rival that is offering an inferior service has a far lesser impact upon the Joint Applicant's penetration rate than in the case where the competitor is offering service at an equal or greater speed than that being offered by the Joint Applicant. All coefficients in Table A2-2 are statistically significant at the 99 percent level, each model's *F*-statistic is large and significant (see Table A2-4), and the adjusted R-squared of each specification is reasonably high for cross-sectional data.

Robustness checks of the model using Comcast, Charter, and TWC's penetration rates separately are similar to the results obtained taking the three providers together, suggesting that the model is appropriate. See Table A2-3. These results, however, also suggest that the magnitude of the effect of income on penetration differs by provider – as can be seen by differences in the coefficient on *Median Household Income*. As with Specifications 3 through 6 above, the positive algebraic sign of the coefficient on the variable "*Joint Applicants' Speed is Greater than Competitor*" confirms that, once again, the presence of an inferior competitor does not have as much of an adverse impact on the Joint Applicant's penetration rate as would be the case where the Joint Applicant confronts a rival offering equivalent or superior service.

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Table A2-3

REGRESSION ANALYSIS BY SERVICE PROVIDER
SUBSCRIBER PENETRATION, MEDIAN HOUSEHOLD INCOME, AND COMPETITIVE AVAILABILITY

Specification	(7) Comcast Penetration Rate as a function of Median Household Income, Service Provider Faces Competition 25 Mbps and Above, and Competitive Speed is, Greater, Equal to, or Less than Service Provider Speed	(8) Charter Penetration Rate as a function of Median Household Income, Service Provider Faces Competition 25 Mbps and Above, and Competitive Speed is, Greater, Equal to, or Less than Service Provider Speed	(9) TWC Penetration Rate as a function of Median Household Income, Service Provider Faces Competition 25 Mbps and Above, and Competitive Speed is, Greater, Equal to, or Less than Service Provider Speed
Explanatory Variable	Coefficient		
Median Household Income (Thousands of Dollars)	***	***	***
Speed of Competitor is 25 Mbps or Above	- ***	- ***	- ***
Joint App Speed is Greater than Competitor		***	***
Joint App Speed is Equal to Competitor	***	- ***	***
Constant	***	***	***
Observations			
Adjusted R-squared			

Note 1: Regression models are estimated using White's heteroskedasticity-consistent standard errors.

Note 2: Regressions are weighted by the Number of Households Served in each Census Block Group using A-Weights.

Note 3: Single, double, and triple asterisks (*,**,***) denote statistical significance at 90%, 95%, and 99% confidence levels, respectively.

Source: Response to ORA Data Requests Set 1, Nos. 3-4 and CPUC California Broadband Availability Database, Round 10 data as of June 30, 2014. See Table A2-4 for complete regression results.

[**END HIGHLY CONFIDENTIAL**]

Conclusion

The apparent income disparities among customers of each of the four merger partners clearly requires further examination, which is beyond the scope of the present analysis. Is it demand- or supply-driven – that is, does the lower penetration rate in lower income areas result from income elasticity associated with the purchase of broadband access, in which higher income customers have a greater propensity to allocate a portion of their disposable income to broadband? Or is it supply-driven, i.e., does it suggest that broadband *availability* in lower income areas is curtailed due to lack of investment? It is important that the Commission gain an understanding as to the

source of the income/penetration relationship so as to determine whether the apparently lower penetration rate among lower income households is due to a lower level of broadband investment in low-income areas, or to a price level that is unaffordable to many low-income households.

[**BEGIN HIGHLY CONFIDENTIAL**]

Table A2-4

COMPLETE REGRESSION RESULTS:
SUBSCRIBER PENETRATION, MEDIAN HOUSEHOLD INCOME, SERVICE PROVIDER AND COMPETITIVE AVAILABILITY

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Penetration Rate	Penetration Rate	Penetration Rate	Penetration Rate	Penetration Rate	Penetration Rate	Penetration Rate Comcast Only	Penetration Rate Charter Only	Penetration Rate TWC Only
Median Household Income (Thousands of Dollars)									
Charter									
Time Warner									
Has Competition									
Speed of Competitor is 25 mbps or Above									
Joint App Speed is Greater than Competitor									
Joint App Speed is Equal to Competitor									
Constant									
Observations									
Adjusted R-squared									
F-Statistic									
RMSE									

Note 1: t-statistics calculated using White's heteroskedasticity-consistent standard errors are displayed in parenthesis.
Note 2: Regressions are weighted by the Number of Households Served in each Census Block Group using A-Weights.
Note 3: Single, double, and triple asterisks (*,**,***) denote statistical significance at 90%, 95%, and 99% confidence levels, respectively.
Source: Response to ORA Data Requests Set 1, Nos. 3-4 and CPUC California Broadband Availability Database, Round 10 data as of June 30, 2014. See Table A2-4 for complete regression results.

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Attachment 3

Analysis of Web Traffic Statistics

ECONOMICS AND
TECHNOLOGY, INC.

WEB PAGE VISITS: SUMMARY STATISTICS

July 14th - August 14th, 2014 or most recent 30-day period for which data is available.
Source: www.trafficestimate.com [9/9/2014]

TOTAL WEB PAGES VISITED -- TOP 250 NON-ISP WEBSITES	30,652,595,941
TOTAL WEB PAGES VISITED -- ISP WEB PORTALS	92,935,100
TOTAL WEB PAGES VISITED	30,745,531,041
ISP WEB PORTAL VISITS AS PERCENT OF TOTAL	0.3023%

WEB PAGE VISITS

July 14th - August 14th, 2014 or most recent 30-day period for which data is available.
Source: www.trafficestimate.com [9/9/2014]

Rank	Website	Estimated Monthly Visits	Broadband Access Provider Web Portal
1	google.com	4,840,295,000	
2	facebook.com	2,668,419,000	
3	youtube.com	1,883,529,000	
4	yahoo.com	1,471,079,000	
5	baidu.com	1,214,450,000	
6	wikipedia.org	1,038,375,000	
7	qq.com	909,577,000	
8	twitter.com	732,947,000	
9	amazon.com	669,517,000	
10	live.com	616,880,000	
11	linkedin.com	572,449,000	
12	blogspot.com	456,525,000	
13	wordpress.com	341,161,000	
14	ebay.com	340,082,000	
15	bing.com	327,339,000	
16	pinterest.com	288,348,000	
17	ask.com	268,232,000	
18	instagram.com	260,533,000	
19	msn.com	228,217,000	
20	tumblr.com	221,463,333	
21	microsoft.com	207,956,000	
22	paypal.com	195,129,000	
23	imdb.com	177,156,000	
24	apple.com	173,981,000	
25	imgur.com	171,944,333	
26	craigslist.org	165,151,000	
27	stackoverflow.com	160,585,800	
28	t.co	157,237,000	
29	xhamster.com	153,985,333	
30	cnn.com	152,433,333	
31	reddit.com	147,874,000	
32	go.com	143,225,000	
33	bbc.co.uk	141,605,000	
34	blogger.com	140,622,333	
35	aliexpress.com	130,639,000	
36	wordpress.org	128,987,000	
37	googleusercontent.com	120,948,000	
38	kickass.to	119,949,000	
39	adobe.com	118,574,000	
40	huffingtonpost.com	117,860,000	
41	godaddy.com	117,232,000	
42	alibaba.com	117,232,000	
43	thepiratebay.se	105,420,000	
44	espn.go.com	101,382,000	
45	dailymotion.com	101,382,000	
46	akamaihd.net	100,425,000	
47	about.com	98,566,000	
48	netflix.com	97,665,000	
49	dailymail.co.uk	96,538,000	
50	vimeo.com	94,812,333	
51	themeforest.net	93,412,000	
52	redtube.com	90,287,000	
53	flickr.com	86,684,000	
54	cnet.com	84,667,000	
55	dropbox.com	84,017,000	
56	amazonaws.com	84,017,000	
57	aol.com	82,131,000	
58	youporn.com	79,753,000	
59	conduit.com	78,066,000	
60	buzzfeed.com	76,983,000	
61	outbrain.com	74,911,000	
62	fiverr.com	74,884,333	
63	secureserver.net	74,340,750	
64	yelp.com	73,920,000	
65	nytimes.com	73,920,000	
66	weather.com	71,109,000	
67	wikia.com	70,231,750	
68	theguardian.com	70,223,000	
69	hootsuite.com	69,360,000	
70	mozilla.org	68,938,000	

WEB PAGE VISITS

July 14th - August 14th, 2014 or most recent 30-day period for which data is available.
Source: www.trafficestimate.com [9/9/2014]

Rank	Website	Estimated Monthly Visits	Broadband Access Provider Web Portal
71	bbc.com	68,827,333	
72	gmail.com	68,520,000	
73	wikihow.com	67,301,000	
74	directrev.com	65,745,000	
75	etsy.com	64,997,000	
76	w3schools.com	64,695,000	
77	mailchimp.com	63,553,000	
78	forbes.com	63,051,000	
79	deviantart.com	62,857,000	
80	foxnews.com	61,513,000	
81	stumbleupon.com	61,513,000	
82	bankofamerica.com	60,229,000	
83	businessinsider.com	59,609,000	
84	avg.com	59,304,000	
85	files.wordpress.com	58,704,000	
86	answers.com	58,042,666	
87	indeed.com	57,829,000	
88	wikimedia.org	57,829,000	
89	stackexchange.com	57,543,000	
90	github.com	56,430,000	
91	chase.com	55,626,000	
92	archive.org	55,626,000	
93	aweber.com	54,339,000	
94	hostgator.com	54,339,000	
95	zillow.com	53,597,000	
96	reference.com	53,597,000	
97	loading-delivery1.com	53,597,000	
98	walmart.com	52,551,000	
99	addthis.com	52,273,400	
100	salesforce.com	51,948,000	
101	soundcloud.com	51,948,000	
102	skype.com	49,983,000	
103	tripadvisor.com	49,568,000	
104	wix.com	48,959,000	
105	statcounter.com	48,571,750	
106	bleacherreport.com	47,103,500	
107	wsj.com	46,676,000	
108	mashable.com	46,676,000	
109	telegraph.co.uk	46,318,000	
110	wellsfargo.com	45,966,000	
111	pandora.com	45,619,000	
112	twitch.tv	45,278,000	
113	moz.com	44,777,000	
114	weebly.com	44,612,000	
115	photobucket.com	43,809,000	
116	warriorforum.com	43,112,500	
117	ups.com	41,437,000	
118	ikea.com	40,752,000	
119	goodreads.com	39,704,000	
120	comcast.net	39,572,600	Comcast Corporation
121	infusionsoft.com	38,593,000	
122	media.tumblr.com	38,121,000	
123	zedo.com	38,005,000	
124	disqus.com	37,889,000	
125	usps.com	37,775,000	
126	meetup.com	37,102,000	
127	usatoday.com	36,884,000	
128	zendesk.com	36,455,000	
129	washingtonpost.com	35,832,000	
130	fedex.com	35,822,666	
131	bitly.com	35,769,666	
132	ign.com	35,659,200	
133	microsoftonline.com	35,509,000	
134	bluehost.com	35,232,000	
135	zeobit.com	35,134,000	
136	reuters.com	35,134,000	
137	constantcontact.com	35,036,000	
138	ehow.com	34,372,000	
139	tmz.com	33,553,600	
140	hulu.com	33,378,000	

WEB PAGE VISITS

July 14th - August 14th, 2014 or most recent 30-day period for which data is available.
Source: www.trafficestimate.com [9/9/2014]

Rank	Website	Estimated Monthly Visits	Broadband Access Provider Web Portal
141	nih.gov	32,694,000	
142	time.com	32,627,600	
143	webmd.com	32,528,000	
144	nbcnews.com	32,217,333	
145	bestbuy.com	31,337,000	
146	lifehacker.com	31,261,000	
147	mlb.com	30,946,750	
148	4dsply.com	30,666,000	
149	homedepot.com	30,166,000	
150	bloomberg.com	29,957,000	
151	americanexpress.com	29,683,000	
152	groupon.com	29,615,000	
153	gfycat.com	29,548,000	
154	force.com	29,414,000	
155	getresponse.com	28,828,000	
156	target.com	28,576,000	
157	cj.com	28,452,000	
158	list-manage.com	28,390,000	
159	techcrunch.com	28,146,000	
160	intuit.com	28,086,000	
161	capitalone.com	28,026,000	
162	gizmodo.com	27,906,000	
163	pof.com	27,186,000	
164	accuweather.com	27,046,000	
165	surveymonkey.com	26,935,000	
166	nydailynews.com	26,398,000	
167	retailmenot.com	25,933,000	
168	abcnews.go.com	25,782,000	
169	taboola.com	25,486,000	
170	trulia.com	25,389,000	
171	att.com	24,685,000	
172	latimes.com	24,038,000	
173	pch.com	23,726,000	
174	expedia.com	23,684,000	
175	shareasale.com	23,560,000	
176	houzz.com	23,117,000	
177	newegg.com	22,616,000	
178	leadpages.net	22,541,000	
179	match.com	22,466,000	
180	taleo.net	22,392,000	
181	upworthy.com	22,030,000	
182	citibank.com	21,680,000	
183	backpage.com	21,262,666	
184	eonline.com	21,133,666	
185	swagbucks.com	20,884,750	
186	cbssports.com	20,825,000	
187	hotels.com	20,825,000	
188	verizonwireless.com	20,793,000	
189	theblaze.com	20,638,000	
190	marketwatch.com	20,576,000	
191	yellowpages.com	20,244,000	
192	citrixonline.com	19,982,000	
193	priceline.com	19,698,000	
194	slate.com	19,698,000	
195	rottentomatoes.com	19,642,000	
196	glassdoor.com	19,532,000	
197	nordstrom.com	19,505,000	
198	liveleak.com	19,505,000	
199	ca.gov	19,398,333	
200	kayak.com	19,289,000	
201	cbslocal.com	19,209,000	
202	examiner.com	19,156,000	
203	gotomeeting.com	19,052,000	
204	gawker.com	19,026,000	
205	macys.com	18,821,000	
206	npr.org	18,745,000	
207	cnbc.com	18,729,000	
208	eventbrite.com	18,599,000	
209	southwest.com	18,522,000	
210	realtor.com	18,498,000	

WEB PAGE VISITS

July 14th - August 14th, 2014 or most recent 30-day period for which data is available.
Source: www.trafficestimate.com [9/9/2014]

Rank	Website	Estimated Monthly Visits	Broadband Access Provider Web Portal
211	lowes.com	18,401,000	
212	allrecipes.com	18,377,000	
213	slickdeals.net	18,196,666	
214	monster.com	18,149,666	
215	coupons.com	18,070,000	
216	m-w.com	18,065,600	
217	wunderground.com	17,752,000	
218	squarespace.com	17,663,000	
219	optmd.com	17,641,000	
220	ancestry.com	17,597,000	
221	sears.com	17,403,000	
222	sfgate.com	17,276,000	
223	overstock.com	17,171,000	
224	foxsports.com	17,068,000	
225	mapquest.com	16,747,000	
226	people.com	16,699,333	
227	zappos.com	16,592,000	
228	worldstarhiphop.com	15,984,000	
229	usmagazine.com	15,921,400	
230	verizon.com	15,702,000	
231	gap.com	15,207,000	
232	whitepages.com	14,655,000	
233	comcast.com	14,381,000	
234	foodnetwork.com	14,186,000	
235	ticketmaster.com	14,118,000	
236	disney.go.com	14,010,000	
237	nypost.com	13,997,000	
238	delta.com	13,944,000	
239	zulily.com	13,813,000	
240	united.com	13,621,000	
241	staples.com	13,596,000	
242	careerbuilder.com	13,534,000	
243	fidelity.com	13,484,000	
244	kohls.com	13,387,000	
245	nbcsports.com	13,383,666	
246	nfl.com	12,943,000	
247	cbsnews.com	12,926,600	
248	usbank.com	12,832,000	
249	emgn.com	12,788,000	
250	costco.com	12,284,000	
	cox.net	9,099,200	Cox Communications Inc.
	verizon.net	8,030,900	Verizon Communications Inc.
	bhn.rr.com	6,907,900	Bright House Networks LLC
	att.net	6,799,800	AT&T Inc.
	optimum.net	6,173,100	Cablevision Systems Corporation
	charter.net	5,955,000	Charter Communications Inc.
	centurylink.net	2,873,500	CenturyLink Inc.
	twcc.com	2,248,700	Time Warner Cable Inc.
	windstream.net	1,929,400	Windstream Communications
	suddenlink.net	1,209,100	Suddenlink Communications
	wowway.net	539,800	Wide Open West
	mediacomtoday.com	500,000	Mediacom Communications Corporation
	armstrongmywire.com	356,800	Armstrong Group of Companies
	atlanticbb.net	295,300	Atlantic Broadband Inc.
	midco.net	190,900	Midcontinent Communications
	wavebroadband.com	133,300	Wave Broadband
	metrocast.net	110,000	MetroCast Communications
	mybrctv.com	9,800	Blue Ridge Communications
	midco.net	190,900	Midcontinent Communications
	wavebroadband.com	133,300	Wave Broadband
	metrocast.net	110,000	MetroCast Communications
	mybrctv.com	9,800	Blue Ridge Communications

Attachment 4

Glossary of Acronyms Used in this Report

Attachment 4 GLOSSARY OF ACRONYMS USED IN THIS REPORT	
ARPU	Average Revenue Per Unit
BLS	United States Department of Labor, Bureau of Labor Statistics
CBA	CPUC California Broadband Availability Database
CB	Census Block
CBG	Census Block Group
CDN	Content Delivery Network
CGSA	Cellular Geographic Service Area
CLEC	Competitive Local Exchange Carrier
CMRS	Commercial Mobile Radio Service
Edge Provider	Also referred to as a "content provider," an "edge provider" delivers content typically requested by end users to the "edge" of the ISP's local broadband distribution network.
"Eyeball"	Industry jargon, refers to an end user consumer viewer of video or other content
FCC	Federal Communications Commission
FTTH	Fiber-to-the-Home (e.g., Verizon *FiOS*, Google Fiber)
ILEC	Incumbent Local Exchange Carrier
IBP	Internet Backbone (network) Provider (e.g., Level 3, Cogent)
IP	Internet Protocol
ISP	Internet Service Provider
IXC	Interexchange Carrier (long distance carrier)
LEC	Local Exchange Carrier
Mbps, Gbps, Tbps	Refers to data transmission speeds – Megabits per second, Gigabits (billions) per second, Terabits (trillions) per second
MB, GB, TB	Refers to quantities of data – Megabytes, Gigabytes, Terabytes. A "byte" contains eight (8) bits. So-called "data caps" – i.e., the quantity of data that an end user customer may send and receive per month without incurring "overage" charges, is typically designed in terms of Megabytes or Gigabytes.

MSO	Multi-System [cable] Operator, a term commonly used in the cable industry to describe a company that owns and operates two or more cable TV systems (e.g., Comcast, Time Warner Cable).
MVPD	Multichannel Video Program Distributor (e.g., cable TV operator, satellite TV service)
NANP	North American Numbering Plan
OBRA	Omnibus Reconciliation Act of 1993
OTA	Over-the-Air (i.e., broadcast television station)
OTT	Over-the-top (an application provided over the Internet, e.g., VoIP, streaming video)
OVD	Online Video Distributor (e.g., Netflix, Amazon Prime, Hulu)
PSTN	Public Switched Telephone Network
PBX	Private Branch eXchange
RSN	Regional Sports Network
SIP	Session Initiation Protocol
TA96	Federal Telecommunications Act of 1996
TVE	Television Everywhere (ability to access video programming on various consumer devices, such as tablets and smartphones)
TWC	Time Warner Cable, Inc.
TWCIS	Time Warner Cable Information Services (California), LLC
UNE	Unbundled Network Element (per 47 U.S.C. §§ 251, 252)
VOD	Video On Demand
VoIP	Voice-over-Internet-Protocol
VPN	Virtual Private Network
WISP	[Fixed] Wireless Internet Service Provider
WISPA	Wireless Internet Service Providers Association
WLNP	Wireless Local Number Portability

BEFORE THE PUBLIC UTILITIES COMMISSION\
OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.	Application 14-06-012 (Filed June 17, 2014)

DECLARATION OF AYAT OSMAN, PH.D.
FOR THE OFFICE OF RATEPAYER ADVOCATES

(PUBLIC)

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I. INTRODUCTION

1. The August 14, 2014 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge (Scoping Memo)[1] and the August 29, 2014 presiding officer ruling[2] consolidating Application (A.) 14-04-013 and A.14-06-012 seek to determine how the proposed merger will impact the quality and reliability of the services in California provided by Comcast Corporation (Comcast), Time Warner Cable Inc. (TWC), Time Warner Cable Information Services (California), LLC (TWCIS), Bright House Networks Information Services (California), LLC (Bright House), and Charter Fiberlink CA-CCO, LLC (U6878C) (Charter), collectively referred to as "Joint Applicants".[3] This report addresses the impact of the proposed merger on the quality and reliability of voice services provided by the Joint Applicants to California customers.

ORA issued data requests to the Joint Applicants on the following topics related to the quality and reliability of their voice services:

- Procedures and protocols including definitions, metrics and data supporting the measurements, tracking and reporting of service quality and reliability
- Post-merger plans to improve the service quality and reliability to California customers
- Levels of customer satisfaction
- Customer complaints and complaint procedures

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[1] Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge on Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a). Application 14-04-013. August 14, 2014.

[2] On August 29, 2014, the presiding officer issued a ruling consolidating the proceedings of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C), Charter Fiberlink CA-CCO, LLC (U6878C), and Bright House Networks Information Services (California), LLC (U6955C).

[3] Joint Applicants includes Comcast Corporation and all related affiliates and Subsidiaries, Time Warner Cable Inc. and all related affiliates and Subsidiaries, Charter Communications, Inc. and all related affiliates and Subsidiaries, and Bright House Networks and all related affiliates and Subsidiaries.

- Provisions of services, including service installation intervals and commitment met
- Service reliability related to public safety, such as Outages, 9-1-1 service requirements and battery backup

2. The sources of data used in this report include: the Joint Applicants'[4] responses to ORA data requests and materials provided in their Application,[5] as well as published information. This report provides findings on the Joint Applicants' levels of customer satisfaction and customer complaints, current trends in service provisioning, such as service installation intervals and commitments met, and consumer safety and service reliability, such as voice service outages and 9-1-1 service requirements.

II. EXECUTIVE SUMMARY

3. Customers may face a greater risk of voice service quality and reliability performance degradation if the merger is approved than if it is rejected. Because voice service quality and reliability is essential for public safety, this should be a significant concern. Customers should not bear this risk.

- While the Joint Applicants assert that "the quality of service provided to California customers will not be adversely impacted by the proposed transaction,"[6] they provide little evidence in their applications to support this claim. Responses to ORA's data requests also provide little supporting evidence that the quality of service will be maintained or improved post-merger. When asked about the post-merger plans to address the quality and reliability of voice services, TWC provided its current plans to upgrade its

[4] Bright House did not provide responses to most of the questions, claiming that it either do not possess or track the requested information or stating that "the quality of BHN's services in California will not be affected by the planned transaction because BHNs operations will not change as a result of the transaction." Bright House Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002, No. 26-60. [Public Version] The analysis and findings in this report exclude Bright House, due to the limited responses provided by Bright House.

[5] Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a). Application 14-04-013.

[6] Application Page 23.

network and customer service process. Charter provided its current plans to increase its minimum internet speeds. It is unclear if these current plans will proceed since TWC contends that post-merger plans for improving service quality and reliability are the responsibility of the acquirer, Comcast. Comcast's response to the same question states that the company "has not made any determination regarding the specific steps that it may take to address post-transaction quality of service issues in California."[7]

- TWC and Charter provided some measures on quality of voice service and internal standards that they apply to ensure quality of service for its voice services in California.[8] Comcast claimed that it does not strictly define the term "quality of service" related to voice services and did not provide any information on service quality and reliability metrics, procedures or protocols that it currently uses. Comcast states that quality of service as it pertains to voice services "is not measurable by a limited set of metrics."[9] Clearly, Comcast provides little evidence to substantiate its claim, "that the quality of service provided to California customers will not be adversely impacted by the proposed transaction."[10]

- Comcast and TWC fell short in meeting the standards for service installation intervals and completion of service orders (commitments met) for their voice services when compared to California's service quality minimum standards for public utility telephone corporations.[11]

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[7] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:47 and Q-3:48. [Public Version]

[8] TWC and Charter Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:28. [Public Version]

[9] Comcast briefly described dynamic quality of service (DQoS) as a method that Comcast uses to set and change priorities of different packets in the network. Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q 3-28. And Q 3-29. [PUBLIC VERSION]

[10] Application Page 23.

[11] In 2014, Comcast average service installation for voice services was [redacted] and TWC's was [redacted] California minimum standard for service installations is 5-business days. In 2014, Comcast's commitment met for its voice service orders was [redacted] and TWC's was [redacted]; California minimum stand for service installation is 95%. Comcast CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:36 and Q-3:38.

- Based on J.D. Power and Associated 2014 Residential Wireline Telephone satisfaction study (West),[12] XFINITY (Comcast), TWC and Charter ranked below the west region average for residential telephone customer satisfaction. Out of eight companies[13] measured, Comcast ranked sixth, TWC seventh, and Charter fifth. In addition, according to the American Customer Satisfaction Index's press release in 2014, Comcast and TWC have the most dissatisfied customers with the lowest scores to date.[14]

- When it comes to the process of handling and resolving customer complaints, TWC provided a description of its processes indicating the company's goals to respond and resolve such complaints. On the other hand, Comcast provided a vague description of its processes with no internal standards to ensure responsiveness to customers.[15]

- Although TWC and Comcast have relatively equal number of broadband customers in California, Comcast received approximately [redacted] the amount of voice, broadband, and cable complaints in 2013 and [redacted] the amount of complaints in 2014 compared to TWC.[16] The analysis of the customer complaint data indicates that, compared to Comcast, TWC was more responsive in resolving customer complaints relating to telephone repairs.[17]

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[12] http://www.jdpower.com/press-releases/2014-us-residential-television-internet-telephone-service-provider-satisfaction

[13] Bright House Network was not one of the eight companies; the eight companies in the order of ranking (first on the list is highest) are: Cox Communications, AT&T, Verizon, CenturyLink, Charter Communications, Comcast, TWX, and Frontier Communications. *Ibid.*

[14] Comcast fell 5% to 60 [in 100-point scale] and TWC fell 7% to a score of 56. http://www.theacsi.org/images/stories/images/news/14may_press2.pdf

[15] Comcast and TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:43 (Comcast Exhibit #-3-42; TWC Exhibit).

[16] The number of customer complaints for TWC included broadband, voice and cable services and Comcast complaints included broadband and voice services for the period between January 2010 and August 2014. TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:40 (TWC Exhibit 3-7 and Comcast Exhibit R-3:40).

[17] This finding is based on analyzing the durations to resolve customer complaints; for example, in 2013, TWC had an annual average duration of [redacted] to resolve phone repair complaints, while Comcast had an annual average of [redacted] to resolve phone repair complaints. *Ibid.*

- Comcast's poor customer service in California, based on the number of complaints reported by customers, is troubling because it has not provided any plans to improve customer services. For both Comcast and TWC, the trends in customer complaints data indicate that the largest proportions of these complaints were related to service issues, such as outages, intermittent services, installations and service repairs, as opposed to billing complaints.

- Service reliability and public safety in California is a concern because of the number, duration and magnitude of major outages[18] involving the Joint Applicants' voice services.[19]

  - In 2014, [redacted] major voice network outages, in multiple locations in Northern California, left a total of [redacted] of Comcast's customers with no voice services and access to 9-1-1 services.[20] The duration of the 2014 outages ranged from approximately [redacted]. The outages had a greater impact on Comcast customers in [redacted].[21] Voice network outages affected [redacted] the number of Comcast customers in 2014 (as of August 2014) as compared to 2013 (January to August of 2013).

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[18] The FCC has established rules to require communication providers (including wireline, wireless, VoIP, cable amongst others) to report certain disruptions to their network depending on the type of communication, duration of the outage, and the number of affected users. **The threshold requirement for VoIP outages** is: an outage of at least 30 minutes duration that potentially affects: (1) at least 900,000 user minutes of interconnected VoIP service and results in a complete loss of service; (2) any special offices and facilities; or (3) a 911 special facility. The FCC **reporting requirements for VoIP providers i**s: (1) within 24 hours of discovering a reportable outage meeting the user minute threshold or potentially affecting any special offices and facilities, or (2) within 240 minutes of discovering a reportable outage potentially affecting a 911 special facility. In either event, VoIP providers must submit a Final Report to the Commission within 30 days of discovering the reportable outage.

[19] While TWC and Charter provided service outages information that they track internally, Comcast claimed that it "Comcast does not collect outage information by county, and generally does not differentiate by residential and business customers in its outage reporting." Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:31. [Public Version]

[20] [redacted]

[21] With regard to Comcast's VoIP network outages in California, the number of total affected VoIP users in 2014 was [redacted] those in 2013. In addition, the total outage impact, in terms or duration and number of users (VoIP user minutes), was about [redacted] than that in 2013 (Outage durations in 2013, ranged between [redacted] It is not clear whether Comcast filed NORS Outage Reports in 2010 through 2012 and did not provide those reports to ORA, or it did not experience major reportable voice service outages during this period.

- TWC's Network Outage Reporting System (NORS) outage reports data indicates [redacted] major voice network outages in 2014, affecting a total of [redacted] of its customers in California. In a recent Federal Communications Commission (FCC) order[22] dated August of 2014, the FCC found that TWC failed to file a substantial number of reports related to a series of reportable wireline and VoIP network outages and ordered TWC to pay a civil penalty of $1.1 million and implement a three-year compliance plan.

- Charter provided [redacted] FCC major outage reports affecting voice services (VoIP and Cable Telephony) in California from the period between January 2010 and August 2014. In 2014, [redacted] of these outages affected a total of [redacted] users that were left with no access to voice and E9-1-1 services. The outage durations in 2014 ranged between approximately [redacted]. The impact of the outages on users voice services in 2014 was approximately [redacted] that of 2013, mainly due to [redacted]

III. QUALIFICATIONS, BACKGROUND AND EXPERIENCE

4. My name is Ayat Osman. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

5. I am currently employed by the California Public Utilities Commission (CPUC) as a Regulatory Analyst IV assigned to the Communications and Water Branch of the Office of the Ratepayer Advocates (ORA). I received a Ph.D. in Civil Engineering from the University of Pittsburgh in 2006. I also have two Master of Science degrees: Environmental Engineering from the University of Pittsburgh (2000) and Environmental Science and Management from Duquesne University (1998). I joined Energy Division at the CPUC in March of 2007 and worked as Regulatory Analyst IV for more than five years. I also held an associate position with an energy consultant company (Cadmus) from September 2012 to February 2014.

[22] http://www.fcc.gov/document/time-warner-penalized-11m-network-outage-reporting-violations

6. My Declaration addresses the P.U. Code Section 854 (c) (3) requirements that the merger maintain or improve the service quality and reliability voice service customers in the State.

IV. EVIDENCE OF VOICE SERVICE QUALITY AND RELIABILITY PERFORMANCE DEGRADATION IN CALIFORNIA

A. Joint Applicants' Plans to Address Quality of Service in California

7. Despite the Joint Applicants assertion that "the quality of service provided to California customers will not be adversely impacted by the proposed transaction,"[23] the material provided by the Joint Applicants (in their Applications, as well as in their responses to ORA data requests) included little supporting evidence to indicate the current level of quality and reliability of voice services will be maintained or improved post-merger.

8. When asked about the post-merger plans to address service quality, Comcast, the acquirer of the merger companies, stated that the company "has not made any determination regarding the specific steps that it may take to address post-transaction quality of service issues in California."[24] Comcast provided vague and incomplete responses when asked about its current definitions of quality related to its voice services, the type of metrics it tracks or measures, and any procedures or protocols it currently uses.[25]

9. While Comcast did not provide any specific plans to address quality of service, TWC indicated that post-merger, Comcast is responsible for plans to improve service quality and reliability.[26] TWC's current plans include [redacted]. TWC stated that [redacted],

[23] A 14-04-013 at Page 23

[24] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:47 and Q-3:48. [Public Version]

[25] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:29, Q-3:29 and Q-3:30. [Public Version]

[26] TWC Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:48 [Public Version]

[redacted].[27] Charter stated that it has completed an all-digital upgrade throughout most of its California service area, which have enabled it to launch its product to increase its minimum Internet speed from 30-mbps to 60-mbps, in most areas where Internet is available. Charter stated that it plans to continue to fully optimize the investment in its facilities so long as Charter continues to operate the facilities.[28]

10. While TWC and Charter have some existing plans to improve service quality and reliability of voice services to California customers, Comcast has provided little information on its current efforts, pre-merger, and its plans, post-merger, to improve the quality and reliability of its voice services. The absence of this information means there no concrete assurance from Comcast that it will maintain or improve service quality and reliability of voice services beyond the current upgrades and improvements TWC and Charter independently plan to execute. Indeed, if the merger is approved, Comcast has not made any showing that it will proceed with TWC's and Charter's current plans. Because voice service quality and reliability is essential for public safety, this should be a significant concern for California consumers.

B. Quality of Service: Definitions and Measurements

11. When asked to define quality of service for voice services, Comcast claimed that it does not strictly define the term "quality of service" as it pertains to voice services.[29] Comcast claimed that quality of service as it pertains to voice services "is not measurable by a limited set of metrics."[30]

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[27] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:47

[28] Charter Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:47 [Public Version]

[29] Comcast briefly described dynamic quality of service (DQoS) as a method that Comcast uses to set and change priorities of different packets in the network. Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q 3-28. [Public Version]

[30] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q 3-29. [Public Version]

12. TWC provided some measures on quality of service for voice services,[31] including [redacted]. Refer to Table 1.

Although TWC provided an incomplete response to ORA's questions on quality of service, the information seem to indicate that TWC at least uses some procedures to advance quality of service and define some metrics including targets and indexes.[32] For instance, TWC provided an illustration of its home phone service scorecard, which included critical success factors, measures, targets and incomplete set of past measurements of its performance.[33] Given the incomplete set of data[34] on performance, ORA is limited in its analysis on TWC's quality of service performance outcomes.

[31] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q 3-27.

[32] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:28, Q-3:29, and Q-3:30 (TWC Exhibit 3-11).

[33] TWC provided home phone service scorecards for only three month for the years 2013 and 2014; ORA data request asked for data covering the period between 2010 to August of 2014.

[34] ORA issued a Meet and Confer letter on November 15, 2014 and received the information November 26, 2014. Given the briefing schedule timeline, ORA has not had the opportunity to analyze the new material.

Table 1: TWC Phone Critical Success Factors (2013 and 2014)[35]

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[redacted]

13. Although Charter did not provide its definition of quality of service,[43] it stated that it relies on the provisions of the Commission's G.O 133-C to guide its

[35] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], TWC Exhibit 3-11.

[36] [redacted] *Ibid.*

[37] [redacted]. *Ibid*

[38] [redacted] *Ibid.*

[39] [redacted]. *Ibid.*

[40] [redacted] *Ibid*.

[41] [redacted] TWC *Ibid.*

[42] [redacted] *Ibid.*

measurement and monitoring of voice quality of service and identified the following quality of service metrics that it tracks: Customer Trouble Report; Out of Service Report; and Answer Time.[44] Charter further explained [redacted].[45]

14. The analysis of Charter's data indicates that Charter met G.O. 133-C standards for Customer Trouble Reports but fell below the standard on time to repair trouble reports (90% within 24 hours) in 2012, 2013 and 2014.[46] Charter met the standard for Answer Time to reach live agent in 2012 and 2013 but fell below the standard in 2014. Refer to Figure 1.

Figure 1: Charter's Quality of Service Measurements (January 2013 - August 2014)

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[redacted]

[43] Charter Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q 3-26. [Public Version]

[44] Charter Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q 3-27. [Public Version]

[45] Charter CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-26 -28.

[46] Analysis based on Charter CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:29; [Charter provided Excel file named "CONFIDENTIAL CA COMCAST MERGER DATA1.XLS"]

15. TWC and Charter have at minimum provided some data to illustrate their current and historical performance, as well as their internal quality of service standards. The acquiring company in this proposed merger, Comcast, did not. Comcast did not substantiate its claim "that the quality of service provided to California customers will not be adversely impacted by the proposed transaction."[47]

16. While Comcast, TWC and Charter provided some responses to ORA questions, Bright House did not provide responses to most of the questions, claiming that it either does not possess or track the requested information.[48] When asked about its definition of quality of service, Bright House stated that "The quality of BHN's broadband and voice services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction."[49]

17. In most of its responses, Bright House objected to the requested information and stated that "(1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations."[50] Due to the limited responses ORA received from Bright House, the analysis and findings in this report exclude Bright House.

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[47] A 14-04-013 at Page 23

[48] Bright House Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:27, Q-3:30, Q-3:49 and [Public Version]

[49] Bright House Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:29 and [Public Version]

[50] Bright House Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:29, Q-3:30 , Q-3:31,
Q-3:36, Q-3:37, Q-3:340, Q-3:42, Q-3:43, Q-3:44, Q-3:45, Q-3:47, and Q-3:48 [Public Version]

C. Service Provisioning

18. Both Comcast and TWC fell below the CPUC's minimum standards for service quality on two performance metrics: voice service installation intervals and commitments met (service orders completed out of those received).[51] The CPUC adopted minimum standards for service installation intervals is five business days and the minimum standard for installation commitments met is 95%. In 2014, Comcast's average service installation interval for new voice service [redacted] (2014 (year-to-date).[52] TWC's average voice service installation interval was [redacted] (January to September 2014).[53] Thus, on average Comcast took [redacted] to install voice services compared to TWC. Refer to Figure 2. Charter stated that its [redacted].[54]

Figure 2: Comcast and TWC Service Installation Intervals for Voice Services (2014)

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[redacted]

[51] Minimum standards for commitment met apply to residential and small business customers (those that purchase five or fewer lines); commitments will not be considered missed when resulting from customer actions (GO 133 C).

[52] Comcast CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:36.

[53] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:36.

[54] Charter CONFIDENTIAL Supplemental Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:36

19. For the period between January 2011 and August, 2014, both Comcast and TWC voice service installations fell below the minimum standard of 95% for commitments met. In 2014, Comcast's performance was [redacted] lower and TWC's [redacted] lower than this minimum standard.[55] Comcast's data indicates a decrease from [redacted] in 2011 down to [redacted]% in 2014. Refer to Figure 3. Although the quantity of TWC's new service orders was lower than Comcast's for the January 2011 to August 2014 period, TWC's performance indicates a decrease from [redacted] in 2010 to [redacted]% in 2014. Refer to Figure 4.

Figure 3: Comcast Voice Service Orders & Commitment Met (January 2011- August 2014)

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[redacted]

[55] The data received from Comcast and TWC do not distinguish between the type of customers and do not delineate the reasons for missed commitments. Comcast and TWC CONFIDENTIAL Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:38. ORA's calculations did not account for or exclude commitments missed due to customer action given that we didn't have that information.

Figure 4: TWC Voice Service Orders & Commitment Met (January 2010- August 2014)

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[redacted]

20. Charter did not provide the number of service orders that it received for the period between January 2010 and August 2014. Instead, Charter provided the total number of completed installed services ([redacted]) for the years 2012, 2013 and 2014.[56] Therefore, ORA could not determine the percentage of installation commitments met for Charter. Charter provided the percentage of service installations completed within five days out of the total installed services for the years 2012, 2013 and 2014. Refer to Figure 5.

[56] Analysis based on Charter CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:38; Charter provided Excel file named "CONFIDENTIAL CA COMCAST MERGER DATA1.XLS".

Figure 5: Charter Voice Service Installation (January 2012 - August 2014)

[redacted]

V. THE JOINT APPLICANTS HAVE RECEIVED POOR CUSTOMER SATISFACTION RATINGS

21. According to the American Customer Satisfaction Index's press release in 2014, Comcast and TWC have the most dissatisfied customers with the lowest scores to date.[57] David VanAmburg, ACSI Director stated that:[58]

> "Comcast and Time Warner assert their proposed merger will not reduce competition because there is little overlap in their service territories. Still, it's a concern whenever two poor-performing service providers combine operations. ACSI data consistently show that mergers in service industries usually result in lower customer satisfaction, at least in the short term. It's hard to see how combining two negatives will be a positive for consumers."

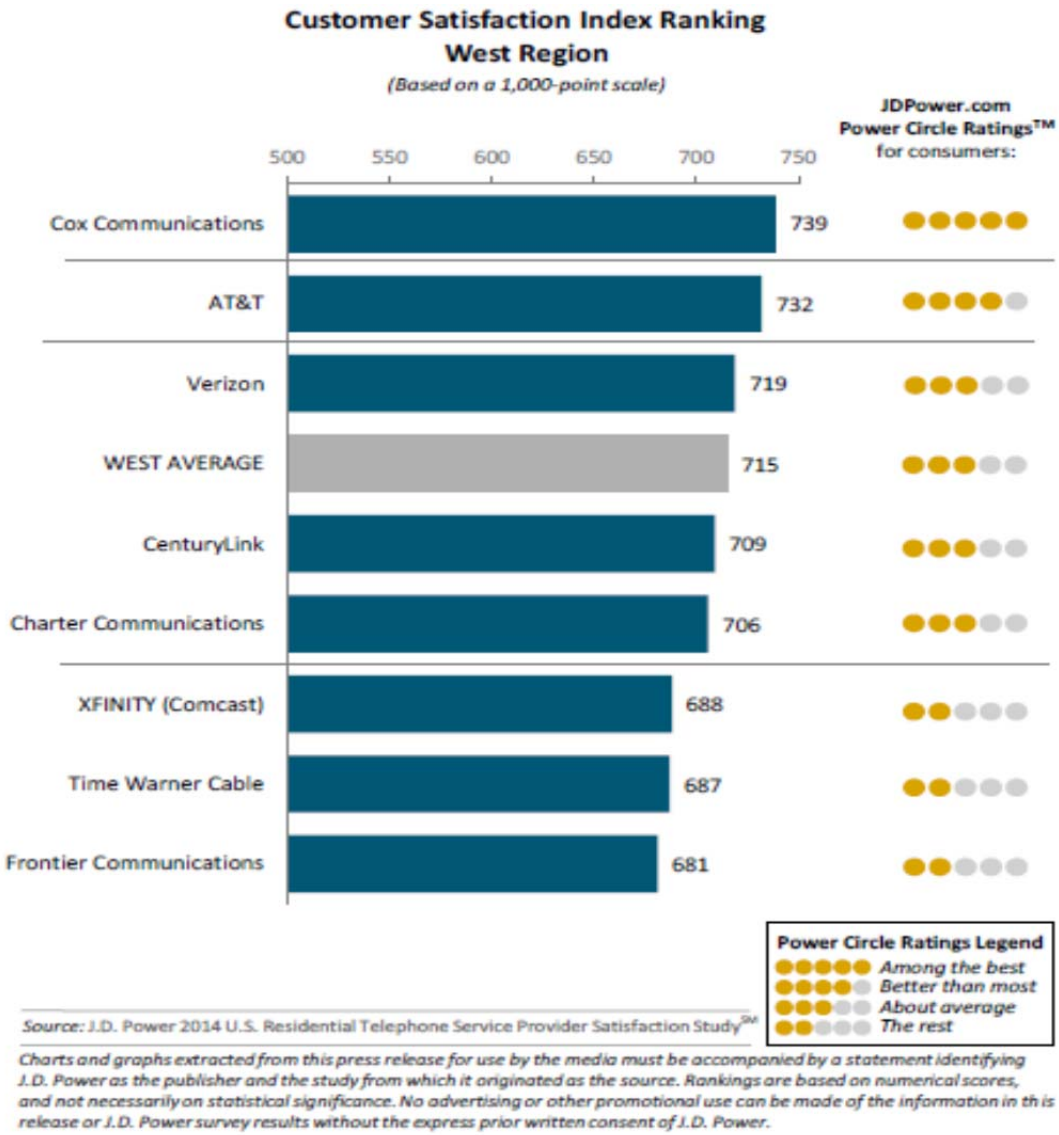
22. Furthermore, based on J.D. Power and Associated 2014 Residential Wireline Telephone satisfaction study (West),[59] XFINITY (Comcast), TWC and

[57] Comcast fell 5% to 60 [in 100-point scale] and TWC fell 7% to a score of 56 http://www.theacsi.org/images/stories/images/news/14may_press2.pdf

[58] *Ibid*

Charter ranked below the west region average for residential telephone customer satisfaction. Out of eight companies measured, Comcast ranked sixth, TWC seventh, and Charter fifth. Refer to Figure 6.

Figure 6: Customer Satisfaction Index Ranking, West Region (J.D. Power 2014 U.S. Residential Telephone Service Providers Satisfaction Study)



23. In fact, Comcast's and TWC's customer satisfaction in the West region has continuously deteriorated based on the last three years (2012, 2013 and 2014) of the

[59] http://www.jdpower.com/press-releases/2014-us-residential-television-internet-telephone-service-provider-satisfaction

Residential Telephone Customer Satisfaction studies conducted by J.D. Power and Associates.[60] As shown in Figure 7, Comcast ranked the second (out of seven) in 2012, fourth (out of eight) in 2013, and sixth (out of eight) in 2014. TWC ranked the fourth in 2012, sixth in 2013 and seventh in 2014. Although Charter's ranking improved from 2012 (seventh) to 2014 (fifth), it still received lower scores and fell below the West region average.

Figure 7: Customer Satisfaction Ranking in the West Region* (Compiled from press releases from J.D. Power and Associates U.S. Residential Telephone Satisfaction Study for the years 2012, 2013 and 2014)

	2012	2013	2014
Comcast	2	4	6
TWC	4	6	7
Charter	7	5	5

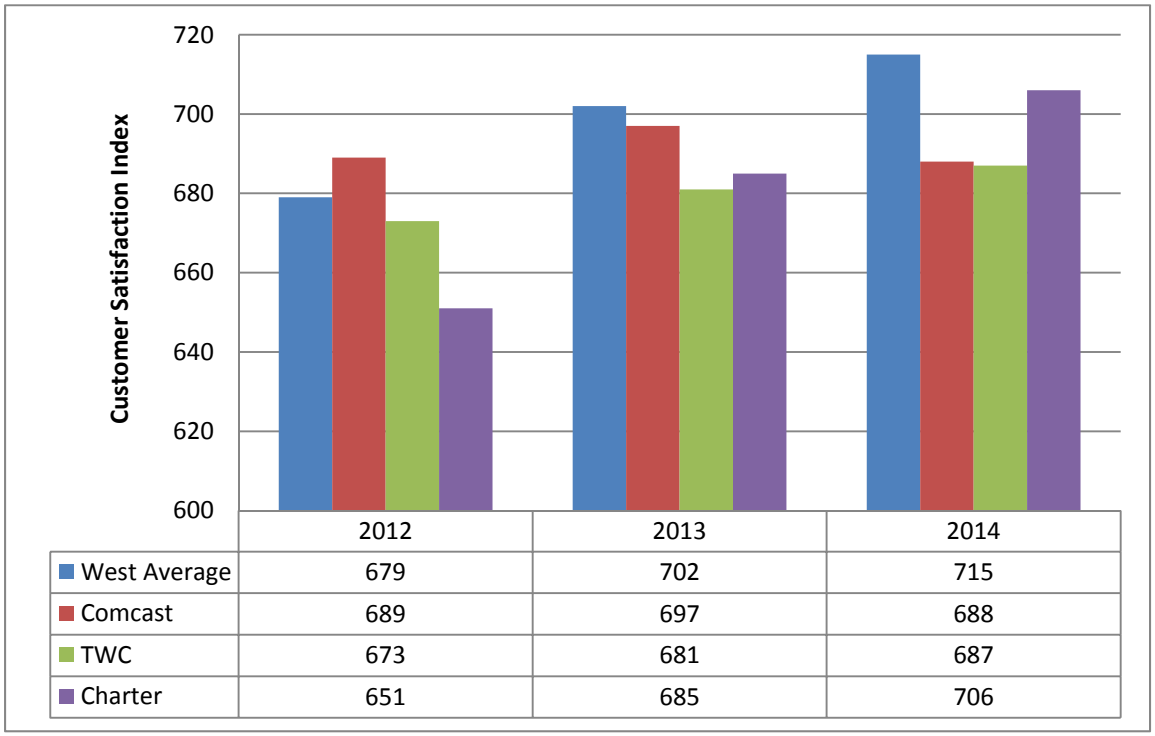
*Note: Total number of companies surveyed: 2012: 7-companies; 2013: 8-companies; 2014: 8-companies

24. Figure 8 shows the ranking scores for Comcast, TWC and Charter in the West Region based on the Residential Telephone Customer Satisfaction studies 2012, 2013 and 2014 conducted by J.D. Power and Associates. With the exception of the results in 2012, Comcast fell below the West region average in 2013 and 2014. TWC and Charter fell below the West region average in all years: 2012, 2013 and 2014.[61]

[60] Compiled from press releases from *J.D. Power and Associates U.S. Residential Telephone Satisfaction Study for the years 2012, 2013 and 2014* http://www.jdpower.com/press-releases/

[61] For more details on J.D. Power and Associates U.S. residential telephone customer satisfaction

Figure 8: J.D. Power and Associate Residential Telephone Satisfaction Studies (2012, 2013, and 2014) Customer Satisfaction Index Ranking West Region (based on 1,000-point scale)

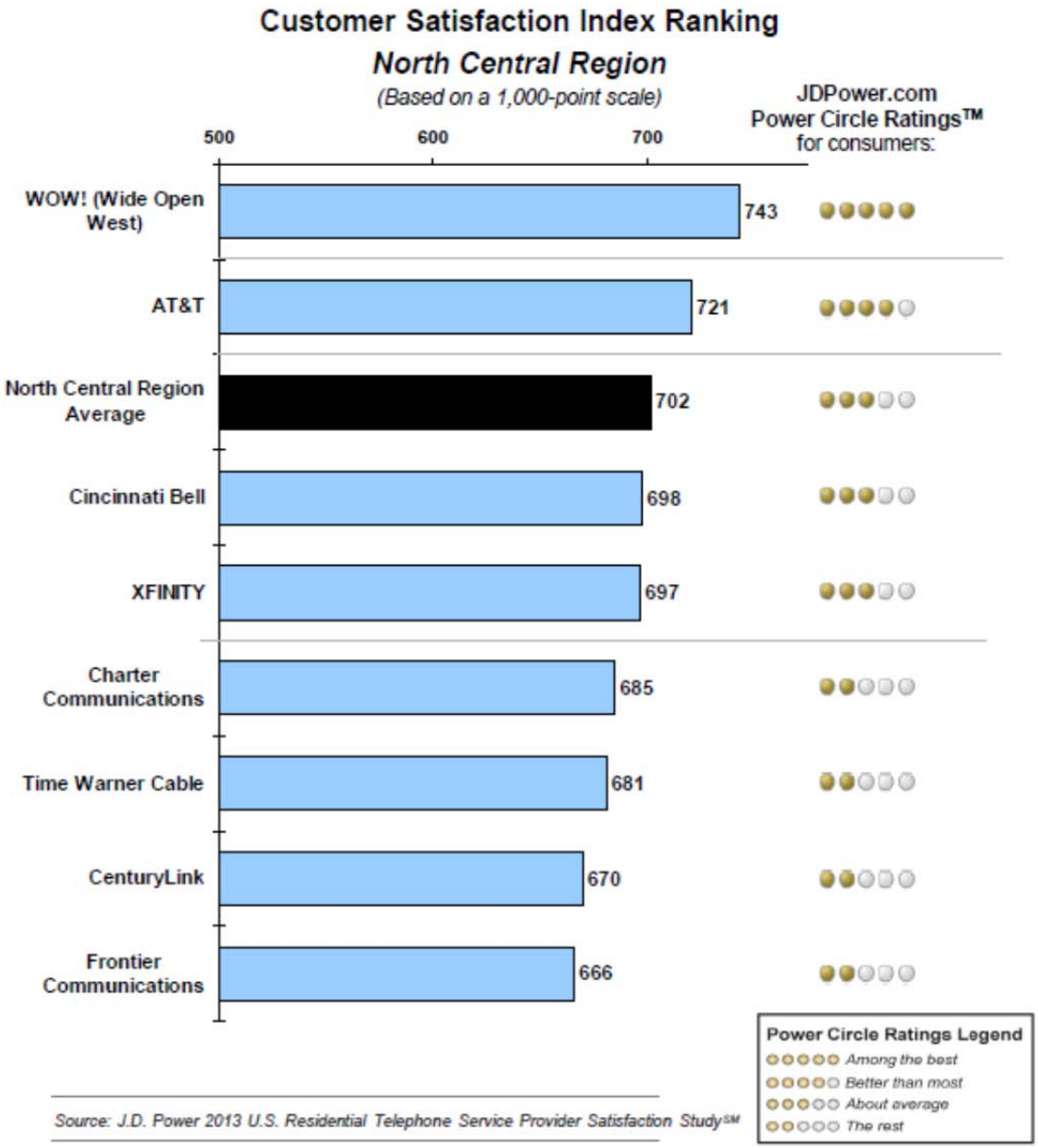


	2012	2013	2014
West Average	679	702	715
Comcast	689	697	688
TWC	673	681	687
Charter	651	685	706

Figure 9 and Figure 10 show the customer satisfaction indexes for 2013 and 2012, respectively (press releases from *J.D. Power and Associates U.S. Residential Telephone Satisfaction Study for the years 2012 and 2013)*

studies for the years 2009, 2010, 2011, 2012 and 2013, please refer to TWC Confidential Exhibit 3-5 in response to ORA CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:52.

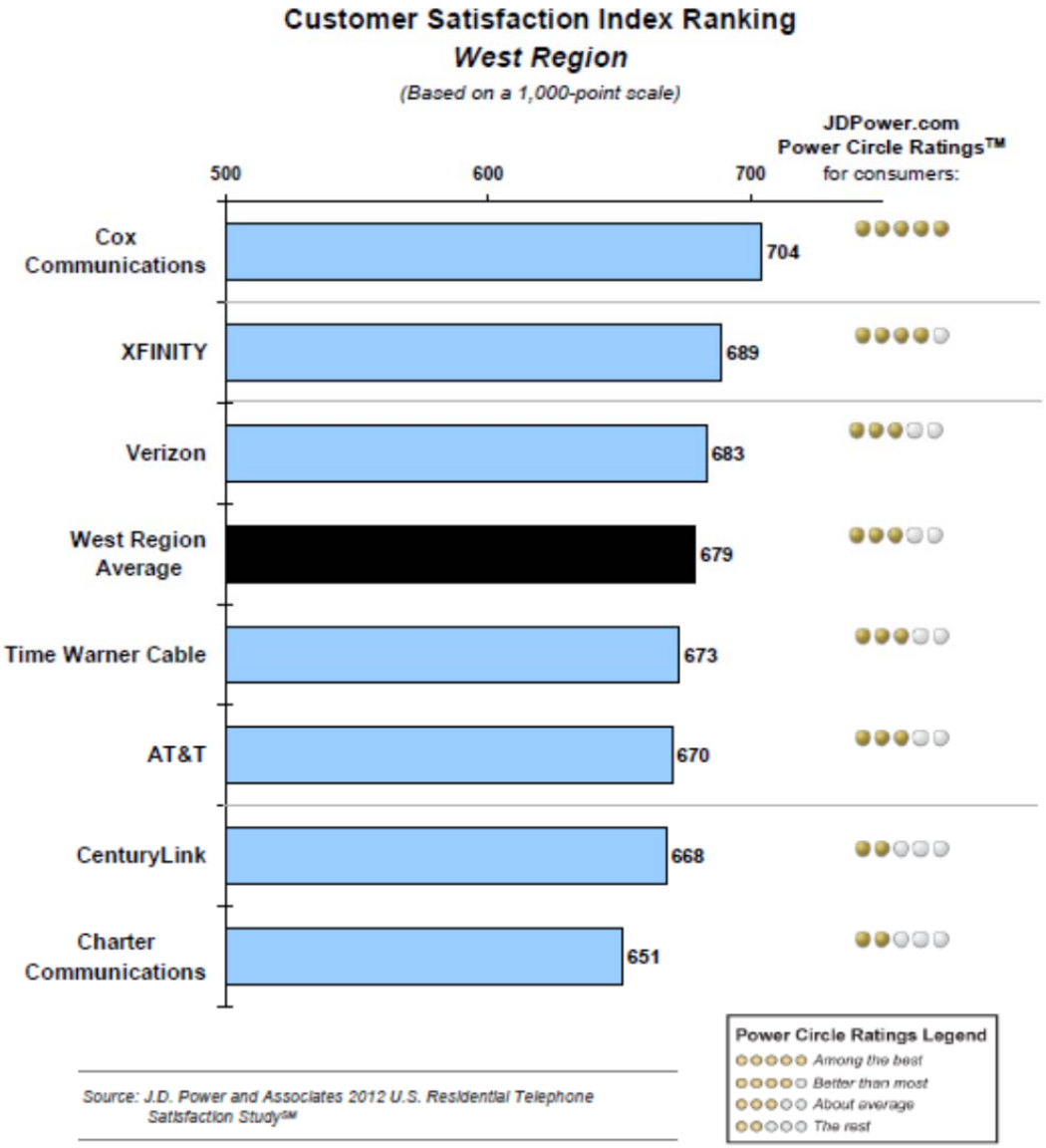
Figure 9: J.D. Power 2013 U.S. Residential Telephone Service Provider Satisfaction Study



Source: J.D. Power 2013 U.S. Residential Telephone Service Provider Satisfaction Study℠

Charts and graphs extracted from this press release must be accompanied by a statement identifying J.D. Power as the publisher and the J.D. Power 2013 U.S. Residential Telephone Service Provider Satisfaction Study℠ as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. JDPower.com Power Circle Ratings™ are derived from consumer ratings in J.D. Power studies. For more information on Power Circle Ratings, visit jdpower.com/faqs. No advertising or other promotional use can be made of the information in this release or J.D. Power survey results without the express prior written consent of J.D. Power.

Figure 10: J.D. Power and Associates 2012 Residential Telephone Satisfaction Study



Charts and graphs extracted from this press release must be accompanied by a statement identifying J.D. Power and Associates as the publisher and the J.D. Power and Associates 2012 U.S. Residential Telephone Satisfaction Study℠ as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. JDPower.com Power Circle Ratings™ are derived from consumer ratings in J.D. Power studies. For more information on Power Circle Ratings, visit jdpower.com/faqs. No advertising or other promotional use can be made of the information in this release or J.D. Power and Associates survey results without the express prior written consent of J.D. Power and Associates.

VI. CUSTOMER COMPLAINTS ON JOINT APPLICANTS' SERVICES

25. To assess the level of customer satisfaction and the Joint Applicants' effectiveness in handling customer complaints, ORA requested customer complaint data from the Joint Applicants. ORA also requested procedures that the Joint Applicants use to handle complaints to gain an understanding of their complaint process.

26. When asked to provide the current process and/or procedures for handling customer complaints for voice services, Comcast provided a flow chart of the process and stated that it uses the same process for both voice and broadband services.[62] The chart depicts how escalated customer complaints are internally handled when a customer contacts Comcast's corporate office and provide a high level illustration of how tickets are created and how the status of a complaint gets assigned (for example [redacted] In addition, the chart includes some acronyms, such as [redacted], which are not defined. Hence, ORA is limited in its interpretation of Comcast's customer complaint process and whether Comcast has any internal standards it uses to ensure the effectiveness of its process.

27. On the other hand, TWC provided a thorough description of its process and procedures that it currently uses to handle residential customer complaints, indicating processes for handling internal and external complaints that have been escalated to TWC corporate office.[63] [redacted]

[62] Comcast CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:42 [Comcast's Exhibit ORA/Comcast R-3:42].

[63] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:42 [TWC's Exhibit 3:8].

[redacted]).[64]

28. When asked for its current process and/or procedures for handling customer complaints, Charter stated that [redacted].[65]

29. When asked about changes to the current process for handling customer complaints that would occur post-merger, TWC stated that "if the merger closes as planned, TWC will be acquired by Comcast. The procedures for handling customer complaint and/or dissatisfaction post-merger are the province of the acquirer, Comcast.[66] Comcast stated that [redacted]."[67]

30. Comcast provided an incomplete and vague description of its customer complaint process and there appears to be an absence of internal targets or goals in handling complaints.

31. When responding to ORA's data request on customer complaint data, both Comcast and TWC provided "escalated" customer complaints. While TWC provided a description of how it qualified complaints as "escalated" (as described in the paragraphs above), Comcast did not provide its definition of what it regards as

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[64] *Ibid.*

[65] Charter CONFIDENTIAL Supplemental Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:42.

[66] TWC Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:43 [Public Version].

[67] Comcast CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:43.

"escalated" customer complaints. Hence, we assume that the following analysis on Comcast's and TWC's customer complaints represent a sub-set of the population of customer complaints received by both companies i.e. customer complaints that are "escalated."[68]

32. In addition to the customer complaint data provided by the Joint Applicants, the CPUC Consumer Affairs Branch (CAB) receives and tracks complaints and inquiries on utility services.[69] During the period from January 2009 and August 2014, CAB received a total of [redacted] customer complaints and inquiries (cases) regarding Comcast's services; [redacted] cases regarding TWC's services; and [redacted] cases regarding Charter's services. Figure 11 shows the number of cases received by CAB on Comcast, TWC and Charter services from California customers. Further analysis of CAB data regarding customer complaints on Comcast's services for the period between January and August 2014, indicate that the majority of the customer complaints were regarding Comcast's service and billing issues.

[68] Comcast claimed that it "does not track complaints that have not been escalated." Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:45 TWC stated that it "[redacted] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:40.

[69] CPUC CAB customer complaints data on Comcast, TWC, Charter and Bright House, January 2009 to August 2014.

Figure 11: Complaints and Inquiries (January 2009 - August 2014) based on Data obtained from CPUC Consumer Affairs Branch Consumer

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[redacted]

A. General Trends in Joint Applicants' Customer Complaints Data

33. Based in 2014 data, TWC had approximately an equal number of customers as Comcast in California.[70] However, the number of customer complaints that Comcast[71] received almost [redacted] that of TWC.[72] Refer to Table 2.

Table 2: Comcast and TWC Subscribers and Customer Complaints in 2014

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[redacted]

Figure 12 shows the total number of complaints in the period between January 2010 and August 2014, indicating [redacted] number of customer complaints for Comcast when compared to TWC. TWC customer complaints included complaints on all of its services (cable, broadband and voice) while Comcast's customer complaints pertained to its broadband and voice services.

[70] Based on TWC CONFIDENTIAL Responses to ORA Set 1 DR [ORA-A.14-04-013.PHH-001], No. 8-9 [TWC Exhibit 3 and 4].

[71] The analysis of Comcast's customer complaints data in this section is based on Comcast CONFIDENTIAL Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:40, Q-3:44, Q-3:45 and Q-3:46 [Comcast Exhibit R-3:40].

[72] The analysis of TWC's customer complaints data in this section is based on CONFIDENTIAL Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:40, Q-3:44, Q-3:45 and Q-3:46 [TWC Exhibit 3-7].

Figure 12: Comcast and TWC Customer Complaints- Multiple Service Complaints (January 2010- August 2014)

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[redacted]

34. Based on the analysis of the data responses regarding customer complaints (that required escalation), the majority of Comcast and TWC customer complaints in California were complaints on service (voice or broadband service quality) issues, such as service repairs, installations, outages, intermittent services, as opposed to billing complaints. In addition, the majority of these complaints originated from residential customers (on average about [redacted] compared to those that originated from business customers (about [redacted].

35. During the period from January 2010 to August 2014, Comcast received a total of [redacted] customer complaints from its California customers regarding Comcast's voice and broadband services. During this period, about [redacted] of Comcast's total customer complaints were service-related complaints versus [redacted] billing-related complaints. Figure 13 shows Comcast's percent of billing and service related complaints of the total customer complaints for broadband and voice services.

Figure 13: Comcast Customer Complaints (Voice and Broadband) (January 2010- August 2014)

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[redacted]

Figure 14 shows the percent contribution of Comcast customer complaints by type of service (broadband versus voice) and by type of issue of complaints (billing- versus service-related). The majority of customer complaints (billing and service) were pertaining to broadband services when compared to complaints on voice services (this could be a function of the number of broadband customers versus customers with voice services only).

Figure 14: Comcast Customer Complaints (Voice and Broadband) by Type of Complaint (January 2010-August 2014)

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[redacted]

36. During the same period (January 2010-August 2014), TWC[73] received [redacted] customer complaints[74] from its California customers on various issues related to their voice, broadband and cable services.

37. TWC did not delineate between customer complaints from voice and broadband customers or whether they originated from residential or business customers. In addition, the majority of data on customer complaints included more than one category with regard to the issue and/or cause of the complaint. For the purpose of this report, if a complaint is assigned more than one category, it will be

[73] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:40 TWC Exhibit 3-7

[74] TWC customer complaints data (Exhibit 3-7) did not delineate between residential versus business customer-initiated complaints. TWC did not provide customer complaints by type of service (voice versus broadband) as requested in ORA DR. *Ibid.* Hence, some of TWC's customer complaints categories could comprise multiple services, such as voice, broadband and cable. Also, the complaints could include more than one category; for example, a complaint about appointment could include billing related complaints etc.

assigned (counted) based on the first category in the list (to avoid double counting). For example, if the complaint was categorized as billing/appointments/repair/customer experience, it is counted as a billing complaint.

38. About [redacted] of these complaints were related to billing issues and about [redacted]% were regarding service issues. Figure 15 shows TWC's percent of billing and service related complaints of the total customer complaints for broadband and voice services.

Figure 15: TWC Total Customer Complaints (Voice and Broadband) (January 2010-August 2014)

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[redacted]

Figure 16 shows the percent of TWC's customer complaints by type of service (broadband versus voice) and by type of complaint (billing- versus service-related). TWC's service-related customer complaints contained a variety of issues, such as [redacted]. About [redacted] of disconnection complaints were regarding disconnections that occurred due [redacted].

Figure 16: TWC Customer Complaints (Voice and Broadband) by Type of Complaint (January 2010-August 2014)

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[redacted]

39. TWC customer complaints regarding telephone repair contained various issues such as, [redacted]. During the period between January 2010 and August 2014, the average number of business days to resolve a customer complaint regarding telephone repair was about [redacted] The trend in data indicates that the duration for resolving a telephone repair [redacted] from 2010 to 2013 (2014 is a partial year, January to August). Also, during this period the maximum

duration to resolve a telephone repair complaint [redacted] from [redacted] in 2010 to [redacted] in 2013. Refer to Figure 17.

Figure 17: TWC Resolution Duration for Customer Complaints (Telephone Repair)

January 2010-August 2014

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[redacted]

40. During the same period (January 2010 to August 2014),[75] Charter received a total of [redacted] customer complaints on its voice and broadband services in California Charter had lower number of subscribers compared to Comcast and TWC. For instance, in 2014, Charter's number of subscribers were about [redacted] that of Comcast's.

[75] Charter stated that [redacted]. For the period 2010-2013, Charter's data did not delineate the type of complaints, whether the complaints were related to voice or broadband service. For the period covering Jan 2013 – August 2014, [redacted] for this period, Charter provided the counts of customer complaints data and did not provide the additional information requested in ORA data request. The analysis of Charter's customer complaints data in this section is based on Charter CONFIDENTIAL responses to ORA's DATA REQUESTORA-A.14-04-013.PHH-002 No. Q-3:40, Q-3:44, Q-3:45 and Q-3:46; additional information in Charter's Excel file named [CONFIDENTIAL CA ORA DR#2_Question 40_44_45 Agency Customer Complaints 2010-2014.xlsx].

B. Trends in Comcast's Customer Complaints Pertaining to Voice Services

41. Comcast's customer complaints on service related issues originating from its voice customers in California totaled [redacted] between January 2010 and August 2014, which is about [redacted] of the total (broadband and voice) *service* related complaints. Most of these complaints originated from residential customers. A large proportion of Comcast's voice service-related complaints were associated with [redacted] Other voice service-related complaints included issues, such as customers' claims regarding [redacted].

42. During the period between January 2010 and August 2014, Comcast's duration to resolve a complaint for telephony repair varied widely from about [redacted] to [redacted] per complaint.

43. Figure 18 shows Comcast's voice customer complaints related to telephone repairs for the period between January 2010 and August 2014, including annual average and maximum days to resolve a telephone repair complaint. In 2014, the average annual duration for Comcast to resolve telephone repair complaint was about [redacted] and the maximum duration to resolve a complaint was [redacted]), which is substantially [redacted] than TWC's complaint resolution durations in 2014. Comcast took [redacted] as long on average to resolve a telephone repair complaint than TWC in 2014.

Figure 18: Comcast Customers' Voice Services Complaints related to Telephone Repair (January 2010- August 2014)

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[redacted]

44. Comcast's' customer complaints on billing issues followed similar trends to service related complaints. During the period between January 2010 and August 2014, the majority of billing complaints originated from residential customers, and the majority of those complaints were related to broadband services versus voice services.

45. During the period between January 2010 and August 2014, Comcast's billing related complaints from customers with voice services totaled to [redacted] complaints, about [redacted] of the total (voice and broadband) billing complaints). Refer to Figure 19.

Figure 19: Comcast Billing-Related Customer Complaints (January 2010- August 2014)

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[redacted]

46. Some of the main issues related to Comcast's billing disputes were: [redacted]. The remaining categories of customer billing complaints associated with Comcast voice services included issues such as, [redacted]

47. The durations to resolve such billing complaints ranged **from** [redacted] to [redacted] per billing complaint during this period. The average annual duration to resolve such complaints during this period ranged between [redacted] in 2010 and 2011 to [redacted] in 2014; the maximum durations to resolve a billing complaint were about: [redacted] in 2010; [redacted] in 2011; [redacted] in 2012; [redacted] in 2013; and [redacted] in 2014.

48. The data indicates that Comcast's service quality and reliability is poor, and that its customer satisfaction rating is low.

VII. SAFETY AND SERVICE RELIABILITY: VOICE SERVICE OUTAGES IN CALIFORNIA

49. Service outages provide critical measures of service reliability and the degree of risk to public safety. The FCC has established rules to require communication providers to report certain disruptions to their network depending on the type of communication, duration of the outage, and the number of affected users. The FCC has determined that such information is crucial to the national telecommunication infrastructure and would enable it to prevent disruptions in service that could threaten homeland security, public health and safety, as well as the nation's economic well-being.[76] The FCC uses such information to analyze communication vulnerabilities and share aggregate information with industry to help prevent future outages and preserve network integrity. The CPUC has not established specific standards, reporting requirements and/or enforcement strategies to address major service outages. Instead, the only requirement for telecommunication carriers is to provide copies of the FCC Network Outage Reporting System (NORS) to the CPUC.[77]

50. Therefore, to gain an understanding of the current level of performance and service reliability as it pertains to voice services provided by the Joint Applicants in California, ORA requested their voice service outage data for the period between January 2010 and August 2014, including any outage reports tracked at the company level, as well as voice service outages that met the FCC reporting requirements and submitted to the FCC (NORS outage reports).

51. Comcast did not provide voice service outage reports, claiming that it "does not collect outage information by county, and generally does not differentiate by

[76] http://www.fcc.gov/document/time-warner-penalized-11m-network-outage-reporting-violations

[77] NORS are produced in email format in unusable fashion and the CPUC has a petition pending before the FCC for the last four years seeking access to the FCC NORS database.

residential and business customers in its outage reporting."[78] Comcast provided only voice outage reports that they submitted to the FCC (NORS reports) for the period covering January 2013 to August 2014. TWC and Charter provided both company outage reports and FCC NORS reports. Bright House stated that it did not submit outage reports in California to the FCC for the period January 2010 through August 2014.[79]

A. Comcast's FCC Outages in California

52. Comcast's voice service outages affected VoIP and E9-1-1 services in California. Based on the analysis of Comcast's FCC outage reports,[80] although the number of major outages in 2014 [redacted] were less than in 2013 [redacted] the impact of outages in 2014 were [redacted] than those that occurred in 2013 both in terms of the total affected users and the total magnitude of the outages (measured by the number of VoIP user minutes impacted). In fact, the total number of affected VoIP users in 2014 was about [redacted] higher than 2013; and the total number of VoIP user minutes[81] in 2014 is about [redacted] than in 2013.

Table 3 shows Comcast voice outages that affected VoIP users in California during the period between January 2013 and August 2014.

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[78] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:31. [Public Version]

[79] Bright House Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q3:35. [Public Version]

[80] Based on ORA's analysis of Comcast's FCC outage reports data Comcast CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:35 [Comcast's Exhibit ORA/Comcast R-3:35]

[81] "User minutes" is the result of multiplication of number of affected users and the outage duration. For example, 900,000 user minutes could mean an outage of 30 minutes that affected 30,000 users.

Table 3: Comcast FCC Outage Reports affecting VoIP User California (January 2013 - August 2014)

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[redacted]

Figure 20 shows the voice outage data (including the n ber of affected VoIP users, outage durations and the impact of the outages in terms user minutes) that occurred in California during the period between January and Aug of 2014.

Figure 20: Comcast FCC Voice Service Outage Repor ata (January - August, 2014)

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[redacted]

53. The largest impact of voice outages in 2014 affected [redacted] VoIP user minutes in [redacted] California (which is about [redacted] the FCC's standard of 900,000 VoIP user minutes). This outage lasted about an [redacted] affecting [redacted] VoIP users that did not have access to E9-1-1 services. Comcast reported that the root cause

of the outage [redacted].

54. The second largest impact of the outages in 2014 affected [redacted] VoIP user minutes in [redacted], California (which is about [redacted] the FCC's standard of 900,000 VoIP user minutes). This outage lasted about [redacted] affecting [redacted] VoIP users that did not have access to E9-1-1 services. The cause of the outage was due to [redacted]

55. The third largest impact of the outages in 2014 affected, [redacted] VoIP user minutes in [redacted] in California (which is about [redacted] the FCC's standard of 900,000 VoIP user minutes). This outage lasted [redacted] affecting [redacted] users who did not have access to E9-1-1. The cause of the outage [redacted]

56. Figure 21 shows Comcast's voice outage data (including the number of affected VoIP users, outage durations and the impact of the outages in terms of user minutes) that occurred in California during the period between January and August of 2013.

Figure 21: Comcast FCC Voice Service Outage Reports (January - December 2013)

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[redacted]

57. In the period between January to December of 2013, the magnitude of voice service outages in California, in terms of user minutes, ranged between [redacted] (about [redacted] the FCC's standard of 900,000 VoIP user minutes) and [redacted]. The largest outage during this period lasted about [redacted], impacting [redacted] VoIP users in [redacted], California, who did not have access to E9-1-1. The cause of this outage was [redacted]

58. The second largest outage in 2013 impacted [redacted] VoIP user minutes (about [redacted] times the FCC's standard of 900,000 VoIP user minutes). This outage lasted for about [redacted] and impacted [redacted] VoIP users in [redacted] California, who did not have access to E9-1-1. This outage resulted from [redacted]."

59. Another major Comcast voice outage in 2013 affected [redacted] user minutes (about [redacted] times the FCC's standard of 900,000 VoIP user minutes). This

outage lasted for about [redacted] and impacted [redacted] VoIP users in [redacted], California, who did not have access to E91-1-1. The cause of this outage was [redacted].[82]

B. TWC's FCC Outage Reports

60. TWC provided incomplete data in its FCC NORS outage reports that affected voice services in California in 2014. In a recent order from the FCC[83] dated August of 2014, the FCC required TWC to pay a civil penalty of $1.1 million and implement a three-year compliance plan as the result of TWC failing to file a substantial number of reports pertaining to a series of reportable wireline and Voice over Internet Protocol (VoIP) network outages.

61. For the period of January 2010-August 2014, TWC provided [redacted] FCC outage reports that affected voice services in California.[84] TWC did not provide the outage durations for two of its FCC outage reports; hence ORA is not able to provide the impact of these two outages in terms of user minutes.

62. Figure 22 shows three of the outage events that affected TWC's VoIP users in California in February, March and April of 2014.

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[82] Additional Comcast voice outages that affected VoIP networks in California during the period from January 2010- August 2014 is included in Comcast's Exhibit ORA/Comcast R-3:35, Comcast CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:35.

[83] http://www.fcc.gov/document/time-warner-penalized-11m-network-outage-reporting-violations

[84] Based on ORA's analysis of TWC's FCC outage reports data [TWC's Exhibit 3-2] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:35. TWC provided an additional [redacted] FCC Outage Reports affecting DS3 Circuits (businesses) for 2014 only.

Figure 22: TWC FCC Voice Outage Reports (February- April 2014)

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[redacted]

63. TWC's largest outage in 2014 [redacted] user minutes, about [redacted] times the FCC threshold) lasted [redacted], affecting [redacted] VoIP users, who did not have access to E9-1-1. The outage report indicated that [redacted] were affected including [redacted]. However, it is not clear from the report what the proportion of the affected users were in [redacted]. Based on the outage report, this outage was a result of a [redacted].

64. TWC's second largest outage [redacted] user minutes, about [redacted] FCC's threshold) lasted for about [redacted] VoIP users in [redacted], California who did not have access to E9-1-1. This outage resulted from [redacted]

65. TWC's third outage [redacted] lasted for about [redacted] affecting [redacted] VoIP users in [redacted] in California who did not have

access to E9-1-1. The outage occurred as a [redacted].[85]

C. Charter's FCC Outage Reports

66. Charter provided [redacted] FCC major outage reports affecting voice services (VoIP and Cable Telephony) in California from the period between January 2010 and August 2014.[86] During this period, [redacted] of these outages affected [redacted] cable telephony users, and [redacted] of these outages affected [redacted] VoIP users. Refer to Table 4.[87]

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[85] Additional information on TWC voice outages that affected VoIP networks in California is included in TWC's Exhibit 3-2, TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:35.

[86] Based on ORA's analysis of Charter's FCC outage reports data. Charter CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:34 [CONFIDENTIAL CA ORA DR #2_Question 34 FCC Outage Reports_pdfs.zip]; Charter also provided the data (in response to and Q-3:30) in Excel File named "CONFIDENTIAL CA ORA DR#2_Question 30 FCC Outage Report Spreadsheet 2010-2014 xlsx."

[87] Additional information on Charter voice outages that affected (VoIP and Cable Telephony) in California from the period between January 2010 and August 2014 is included in Charter's Confidential Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. R-3:30, in Excel File named "CONFIDENTIAL CA ORA DR#2_Question 30 FCC Outage Report Spreadsheet 2010-2014 xlsx."

Table 4: Charter FCC Voice Outage Reports Data (January 2010- August 2014)

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[redacted]

67. Figure 23 shows Charter FCC voice outage reports data that occurred during the period between January and August of 2014. The largest impact [redacted] user minutes, about [redacted]-times the FCC's threshold) lasted about [redacted] and affected [redacted] VoIP users in [redacted], California, who did not have access to E9-1-1. This outage was a result of [redacted]. The second largest impact [redacted] user minutes, about [redacted] times the FCC's reporting threshold) lasted about [redacted] and affected [redacted] VoIP users in [redacted] California who did not have access to E9-1-1. This outage was a result of [redacted].

Figure 23: Charter FCC Voice Service Outage Reports Data (January - August 2014)

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[redacted]

D. Joint Applicants' Company Level Service Outage Data

68. As noted earlier, Comcast claimed that it "does not collect outage information by county, and generally does not differentiate by residential and business customers in its outage reporting."[88] Comcast provided only its FCC outage reports for voice services in California for the years 2013 and 2014 only (discussed in the previous section).

69. TWC provided voice outage reports that it tracked at the company level including California voice service outage statistics for the period between January 2010 and August 2014. The data indicates that the majority of its voice service outages were residential (total of [redacted] residential outages versus [redacted] business outages in that period). The three top causes of TWC service outages during this period were due to:[89]

[redacted]

[88] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:31. [Public Version]

[89] TWC CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:31.

[redacted]. On average during this period, TWC mean time to repair service outages was [redacted], ranging from a low of [redacted] in 2013 to a [redacted] in 2011 (Refer to Figure 24). However, the maximum time for TWC to repair service outages was close to a [redacted] in 2011 and ranged between [redacted] in 2010 to [redacted] in 2014 (Refer to Figure 25).

Figure 24: TWC Residential Outages (January 2010- August 2014)

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[redacted]

Figure 25: TWC Maximum Time to Repair Service in Days (January 2010-Augsut 2014)

CONFIDENTIAL

[redacted]

70. Charter provided out of service reports data in California for the period between January 2012 and August 2014.[90] During that period, Charter had a total of [redacted] out of service reports, an annual average of approximately [redacted] out of service reports. Out of service report tickets constituted [redacted] of Charter total working lines in 2012, [redacted] in 2013 and [redacted] in 2014. The average outage duration was about [redacted] in 2012, about [redacted] in 2013 and about [redacted] in 2014. During this period, Charter repaired on average about [redacted] of the outage tickets in less than 24 hours (which is below the minimum standard of 90% within 24 hours for public telephone companies), as indicated in Figure 26.

Figure 26: Charter Out of Service and Repair Reports (January 2012-August 2014)

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[redacted]

[90] The analysis is based on Charter CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:29; Charter provided data relating to voice quality of service including "out of service report" in the Excel file named "CONFIDENTIAL CA Comcast Merger Data1. xls"

E. Joint Applicants' Provision of Battery Backup and 9-1-1 Services

71. In response to ORA's data request regarding the Joint Applicants' provisioning of educational materials to their customers regarding the disruptions to their phone services in the instances of power outages, Comcast, TWC and Charter stated that they provide educational material on the availability of phone service during power outages.[91]

72. Comcast and TWC do not provide free backup batteries to their residential customers. Comcast stated that "backup batteries (initial and replacement) for residential services are available for purchase from Comcast and include a 1-year warranty. The Voice Backup Battery is $35.00 and the Voice Backup Battery Shipping is $5.95. Battery and shipping fees will appear on a customer's bill as "Voice Backup Battery" and "Shipping & Handling Fee"."[92]

73. TWC stated that it "does not provide backup batteries, but consumers may purchase backup batteries for their compatible Home Phone modems from a variety of vendors. These batteries generally range in price from approximately $28 to $80, depending on equipment compatibility and performance features."[93]

74. Bright House stated that it "does not currently provide battery backup in California. BHN's policies and procedures with respect to battery backup in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction."[94]

75. Charter stated that it "[redacted][95]

[91] Comcast, TWC and Charter Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:56. [Public Version]

[92] Comcast Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:57 [Public Version]

[93] TWC Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:55 [Public Version]

[94] Bright House Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:55 [Public Version]

[95] Charter CONFIDENTIAL Response to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. Q-3:57

76. Joint Applicants provided information on the process they currently use to provision E9-1-1 services in California.[96]

VIII. CONCLUSION

77. The information provided in this report indicates the Joint Applicants' current level of voice service quality and reliability is poor. Consumer satisfaction reports indicate that Comcast and TWC currently have the lowest customer satisfaction ratings. Comcast provided little evidence to substantiate its claim that the proposed merger will not have an adverse impact on voice service quality and reliability.

I declare under penalty of perjury that the foregoing information is true and correct to the best of my knowledge.

Executed this 10th day of December, 2014 in San Francisco, California.

Ayat Osman
Public Utilities Regulatory Analyst

[96] Comcast, TWC and Charter Responses to ORA 3rd DR [ORA-A.14-04-013.PHH-002], No. No. Q-3:59 [Public Version]

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.	Application 14-06-012 (Filed June 17, 2014)

DECLARATION OF ADAM J. CLARK

FOR THE OFFICE OF RATEPAYER ADVOCATES

(PUBLIC)

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I. INTRODUCTION

1. On April 11, 2014, Comcast Corporation ("Comcast"), Time Warner Cable Inc. ("TWC"), Time Warner Cable Information Services (California), LLC ("TWCIS") and Bright House Networks Information Services (California), LLC ("Bright House") filed Application (A.) 14-04-013 with the California Public Utilities Commission (CPUC) for the approval of the transfer of control of TWCIS and Bright House to Comcast.

2. On June 17, 2014, Comcast, TWC, and Charter Fiberlink CA-CCO, LLC ("Charter") filed a subsequent Application, A.14-06-012, requesting that the CPUC authorize the transfer of a limited number of non-residential (business) customers and associated regulated assets of Charter to TWC under Public Utilities Code Section 851. Collectively, Comcast, TWC, Bright House, and Charter will be referred to as "Joint Applicants"[1].

3. The proposed merger would combine two of the largest cable broadband providers in California.[2] In fact, Comcast is the largest cable company in northern California, and TWC is the largest cable company in southern California.[3]

4. Pursuant to the August 14, 2014 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge (Scoping Memo), the Office of Ratepayer Advocates (ORA) submits the following report summarizing the "quality of service"[4] metrics and information for Comcast, TWC, Bright House and Charter in considering

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[1] Joint Applicants includes Comcast Corporation and all related affiliates and Subsidiaries, Time Warner Cable Inc. and all related affiliates and Subsidiaries, Charter Communications, Inc. and all related affiliates and Subsidiaries, and Bright House Networks and all related affiliates and Subsidiaries.

[2] *Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge* (Scoping Memo), Application 14-04-013 (filed Aug. 14, 2014), at 5.

[3] *Ibid.*, at 2.

[4] Quality of Service, for the purposes of this Declaration, represents the service quality and reliability of broadband services offered to California customers.

how the proposed merger will maintain or improve the quality of broadband services available to California consumers.

5. The Scoping Memo explains the CPUC's intent to "[g]ather and analyze information relevant to the proposed merger to determine the specific impact of the merger on California under the public interest criteria enumerated in Sections 854(a) and 854(c) of the Public Utilities Code."[5] Furthermore, the CPUC expounded upon its authority to review the effects of the proposed merger on broadband deployment pursuant to Section 706(a) of the *1996 Federal Telecommunications Act*.[6]

6. It is essential and critical that quality and reliability of services offered by the Joint Applicants is carefully examined to determine the effect on California consumers. As cable companies, the Joint Applicants offer a variety of broadband-based services, such as: high-speed Internet access, e-mail, video conferencing, and VoIP telephony. These services are an essential part of everyday life, and the quality and reliability of service offered by the Joint Applicants is vital to its California customers.

7. ORA issued Data Requests to the Joint Applicants on the following topics related to the quality and reliability of their broadband services: customer satisfaction, service or network outages, installation and service orders, and consumer complaints.[7] Based on the Joint Applicants' responses to ORA's Data Requests, as well as publically available information, this report provides ORA's findings on the quality and reliability of the Joint Applicants' broadband services.

II. EXECUTIVE SUMMARY

8. Broadband is an increasingly critical means of communication, and low quality and reliability of broadband services is detrimental to the public's safety. Consumers face the risk of poor quality and reliability of broadband services they receive post-merger based on the following findings:

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[5] Scoping Memo, at 4.

[6] *Ibid*., at 5.

[7] ORA Data Request, Set 3.

- The Joint Applicants provided limited data to support the claim that the proposed merger will maintain or increase the quality and reliability of their broadband services in California. There is limited evidence to suggest that the proposed network upgrades are sufficient to overcome deficiencies in the overall quality and reliability of their broadband services. Furthermore, the Joint Applicants have not offered substantial evidence that they are not able to achieve the same (or greater) level of network quality and reliability improvements on their own. The Joint Applicants provided little to no supporting data or documentation to quell serious concerns regarding the currently substandard quality of their broadband services. As such, consumers may be at risk of experiencing a decline in the quality and reliability of broadband services.
- The Joint Applicants' receive poor "customer satisfaction" scores and ranks from third party rating agencies. Comcast and TWC do not compare favorably to other broadband service providers and consistently earn substandard marks. In fact, according a University of Michigan study, Comcast and TWC are the lowest rated companies compared to not only Internet service providers, but across all industries and companies included in the study.
- The Joint Applicants receive customer complaints on various aspects of their broadband service, from [redacted]. There has been an upward trend in the number of complaints to the Joint Applicants, and the Joint Applicants have not provided evidence to demonstrate how they will improve on their services, and reduce the number of customer complaints post-merger. Most concerning, however, is that Comcast escalated [redacted] the number of complaints (per broadband connection) as compared to TWC. If Comcast acquires TWC, there is a risk that the merged entity will adopt less effective quality assurance processes and protocols than what TWC currently employs today.
- Comcast takes [redacted] than TWC to complete broadband installations. Comcast provided limited evidence that it will improve broadband installation service quality, or even preserve the status quo. Furthermore, neither Comcast nor TWC completes a satisfactory percentage of new broadband service orders

when compared to a 95% benchmark for "commitments met".

- The Joint Applicants provision broadband services that experience outages impacting a significant number of customers in California. The effects of these outages are concerning given Comcast's expansion as a broadband service provider in California. Despite the evidence that Comcast's broadband services experience frequent outages in California, Comcast claims that it does not track broadband outages in the State. TWC and Charter, on the other hand, do track broadband outages in California.

III. QUALIFICATIONS AND EXPERIENCE

9. My name is Adam Clark. I am currently employed by the CPUC as a Public Utility Regulatory Analyst V assigned to the Communications and Water Policy Branch of the ORA. I received a Bachelor of Arts Degree in Economics and Sociology from the University of California at Santa Barbara in 2006.

10. I joined the CPUC in June of 2007 as a Regulatory Analyst in the Communications Division, where I worked on various issues, including inter-carrier compensation, public purpose programs, and broadband deployment. I have performed extensive research on California's telecommunications and broadband markets. I have also aided the CPUC in review of previously proposed mergers. I recently joined ORA in October of 2014.

IV. CUSTOMER SATISFACTION

11. **The Joint Applicants' receive poor "customer satisfaction" scores and ranks from third party rating agencies.**

12. Customer satisfaction levels can provide valuable insight as to the quality of services rendered. In various data requests, ORA solicited information from each Joint Applicant regarding the company's approach to customer satisfaction.[8] Charter was the only entity that claimed to conduct ongoing company-specific customer satisfaction

[8] ORA Data Request, Set 3, No.49 through 54.

research.[9] Comcast[10] and TWC[11] referred to J.D. Power and Associates (J.D. Power) as their resource for customer satisfaction data. Bright House stated it "does not track or maintain the requested information." [12]

13. Independent third party surveys and studies rank the Joint Applicants' Internet access services as follows:

A. J.D. Power and Associates

14. J.D. Power is a marketing information services firm, and produces one of the most highly regarded and commonly referenced customer satisfaction studies. To assess residential Internet access services, J.D. Power conducts customer surveys in order to develop Satisfaction Index Scores[13] for various aspects of each company's service. Next, J.D. Power compares the scores of companies that operate within a similar geographical location. Finally, to rank the companies, J.D. Power assigns Power Circle Ratings[14] based on the variation between Satisfaction Index Scores.

15. Comcast claims to have focused on improving customer service during the past several years, and in its Public Interest Statement stated:

> "Since 2010, Comcast has improved its J.D. Power Overall Satisfaction by nearly 100 points as a video provider and

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[9] Charter's Response to ORA Data Request, Set 3, No. 49.

[10] Comcast's Responses to ORA Data Request, Set 3, No. 49.

[11] TWC's Responses to ORA Data Request, Set 3, No. 49.

[12] Bright House's Responses to ORA Data Request, Set 2, No. 49.

[13] In order to develop the Satisfaction Index Scores, J.D. Power conducts surveys in which participants rate various aspects of their service or product experience. J.D. Power then assigns a weight to each experience category (i.e. billing, customer service, ease of use, etc.) according to the extent that each category contributes to overall satisfaction. The resulting Satisfaction Index Scores are used to determine which companies receive a J.D. Power award. More information is available at http://www.jdpower.com/about-us/faq-general-questions.

[14] J.D. Power uses their Satisfaction Index Scores in order to assign Power Circle Ratings. In doing so, J.D. Power measures the range between the highest and lowest scores of an industry or segment, and also the variation between scores. The worst Power Circle rating is two, and the best is five. More information is available at http://www.jdpower.com/about-us/jdpower-ratings.

> close to 80 points in High Speed Data – more than any other provider in the industry during the same period."[15]

16. This statement is misleading and misrepresents the facts. J.D. Power has changed the specific criteria and weights used to determine Overall Customer Satisfaction scores several times since 2010. As such, a simplistic year-to-year comparison is not an accurate evaluation of a company's scores. A more appropriate assessment involves comparing a company's score for a specific year to the scores of other companies for that same year. Hence, the analysis presented herein focuses on the Joint Applicants' scores compared to each other and the industry-wide regional average score for each year.

17. According to J.D. Power's 2014 Residential Internet Service Provider Satisfaction Study (West)[16], Comcast and TWC produce subpar levels of customer satisfaction. J.D. Power gave both of these cable companies an overall Satisfaction Index Score that fell short of the average received by the major Internet access providers in the western region. Meanwhile, Charter Communications scored just slightly above the average for the western region.

18. The J.D. Power study categorized Comcast, TWC and Charter Communications as "about average", as denoted by three out of a possible five Power Circles (see Attachment 1).[17] A closer look, however, suggests an average classification may be overly generous, especially for Comcast.

19. J.D. Power gave Comcast the lowest overall Satisfaction Index Score among the Joint Applicants. Comcast also received [redacted]

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[15] Applications and Public Interest Statement, In the Matter of Applications of Comcast Corp. and Time Warner Cable Inc. For Consent to Transfer Control of Licenses and Authorizations, FCC MB Docket No. 14-57 (Filed April 8, 2014) at 72; footnotes omitted.

[16] JD Power Press Release. J.D. Power Reports: *Performance and Reliability Problems Decline in Both Residential TV and Internet Services; Quality and Connection Speeds Continue to Improve*. Westlake Village, CA. September 25, 2014. See, http://www.jdpower.com/press-releases/2014-us-residential-television-internet-telephone-service-provider-satisfaction

[17] To earn three Power Circles a company must score between 10 percent of the range above the industry and 20 percent below the industry.

[redacted], for several aspects of their residential Internet access services. J.D. Power characterizes a rating of two Power Circles as "the rest".[18] Comcast received J.D. Power's [redacted] in four of the five subcategories: Billing, Communication, Cost and Customer Service. Comcast earned [redacted] in only one subcategory, Performance.

20. TWC performed slightly better, earning [redacted] for Cost and [redacted] for Billing, Communication, Customer Service and Performance. Charter received the best scores among the Joint Applicants with [redacted] in Billing and Customer Service, and [redacted] for Communication, Cost and Performance. These scores, along with the scores of other major providers, are in Figure 1, below.

Figure 1 (CONFIDENTIAL)

[redacted]

[redacted]

[18] A rating of two Power Circles indicates the service's Satisfaction Index Score was more than 20% below the industry average.

21. The Joint Applicants did not perform well in years past, consistently ranking below the average Internet service providers in the western region.[19] In five of the past six years, J.D. Power's studies assigned Comcast and Charter Communications a sub-average score for Overall Customer Satisfaction. TWC failed to earn even one average mark for overall customer satisfaction in each of the six years from 2009 to 2014.

22. Of most concern is the lack of significant progress or improvement. For example, between 2009 and 2013, Comcast and Charter Communications received five straight [redacted] scores for the Cost of Service segment of J.D. Power's customer satisfaction study. In 2013, J.D. Power rated Comcast at a level "[redacted]" for Cost of Service and Customer Service.[20] The 2013 survey found that [redacted].[21]

23. The Figure 2 below depicts the overall Customer Satisfaction Scores of Comcast, TWC and Charter alongside the average score of all the major Internet access providers in the western region for 2009 through 2014.

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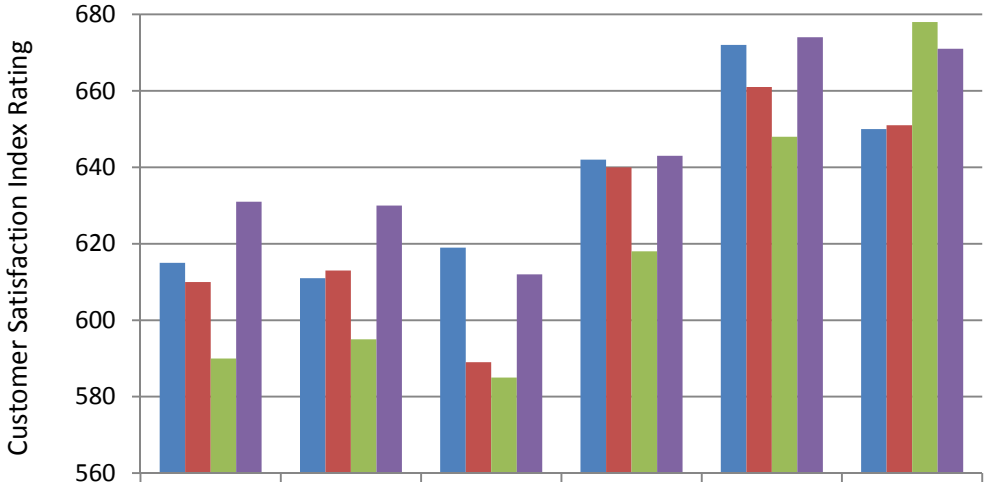
[19] TWC's Response to ORA Data Request, Set 3, No.49. Exhibit 3-6 (JD Power. *U.S. Residential Internet Service Provider Satisfaction Study* for 2010, 2011, 2012, 2013 and 2014).

[20] TWC's Response to ORA Data Request, Set 3, No.49. Exhibit 3-6 (JD Power. *U.S. Residential Internet Service Provider Satisfaction Study* for 2010, 2011, 2012, 2013 and 2014).

[21] *Ibid*., at 750.

Figure 2

J.D. Power Residential Internet Service Providers Satisfaction Study 2009-2014



	2009	2010	2011	2012	2013	2014
Comcast	615	611	619	642	672	650
TWC	610	613	589	640	661	651
Charter	590	595	585	618	648	678
West-Average	631	630	612	643	674	671

B. American Customer Satisfaction Index

24. The American Customer Satisfaction Index (ACSI), another highly regarded national study, produced an even more discouraging assessment of the Joint Applicants. In fact, the ACSI ranked the Internet service sector, as a whole, the worst performing of all 43 sectors tracked by the index.[22] Comcast, TWC and Charter Communications received the three lowest scores of all Internet service providers included in the study.[23] Comcast, TWC and Charter Communications also received the lowest scores among all companies across all industries included in the ACSI study.[24]

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[22] American Customer Satisfaction Index. *ACSI Telecommunications and Information Report 2014* (ACSI Report). ACSI, LLC. May 20, 2014. See, http://www.theacsi.org/news-and-resources/customer-satisfaction-reports/reports-2014/acsi-telecommunications-and-information-report-2014

[23] *Ibid.*, at 4.

[24] *Ibid.*, at 4.

Refer to Figure 3 below for the 2013 and 2014 ACSI rankings of Internet access providers.

Figure 3

ACSI – Internet Service Provider Scores[25]

Company	2013	2014	Percent Change
Internet Service Providers	**65**	**63**	**-3.1%**
Verizon Communications (FiOS)	**71**	**71**	**0%**
AT&T (U-Verse)	**65**	**65**	**0%**
CenturyLink	**64**	**65**	**2%**
All Others[26]	**71**	**65**	**-8%**
Cox Communications	**68**	**64**	**-6%**
Charter Communications	**65**	**61**	**-6%**
Comcast	**62**	**57**	**-8%**
Time Warner Cable	**63**	**54**	**-14%**

25. The ACSI also presents the year over year percentage change of each company's score. From 2013 to 2014, Comcast and TWC experienced the largest decline with changes of -8% and -14%, respectively.[27] The findings of the ACSI clearly show that customers are not satisfied with the quality of service they receive from the Joint Applicants and that their satisfaction rates are declining. With regard to the impact of mergers on customer satisfaction, the ACSI study notes:

> "Mergers and acquisitions have a generally negative effect on customer satisfaction, particularly among service industries. ACSI-measured service companies that have engaged in frequent, large acquisitions typically experience significantly

[25] *Ibid.*, at 5.

[26] The "All Others" score for an industry represents the remainder of the total industry market share, less the market shares of the ACSI measured companies. It is an aggregate of a representative number of customer interviews from each of potentially hundreds of smaller companies within the industry.

[27] ACSI Report, at 5.

> lower ACSI scores in the period following a Merger when the 'customer as asset' often takes a backseat to reorganization and consolidation via cost cutting."[28]

26. The low customer satisfaction ratings of the Joint Applicants is very concerning, particularly with regard to the acquiring entity, Comcast. The Joint Applicants' individual customer satisfaction ratings, along with year over year trends of substandard ratings, are indicative of what the proposed merger might produce: dissatisfied customers. Furthermore, according the ACSI study, the satisfaction ratings of Comcast will likely drop even further if the merger is completed.

V. QUALITY OF SERVICE METRICS

27. This analysis examines the "quality of service" of the broadband services provisioned by the Joint Applicants. There is a lack of explicit standards with regard to an acceptable "quality of service" as it pertains to broadband services. As such, this analysis borrows from various sources, including Federal standards, to form benchmarks and metrics to analyze the quality of the Joint Applicant's broadband services and the effects of the proposed merger. One such source is the CPUC's General Order 133-C, which established uniform minimum standards of service for certain telephone corporations.[29]

28. General Order 133-C includes five measures of service quality and their respective standards,[30] which certain carriers are expected to meet:

(1) telephone service installation intervals (five business days);

(2) installation commitments (95%);

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[28] American Customer Satisfaction Index. *Key ACSI Finding*. ACSI, LLC. See, http://www.theacsi.org/about-acsi/key-acsi-findings

[29] Decision (D.) 09-07-019, Ordering Paragraph 1 at 92.

[30] According to D.09-07-019, "[m]easures are the aspects or features of service subject to evaluation and reporting. Standards are the minimum acceptable values that measures must meet to be in compliance with the CPUC's requirements. Existing measures include held primary service orders, installation-line energizing commitments, trouble reports, dial tone speed, dial service, toll operator answering time, directory assistance operator answering time, trouble report service answering time, and business office answering time." D.09-07 019, mimeo, at p. 2, n. 1.

(3) customer trouble reports (six reports per 100 lines for reporting units with 3,000 or more working lines; eight reports per 100 working lines for reporting units with 1,001-2,999 working lines; and ten reports per 100 working lines for reporting units with 1,000 or fewer working lines);

(4) out of service repair intervals (90% within 24 hours excluding Sundays and federal holidays, catastrophic events and widespread outages); and

(5) answer time (80% within 60 seconds related to trouble reports and billing and non-billing issues) with the option to speak to a live agent, preferably in the first set of options (reporting units are limited to traffic offices with 10,000 or more lines).[31]

G.O. 133-C's five measures and standards became effective January 1, 2010.

29. The Joint Applicants provided minimal evidence to support their claim[32] that the proposed merger will not adversely impact the quality of service of their broadband services offered in California.

30. ORA asked the Joint Applicants to provide their definition of "quality of service" as it pertains to broadband services, and any related metrics or internal processes.[33] Bright House[34] raised various objections to the questions and did not provide an answer. Comcast indicated the company does not define the term "quality of service", and stated:

> "For broadband services, Comcast does not provide a "quality of service" for any Internet traffic on its Internet access service – all traffic delivered over XFINITY Internet service

[31] D.09-07-019, Conclusion of Law 5 at 89.

[32] A.14-04-013 Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a). (April 11, 2014) at 23.

[33] ORA Data Request, Set 3, No.27 through 30.

[34] Bright House's Responses to ORA Data Request, Set 3, No.27 through 30.

> is delivered on a 'best efforts' basis. Comcast, however, ensures that it provisions sufficient capacity for its Internet access service to ensure that it delivers the speeds it advertises."[35]

31. Apart from assurances of advertised speeds and "best effort" network management, Comcast did not identify any specific service quality metrics or internal processes. Comcast does not identify any internal procedures in place to track, monitor or improve the quality of its broadband services. As the potential acquiring company, Comcast's assertions are especially worrisome.

32. In contrast, TWC tracks and grades the performance of its broadband network by identifying and measuring "critical success factors" against targeted performance values. For example, TWC's internal processes include [redacted].[36] See Attachment 2 for additional details on TWC's internal metrics, including associated measurements, calculations, definitions and systems. Then, refer to Attachment 3 for an example of a 'HSD Scorecard', which summarized the performance of TWC's broadband network over a three month period, August through October of 2013.

33. The Joint Applicants shared some examples of recent and current operations intended to improve the quality of their broadband services:

- Charter is currently in the midst of an upgrade to a majority of its network in California, which will increase the minimum broadband speed from 30 mbps to 60 mbps in most areas where Charter's Internet service is available.[37] Charter expected to complete this particular upgrade by mid-October 2014, but also plans to continually optimize the network so long as Charter controls the facilities.[38]

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[35] Comcast's Response to ORA Data Request, Set 3, No.27.

[36] TWC's Response to ORA Data Request, Set 3, No.28.

[37] Charter's Response to ORA Data Request, Set 3, No.47.

[38] Charter's Response to ORA Data Request, Set 3, No.47.

- TWC states that it is currently [redacted]. Starting with service territory in [redacted], TWC is [redacted]”[39]
- Comcast noted that it recently completed an upgrade to its broadband network called “Project Cavalry”; Comcast claims this upgrade reclaimed bandwidth by converting systems to an all-digital platform.[40] According to Comcast, these upgrades allowed it to improve the delivery of broadband services in most of its markets via the ability to bond more than eight digital cable channels.

  Comcast also stated that it expects to upgrade its cable modem termination systems in [redacted] of its footprint by the end of 2015.[41] Comcast believes that these upgrades will allow Comcast to bond 48 digital cable channels in the near term and potentially 96 channels in 2016, pending further upgrades.[42]

34. Furthermore, Comcast described, as part of its Public Interest Statement on file with the Federal Communications Commission (FCC), upgrades and maintenance to its all-digital network:

> “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”

[39] TWC’s Response to ORA Data Request, Set 3, No. 47.

[40] Comcast’s Response to ORA Data Request, Set 3, No. 1.

[41] Comcast’s Response to ORA Data Request, Set 3, No. 1.

[42] Comcast’s Response to ORA Data Request, Set 3, No. 1.

app, which provides systems status updates as well as troubleshooting tips and advice."[43]

35. According to Comcast, these upgrades and tools improve network reliability and service quality. However, ORA's analysis is limited by Comcast's vague and unresponsive answers with regard to internal service quality metrics and processes.

36. ORA also asked the Joint Applicants to provide any future plans to improve the quality of broadband service to California customers post-merger.[44] Charter did not provide any specific plans, but stated that it intends to continually optimize its broadband network facilities so long as Charter retains and operates the facilities.[45] Meanwhile, TWC claims any "post-merger plans are the province of the acquirer, Comcast" and therefore TWC cannot provide post-merger plans.[46] Comcast admits it "has not made any determinations regarding the specific steps it may take to address post-transaction quality of service issues in California".[47]

37. TWC and Charter have existing procedures and/or targeted benchmarks for the quality of their broadband services, but Comcast, the acquiring company, did not provide any existing procedures or plans for post-merger improvements with regard to the quality of their broadband services. Furthermore, the Joint Applicants give no assurance that their current, individual plans for network and service upgrades will remain intact in the event the merger occurs. Comcast, the acquiring entity, provided little to no data to show that the proposed merger will either maintain or improve the quality of broadband service available throughout California.

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[43] Applications and Public Interest Statement, In the Matter of Applications of Comcast Corp. and Time Warner Cable Inc. For Consent To Transfer Control of Licenses and Authorizations, FCC MB Docket No. 14-57 (Filed April 8, 2014).

[44] ORA Data Request, Set 3, No.48.

[45] Charter's Response to ORA Data Request, Set 3, No.48.

[46] TWC's Response to ORA Data Request, Set 3, No.48.

[47] Comcast's Response to ORA Data Request, Set 3, No.47.

VI. CUSTOMER COMPLAINTS

38. **Customers contact the Joint Applicants in order to file complaints on many aspects of their broadband service. The Joint Applicants provided minimal evidence to demonstrate how they will improve on their services and reduce the number of customer complaints post-merger.**

39. Complaints can lend valuable insight as to the Joint Applicants' existing problems, year-over-year trends and potential future shortcomings. Ultimately, the data also speaks to the proposed merger's possible effects on the overall quality of service.

40. In various data requests, ORA solicited information from each Joint Applicant regarding customer complaints received between January 1, 2010 and August 31, 2014 in California.[48] ORA requested the Joint Applicants to convey the details of each complaint, including: the issue, key dates, frequency, response time, and location.

A. Bright House

41. Bright House responded to ORA's requests for data on customer complaints by raising various objections and provided extremely limited data or no data at all. Bright House's response included the following:

> "BHN [Bright House] also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment- Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations."[49]

B. Comcast

42. In response to ORA's Data Request inquiries regarding customer complaints, Comcast stated that the company only tracks complaints that have been

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[48] ORA Data Request, Set 3, No.46.

[49] Bright House Response to ORA Data Request, Set 2, No.46.

"escalated".[50] As a result, the following analysis of Comcast's customer complaint data is not inclusive of all complaints pertaining to broadband services. Rather, the complaint data discussed herein is merely a subset of the total customer complaints received by Comcast.

43. Comcast escalated [redacted] broadband service complaints from customers between January 1, 2010 and August 31, 2014. Residential customers submitted [redacted] of these complaints, while business customers contributed [redacted] On average, Comcast escalated [redacted] complaints per year from 2010 through 2013. As of August 31, 2014, Comcast was on track to escalate approximately [redacted] complaints in 2014. The number of escalated complaints pertaining to broadband services has increased every year since 2010. The projected total number of complaints escalated by Comcast during 2014 is [redacted] as compared to just four years prior.

Figure 4 (CONFIDENTIAL)

[redacted]

44. There is a dramatic increase in the number of complaints that Comcast escalated per 100 broadband connections in service to end users in California. From 2010 through 2012, Comcast escalated about [redacted] complaints per 100 broadband

[50] Comcast's Response to ORA Data Request, Set 3, No.40 through 46.

connections.[51] In 2013 that figure [redacted] complaints per 100 broadband connections.[52] Thus far in 2014, Comcast appears on track to maintain the elevated rate of escalated complaints (per 100 broadband connections) seen in 2013. The recent spike in escalated complaints could be due to many different factors, yet the overarching implication of this increase in escalated complaints is the potential of a declining quality and reliability of broadband service of a merged Comcast entity.

45. Comcast received complaints about a wide variety of issues related to their broadband service. Comcast categorized the majority of broadband complaints as either [redacted] complaints. The former is the most common category, with approximately [redacted] of all broadband complaints relating to an [redacted] issue. This category includes complaints involving matters such as: [redacted] The second most common category was [redacted]. A [redacted] of all escalated broadband complaints were related to [redacted], including: [redacted] Figure 5 below illustrates annual complaints in the categories of [redacted], and *Other*[53].

[51] According to Part VI of the FCC's Form 477, between 2010 and 2012, Comcast averaged [redacted] broadband connections in service to end users in California. During that same timespan, Comcast averaged [redacted] complaints per year in California.

[52] According to Part VI of the FCC's Form 477, Comcast had approximately [redacted] broadband connections in service to end users in California during 2013.

[53] For Comcast's customer complaints, the *Other* category includes complaints that focused on issues such as [redacted].

Figure 5 (CONFIDENTIAL)

[redacted]

46. Comcast took an average of [redacted] to resolve a customer's escalated broadband complaint. Some complaints were resolved [redacted] but others took [redacted]. Just over [redacted] of escalated broadband complaints were resolved within [redacted] and [redacted] were resolved within [redacted]. However, Comcast took over [redacted] to resolve [redacted] of the escalated broadband complaints. Comcast took [redacted], on average, to resolve escalated complaints categorized as [redacted].

47. Comcast took over one month to resolve [redacted] of escalated complaints. Nearly every complaint category was represented within this subset. The [redacted] categories were most heavily represented, and accounted for [redacted] respectively, of the complaints that remained unresolved for more than [redacted]

48. On the extreme end, in 2013, Comcast took [redacted] to resolve one residential customer's broadband complaint. Comcast categorized this

particular complaint as a [redacted], and noted the customer [redacted].[54]

Figure 6 (CONFIDENTIAL)

[redacted]

49. It is interesting to note the large disparity in the number of complaints escalated by Comcast as opposed to the number escalated by TWC. In 2013, TWC[55] escalated a total of [redacted] complaints from customers of all services (including phone, television and Internet access), while Comcast[56] escalated [redacted] complaints from broadband customers only. Comcast and TWC each reported just slightly more than [redacted] broadband connections serving end users in California during 2013.[57] It is worrisome, then, that Comcast escalated more than [redacted] the complaints specifically relating to broadband, than TWC escalated across all services.

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[54] Comcast's Response to ORA Data Request, Set 3, No.46. *See* Confidential Exhibit ORA/Comcast R-3:40.

[55] TWC's Response to ORA Data Request, Set 3, No.46. *See* Exhibit 3-7.

[56] Comcast's Response to ORA Data Request, Set 3, No.46. *See* Confidential Exhibit ORA/Comcast R-3:40.

[57] According to Part VI of the FCC's Form 477, Comcast and TWC each had approximately [redacted] broadband connections in service to end users in California during 2013.

C. Charter

50. Charter raised various objections to ORA's Data Request seeking information on customer initiated complaints concerning unauthorized charges in California.[58] Furthermore, Charter stated it, "does not track such complaints relating to broadband service."[59] Charter did, however, submit data on complaints filed by Charter's customers with third party agencies, such as the FCC or CPUC.

51. Charter customers in California filed a total of [redacted] complaints with these third party agencies between January 1, 2010 and August 31, 2014. Those complaints included issues related to voice and broadband services, such as: credit requests, internet connectivity, equipment problems and service appointments.

D. TWC

52. In response to ORA's Data Request inquiries regarding customer complaints, TWC stated that it, "interprets customer-initiated complaints to be matters requiring escalation."[60] As a result, the following analysis of TWC's customer complaint data might not include complaints that did not require escalation.

53. TWC[61] provided limited or incomplete data on complaints received between January 1, 2010 and August 31, 2014.[62] TWC escalated [redacted] complaints from customers of television, phone and broadband services. TWC escalated an average of [redacted] complaints per year from 2010 through 2013. In 2014, TWC is on track to escalate

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[58] Charter's Response to ORA Data Request, Set 3, No.46.

[59] Charter's Response to ORA Data Request, Set 3, No.46.

[60] TWC's Response to ORA Data Request, Set 3, No. 40.

[61] TWC's Response to ORA Data Request, Set 3, No. 40. *See* Exhibit 3-7.

[62] TWC submitted customer complaint data (Exhibit 3-7) that did not include all of the information requested within ORA's Data Request, Set 3. The data did not differentiate between the type of service (voice or broadband), or the type of customer (residential versus business customer). Thus, this analysis of TWC's customer complaints is not limited to broadband services, and includes voice, broadband and television services. Also, the complaints might include more than one category; for example, a complaint about appointment could include billing related issues, as well.

approximately [redacted] total complaints. On average, TWC took [redacted] to resolve a customer's complaint.

Figure 7 (CONFIDENTIAL)

[redacted]

54. TWC received complaints on a wide variety of issues. [redacted] related issues are the most common topics raised within a complaint. Approximately [redacted] of all customer complaints deal with a [redacted] issue, such as: [redacted]

55. The remaining [redacted] of complaints center upon service related issues, such as [redacted]. On average, the [redacted] category account for approximately [redacted] of all claims received each year. Common [redacted] issues include [redacted]. Refer to Figure 8 below for a more complete breakdown of all complaints by category.

Figure 8 (CONFIDENTIAL)

[redacted]

56. TWC categorized around [redacted] of escalated customer complaints as [redacted] These complaints are related to issues with [redacted]. TWC took an average of [redacted] to resolve these broadband related issues, with the fastest resolution occurring [redacted] as the complaint. In one extreme case, TWC did not resolve an Internet access related complaint, related to [redacted], for [redacted]

57. TWC takes between [redacted], on average, to resolve complaints that categorized as an [redacted] complaint. It appears TWC is improving the average resolution timeframe at a slow pace. The total number of complaints that include a broadband related issue is trending in an upward direction. In the first eight

months of 2014, TWC received [redacted] broadband complaints, which is an average of [redacted] per month.[63] TWC is on track to receive around [redacted] complaints in 2014. The projected 2014 total is [redacted] than the total received just four years earlier in 2010. See Figure 9 below additional detail on TWC's [redacted] complaints.

Figure 9 (CONFIDENTIAL)

[redacted]

E. Post-Merger Plans

58. ORA also asked the Joint Applicants to provide any post-merger plans for changes to their current processes and procedures for handling customers' complaints and dissatisfaction for broadband services.[64] In response, Comcast stated:

[redacted]

[63] TWC's Response to ORA Data Request, Set 3, No. 40. *See* Exhibit 3-7.

[64] ORA Data Request, Set 3, No. 42.

[65] Comcast's Response to ORA Data Request, Set 3, No.1.

59. The lack of post-merger plans and strategies regarding customer complaints is worrisome, especially considering Comcast's and TWC's poor customer service track record.[66]

VII. SERVICE INSTALLATION

60. **Comcast and TWC do not complete a satisfactory percentage of new broadband service orders**. ORA asked the Joint Applicants to provide the Service Installation Intervals of orders for new broadband service installations in California.[67] A Service Installation Interval is the number of business days it took the service provider to install the new broadband service, starting on the date the service order was placed and ending on the date the service becomes operational.

61. ORA also asked the Joint Applicants to provide the total number of California service orders received and completed for new broadband services for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).[68] The service orders received, but not completed, are unfulfilled orders in which the service provider did not provision broadband service to the customer.

62. California does not have broadband specific standards for Service Installation Intervals or Service Installation Commitments. However, in General Order 133-C, the CPUC has standards for Service Installation Intervals and Service Installation Commitments for traditional voice telephony services. These telephony standards set a maximum of five business days to complete an installation, and a minimum of 95% of installation commitments fulfilled.[69] This analysis uses these standards to assess the Joint Applicants performance regarding broadband service installations and activations.

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[66] Please refer to the "Customer Satisfaction" section of this analysis for a discussion on the Joint Applicant's customer service ratings.

[67] ORA Data Request, Set 3, No.39.

[68] ORA Data Request, Set 3, No.39.

[69] D.09-07-019, Conclusion of Law 5 at 89.

A. Comcast

63. Comcast took an average of [redacted] business days to install new broadband services to customers in California.[70] Comcast stated it does not know the number of broadband service orders received and completed in 2010, but submitted figures for 2011 through 2014.[71] Figure 10 below displays this data along with the percentage of orders fulfilled per year.

Figure 10 (CONFIDENTIAL)

[redacted]

64. Comcast met one of the two standards pertaining to service installation and activation. Comcast's average broadband Service Installation Interval is just slightly less than the telephony standard of 5 business days. However, from January 1, 2010 to August 31, 2014, Comcast received [redacted] complaints related to appointment for broadband service installation.[72] The most common issues raised in these complaints were [redacted].[73]

[70] Comcast's Response to ORA Data Request, Set 3, No.39.

[71] Comcast's Response to ORA Data Request, Set 3, No.39.

[72] Comcast's Response to ORA Data Request, Set 3, No.46. *See* Confidential Exhibit

65. Comcast only completed an average [redacted] of broadband service orders per year, which does not meet the minimum 95% benchmark.[74] Although fairly consistent from year to year, Comcast's worst performance [redacted] occurred in the recorded period for 2014.

66. Each year, Comcast received more broadband service orders than the year prior, and is on pace to receive an estimated [redacted] total broadband service orders in 2014.[75]

B. TWC

67. TWC takes an average of [redacted] to install broadband services to new customers in California, which is less than the 5 day maximum benchmark.[76] However, TWC received many complaints related to broadband installations.[77] From January 1, 2010 to August 31, 2014, TWC received [redacted] complaints related to broadband service installations.[78]

68. Furthermore, TWC's average Service Installation Interval is significantly less than Comcast's. On average TWC completes orders for new broadband service [redacted], which is [redacted], than Comcast.

69. TWC completed approximately [redacted] of broadband service orders, which falls short of the 95% benchmark. However, since 2010, TWC has completed a lower percentage of broadband service orders than the year prior three out of four times. In fact,

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ORA/Comcast R-3:40.

[73] For more information on Comcast's customer complaints, please refer to the section of this Declaration titled Customer Complaints on page 23.

[74] This analysis assumes that the service provider, and not the customer, was at fault for all unfulfilled service orders.

[75] In the first eight months of 2014 Comcast received [redacted] orders for new broadband service installations, which is an average of [redacted] per month. Assuming Comcast receives the average number of orders per month for the remainder of the calendar year, Comcast will receive [redacted] more orders for an annual total of [redacted].

[76] TWC's Response to ORA Data Request, Set 3, No.37.

[77] TWC's Response to ORA Data Request, Set 3, No. 40. *See* Exhibit 3-7.

[78] TWC's Response to ORA Data Request, Set 3, No. 40. *See* Exhibit 3-7.

TWC's 2014 completion percentage is [redacted] than it was in 2010. Figure 11 below summarizes TWCs performance with regard to broadband service orders since 2010.

Figure 11 (CONFIDENTIAL)

[redacted]

C. Charter

70. Charter takes an average of [redacted] to install broadband services to new customers in California, which is less than the 5 day maximum benchmark. However, Charter only completes approximately [redacted] of new residential broadband service installation requests per year, which falls short of the 95% bench.[79]

[79] Charters Response to ORA Data Request, Set 3, No. 36 and 38.

VIII. BROADBAND SERVICE OUTAGES

72. **The Joint Applicants' broadband services experience outages that impact a significant number of customers in California.**

73. Much like traditional telephone service, the quality of a broadband service is very much affected by unwanted periods of inoperability referred to as "outages". The FCC defines an outage as follows:

> "…a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communications provider's network."[80]

74. Ensuring a reliable broadband connection is increasingly essential as end users continue to migrate out from traditional telephone[81] and cable TV[82] service in favor of broadband services as their preferred means of communication, entertainment and Internet access. During a broadband service outage, consumers that rely on VoIP and broadband service as their means of communication are unable to contact emergency services, access information or contact family and friends. Assessing the Joint Applicants' performance with regards to broadband outages is a key element in the evaluation of the quality of their broadband services and the impact on safety.

A. ORA Outage Data Request

75. ORA asked the Joint Applicants to provide information regarding broadband outages that occurred in California between January 1, 2010 and August 31, 2014.[83] Specifically, ORA requested the number of outages by type of customer, the cause of each outage, the time it took to respond to an outage, and the total number of outages by county. The Joint Applicants generally responded to these inquiries by raising

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[80] See 47 C.F.R § 4.5(a)

[81] Kaste, Martin. *Is it the End of the Line for the Landline?* National Public Radio. November 18, 2013.

[82] Edwards, Jim. *Analyst Sounds Warning On Death Of TV: 'Cord Cutting Used To Be An Urban Myth. It Isn't Any More.'* Business Insider. August 2013.

[83] ORA Data Request, Set 3, No.32.

numerous objections. In some cases, the Joint Applicants provided limited information in response to ORA's requests for data pertaining to broadband service outages. The following analysis is a summary of the data.

1. Comcast

76. Comcast responded to ORA's data request by expressing various objections, and stating:

> "Comcast does not maintain California-specific broadband outage reports. In some instances where a reportable VoIP outage was caused by a network equipment issue, broadband service may also have been affected. Comcast does maintain records of those instances in the ordinary course of its business."[84]

77. Despite the lack of data from Comcast, there is publicly available evidence that Comcast's broadband services experience outages that leave customers disconnected. In June of 2014, for example, a substantial broadband service outage affected residents across Northern California and Comcast customers were without broadband service for roughly six hours.[85] Four months later, on October 16, 2014, approximately 800 of Comcast's customers in the Sacramento area were left without television and Internet services for several hours in the afternoon.[86] Although these events were reported by local news agencies, determining the details of the outages is nearly impossible without assistance from Comcast.[87] Still, Comcast claims that it does not track broadband outages

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[84] Comcast's Response to ORA Data Request, Set 3, No.32.

[85] CBS Sacramento. *Comcast, Verizon Outage In Vacaville, Fairfield Caused By Construction Crews.* CBS Local Media. Sacramento, CA. June 13, 2014. See http://sacramento.cbslocal.com/2014/06/13/major-comcast-outage-affecting-internet-customers-from-roseville-to-san-jose/

[86] CBS Sacramento. *Comcast Outage Hits 800 Homes In Sacramento Near Cal Expo.* CBS Local Media. Sacramento, CA. October 16, 2014. See http://sacramento.cbslocal.com/2014/10/16/comcast-outage-hits-800-homes-in-sacramento-near-cal-expo/

[87] Munday, Dave. *Comcast Officials Offer Few Details About Outage's Cause after Service Restored*. The Post and Courier. Charleston, South Carolina. May 30, 2013

in California, even those affecting a great many customers, despite the apparent regularity of such events.[88]

2. TWC

78. TWC experienced an average of [redacted] broadband outages in California per year from 2010 through 2013 (see Figure 12).[89] In 2014, TWC is on track to surpass that figure and experience an estimated total of [redacted] outages. Over [redacted] of the broadband outages affected residential customers.

Figure 12 (CONFIDENTIAL)

[redacted]

79. From 2010 through August of 2014, the average outage lasted approximately [redacted][90] However, the duration of the outages varied tremendously. The longest outage recorded in the past five years [redacted]

(http://www.postandcourier.com/article/20130530/PC16/130539946).

Furthermore, ORA was not able to issue data requests on this issue because Joint Applicants indicated on multiple occasions that they refuse to answer data requests issued after October 1, 2014. The Assigned ALJ and Commissioner never ruled on ORA's request to not have a discovery cut-off date and that in any event, the discovery cut-off dates does not apply to ORA consistent with Public Utilities Code Section 309.5(e). (*see* ORA's Motion to Modify Schedule of the Proceeding; *see also* October 16, 2014 Hearing Transcript at TR 96)

[88] Comcast's Response to ORA Data Request, Set 3, No.32.

[89] TWC's Response to ORA Data Request, Set 3, No.32.

[90] TWC's Response to ORA Data Request, Set 3, No.32. *See* Exhibit 3-2.

[redacted].[91] On the other hand, in each of the past five years, the shortest outage reported was [redacted]. The average outage duration decreased in more recent years, falling from [redacted] in 2011, to about [redacted] in each of 2012, 2013 and 2014.[92]

80. TWC reported a wide variety of issues that caused broadband outages (see Figure 13). Since 2010, approximately [redacted] of TWC's broadband outages were caused by problems with [redacted].[93] In more recent years, issues with [redacted] have become more prevalent. In 2013 and 2014, [redacted] accounted for [redacted] of all broadband outages, respectively.[94]

Figure 13 (CONFIDENTIAL)

[redacted]

[91] ORA does not know the number of customers impacted by this outage.

[92] TWC's Response to ORA Data Request, Set 3, No.32. *See* Exhibit 3-2.

[93] TWC's Response to ORA Data Request, Set 3, No.32. *See* Exhibit 3-2.

[94] TWC's Response to ORA Data Request, Set 3, No.32. *See* Exhibit 3-2.

3. Charter

81. Charter's residential customers experienced an average of [redacted] broadband outages in California per year from 2010 through 2013 (see Figure 14).[95] In 2014, Charter is on track to surpass that figure and experience an estimated total of [redacted] outages. Although the total number of residential broadband outages did not vary tremendously from year to year, the average duration of an outage increased in recent years. Thus, the cumulative outage hours has also increased. In the first eight months of 2014, Charter's residential broadband services have already experienced nearly [redacted] the amount of cumulative outage hours than during all of 2010.[96]

Figure 14 (CONFIDENTIAL)

[redacted]

82. Just under [redacted] of Charter's residential broadband outages [redacted] were due to an [redacted].[97] The Figure 15 below summarizes most prevalent causes of residential broadband outages on Charter's network.

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[95] Charter's Response to ORA Data Request, Set 3, No.31. *See* CONFIDENTIAL California Historical HSI Outages TRB send.xls.

[96] Charter's Response to ORA Data Request, Set 3, No.31. *See* CONFIDENTIAL California Historical HSI Outages TRB send.xls.

[97] Charter's Response to ORA Data Request, Set 3, No.31. *See* CONFIDENTIAL California Historical HSI Outages TRB send.xls.

Figure 15 (CONFIDENTIAL)

[redacted]

83. Charter responded to residential broadband outages in an average of [redacted] but took approximately [redacted] (on average) to repair an outage.[98] In addition, the mean time for Charter to repair a residential broadband outage has increased every year since 2010.[99] The 2014 average repair time is nearly [redacted] as long as the average repair time of 2010. Figure 16 below depicts Charter's average repair time and maximum repair time with regard to residential broadband outages since 2010.[100]

[98] Charter's Response to ORA Data Request, Set 3, No. 31. *See* CONFIDENTIAL California Historical HSI Outages TRB send.xls.

[99] Charter's Response to ORA Data Request, Set 3, No.31. *See* CONFIDENTIAL California Historical HSI Outages TRB send.xls.

[100] The maximum repair time pertains to a single incident.

Figure 16 (CONFIDENTIAL)

[redacted]

84. ORA requested the Joint Applicants to provide all outage reports submitted to the FCC (as required by 47 C.F.R. Part 4) pertaining specifically to outages in California that occurred during 2010, 2011, 2012, 2013, and 2014. These reports contain details regarding disruptions to communications and the reliability and security of communications infrastructure.

85. The FCC requires that cable communications providers report outages that affect 900,000 user minutes of telephony service, 1,350 Digital Signal 3 (DS3) minutes[101], a special office or facility, or a 911 special facility.[102] For outages that meet the criteria, service providers submit data that may include: the incident date and time, the duration, the reason or cause, a description of the incident, steps taken to prevent future reoccurrences, and applicable best practices.

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[101] According to 47 C.F.R. §4.9(d), *DS3 minutes* are defined as the mathematical result of multiplying the duration of an outage, expressed in minutes, by the number of previously operating DS3 circuits that were affected by the outage.

[102] See 47 C.F.R. §4.9(a)

86. A DS3 is a network connection that transmits digital signals at a rate of 44.736 megabits per second. A DS3 is the equivalent to 28 T1 lines, or 672 standard phone lines. Large organizations might purchase a DS3 line to support a high capacity phone system, or for use as a high bandwidth broadband connection that can connect many end users to the Internet or a private network. It follows that service providers typically sell DS3 lines to business customers, rather than residential customers.

1. Comcast

87. Comcast's nation-wide DS3 outage reports indicate a sharp increase in the number of reports from the years 2010 to 2014 (refer to Figure 17).[103] The largest impact of outages in terms of DS3 minutes affecting DS3 circuits occurred in the years 2012, 2013 and 2014. In 2012, [redacted] DS3 circuits were affected by [redacted] of outages; in 2013, [redacted] DS3 circuits were impacted by [redacted] instances of outages; and in 2014 (partial year), [redacted] DS3 circuits were impacted by [redacted] instances of outages.[104]

Figure 17 (CONFIDENTIAL)

[redacted]

[103] Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

[104] Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

88. The Figure 18 below contains a summary of the DS3 outages that Comcast's network experienced from 2010 through 2014.[105] For specific details on the DS3 outage for each year, please reference Attachment 4 through Attachment 8.

Figure 18 (CONFIDENTIAL)

[redacted]

2. TWC

89. TWC's DS3 outage reports appear incomplete and lacking key data.[106] The reports indicate a maximum of [redacted] qualifying service interruptions annually from the years 2010 to 2014 (refer to Figure 19).[107] However, in several instances the data is insufficient to determine the magnitude of the outage and the effect on end users. The reported outages were caused by [redacted].[108] The longest outage lasted [redacted] minutes and occurred in [redacted]

[105] Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

[106] TWC's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit 3-2.

[107] TWC's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit 3-2.

[108] TWC's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit 3-2.

[redacted] during [redacted]. The most severe outage affected [redacted] DS3 lines for [redacted], which translates to [redacted] *DS3 minutes*.[109]

Figure 19 (CONFIDENTIAL)

[redacted]

C. Broadband Outage Conclusion

90. As Californians increasingly rely on their broadband connections to reach emergency services, outages can pose a serious threat to public safety. The Communications Security, Reliability and Interoperability Council's (CSRIC) is an advisory committee that provides recommendations to the FCC to ensure the reliability of communications systems.[110] In an official recommendation, CSRIC suggests: "[n]etwork operators and service providers should track and analyze facility outages taking action if any substantial negative trend arises or persists."[111]

91. Apart from the quantity and severity of outages to Comcast's DS3 services, Comcast admitted it "does not maintain California-specific broadband outage reports".[112] Meanwhile, TWC was recently reminded of the importance of tracking and reporting

[109] TWC's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit 3-2.

[110] See http://www.fcc.gov/encyclopedia/communications-security-reliability-and-interoperability-council-iii

[111] See CSRIC Best Practice number 9-7-0738 available at https://www.fcc.gov/nors/outage/bestpractice/DetailedBestPractice.cfm?number=9-7-0738

[112] Comcast's Response to ORA Data Request, Set 3, No.32.

broadband outages. On August 25, 2014 the FCC fined TWC $1.1 million dollars for failing to promptly report service outages.[113] Furthermore, the Joint Applicants did not include in their Applications to the CPUC any specific plan to address network outages in California.

IX. CONCLUSION

92. The information provided in this report indicates the Joint Applicants' current level of broadband service quality and reliability is poor. Broadband service is an important means of communication, and low quality of service and reliability of broadband services can be detrimental to the public's safety. Furthermore, the Joint Applicants have not offered substantial evidence that they are not able to achieve the same (or greater) level of network quality improvements on their own.

93. The Joint Applicants' receive poor "customer satisfaction" scores and ranks from third party rating agencies. Other data, such as customer complaints, service outages and installation commitments, shed light on the poor quality of service offered by the Joint Applicants. In several instances the data pertaining to Comcast, the acquiring company, is indicative of a lower quality of service as compared to the other Joint Applicants. There is a risk that a merged Comcast entity will adopt less effective quality assurance processes and protocols than what the Joint Applicants currently employs today.

94. Currently, there are few service quality and reliability standards and/or reporting requirements for companies providing broadband services in California. The data contained herein suggests that California might benefit from set standards and reporting requirements pertaining to the service quality and reliability of broadband services.

[113] Order of the FCC's Enforcement Bureau on investigation into whether TWC complied with the FCC's network outage reporting requirements. *In the Matter of Time Warner Cable Inc*. DA 14-1126. Released August 25, 2014.

X. ATTACHMENTS

Attachment 1

Charts and graphs extracted from this press release for use by the media must be accompanied by a statement identifying J.D. Power as the publisher and the study from which it originated as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. No advertising or other promotional use can be made of the information in this release or J.D. Power survey results without the express prior written consent of J.D. Power.

Attachment 2 -- CONFIDENTIAL

[redacted]

Attachment 3 -- CONFIDENTIAL

[redacted]

Attachment 4 -- CONFIDENTIAL

Figure 20 shows, Comcast's outage data for the year 2014 (partial year) indicating the number of affected DS3 circuits, the outage duration and the number of DS3 minutes. Some of key observations based on Comcast's 2014 DS3 outage data:

- There were [redacted] DS3 outage reports (originally [redacted] were reported and [redacted] were withdrawn). The number of affected DS3 circuits ranged between [redacted]
- Outage duration ranged from a high of [redacted]
- The largest outage instance affected [redacted] DS3 circuits and lasted for [redacted] impacting [redacted] DS3 minutes.The report indicates [redacted]
- Various root causes were reported including [redacted]
- The most frequent step taken to prevent future occurrences was: [redacted]

Figure 20 (CONFIDENTIAL)

[redacted]

Source: Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

Attachment 5 -- CONFIDENTIAL

Figure 21 shows, Comcast's outage data for the year 2013 indicating the number of affected DS3 circuits, the outage duration and the number of DS3 minutes. Some of key observations based on Comcast's 2013 DS3 outage data:

- There were [redacted] DS3 outage reports (originally [redacted] were reported and [redacted] were withdrawn). The number of affected DS3 circuits ranged between [redacted].
- Outage duration ranged from a high of [redacted]) to [redacted]
- The largest outage instance affected [redacted] DS3 circuits and lasted for [redacted] impacting [redacted] DS3. The outage report indicates that the cause was a [redacted]
- Various root causes were reported including [redacted]
- The most frequently reported statement for steps taken to prevent future occurrences was: [redacted]

Figure 21 (CONFIDENTIAL)

[redacted]

Source: Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

Attachment 6 -- CONFIDENTIAL

Figure 22 shows, Comcast's outage data for the year 2012 indicating the number of affected DS3 circuits, the outage duration and the number of DS3 minutes. Some of key observations based on the 2012 Comcast's DS3 outage data:

- There were [redacted] DS3 outage reports. The number of affected DS3 circuits ranged between [redacted]
- [redacted]
- The largest outage instance affected [redacted] DS3 circuits and lasted for [redacted] impacting [redacted] DS3 minutes. The outage report indicates that the cause was a [redacted]
- Various root causes were reported including [redacted]
- The most frequently reported statement for steps taken to prevent future occurrences was: [redacted]

Figure 22 (CONFIDENTIAL)

[redacted]

Source: Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

Attachment 7 -- CONFIDENTIAL

Figure 23 shows, Comcast's outage data for the year 2011 indicating the number of affected DS3 circuits, the outage duration and the number of DS3 minutes. Some of key observations based on the 2011 Comcast's DS3 outage data:

- There were [redacted] DS3 outage reports (originally [redacted] were reported and [redacted] was withdrawn). The number of affected DS3 circuits ranged between a high of [redacted] to [redacted]
- Outage duration ranged from a high of [redacted]
- The largest outage instance affected [redacted] DS3 circuits and lasted for [redacted] impacting [redacted] DS3 minutes. The outage report indicates that the cause was [redacted]
- Various root causes were reported including [redacted]
- The most frequently reported statement for steps taken to prevent future occurrences was: [redacted]

Figure 23 (CONFIDENTIAL)

[redacted]

Source: Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

Attachment 8 -- CONFIDENTIAL

Figure 24 shows, Comcast's outage data for the year 2010 indicating the number of affected DS3 circuits, the outage duration and the number of DS3 minutes. Some of key observations based on the 2010 Comcast's DS3 outage data:

- There were [redacted] DS3 outage reports (originally [redacted] were reported and [redacted] was withdrawn). The number of affected DS3 circuits ranged between a high of [redacted]
- Outage duration ranged from a high of [redacted]
- There were [redacted] large outage instances; one affected [redacted] DS3 circuits and lasted for [redacted] impacting [redacted] DS3 minutes, and the other affected [redacted] DS3 circuits and lasted for [redacted]. The former instance was a result of [redacted] and the later instance was due [redacted].
- Various root causes were reported including [redacted]

Figure 24 (CONFIDENTIAL)

[redacted]

Source: Comcast's Response to ORA Data Request, Set 3, No.35. *See* Confidential Exhibit ORA/Comcast R-3:35.

I declare under penalty of perjury that the foregoing information is true and correct to the best of my knowledge.

Executed this 10th day of December, 2014 in San Francisco, California.

Adam J. Clark

Adam J. Clark
Public Utilities Regulatory Analyst

EXHIBIT 4

Declaration of Eileen Odell

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION\
OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.	Application 14-06-012 (Filed June 17, 2014)

DECLARATION OF EILEEN ODELL

FOR THE OFFICE OF RATEPAYER ADVOCATES

(PUBLIC)

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I. INTRODUCTION

1. Pursuant to the August 14, 2014 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge (Scoping Memo),[1] the following report provides information regarding the low-income services project plans for voice and broadband services of Comcast Corporation (Comcast), Time Warner Cable Inc. (TWC), Bright House Networks Information Services, LLC (Bright House) and Charter Fiberlink CA-CCO, LLC (Charter), (collectively Joint Applicants) based on the Joint Applicants responses to the Office of Ratepayer Advocates (ORA) data requests and publicly available information.

2. On April 11, 2014, Comcast, TWC, and Bright House filed with the California Public Utilities Commission (Commission or CPUC) Joint Application (A.)14-04-013 for the transfer of control of TWC and Bright House to Comcast. On June 17, 2014, Comcast, TWC, and Charter Fiberlink CA-CCO, LLC (Charter) filed A.14-06-012 requesting that the CPUC authorize the transfer of a limited number of non-residential (business) customers and associated regulated assets of Charter to TWC under Public Utilities Code Section 851. The assigned administrative law judge (ALJ) consolidated the review of these two applications, and in the Ruling granting consolidation, the assigned ALJ stated that the Scoping Memo would apply to the consolidated proceeding.[2] Comcast is the largest cable company in northern California, and TWC is the largest cable company in southern California.[3]

3. The Scoping Memo lays out the framework for the Commission's review of the proposed merger including questions regarding how the merger would benefit California consumers. For example, will the merger benefit low income outreach and adoption of broadband services that are accessible, affordable, and equitable in a manner

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[1] Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, A.14-04-013, filed Aug. 14, 2014 [hereinafter Scoping Memo].

[2] Presiding Officer's Ruling Granting Joint Motion to Consolidate Proceedings, A.14-04-013, A.14-06-012, filed Aug. 29, 2014.

[3] Scoping Memo, *supra* note, 1 at 2.

that is enforceable and will help close the digital divide?[4]

II. EXECUTIVE SUMMARY

4. The CPUC has asked parties to evaluate the benefits the proposed merger will deliver to California consumers, including whether the merger will increase low income outreach and adoption of broadband services[5] and whether the proposed merger will affect the provision of Lifeline services to California ratepayers.[6] The information reviewed as part of the Joint Applicants data request responses and other publicly available information highlights concerns with two low-income programs in particular: the federal Lifeline program (as noted above) and Comcast's Internet Essentials. The Joint Applicants provide limited data referencing plans to augment these programs directly including current plans to expand Lifeline access. In addition, there is a lack of information on how the Joint Applicants will deliver benefits or utilize efficiencies from the merger to increase access to telecommunications services, advanced or otherwise, for low income consumers.

- The federal Lifeline program provides discounts on phone services to qualifying low-income consumers. None of the Joint Applicants currently provide Lifeline services, though the Commission recently authorized TWC to do so.
- Comcast's Internet Essentials program, required as a condition of Comcast's previous merger with NBC Universal, has low penetration rates within its existing footprint. Further, Internet Essentials speeds are slower than those identified by the CPUC as "served"[7] in California.

III. QUALIFICATIONS

5. I am currently employed by the CPUC as a Public Utilities Regulatory Analyst assigned to the Communications and Water Policy branch of the Office of

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[4] *Id*. at 13.

[5] *Id* at 13.

[6] *Id*. at 7.

[7] Served speeds in California are currently 6 Mbps download and 1.5 Mbps upload. CPUC Decision Implementing Broadband Grant and Revolving Loan Program at 17, D.12-02-015, decided Feb. 1, 2012.

Ratepayer Advocates (ORA). I graduated from the University of California at San Diego with a Bachelor of Arts degree in International Studies – Political Science in 2007. I graduated from the University of California, Hastings College of the Law in 2011 and was admitted to the California Bar in November of that year. In 2010 and again in 2011, I clerked for the Office of the City Attorney of San Francisco on the Land Use and Environment team and the Public Utilities Commission team, working on public policy projects such as drafting affordable housing legislation and researching conjunctive use agreements for groundwater management. From 2012 through 2013, I completed an attorney fellowship with the Sonoma County Counsel's office, assisting in a broad range of projects including the formation of a community choice aggregation program. I joined the CPUC in June of 2014.

IV. LIFELINE SERVICES

6. The federal Lifeline program provides discounts on phone service to qualifying low-income consumers "to ensure that all Americans have the opportunities and security that phone service brings, including being able to connect to jobs, family and emergency services."[8]

7. None of the Joint Applicants currently offer Lifeline services in California, although Charter provides a "discount equivalent to the combined federal Lifeline . . . support rate."[9] In 2013, TWC sought Eligible Telecommunications Carrier (ETC) designation in order to begin providing Lifeline service to qualifying low-income customers in California.[10] The Commission granted TWC's ETC designation application

[8] FCC Lifeline Program for Low-Income Consumers Webpage, http://www.fcc.gov/lifeline, updated Nov. 7, 2014.

[9] Comcast Response to ORA Data Request Set 1, No. 56; BHN Response to ORA Data Request Set 1, No. 56; Charter Response to ORA Data Request Set 1, No. 56; TWC Response to ORA Data Request Set 1, No. 56.

[10] CPUC Decision Granting Request for Eligible Telecommunications Carrier Status, D.14-03-038, decided Mar. 27, 2014.

on March 27, 2014. Over eight months later, as of the date of this declaration, TWC has yet to offer Lifeline services to its California customers.[11]

8. In the application for the proposed merger, Joint Applicants state that "[i]f [TWC] offers Lifeline services prior to the transfer of control of [TWC] to Comcast Corporation, Comcast Corporation acknowledges that it would continue to provide service to Lifeline customers (unless and until the Commission approved an application to relinquish the [TWC] Lifeline certificate)."[12] It is unclear why TWC has not offered Lifeline services to an estimated [redacted] eligible households within its footprint,[13] even though the CPUC gave TWC approval to do so in March, 2014. It is concerning that because TWC has yet to offer Lifeline services, Comcast will be under no obligation to do so, nor has it expressed any intention to do so, post-merger. As a result, consumers are at risk that Comcast will have subsumed both a company that is authorized, and indeed planned to offer Lifeline prior to the announcement of the proposed merger, and a company that offers Lifeline-equivalent discounts, without presenting any guarantees or even plans to indicate the possibility that it will carry on or further the progress of TWC and Charter in this area.

V. LOW-INCOME SERVICES FOR BROADBAND ADOPTION

9. In the Scoping Memo for this proceeding, the Commission asked for information regarding what benefits the proposed merger may have for "low income outreach and adoption of broadband services that are accessible, affordable, and equitable in a manner that is enforceable and will help close the digital divide[.]"[14] Section 706 of the Telecommunications Act of 1996 requires that "each State commission with

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[11] TWC Response to ORA Data Request Set 3, No. 3.

[12] Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC, for Expedited Approval of Indirect Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C) to Comcast Corporation, Pursuant to Public Utilities Code Section 854 (A), A.14-04-013, filed April 11, 3014, at 21-22 [hereinafter Joint Application].

[13] TWC CONFIDENTIAL Response to ORA Data Request Set 3, No. 12.

[14] Scoping Memo, *supra* note 1, at 13.

regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)."[15] This directive aligns with California's universal service policies for telecommunications, which include "assist[ing] in bridging the 'digital divide' by encouraging expanded access to state-of-the-art technologies for rural, inner-city, low-income, and disabled Californians."[16] Further, California has a stated goal of providing broadband access to no less than 98% of households by no later than December 31, 2015.[17] However, a recent study by the California Emerging Technology Fund (CETF) in conjunction with The Field Poll shows that "home broadband adoption rates have stagnated over the past few years," with certain demographics trailing more than others, "leaving the hardest-to-reach Californians without an essential tool to access the educational, employment and civic engagement opportunities that lead to self-sufficiency."[18]

10. Comcast and Bright House Networks[19] are the only applicants that currently have a broadband program targeting low-income subscribers.[20] TWC

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[15] 47 U.S.C. § 1302(a).

[16] Pub. Util. Code § 709(d).

[17] Pub. Util. Code § 281(b)(1), referring to the goals of the California Advanced Services Fund program, created "to encourage deployment of high-quality advanced communications services to all Californians[.]" *Id*. at §281(a).

[18] Press Release, CETF, California Emerging Technology Fund Calls for National Policy on Affordable Broadband Rate, July 8, 2014; Digital Divide Persists in California: Wide Differences in Internet Use and Broadband Connectivity Across Demographic Subgroups of the State's Adult Population, July 8, 2014. Both are *available at* www.cetfund. org/news/Affordable_Internet_for_All/Field_Poll, last visited Nov. 12, 2014. Survey results show a 32% adoption rate for those who have not graduated from high school, 47% for those aged 65 or older, 59% for people with disabilities, 46% for Spanish-speaking Latinos, 63% for all Latinos, 53% for those with a household income of less than $20,000, and 60% for non-citizens, all as compared to a 75% overall home broadband adoption rate in 2014.

[19] BHN is a partner in the Connect2Compete program, established by the non-profit organization EveryoneOn. The program rules are substantially similar those for the Internet Essentials program. *See* BHN Response to ORA Data Request Set 2, No. 3.

[20] TWC Response to ORA Data Request Set 3, No. 3; Charter Response to ORA Data Request Set 3, No. 3; BHN Responses to ORA Data Request Set 2, No. 3; Comcast Responses to ORA Data Request Set 3, No. 3.

participated in Connect2Compete by creating Starter Internet, a pilot program with eligibility requirements similar to those of Internet Essentials.[21] This program lasted for only two months, however, from October 1 through November 30, 2012.[22] TWC has not explained why its participation in Connect2Compete ended.[23]

11. While Internet Essentials, Comcast's program to provide low-fee standalone broadband access, is a step towards fulfillment of California's goals of increasing home broadband adoption rates, the program's progress thus far has been slow to offer significant technological upgrades and is only available to a narrow scope of eligible customers. Further, Bright House Network's participation in Connect2Compete illustrates that smaller service providers are capable of developing low-income subscriber-targeted products.

A. Internet Essentials Current Eligibility Requirements and Services

12. As a condition of its approval of the 2011 merger of Comcast and NBC Universal, Inc. (NBCU), the Federal Communication Commission (FCC) required Comcast to "make available to approximately 2.5 million low income households: (i) high-speed Internet access service for less than $10 per month, (ii) personal computers, netbooks, or other computer equipment at a purchase price below $150, and (iii) an array of digital-literacy opportunities."[24] Originally referred to as the Comcast Broadband

[21] TWC StarterInternet Frequently Asked Questions, http://www.timewarnercable.com/MediaLibrary/1/1/Content Management/campaigns/2012/starter_internet/StarterInternet_FAQs.pdf, last visited Dec. 1, 2014.

[22] Comments of the California Emerging Technology Fund, FCC MB Docket No. 14-57, In the Matter of Applications of Comcast Corporation and Time Warner Cable Inc. et al., to Assign and Transfer Control of FCC Licenses and Other Authorizations at 9-10, filed Aug. 25, 2014 (hereinafter CETF FCC Comments).

[23] *Id*. (internal citations omitted).

[24] FCC Memorandum Opinion and Order, In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licenses, adopted Jan. 18, 2011, at ¶6 (hereinafter FCC Comcast-NBCU Merger Order).

Opportunity Program,[25] Internet Essentials emerged as the compliance effort targeted towards fulfillment of this condition.

13. Initially, in order for households to be eligible for Internet Essentials, the households had to meet the following requirements:

1. Households must have had at least one child in the household who was eligible for free school lunches under the National School Lunch Program (NSLP);
2. The household must "not have an overdue Comcast bill or unreturned equipment;"[26] and
3. The household must not have subscribed to a Comcast Internet service within 90 days prior to installation.[27]

The FCC required that the program run for a three-year period,[28] which commenced in the summer of 2011.[29]

14. Since 2011, Comcast changed Internet Essentials in a number of ways:

1. Eligible families must now have at least one child eligible to participate in the NSLP on either a free *or reduced-cost* basis;
2. the program is now open to public, parochial, private, and homeschooled students;
3. Comcast increased the broadband speed to which Internet Essentials customers have access to 5 Mbps downstream and 1 Mbps upstream;
4. Comcast will now accept customers with delinquent balances more than one year old; and finally, Comcast has extended the program indefinitely.[30]

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[25] *Id*. at p. 141-42.

[26] Comcast Response to ORA Data Request Set 3, No. 3.

[27] FCC Comcast-NBCU Order, *supra* note 24, at p. 142.

[28] *Id*.

[29] Internet Essentials from Comcast: From Idea to Launch, Launch Report, Jan. 2012, at 3. Available at http://corporate.comcast.com/comcast-voices/internet-essentials-progress-report.

[30] Comcast Response to ORA Data Request Set 3, No. 9.

5. Comcast also implemented an instant-approval process for any families with students attending schools with 70 percent or more NSLP participation rates.[31]

Comcast will offer Internet Essentials to eligible households within its post-transaction footprint in California, should the proposed merger be approved but notes that the extension does not encompass Bright House territory.[32]

B. Internet Essentials Program: Existing Shortcomings

15. The enhancements listed above indicate some level of program improvements. However, while Comcast has stated that it "has not identified any shortfalls of Internet Essentials in California[,]"[33] the program has limitations, including a (1) subscription rate of only roughly [redacted] of eligible consumers in California;[34] (2) a speed offering that does not qualify as "served" under California benchmarks,[35]and (3) eligibility limited to only low income families with school-age children. According to responses to ORA data requests, Comcast has no plans to improve Internet Essentials by increasing speeds or expanding eligibility to other low-income Californians. Finally, while Comcast was required to offer Internet Essentials for three full school years under the terms of the FCC's Comcast-NBCU merger order[36] and Comcast has stated they will extend the program indefinitely,[37] Comcast is under no legal obligation to continue offering the program and may suspend Internet Essentials at any time.[38] Thus, the

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[31] *Id.* Households with students who attend such schools are deemed categorically eligible for Internet Essentials, and are not required to fill out an application.

[32] Comcast Response to ORA Data Request Set 3, No. 11 & No.13.

[33] Comcast Response to ORA Data Request Set 3, No. 8.

[34] CETF FCC Comments, *supra* note 24, at 3.

[35] Served speeds in California are currently 6 Mbps download and 1.5 Mbps upload. CPUC Decision Implementing Broadband Grant and Revolving Loan Program at 17, D.12-02-015, decided Feb. 1, 2012.

[36] FCC Comcast-NBCU Merger Order, *supra* note 24, at 142.

[37] Comcast Extends National Broadband Adoption Program for Low-Income Families, Mar. 4 2014. http://corporate.comcast.com/news-information/news-feed/internet-essentials-2014.

[38] Comcast began offering Internet Essentials in the 2011-2012 school year. *About Internet Essentials from Comcast*, June 2, 2014. http://customer.comcast.com/help-and-support/internet/comcast-broadband-

program's simple extension into Time Warner Cable's footprint does not constitute a public interest benefit derived solely from the merger.

1. Internet Essentials Targets Only a Narrow Subset of Households at the Far End of the Digital Divide

16. Internet Essentials is available only to households with children who attend schools with a 70 percent student-participation rate in the NSLP or who attend other forms of school but would be otherwise eligible for a free or reduced lunch under the NSLP. This eligibility criterion leaves other individuals, including the elderly, the disabled, and low-income childless adults, without an affordable option for broadband service. According to responses to ORA data requests, Comcast has no plans to extend their affordable broadband service program to other low-income groups,[39] including households without school-age children, who nevertheless may have limited access to broadband services.[40]

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opportunity-program/. As three full school years have elapsed, Comcast is no longer obligated to offer Internet Essentials to consumers.

[39] Comcast Response to ORA Data Request Set 3, No. 9. When asked to "Provide your plans to improve or enhance Internet Essentials in California, reflecting planned changes over the three years following the merger, including;

a. Expansion of eligibility requirements

b. Equipment improvements

c. Expansion into wireless modem offerings, and

d. Speed upgrades[,]"

Comcast responded, "[T]here are currently no plans to further enhance Internet Essentials as per the four criteria specified in this question[.]"

[40] Comcast has not provided and ORA does not know the number of low-income households which do not have school-age children but which would be otherwise eligible for Internet Essentials. In its response to an ORA data request, Comcast stated that:

> Comcast recently began the process of determining the number of eligible households that would be living in Comcast's service territory after consummation of the proposed TWC transaction […]. [redacted]

2. Low Numbers of the Already-Limited Number of Eligible Households Have Subscribed to Internet Essentials

17. Despite Comcast's recent publicity of Internet Essentials after the announcement of the proposed merger,[41] less than [redacted] of the eligible households currently in Comcast's footprint in California are enrolled in the program.[42] As the CETF notes, at the rate of adoption seen since the program's inception, "it would take another decade for Comcast to reach just half of the currently eligible population."[43]

18. Understanding the causes of such a low enrollment percentage to the Internet Essentials program may shed some light on some of the challenges that low-income consumers may face, such as potential lengthy wait times for receiving an application and receiving equipment.[44]

19. As noted above, Comcast has stated that it is unaware of any existing shortfalls of the Internet Essentials program in California,[45] and has provided limited information on plans to enhance the program through any merger-derived efficiencies.[46]

3. Speeds Offered to Internet Essentials' Customers Fall Below the California Broadband Served Speed Benchmarks

20. Comcast provides Internet Essentials customers with 5 Mbps download/1 Mbps upload broadband capability. However, under the Commission's Decision 12-02-015 Implementing Broadband Grant and Revolving Loan Program Provisions, California

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[redacted]

Comcast CONFIDENTIAL Response to ORA Data Request Set 3, No. 14.

[41] See Comcast Response to ORA Data Request Set 3, No. 9.

[42] See Comcast CONFIDENTIAL Response to ORA Data Request Set 3, Nos. 12 and 16.

[43] CETF FCC Comments, supra note 22, at 3.

[44] Comcast Response to ORA Data Request Set 3, No. 4; Comments of the California Emerging Technology Fund, CPUC A.14-04-013 at 12-13, filed Oct. 19, 2014 [hereinafter CETF CPUC Comments].

[45] Comcast Response to ORA Data Request Set 3, No.8.

[46] Comcast Responses to ORA Data Request Set 3, No. 9.

policy declares areas as underserved if there are no wireline or wireless facilities-based provider offering service at advertised speeds of at least 6 Mbps download and 1.5 Mbps upload.[47]

21. Despite increasing speeds without increasing prices for higher-speed users,[48] Comcast provided no plans to increase the 5 Mbps offered to its low-income customers to 6 Mbps, served-level speeds, let alone the higher speeds touted by Chairman Wheeler as "table-stakes" in today's economy.[49] Internet Essentials customers receive speeds equivalent to those offered in "underserved" areas of California.[50] California has recognized that increasing speeds "promote economic growth, job creation, and the substantial social benefits of advanced information and communications technologies."[51]

VI. CONCLUSION

22. Joint Applicants provided limited information and plans on improvements to or extensions of either Lifeline services or the Internet Essentials program as a result of the proposed merger. Low-income consumers face the risk of not having the opportunity

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[47] D. 12-02-015, *supra* note 35, at 17.

[48] *Compare* Comcast Response to ORA Data Request Set 1, No. 9, Exhibit ORA/Comcast R:1-8, September 11, 2014 (stating price of Extreme 105 Upgrade [download speed of 105 Mbps] as $114.95) , *with* XFINITY Internet Offer for Extreme 150, *available at* http://www.comcast.com/internet-service.html (stating price of Extreme 150 [download speed of 150 Mbps] as $114.95) (last visited Nov. 25, 2014). In 2014, Comcast increased the speed of its "Extreme" product by 45 Mbps without increasing its price.

[49] Tom Wheeler, Chairman, Fed. Commc'n Comm'n, Remarks at National Digital Learning Day: The Facts and Future of Broadband Competition (Sept. 4, 2012).

[50] Comcast Response to ORA Data Request Set 3, No. 9. When asked to "Provide your plans to improve or enhance Internet Essentials in California, reflecting planned changes over the three years following the merger, including;

a. Expansion of eligibility requirements

b. Equipment improvements

c. Expansion into wireless modem offerings, and

d. Speed upgrades[,]"

Comcast responded, "[T]here are currently no plans to further enhance Internet Essentials as per the four criteria specified in this question[.]"

[51] Pub. Util. Code § 281.

to receive Lifeline services as TWC has yet to offer customers Lifeline. Furthermore, Comcast's Internet Essentials does not extend to low income households without children, and it offers speeds slower than those identified by the CPUC as "served" in California.

I declare under penalty of perjury that the foregoing information is true and correct to the best of my knowledge.

Executed this 10th day of December, 2014 in San Francisco, California.

Eileen Odell

Public Utilities Regulatory Analyst

EXHIBIT 5

ORA Section 706 Jurisdiction Letter

ORA

Office of Ratepayer Advocates
California Public Utilities Commission

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Acting Director

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July 22, 2014

VIA EMAIL

ALJ Karl Bemesderfer
Niki Bawa
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: **Time Warner/Comcast Transfer of Control Application: A.14-04-013**

Dear ALJ Bemesderfer and Mr. Bawa,

The Office of Ratepayer Advocates (ORA) provides this written response to the July 1, 2014 letter from Suzanne Toller to Niki Bawa (Joint Applicants' Letter I)[1] concerning the application of Section of 706 of the 1996 Telecommunications Act (Section 706)[2] to the Time Warner Cable/Comcast Transfer of Control Application, A.14-04-013 and the July 9, 2014 letter from Suzanne Toller to Administrative Law Judge (ALJ) Bemesderfer (Joint Applicants' Letter II) concerning proposed schedules for the proceeding, as well as a detailed discussion on Comcast's and Time Warner Cable's (Joint Applicants) position concerning the following:

- Whether the California Public Utilities Commission (CPUC) has jurisdiction to consider the advanced telecommunications aspects, including broadband, of the proposed merger.
- What the appropriate procedural vehicles are for reviewing the proposed merger.
- Whether hearings are necessary.

Joint Applicants' Letter I contains responses to ORA's Protest on the application of Section 706 of the 1996 Telecommunications Act to the CPUC's review of the proposed merger, and Joint Applicants' Letter II directly references ORA on several occasions.[3] ORA also wishes to ensure that the assigned ALJ and Commissioner have accurate information upon which to make a well-informed decision. Therefore, ORA responds to both letters here. ORA's response focuses on

[1] While Ms. Toller did not specify whose views she represented in Joint Applicants' Letter I, ORA assumes the letter represents the views of Comcast and Time Warner Cable.

[2] Codified at 47 U.S.C. § 1302(a).

[3] *See* Joint Applicants' Letter II at 3-6.

the CPUC's authority to review the impact of the proposed merger on advanced telecommunications in California. ORA does not discuss the CPUC's authority under Public Utilities Code Section 854 (Section 854) in detail in this letter because all parties agree that the CPUC must review the proposed merger under Section 854.

The Center for Accessible Technology (CforAT), National Asian American Coalition (NAAC) and The Utility Reform Network (TURN) all support and are signatories to this letter, as noted in Attachment A. CforAT, NAAC, TURN and ORA disagree with the substance Joint Applicants' Letters I and II, as discussed below.

A. The CPUC has Jurisdiction to Review the Effects of the Merger on Broadband Deployment in California

1. Section 706 of the 1996 Telecommunications Act

Joint Applicants claim that the CPUC does not have authority under Section 706 to review the impact of the proposed merger on broadband deployment.[4] Section 706(a) states:

> The [Federal Communications] Commission *and each State commission* with regulatory jurisdiction over telecommunications services *shall* encourage the deployment on a reasonable and timely basis of advanced telecommunications capability[5] to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.[6]

Section 706 provides a specific grant of authority to the Federal Communications Commission (FCC) and to each state to "encourage the deployment of advanced telecommunications capabilities on a reasonable and timely basis."[7] Section 706 does not distinguish between its

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[4] Joint Applicants' Letter I at 1-2; Joint Applicants' Letter II at 2.

[5] Section 706 defines "Advanced Telecommunications capability" to include Voice over Internet Protocol (VoIP) and broadband. Federal statute provides at 47 U.S.C. § 1302(d)(1) that: "The term 'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology."

[6] 47 U.S.C. § 1302(a) (emphasis added).

[7] *Id.* ALJ Bemesderfer agreed with this conclusion at the prehearing conference (PHC), stating that "this Commission possesses jurisdiction to investigate the effects of the merger on broadband Internet access in California and to take appropriate regulatory action in response to the findings of such an investigation." PHC Transcript at 12, lines 1-7.

grant of regulatory authority to the FCC and the states.[8] This reading was recently affirmed by the District of Columbia Circuit Court of Appeals (D.C. Circuit) in *Verizon v. FCC*.[9] Under Section 706, the CPUC has an obligation to review the impact of the merger on broadband deployment in California as Section 706 contains, in the D.C. Circuit's words, "a direct mandate."[10]

Joint Applicants claim that the CPUC cannot invoke Section 706 because it has not relied on it in the past to review broadband deployment in California.[11] This claim mischaracterizes the FCC's and the D.C. Circuit's treatment of Section 706 over the last sixteen years. The CPUC did not rely on Section 706 in the past because the FCC had determined incorrectly in 1998 in its *Advanced Services Order* that Section 706 was only a Congressional statement of policy and did not constitute a specific grant of regulatory authority.[12] The FCC attempted to change its reading of Section 706 in its 2008 *Comcast Order.*[13] However, in 2010, the D.C. Circuit held in *Comcast v. FCC* that the FCC "'remained bound' by its prior interpretation" of Section 706 "[b]ecause the [Federal Communications] Commission had 'never questioned, let alone overruled, that understanding of section 706[].'"[14]

The FCC clearly overruled and rejected its incorrect reading of Section 706 in the *Open Internet Order* in 2010, finding that "section 706(a) constitutes an affirmative grant of regulatory authority."[15] The D.C. Circuit upheld and affirmed the FCC's determination in *Verizon v. FCC* issued in January of this year, holding that "section 706 of the 1996 Telecommunications Act . . . furnishes the [Federal Communications] Commission with the requisite affirmative authority to adopt the regulations [the *Open Internet Order* rules]."[16]

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[8] 47 U.S.C. § 1302(a).

[9] *Verizon v. FCC*, 740 F.3d 623, 638 (D.C. Cir. 2014). ALJ Bemesderfer also supported this reading of Section 706 at the PHC, noting that: "In [*Verizon v. FCC*], the D.C. Circuit affirms the FCC's interpretation of Section 706 as a grant of regulatory authority even though the decision itself rejects once again the FCC's attempt to formulate net neutrality rules." PHC Transcript at 11, lines 4-9.

[10] *Comcast v. FCC*, 600 F.3d 642, 658 (D.C. Cir. 2010).

[11] Joint Applicants' Letter II at 4.

[12] *Advanced Services Order*, 13 F.C.C.R. 24012, 24044, ¶ 9 (1998).

[13] *In re Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications*, 23 F.C.C.R. 13028 (2008) (*Comcast Order).*

[14] *Comcast Corp. v. FCC*, 600 F.3d at 659.

[15] *Open Internet Order*, 25 F.C.C.R. 17905, 17969-70, ¶¶ 117-121 (2010).

[16] *Verizon*, 740 F.3d at 635. *See also Verizon*, 740 F.3d at 649 (finding "section 706 grants the [Federal Communications] Commission authority to promote broadband deployment by regulating how broadband providers treat edge providers . . .").

Until the FCC effectively adopted the position that Section 706 is, in fact, a specific grant of authority in its *Open Internet Order,*[17] the CPUC followed the FCC's erroneous conclusion in the *Advanced Services Order*. Moreover, until the D.C. Circuit upheld the FCC's determination regarding Section 706 in the *Open Internet Order*, there was uncertainty about whether the FCC's conclusion that Section 706 is a grant of regulatory authority would be amended. There is now no doubt that the CPUC has the authority to review the impact of the deployment of advanced telecommunications in California and that it *must use that authority*.

Joint Applicants' Letter II states that "Section 706 at most authorizes a public utility commission to use the authority it *already possesses under other provisions of law* to advance the deregulatory policy that Congress pursued in section 706."[18] Joint Applicants essentially argue that Section 706 has no purpose and effect. This view is at odds with the FCC's position on Section 706 and with the D.C. Circuit's determination in *Verizon v. FCC* that Section 706 is a specific grant of regulatory authority to both the FCC and state commissions.[19] Joint Applicants' opinion is also inconsistent with the Senate Committee Report on the Telecommunications Competition and Deregulation Act of 1995 (Senate Committee Report).[20] The Senate Committee Report states that Section 706 is "intended to ensure that one of the primary objectives of the [1996 Telecommunications Act]--to accelerate deployment of advanced telecommunications capability--is achieved," and emphasized that Section 706 is "'a necessary fail-safe' to guarantee that Congress's objective is reached."[21] As the FCC observed, and the D.C. Circuit quoted in *Verizon v. FCC*, "[i]t would be odd indeed to characterize Section 706(a) as a 'fail-safe' that 'ensures' the [Federal Communications] Commission's ability to promote advanced services if it conferred no actual authority."[22] The D.C. Circuit further observed that "when Congress passed section 706(a) in 1996, it did so against the backdrop of the [Federal Communications] Commission's long history of subjecting to common carrier regulation the entities that controlled the last-mile facilities over which end users accessed the Internet."[23]

Joint Applicants' Letter II claims that ORA has taken the position that the CPUC has "a nearly boundless delegation of authority over broadband Internet access . . . ."[24] Joint Applicants mischaracterize ORA's position and the language of Section 706. ORA did not claim in its Protest that the CPUC has "boundless" authority over broadband Internet access. Rather, ORA

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[17] *Open Internet Order*, 25 F.C.C.R. at 17968-17971, ¶¶ 117-122.

[18] Joint Applicants' Letter II at 2 (emphasis in original).

[19] *Open Internet Order*, 25 F.C.C.R. at 17968-17971, ¶¶ 117-122; *Verizon*, 740 F.3d at 635.

[20] The Telecommunications Competition and Deregulation Act of 1995 was eventually adopted by Congress in 1996, and became known as the 1996 Telecommunications Act.

[21] Committee Reports, 104th Congress (1995-1996) Telecommunications Competition and Deregulation Act of 1995**,** S. Rep. No. 104-23, at 50-51 (1995). *See also Open Internet Order*, 25 F.C.C.R. at 17969-17970, ¶ 120; *Verizon*, 740 F.3d at 639.

[22] *Open Internet Order*, 25 F.C.C.R. at 17969-17970, ¶ 120. *See also Verizon*, 740 F.3d at 639.

[23] *Verizon*, 740 F.3d at 638.

[24] Joint Applicants' Letter II at 3.

stated that "the CPUC has the authority to adopt some regulations and conduct a review of advanced telecommunications services in California."[25] Moreover, as the FCC noted in the *Open Internet Order,* the authority Congress granted to the FCC and each state under Section 706 is limited to the following three factors: (1) regulatory actions that fall within the state's subject matter jurisdiction over such communications;[26] (2) actions taken under Section 706(a) that "'encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans"; and (3) "activity undertaken to encourage such deployment [that] must 'utilize[e], in a manner consistent with the public interest, convenience, and necessity,' one (or more) of various specified methods" delineated in Section 706(a).[27] The FCC found that these limiting factors support the conclusion that Congress intended to grant substantive authority to the FCC and each state commission in section 706(a).[28]

2. California Public Utilities Code Section 710 (Section 710)

Joint Applicants' Letter II argues that the CPUC's authority over advanced communications extends only to the regulation of public utilities and that their entities deploying broadband are not public utilities under Section 710 of the California Public Utilities Code (Section 710).[29] Joint Applicants claim that "Section 706 *cannot* be used as a delegation of authority that overrides express limitations on . . . [the CPUC's] jurisdiction under federal *or* state law."[30] Joint Applicants believe that if the CPUC reviews the proposed merger under Section 706, it will not be acting within the state's subject matter jurisdiction over such communications, as required by Section 706, because it is barred by Section 710.[31] Joint Applicants' understanding of Section 710 is erroneous and inconsistent with the findings declared by the state Legislature in Senate Bill (SB) 1161,[32] the bill which enacted this statutory provision, as further discussed below.

Section 710 contains clear exceptions to the limitation on regulating Voice over Internet Protocol (VoIP) and Internet Protocol (IP)-enabled services:

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[25] ORA Protest to A.14-04-013,Time Warner Cable/Comcast Merger at 10.

[26] ORA discusses the subject matter jurisdiction argument in Section A(2) below.

[27] *Open Internet Order*, 25 F.C.C.R. at 17970, ¶ 121 (citations omitted). In *Verizon*, 740 F.3d at 639-640, the D.C. Circuit only discusses the first two limitations, but not the third limitation. The D.C. Circuit reaches the same conclusion as the FCC that it is "satisfied that the scope of authority granted to the [Federal Communications] Commission by section 706(a) is not so boundless . . . . "

[28] *Open Internet Order*, 25 F.C.C.R. at 17968-17971, ¶¶ 117-122.

[29] Joint Applicants' Letter II at 2-3.

[30] *Id.* at 2 (emphasis in original).

[31] *Id.* at 2-3.

[32] Legislative Counsel's Digest for SB 1161, http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB1161&search_keywords

> The commission shall not exercise regulatory jurisdiction or control over Voice over Internet Protocol and Internet Protocol enabled services *except as required or expressly delegated by federal law* or expressly directed to do so by statute or as set forth in subdivision (c).[33]

The CPUC is an agency embodied in the California Constitution,[34] and as such, has broad, far-reaching discretionary authority, though the Legislature can limit such authority, as it did with passage of SB 1161. However, even in enacting Section 710, the Legislature has acknowledged the CPUC's subject matter jurisdiction over VoIP and IP-enabled services, while placing limits on that authority. The legislative limits on CPUC authority in Section 710 contain exceptions, and one of those exceptions is federally delegated authority.[35] If the CPUC had never had authority over VoIP and IP-enabled services, then the need for Section 710 would have never arisen. In addition, Section 706 applies to "each State commission with regulatory jurisdiction over telecommunications services,"[36] and the CPUC is the state commission in California with regulatory jurisdiction over telecommunications services.[37] Thus, clearly, the "advanced telecommunications capability" referenced in Section 706 is within the CPUC's subject matter jurisdiction, consistent with Section 710. Because Section 706 both requires and expressly delegates the CPUC to encourage broadband deployment, consistent with Section 710(a), the CPUC must review the proposed merger under Section 706.

Furthermore, the D.C. Circuit in *Verizon v. FCC* equated the grant of authority of Section 706 to the grant of authority to states in Sections 251 and 252 of the 1934 Telecommunications Act, as Amended (Section 251 and 252).[38] This fact is telling because Sections 251 and 252 are mentioned in Section 710 as examples of the type of delegation of authority under which the CPUC may exercise jurisdiction over VoIP and IP-enabled services.[39]

Joint Applicants' argument that "Section 706 cannot grant a public utility commission – a creature of the state – power that the state legislature itself has not granted to it"[40] and that

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[33] Section 710(a) (emphasis added).

[34] CA Const., Art. XII.

[35] At the PHC, ALJ Bemesderfer agreed, stating: "Assuming that broadband Internet access constitutes an Internet protocol enabled service, I believe that Section 706 of the 1996 Act, as currently interpreted by the FCC [and] the D.C. Circuit, provides the required express federal delegation and, accordingly, [] Public Utilities Code Section 710 does not bar this Commission from reviewing the effects of the merger on broadband Internet access in California." PHC Transcript at 12, lines 16-25.

[36] 47 U.S.C. § 1302(a).

[37] *See, e.g.*, Pub. Util. Code §§ 216, 233-236, 270-285, 871-887, 2871-2897.

[38] *Verizon*, 740 F.3d at 638.

[39] Pub. Util. Code § 710(c)(3).

[40] Joint Applicants' Letter II at 2.

ORA's position "eviscerates the legislative intent behind Section 710"[41] is unsupported. First, Joint Applicants' argument is contrary to the purpose and meaning of Section 706 and Section 710, and to the FCC's and D.C. Circuit's opinions on this matter.[42] Congress would not have added Section 706 if it did not actually confer any authority on the states and the FCC. As the D.C. Circuit noted, "Congress has granted regulatory authority to state telecommunications commissions on other occasions, and we see no reason to think that it could have not done the same here."[43] The Senate Committee Report characterizes Section 706 as "a necessary fail-safe" in achieving Congress' goal in accelerating the deployment of advanced telecommunications capability.[44] Second, Joint Applicants' argument renders the exceptions provisions of Section 710 meaningless. If the CPUC could only act under the exceptions of Section 710 if it already had the authority under Section 710, the Legislature would not have included the exceptions in the statute.

The CPUC's review of the proposed merger must ensure that if approved, the merger will promote rapid deployment of advanced communications and competition, and reduce barriers to infrastructure investment, which are the stated goals of Section 706. This policy is in harmony with the California Legislature's stated intent in California SB 1161, codified as Section 710, which provides that the purpose of SB 1161 is to achieve the following goals:[45]

> (1) Preserve the future of the Internet by encouraging continued investment and technological advances and supporting continued consumer choice and access to innovative services that benefit California.
> (2) Ensure a vibrant and competitive open Internet that allows California's technology businesses to continue to flourish and contribute to economic development throughout the state.[46]

ORA sees no conflict between the stated goals of Senate Bill 1161 and Section 706, and the CPUC's review of the merger will further those goals. It is clear that the intent of Section 710 is consistent and harmonious with Section 706.

Furthermore, because Section 706 delegates specific authority to "each State commission with regulatory jurisdiction over telecommunications services," the CPUC does not need additional

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[41] *Id.* at 3.

[42] *Open Internet Order*, 25 F.C.C.R. at 17968, ¶ 117; *Verizon*, 740 F.3d at 635.

[43] *Verizon*, 740 F.3d at 638.

[44] S. Rep. No. 104-23, at 50-51 (1995). *See also Open Internet Order*, 25 F.C.C.R. at 17969-17970, ¶ 120; *Verizon*, 740 F.3d at 639.

[45] The Legislature passed SB 1161 when the FCC's *Open Internet* rules (i.e., net neutrality rules) were still in effect. The D.C. Circuit rejected the legal basis for the FCC's *Open Internet* rules, and currently, there are no net neutrality rules in place.

[46] Legislative Counsel's Digest, SB 1161, Ch. 733, § 1(b). http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB1161.

authority granted by the Legislature to have regulatory authority over deployment of advanced telecommunications.[47] Under the Supremacy Clause of the United States Constitution,[48] federal law can preempt state law:

> "The supremacy clause of the United States Constitution establishes a constitutional choice-of-law rule, makes federal law paramount, and vests Congress with the power to preempt state law." Congress may exercise that power by enacting an express preemption provision, or courts may infer preemption under one or more of three implied preemption doctrines: conflict, obstacle, or field preemption.[49]

However, because Section 710 contains exceptions to accommodate federal law requirements, there does not appear to be any preemption issue here.

3. Joint Applicants' Other Arguments Concerning the CPUC's Authority

a. The Principles of Federalism Do Not Bar the CPUC's Review

Joint Applicants reference the "core principles of federalism" in arguing that "Congress and the FCC have established a *deregulatory* framework for interstate information services like broadband, and attempts by state commissions to impose inconsistent regulation that undercuts that federal goal are clearly preempted."[50] Contrary to Joint Applicants' assertions, the FCC's classification has no impact on the CPUC's ability to review the proposed merger in a manner consistent with Section 706 objectives. As noted by the FCC and the D.C. Circuit, Section 706 is a specific grant of authority from Congress to each state commission.[51] And, as previously stated, Congress, the FCC, and the D.C. Circuit have all made it clear that Section 706 provides state commissions, such as the CPUC, with authority to review advanced communications deployment at a state level.[52]

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[47] 47 U.S.C. § 1302(a).

[48] U.S. Const. Art. VI., § 2. ORA notes that under Article 3.5(c) of the California Constitution, an administrative agency, such as the CPUC, does not have the authority "to declare a statute unenforceable, or to refuse to enforce a statute on the basis that federal law or federal regulations prohibit the enforcement of such statute unless an appellate court has made a determination that the enforcement of such statute is prohibited by federal law or federal regulations." However, because Section 710(a) provides an exception, there is no need for a Supremacy Clause inquiry.

[49] *Brown v. Mortensen*, 51 Cal. 4th 1052, 1059 (2011).

[50] Joint Applicants' Letter II at 3 (emphasis in original) (citation omitted).

[51] *Open Internet Order*, 25 F.C.C.R. at 17968, ¶ 117; *Verizon*, 740 F.3d at 635.

[52] 47 U.S.C. § 1302(a); *Open Internet Order*, 25 F.C.C.R. at 17969-17970, ¶ 120; *Verizon*, 740 F.3d at 639.

b. The CPUC Has Authority over Aspects of Advanced Telecommunications Services

Joint Applicants assert that the CPUC has no authority to regulate broadband or VoIP.[53] This is not an accurate characterization of the CPUC's authority.[54] The CPUC has jurisdiction over various aspects of advanced telecommunications in the California Public Utilities Code. For example, the Legislature has conferred upon the CPUC the responsibility for promoting advanced information and communications technologies under Public Utilities Code Section 709:

> The Legislature hereby finds and declares that the policies for telecommunications in California are as follows:
>
> (a) To continue our universal service commitment by assuring the continued affordability and widespread availability of high-quality telecommunications services to all Californians.
>
> (b) To focus efforts on providing educational institutions, healthcare institutions, community-based organizations, and governmental institutions with access to advanced telecommunications services in recognition of their economic and societal impact.
>
> *(c) To encourage the development and deployment of new technologies and the equitable provision of services in a way that efficiently meets consumer need and encourages the ubiquitous availability of a wide choice of state-of-the-art services. . . .*
>
> *(e) To promote economic growth, job creation, and the substantial social benefits that will result from the rapid implementation of advanced information and communications technologies by adequate long-term investment in the necessary infrastructure.*
>
> *(f) To promote lower prices, broader consumer choice, and avoidance of anticompetitive conduct.*
>
> *(g) To remove the barriers to open and competitive markets and promote fair product and price competition in a way that encourages greater efficiency, lower prices, and more consumer choice.*
>
> (h) To encourage fair treatment of consumers through provision of sufficient information for making informed choices, establishment of reasonable service quality standards, and establishment of processes for equitable resolution of billing and service problems.[55]

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[53] Joint Applicants' Letter II at 2.

[54] *Id.* at 3.

[55] Pub. Util. Code § 709 (emphasis added).

The CPUC is responsible for creating and running the California Teleconnect Fund under Public Utilities Code Section 280:

> The commission shall develop, implement, and administer a program to advance universal service by providing discounted rates to qualifying schools maintaining kindergarten or any of grades 1 to 12, inclusive, community colleges, libraries, hospitals, health clinics, and community organizations, consistent with Chapter 278 of the Statutes of 1994.[56]

The Legislature also charged the CPUC with developing and administering all aspects of the California Advanced Services Fund (CASF) pursuant to Public Utilities Code Section 281:

> The commission shall develop, implement, and administer the California Advanced Services Fund program to encourage deployment of high-quality advanced communications services to all Californians that will promote economic growth, job creation, and the substantial social benefits of advanced information and communications technologies, consistent with this section.[57]

Section 275.6 of the Public Utilities Code authorizes the CPUC to oversee the California High Cost Fund-A and to impose surcharges on California customers in order to:

> (5) Promote customer access to advanced services and deployment of broadband-capable facilities in rural areas that is reasonably comparable to that in urban areas, consistent with national communications policy.
>
> (6) Include all reasonable investments necessary to provide for the delivery of high-quality voice communication services and the deployment of broadband-capable facilities in the rate base of small independent telephone corporations.[58]

The Legislature has also directed the CPUC to collect surcharges from VoIP providers for Public Purpose Programs under Public Utilities Code Section 285:

> (c) The commission shall require interconnected VoIP service providers to collect and remit surcharges on their California intrastate revenues in support of the following public purpose program funds:
>
> (1) California High-Cost Fund-A Administrative Committee Fund under Section 275.

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[56] Pub. Util. Code § 280(a).

[57] Pub. Util. Code § 281(a).

[58] Pub. Util. Code § 275.6(c).

> (2) California High-Cost Fund-B Administrative Committee Fund under Section 276.
>
> (3) Universal Lifeline Telephone Service Trust Administrative Committee Fund under Section 277.
>
> (4) Deaf and Disabled Telecommunications Program Administrative Committee Fund under Section 278.
>
> (5) California Teleconnect Fund Administrative Committee Fund under Section 280.
>
> (6) California Advanced Services Fund under Section 281.[59]

The Moore Universal Lifeline Service Act (Moore Act, also commonly referred to as the LifeLine Program) also contains several references to the CPUC's role in encouraging consumers to have access to advanced telecommunications in promoting California's universal service goals. For example, Public Utilities Code Section 871.7(c) of the Moore Act states:

> It is the intent of the Legislature that the Commission initiates a proceeding investigating the feasibility of redefining universal telephone service by incorporating two-way voice, video, and data service as components of basic service. It is the Legislature's further intent that, to the extent that the incorporation is feasible, that it promote equity of access to high-speed communications networks, the Internet, and other services to the extent that those services provide social benefits that include all of the following:
>
> (1) Improving the quality of life among the residents of California.
>
> (2) Expanding access to public and private resources for education, training, and commerce.
>
> (3) Increasing access to public resources enhancing public health and safety.
>
> (4) Assisting in bridging the "digital divide" through expanded access to new technologies by low-income, disabled, or otherwise disadvantaged Californians.
>
> (5) Shifting traffic patterns by enabling telecommuting, thereby helping to improve air quality in all areas of the state and mitigating the need for highway expansion.
>
> (d) For purposes of this section, the term "feasibility" means consistency with all of the following:
>
> (1) Technological and competitive neutrality.
>
> (2) Equitable distribution of the funding burden for redefined universal service as described in subdivision (c), among all affected consumers and

[59] Pub. Util. Code § 285.

> industries, thereby ensuring that regulated utilities' ratepayers do not bear a disproportionate share of funding responsibility.
>
> (3) Benefits that justify the costs.[60]

Public Utilities Code Section 882 of the Moore Act asks the CPUC to open a proceeding to consider various aspects of how advanced communications services may promote the goals of universal service:

> (a) The Public Utilities Commission shall, as soon as practicable, open a proceeding or proceedings to, or as part of existing proceedings shall, consider ways to ensure that advanced telecommunications services are made available as ubiquitously and economically as possible, in a timely fashion, to California's citizens, institutions, and businesses. The proceeding or proceedings should be completed within one year of commencement.
>
> (b) The proceeding or proceedings shall develop rules, procedures, orders, or strategies, or all of these, that seek to achieve the following goals:
>
> (1) To provide all citizens and businesses with access to the widest possible array of advanced communications services.
>
> (2) To provide the state's educational and health care institutions with access to advanced communications services.
>
> (3) To ensure cost-effective deployment of technology so as to protect ratepayers' interests and the affordability of telecommunications services.
>
> (c) In the proceeding or proceedings, the commission should also consider, but need not limit its consideration to, all of the following:
>
> (1) Whether the definition of universal service should be broadened.
>
> (2) How to encourage the timely and economic development of an advanced public communications infrastructure, which may include a variety of competitive providers.[61]

The CPUC also established the California Emerging Technology Fund (CETF) in its decisions approving the mergers of SBC-AT&T[62] and Verizon-MCI in 2005.[63] As a condition of approval of the mergers, AT&T and Verizon were required to contribute to CETF a total of $60 million over five years "for the purpose of achieving ubiquitous access to broadband and advanced

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[60] Pub. Util. Code § 871.7(c).

[61] Pub. Util. Code § 882.

[62] D.05-11-028 at 79-83, 113-114, Ordering Paragraph 8.

[63] D.05-11-029 at 129, Ordering Paragraph 3(c).

services in California, particularly in underserved communities, through the use of emerging technologies . . . ."[64] The CPUC also directed that at least $5 million should be used for telemedicine projects.[65]

c. The CPUC has the Necessary Knowledge and Ability, and is Required to Review the Impact of the Merger on Broadband Deployment in California

Joint Applicants assert that "[t]he broadband market is complex and multi-faceted and the CPUC lacks experience and expertise regulating it."[66] Joint Applicants also claim that the CPUC does not have sufficient knowledge concerning the broadband market to take any regulatory actions with respect to the proposed merger.[67] Joint Applicants conclude that the CPUC should defer to the FCC on the issues of broadband competition and net neutrality.[68]

Joint Applicants' comments on this issue are, at best, a mischaracterization of the CPUC's authority, responsibilities, knowledge and capabilities. As noted above, the CPUC does have a breadth of experience regulating and monitoring broadband access in California. There is no doubt that the CPUC has extensive knowledge on the telecommunications market as whole, of which the advanced telecommunications market, including broadband, is a part. And the CPUC certainly has the skills and capability to gather, analyze, and reflect on relevant data concerning the deployment of broadband in California, and determine what, if any, steps it should take consistent with Section 706 in response to the data. While ORA acknowledges that the FCC plays a critical role in evaluating broadband competition, Section 706 makes it clear that state commissions are also empowered to play a key role in encouraging the deployment of advanced communications. Furthermore, the CPUC should not and, in fact, cannot, discharge its duties to review the impact of the merger on the deployment of advanced telecommunications. Section 706 is mandatory, not permissive ("each state commission . . . shall . . ."),[69] and the CPUC must review the California-specific effects of the merger that will not be the focus of the broader review at the federal level by the FCC and the United States (U.S.) Department of Justice.

B. The CPUC Should Open an OII to Investigate the Effects of the Merger on the Deployment of Broadband in California and Hearings are Necessary

ORA recommends that the CPUC open an Order Initiating Investigation (OII) to gather, analyze and review information relevant to the proposed merger of Comcast and Time Warner Cable to

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[64] D.05-11-028 at 79.

[65] *Id.* at 81.

[66] Joint Applicants' Letter II at 4.

[67] *Id.*

[68] *Id.*

[69] 47 U.S.C. § 1302(a).

determine if such a merger is in the public interest under Section 854 and Section 706. The scope of the CPUC's inquiry and authority to review the merger is much broader than what Joint Applicants set forth in their Application. As such, it may be procedurally awkward for the CPUC to expand the scope of the review of the proposed merger, particularly with regard to the Section 706 issues, in the instant proceeding. An OII will allow the CPUC to carefully define the appropriate scope of the proceeding and will provide direction to parties on data discovery, which is necessary for the CPUC to make an informed, evidence-based decision on the proposed merger. In addition, an OII will ensure that such information becomes part of a record that the CPUC can pass on to the FCC in the FCC's review of the proposed merger and the CPUC may also make recommendations to the FCC concerning the proposed merger. If, even after careful review of the evidence, the CPUC elects not to adopt any rules, conditions, or take other actions, at a minimum, the CPUC is required to review the merger under Section 706 and Section 854, and an OII is the best procedural vehicle to accomplish that goal.[70]

An OII should focus on what remedies the CPUC may wish to take concerning the merger after gathering and analyzing the data consistent with Section 706 and Section 854. ORA does not presuppose any outcome as ORA has not yet gathered and analyzed the data. Section 706 is flexible enough to allow to the CPUC to act (or not act), so long as the CPUC's actions "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans" and the activities the CPUC undertakes to encourage such deployment "utilize[e], in a manner consistent with the public interest, convenience, and necessity," one (or more) of various specified methods set forth in Section 706.[71]

Generally, the CPUC has relied on faith in a competitive marketplace to keep prices reasonable and to ensure customers receive good service quality. ORA recommends focusing the Section 706 review of the proposed merger on the impacts the transaction will have on customers and competition in California in determining what steps the CPUC may wish to take under Section 706, consistent with the intent of Section 710.

As an alternative to opening an OII, ORA recommends that the assigned ALJ and Commissioner convert the instant proceeding into a data-driven review of the proposed merger under Section 706 and Section 854, versus the current application, which is merely a review of limited aspects of the transaction under Section 854. If the assigned ALJ and Commissioner elect this

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[70] ORA notes that Section 710(f) provides a provision on this issue: "This section does not limit the commission's ability to continue to monitor and discuss VoIP services, to track and report to the Federal Communications Commission and the Legislature, within its annual report to the Legislature, the number and type of complaints received by the commission from customers, and to respond informally to customer complaints, including providing VoIP customers who contact the commission information regarding available options under state and federal law for addressing complaints." Pub. Util. Code § 710(f).

[71] 47 U.S.C. § 1302(a). *See also Open Internet Order*, 25 F.C.C.R. at 17970, ¶ 121 (citations omitted). In *Verizon*, 740 F.3d at 639-640, the D.C. Circuit only discusses the first two limitations, but not the third limitation. The court reaches the same conclusion as the FCC that it is "satisfied that the scope of authority granted to the [Federal Communications] Commission by section 706(a) is not so boundless . . . ."

procedural path, then ORA also recommends that that they issue a ruling addressing discovery obligations for all parties.

No matter which procedural vehicle is chosen, ORA recommends that the assigned ALJ and Commissioner recategorize the proceeding as adjudicatory. This would help the proceeding remain a data-driven proceeding. ORA also recommends that the CPUC consider the Section 706 and Section 854 issues in one proceeding to promote efficiency and judicial economy. If the CPUC elects to open an OII, ORA recommends that the CPUC hold A.14-04-013 in abeyance while it reviews the proposed merger under Section 706 and Section 854 in the OII. Lastly, the assigned ALJ and Commissioner should ensure that parties have sufficient notice and opportunity to be heard on the issues presented in the expanded scope of the proceeding.

As will be discussed in its Protest to A.14-06-012, ORA recommends that the instant proceeding be merged with A.14-06-012, the Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.

C. Evidentiary Hearings Will Likely Be Necessary

Evidentiary hearings may be necessary to address any disputed issues of fact. Considering that the protestors and Joint Applicants appear to be far apart in terms of their position on the salient issues, it seems likely that hearings will be necessary in this proceeding.

Joint Applicants express concern about timelines and state that "hearings run the risk that a " . . . [CPUC] decision on the proposed transfers of control will not occur until well into 2015, likely after federal approvals of the deal are received."[72] Joint Applicants also claim that any delay to the proposed merger will be a delay that will "not serve the public interest as it would inhibit the newly merged company from bringing the benefits of the transaction to the citizens of California."[73]

If hearings are necessary, then the CPUC must evaluate whether to hold hearings on a basis other than the convenience of the Joint Applicants. Furthermore, it is unclear how long the FCC and U.S. Department of Justice[74] reviews of the proposed merger will take. The FCC has a six

[72] Joint Applicants' Letter II at 7.

[73] *Id.*

[74] The U.S. Department of Justice took a year to review the Comcast/NBC Merger and XM/Sirius Mergers. Also, even if the U.S. Department of Justice reaches a settlement and files a consent decree, the merger is not finalized until a court approves the consent decree. For example, in the SBC/AT&T and Verizon/MCI mergers, U.S. Department of Justice Antitrust Division ("DOJ" or "Antitrust Division") filed complaints and proposed consent decrees in both cases on October 27, 2005. The SBC-AT&T merger closed on December 18, 2005, and the Verizon-MCI merger closed on January 6, 2006. However, the antitrust reviews of these mergers only ended on March 29, 2007, when the United States District Court issued a 56-page opinion concluding that the entry of the proposed final judgments was in the public interest. *United States v. SBC Comm.*, Nos. 05-2102, 05-02103, 2007 U.S. Dist. LEXIS 22947, at *1 (D.D.C. March 29, 2007).

month timeline to review mergers, and the six month clock started on July 10, 2014. However, in large, controversial mergers, such as this one, the FCC typically stops the clock during the six months, and thus the eventual timeline for review is significantly longer than six months.[75] Finally, Joint Applicants continue to claim that the proposed merger is in the public interest yet they fail to provide any support for this claim. The issue of whether this merger will serve the public interest is the central issue in the proceeding and is a disputed issue of fact. Certainly, the CPUC should not rush to a conclusion before making a determination on whether the merger is, in fact, in the public interest.

ORA would also like to clarify the differences between the instant proceeding and the AT&T/T-Mobile merger proceeding. In the AT&T/T-Mobile merger proceeding, AT&T filed an initial information-only letter to the CPUC.[76] AT&T later rescinded that letter and filed an information-only advice letter concerning the merger pursuant to Rule 6.1 of General Order 96-B.[77] The CPUC then directed staff to suspend the advice letter, "to draft and present to the Commission an OII into the merger, to gather facts and analyze data relevant to whether the proposal complies with applicable California law," and "to prepare comments to file at the FCC regarding the Commission's preliminary investigation of this merger and its OII process."[78] In opening the OII, the CPUC acted under authority pursuant to California Public Utilities Code Sections 216, 233, 234, and 851-857 and D.95-10-032.[79]

Due to many factors unique to the AT&T/T-Mobile merger, the CPUC adopted an aggressive timeline in its OII proceeding reviewing the merger. Notably, there was no formal review under Section 854 and no review at all under Section 706. While ORA agrees that the CPUC should open a fact-based OII here to gather facts and analyze data relevant to whether the proposal complies with applicable law, because the laws applicable to the two mergers and the underlying facts differ greatly, the timelines likewise should be quite different. The proposed timelines of the Protestors (ORA, CforAT, Greenlining, NAAC and TURN) carefully balance setting an aggressive schedule to review the merger with providing the CPUC and the parties enough time and opportunity to develop a fact-based, data-driven record.

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[75] The FCC's review of the Comcast/NBC Merger was 234 days; XM/Sirius Merger was 412 days; the FCC review of the AT&T/T-Mobile Merger was open for 178 days, but the FCC never approved the merger as AT&T withdrew its application (the Department of Justice had filed an antitrust lawsuit to stop the merger). The FCC and the U.S. Department of Justice have their own independent timelines for reviewing mergers. For example, the U.S. department of Justice approved the XM/Sirius Merger on March 24, 2008, four months prior to the FCC's approval on July 25, 2008.

[76] *Order Instituting Investigation on the Commission's Own Motion Into the Planned Purchase and Acquisition by AT&T Inc. of T-Mobile USA, Inc., and its Effect on California Ratepayers and the California Economy*, I.11-06-009 at 7.

[77] *Id.*

[78] *Id.*

[79] *Id.* at 3-6.

D. Conclusion

There is much at stake in this merger for California. The CPUC, in its great efforts and work in encouraging the deployment of broadband infrastructure to further economic growth through the state, can continue to further such benefits by closely examining the impact of the merger on broadband availability, access, and competition. In addition, the CPUC's review should not discount the impact on content and application providers as it directly impacts broadband deployment in California, consistent with Section 706. Content and application providers want access to high-speed Internet users. That market is dominated in California by Comcast and Time Warner Cable (which each have a terminating monopoly on their set of subscribers, though there is still competition within the California market as a whole). If the merger is approved, the players in that market collapse to one. Not only would this give the merged entity monopsony power in buying programs on the video/cable side, it would also give such entity more power to dictate terms to content providers (and even service/VoIP providers) who want to reach those subscribers. Subscribers, *e.g.,* the California residential consumers and small businesses that ORA represents, will be impacted because they may not be able to access the content that they want or need, and they may have to pay more for the content. This will likely have a profound effect on broadband deployment in California.

Furthermore, companies such as Comcast want to impose "tolls" to create a revenue stream, and so there is no incentive to build more infrastructures.[80] In fact, if the proposed merger is approved, there would be an incentive not to increase capacity and quality, because by restricting new buildout a merged Time Warner Cable/Comcast entity could potentially raise prices, citing to unsupported congestion. Similarly, there would not be an incentive for a merged entity to invest in infrastructure. All of these actions would directly harm California residential consumers and small businesses because they would pay higher prices, for potentially worse service. In light of these and other issues, the CPUC must assess what impact the proposed merger will have on California's Internet economy, particularly established companies and job-creating small business start-ups which develop content, applications, and services that depend on a vibrant, open Internet. This is consistent with the requirements of Section 706 and the legislative intent of Section 710.[81]

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[80] http://blog.netflix.com/2014/03/internet-tolls-and-case-for-strong-net.html; http://www.theverge.com/2014/5/22/5741748/google-fiber-netflix-isp-free-paid-peering; http://consumerist.com/2010/11/30/comcast-starts-online-video-tollbooth-netflix-supplier-says/

[81] The Legislative Counsel's Digest for SB 1161 states: "The Legislature finds and declares all of the following: (1) the continued vitality and success of California's technology and innovation sector of the economy is dependent on a business climate that supports the national and international nature of the Internet. . . . (3) California's innovation economy is leading the state's economic recovery . . . (5) California-based entrepreneurs and businesses are the global leaders in IP-based services and technologies. These leading technology companies, including content, services and infrastructure providers, represent some of the largest employers in California, contributing to billions of dollars of economic benefit to the state... (6) California consumers and businesses are driving the demand for faster networks, new and innovative apps and software, and continued innovation. As a result of this demand, network infrastructure companies invested billions of dollars in California in 2011. Internet voice communications connections are up over 22 percent, and entrepreneurs and innovators have launched

The CPUC has a duty under Section 706 to evaluate the proposed merger's impact on advanced communications, including on broadband customers and broadband competition. The CPUC also has a duty to review the impact of the proposed merger on California's policy to continue and advance its leadership in the Internet economy, including its well-earned and deserved reputation of cultivating small business start-ups which drive the development of innovative content, applications, and services that depend on an open Internet. Vibrant competition in the broadband access service market is a key element to maintaining an open Internet. The CPUC must determine whether the merger of three major broadband and VoIP providers (Comcast, Time Warner Cable, and Charter) will in the future advance and enhance customer choice among broadband access providers and greater availability of choices in content, applications, and services.

The best and most efficient way for the CPUC to conduct a fact-based, data-drive inquiry and assessment into the proposed merger is to open an OII. The OII should review all aspects of the transactions among Comcast, Time Warner Cable, Charter, and Bright House California, including review under Section 706, without restriction based on Section 710, and Section 854.

Sincerely,

/s/ Lindsay M. Brown

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Office of Ratepayer Advocates
California Public Utilities Commission
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close to a million apps to meet consumer demands." Legislative Counsel's Digest, SB 1161, Ch. 733, § 1(a). http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB1161.

ATTACHMENT A

The undersigned support and sign on to ORA's Letter of July 22, 2014 to Administrative Law Judge Karl Bemesderfer and Mr. Niki Bawa regarding Time Warner/Comcast Transfer of Control Application, A.14-04-013.

Melissa W. Kasnitz
The Center for Accessible Technology (CforAT)

Cassandra Yamasaki
National Asian American Coalition (NAAC)

Jason Wu
National Asian American Coalition (NAAC)

Leslie Mehta
The Utility Reform Network (TURN)

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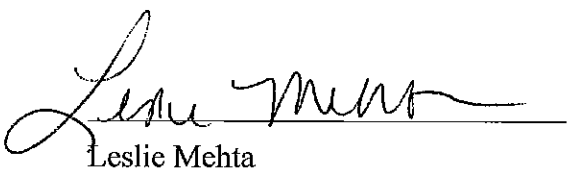
_____

Jason Wu
National Asian American Coalition (NAAC)



Leslie Mehta
The Utility Reform Network (TURN)

EXHIBIT 6

Comcast Master IP Backbone Services Agreement

(HIGHLY CONFIDENTIAL)

EXHIBIT 7

Comcast's Response to ORA Data Request, Set 1

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014) A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION RESPONSES TO FIRST SET OF DATA REQUESTS FROM THE OFFICE OF RATEPAYER ADVOCATES (DATA REQUEST NO. ORA-A.14-04-013.PHH-001)

[PUBLIC VERSION]

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014) A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION RESPONSES TO FIRST SET OF DATA REQUESTS FROM THE OFFICE OF RATEPAYER ADVOCATES (DATA REQUEST NO. ORA-A.14-04-013.PHH-001)

[PUBLIC VERSION]

Pursuant to Rule 10.1 of the California Public Utilities Commission ("CPUC"), Comcast Corporation ("Comcast") provides responses to the data requests ("DRs") served on it by the Office of Ratepayer Advocates, California Public Utilities Commission ("ORA").

These responses are subject to the general objections stated below and the specific objections posed in each response. Comcast's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this response.

GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, Comcast may restate one or more of these general objections. However, these general objections apply to each individual request and Comcast's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive Comcast's right to object to the

questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality, privilege and admissibility as evidence for any purpose, or to other requests for production. Comcast reserves the right to object on appropriate grounds to the use of such information and documents. Comcast hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. Comcast objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. Comcast objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to Comcast together with any copies.

3. Comcast objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to Comcast.

4. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to Comcast.

5. Comcast objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

6. Comcast objects to each DR to the extent that it exceeds the requirements of applicable law or purports to impose upon Comcast any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that is publicly available or readily accessible to the requesting party(ies).

10. Comcast objects to each DR to the extent that it requests documents or materials not in the Comcast's possession, custody or control.

11. Comcast objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

12. Comcast objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are Comcast employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, Comcast generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following responses.

I. RESPONSES

Unless otherwise stated, Comcast's responses to DRs requesting specific figures provide data as of June 30, 2014.

Q-1:1. Please identify the total number of households passed where Comcast broadband service is available in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See ORA Broadband Services Spreadsheet Propounded to Comcast, attached hereto as Confidential Exhibit ORA/Comcast R:1-1, at cell # B145099. Data provided in cell # B145099 of the Broadband Services Spreadsheet is as of August 28, 2014.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:2. Please identify the total number of households subscribed to Comcast broadband services in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See ORA Broadband Services Spreadsheet Propounded to Comcast, attached hereto as Confidential Exhibit ORA/Comcast R:1-1, at cell # C145099. Data provided in cell # C145099 of the Broadband Services Spreadsheet is as of August 28, 2014.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:3. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of households passed.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See ORA Broadband Services Spreadsheet Propounded to Comcast, attached hereto as Confidential Exhibit ORA/Comcast R:1-1 at Column B. Data provided in column B of the Broadband Services Spreadsheet is as of August 28, 2014.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:4. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of households subscribing to Comcast broadband service.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See ORA Broadband Services Spreadsheet Propounded to Comcast, attached hereto as Confidential Exhibit ORA/Comcast R:1-1, at Column C. Data provided in Column C of the Broadband Services Spreadsheet is as of August 28, 2014.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:5. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the maximum advertised download speeds (Mbps) for residential Comcast broadband services.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

The current maximum advertised download speed for the majority of census blocks where Comcast's broadband residential service is available in California is 150 Mbps; the maximum advertised download speed for the vast majority of all remaining census blocks where Comcast's broadband residential service is available in California is 105 Mbps.

Sponsor: Jim Janco, Director, Operations Compliance

Q-1:6. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the maximum advertised upload speeds (Mbps) for residential Comcast broadband services.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

As of June 30, 2014, the maximum advertised upload speed for all census blocks where Comcast's broadband residential service was available in California was 20 Mbps.

Sponsor: Jim Janco, Director, Operations Compliance

Q-1:7. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the price associated with the maximum advertised speed tier for residential Comcast broadband services including:

a. Average initial promotional price of service ($ per month and number of months during which the promotional price remains in effect) within the Census Block

b. Average price of service following the expiration of the initial promotional cost of service ($ per month) within the Census Block.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not compile or maintain data regarding the price associated with the maximum advertised speed tier for residential Comcast broadband services on a census block level. As of June 30, 2014, the maximum advertised speed tier for residential Comcast broadband services offered in California was Extreme 105 at 105 mbps down/20 mbps up. The everyday price of that service in California was $114.95 EDP per month. During the month of June 2014, the Extreme 105 service was not offered at a promotional discount. Subsequent to June 30, 2014 and beginning in early August 2014 the maximum advertised speed tier for residential Comcast broadband services offered in California was Extreme at 150 mbps down/20 mbps up. The everyday price of that service in California was $114.95 EDP per month

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:8. Please list all Your residential broadband products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

In response to subparts (a), (b) and (d) above, please see the Services & Pricing Rate Card for Berkley, CA (effective January 1, 2014), attached hereto as Exhibit ORA/Comcast R:1-8, containing a representative sample of the residential broadband products/services that Comcast offers in California. Comcast's residential broadband services are rated the same throughout California, with the exception of Santa Cruz.

In further response to subpart (b) above, additional descriptive information about Comcast's residential broadband products/services are available via the following webpage: http://www.comcast.com/internet-service.html (last visited September 8, 2014).

In response to subpart (c) above, the following is speed tier information for Comcast's residential broadband products/services offered in California as of June 30, 2014:

- Economy Plus*: 3 Mbps
- Performance**: 25 Mbps
- Blast: 50 Mbps
- Extreme105: 105 Mbps
  ** Internet Essentials* (*subset of Economy Plus*): *3 Mbps*
  *** Performance Starter* (*subset of Performance*): *25 Mbps*

In response to subpart (e):

- Comcast's Agreement for Residential Services, including the terms and conditions for Comcast's residential broadband services, is available for review at http://www.comcast.com/Corporate/Customers/Policies/SubscriberAgreement.html (last visited Sept. 10, 2014).

- Comcast's Acceptable Use Policy applicable to its residential broadband service is available for review at

http://www.comcast.com/Corporate/Customers/Policies/HighSpeedInternetAUP.html (last visited Sept. 10, 2014).

In response to subpart (f): The following states the total number of subscribers for each of Comcast's residential broadband products/services as of June 30, 2014:

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:9. Please provide the information requested in items (7) and (8) separately for each year over the period 2009 through and including 2014.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, in that the company does not retain the request information for prior years. The company also objects on the grounds that the request seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not have a comprehensive list of the residential broadband products/services and pricing that it has offered within California from 2009 through and including 2014 that responds to all of the data points sought by Q-1:7 and Q-1:8. Attached hereto as Exhibit ORA/Comcast R:1-9 are rate cards, dated 2009 through 2013, for Comcast's services offered in Berkley, CA. Those rate cards contain a representative sample of the residential broadband products/services offered by Comcast within California during those years. The 2014 Services & Pricing Rate Card for Comcast's services offered in Berkley, CA is attached as Exhibit ORA/Comcast R:1-8.

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:10. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not conduct speed tests to determine the actual average download speeds of households on a census block level. However, the FCC's most recent *Measuring Broadband America* report released in June found, once again, that Comcast consistently delivers more than its advertised speeds every hour of the day, every day of the week, and even during peak usage periods. *See* Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the U.S. at 34, Office of Eng'g & Tech. & Consumer & Governmental Affairs Bureau, FCC (June 2014), http://data.fcc.gov/download/measuring-broadband-america/2014/2014-Fixed-Measuring-Broadband-America-Report.pdf (noting that Comcast demonstrated average of 113% of advertised download speeds).

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:11. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps during peak times in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not conduct speed tests to determine the actual average download speeds of households on a census block level. However, the FCC's most recent *Measuring Broadband America* report released in June found, once again, that Comcast consistently delivers more than its advertised speeds every hour of the day, every day of the week, and even during peak usage periods. *See* Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the U.S. at 34, Office of Eng'g & Tech. & Consumer & Governmental Affairs Bureau, FCC (June 2014), http://data.fcc.gov/download/measuring-broadband-america/2014/2014-Fixed-Measuring-Broadband-America-Report.pdf (noting that Comcast demonstrated average of 113% of advertised download speeds).

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:12. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not conduct speed tests to determine the actual average download speeds of households on a census block level. However, the FCC's most recent *Measuring Broadband America* report released in June found, once again, that Comcast consistently delivers more than its advertised speeds every hour of the day, every day of the week, and even during peak usage periods. *See* Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the U.S. at 34, Office of Eng'g & Tech. & Consumer & Governmental Affairs Bureau, FCC (June 2014), http://data.fcc.gov/download/measuring-broadband-america/2014/2014-Fixed-Measuring-Broadband-America-Report.pdf (noting that Comcast demonstrated average of 113% of advertised download speeds).

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:13. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps during peak times in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not conduct speed tests to determine the actual average download speeds of households on a census block level. However, the FCC's most recent *Measuring Broadband America* report released in June found, once again, that Comcast consistently delivers more than its advertised speeds every hour of the day, every day of the week, and even during peak usage periods. *See* Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the U.S. at 34, Office of Eng'g & Tech. & Consumer & Governmental Affairs Bureau, FCC (June 2014), http://data.fcc.gov/download/measuring-broadband-america/2014/2014-Fixed-Measuring-Broadband-America-Report.pdf (noting that Comcast demonstrated average of 113% of advertised download speeds).

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:14. Is Comcast broadband service offered as a stand-alone service in California?

Response:

Yes, Comcast's broadband service is offered as a stand-alone service in California.

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:15. If the answer to Question #14 is yes, please identify the following:

a. Product/service name

b. Description

c. Terms and Conditions

d. Price

e. Number of households subscribed to stand-alone broadband service in California

Response:

The requested information for subparts (a)-(d) of this data request is stated in the Response to Q-1:8 and Exhibit ORA/Comcast R:1-8 hereto. In response to subpart (e), there are **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** households subscribed to stand-alone broadband service in California.

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:16. Does Comcast define small businesses as a business with up to 20 employees?

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast markets certain products and services as being well-suited for the needs of small businesses, and for that marketing purpose, defines a small business as a business with up to 20 employees. Comcast does not, however, limit the offering or sale of its small business products and services to businesses with up to 20 employees, and does not track the sale of its small business products and services based on the employee count of a business.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:17. Please identify the total number of small-sized businesses passed by Comcast facilities.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track the number of small-sized businesses passed by its facilities based on the employee count of the businesses. Facilities capable of delivering Comcast's small business services pass **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** business premises in Comcast's service territory in California. Comcast does not collect or retain data to state whether those business premises are occupied by small, medium, or large sized businesses based on employee count.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:18. Please identify the total number of small-sized business subscribed to Comcast broadband services in California.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track subscriptions for its small business services based on the employee count of a business. [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California have subscribed to Comcast's broadband services marketed as being well-suited for small businesses. Comcast does not collect or retain data to state the size of those businesses based on employee count.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:19. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of all small-sized businesses passed where Comcast broadband service is available.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted]

[redacted] **END CONFIDENTIAL]**

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:20. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of all small-sized business subscribed to Comcast broadband service.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted]

[redacted]

[END CONFIDENTIAL]

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:21. Please list all Your small business products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

In response to subparts (a), (b), (c), and (f) above, please see the spreadsheet stating Comcast's products/services marketed as being well-suited for small and medium-sized businesses, attached hereto as Confidential Exhibit ORA/Comcast R:1-21.1 with respect to Comcast's products/services listed as SMB Data, Static IP, and Business Class Voice.

In response to subpart (d), please see Comcast's pricing list for its business voice services, attached hereto as Exhibit ORA/Comcast R:1-21.2. The following price information applies to Comcast's SMB Data and Static IP services currently sold in California:

- SMB Data:
  - Starter Package: $69.95
  - Deluxe 50: $109.95
  - Deluxe 75: $149.95
  - Deluxe 100: $199.95
  - Deluxe 150: $249.95

- Static IP: $14.95

In response to subpart (e) above, the Terms and Conditions for Comcast's products/services marketed to small businesses are available at: http://business.comcast.com/terms-conditions-smb (last visited September 10, 2014).

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:22. Does Comcast define medium-sized business as a business with 21 and up to 500 employees?

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast markets certain products and services as being well-suited for the needs of medium-sized businesses, and for that marketing purpose, defines medium-sized businesses as businesses with 21 and up to 500 employees. Comcast does not, however, limit the offering or sale of its medium-sized business products and services to businesses with 21 and up to 500 employees, and does not track the sale of its medium-sized business products and services based on the employee count of a business.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:23. Please identify the total number of medium-sized businesses passed by Comcast facilities.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track the number of medium-sized businesses passed by its facilities based on the employee count of the businesses. Facilities capable of delivering Comcast's medium-sized business services pass [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California, which, combined, have a [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] serviceable locations. Comcast does not collect or retain data to state whether those businesses are small, medium, or large sized based on employee count.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:24. Please identify the total number of medium-sized business subscribed to Comcast broadband services in California.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track subscriptions for its medium-sized business services based on the employee count of a business. [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California have subscribed to Comcast's broadband services marketed as being well-suited for medium-sized businesses. Comcast does not collect or retain data to state the size of those businesses based on employee count.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:25. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of all medium sized business passed by Comcast facilities.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted]

[redacted] **[END CONFIDENTIAL]**

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:26. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of all medium sized business subscribed to Comcast broadband service.

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted]

[redacted]

[END CONFIDENTIAL]

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:27. Please list all Your medium-sized business broadband products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

In response to subparts (a), (b) and (f) above, please see Confidential Exhibit ORA/Comcast R:1-21.1 with respect to Comcast's as Metro E (Ethernet) service.

In further response to subpart (b) and (c) above, additional information describing Comcast's Metro E service is available at: http://business.comcast.com/ethernet/products (last visited September 10, 2014).

In response to subpart (d) above, please see Confidential Exhibit ORA/Comcast R:1-27.

In response to subpart (e) above, the Terms and Conditions for Comcast's products/services marketed to small businesses are available at: http://business.comcast.com/terms-conditions-ent (last visited September 10, 2014).

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:28. Please identify all voice services offered by your company:

a. Product/service name

b. Description (include if your voice service is VoIP)

c. Is the product/service offered as a stand-alone service?

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

Comcast's Business Voice Services

In response to subparts (a), (b), (d) and (f) above, please see Response to Q-1:21 with respect to Comcast's voice services marketed as being well-suited for small businesses, Confidential Exhibit ORA/Comcast R:1-21.1 for descriptions of Comcast's business voice services, and the pricing lists for Comcast's business voice services attached hereto as Exhibit ORA/Comcast R:1-21.2.

In response to subpart (c) above, yes, Comcast's business voice services are offered as stand-alone services.

In response to subpart (e) above for Comcast's business voice services, please see Response Q-1:21 with respect to Comcast's voice services marketed as being well-suited for small businesses. The Terms and Conditions for Comcast's other business voice services are available at: http://business.comcast.com/terms-conditions-ent (last visited September 10, 2014).

Comcast's Residential Voice Services

In response to subparts (a), (b), and (d) above, please see the pricing lists for Comcast's XFINITY Voice Unlimited and XFINITY Voice Local with More services, attached hereto as Exhibit ORA/Comcast R:1-28.

In further response to subpart (b), yes, Comcast's residential voice services are VoIP services.

In response to subpart (c) above, yes, Comcast offers both the XFINITY Voice Unlimited and XFINITY Voice Local with More services as stand-alone services.

In response to subpart (e) above:

- Comcast's Agreement for Residential Services, including the terms and conditions for Comcast's residential voice services, is available for review at http://www.comcast.com/Corporate/Customers/Policies/SubscriberAgreement.html (last visited Sept. 4, 2014).

- Comcast's Acceptable Use Policy for its residential voice services is available for review at http://www.comcast.com/Corporate/Customers/Policies/VoiceServices.html (last visited Sept. 4, 2014).

In response to subpart (f) above, total subscribers by service in California:

- **XFINITY Voice Unlimited: [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL]**
- **XFINITY Voice Local with More: [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL]**

Sponsors:

Patti Loyack, Vice President, Broadband Voice
Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:29. Please identify the total number of households passed where Comcast voice service is available in California.

Response:

There are **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** households passed where Comcast's residential voice services are available.

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-1:30. Please identify the total number of households subscribed to Comcast voice services in California.

Response:

There are **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** households subscribed to Comcast's residential voice services in California.

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-1:31. Please identify all Your existing current broadband and voice deployment projects currently underway in California that includes:

a. Name of project

b. Description

c. Speeds offered

d. County/city/community name

e. Status of project

f. Estimated time of completion

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsors:

Patti Loyack, Vice President, Broadband Voice
John Gutierrez, Director, Government and Regulatory Affairs

Q-1:32. Please identify all Your planned broadband and voice deployment in California in the next three years. Please include the following:

a. Description

b. Speeds offered

c. County/city/community name

d. Estimated deployment schedule

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsors:

Patti Loyack, Vice President, Broadband Voice
John Gutierrez, Director, Government and Regulatory Affairs

Q-1:33. Please identify and describe how Comcast decides whether to invest and expand its network into a community and what criteria is considered in making this determination. Identify all locations falling generally within or proximate to Comcast's California operating areas where Comcast has specifically declined to furnish any service that had been requested by customers, developers, communities, or others at any time from and after 2009. For each such instance, provide the specific reason or reasons for Comcast's decision not to provide the requested service.

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous and overbroad. The request fails to define key terms and concepts, including "locations … proximate to" Comcast's operating areas. As such, it is not clear what is intended by the term "otherwise," or what services the request is intended to cover. To the extent that this request seeks information about Comcast's video/cable services the company also objects on the grounds that such a request is outside the scope of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast evaluates opportunities and requests to invest and expand its network into a community on a case-by-case basis taking into account various business considerations such as costs of construction, density, ability to obtain necessary governmental authorizations on reasonable terms, ability to obtain necessary agreements with developers or other parties on commercially reasonable terms, and other demands for capital expenditures.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:34. Does Comcast believe that it has an obligation (legal or otherwise) to provide service to any area within California upon request for service?

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous and overbroad. The request fails to define key terms, including "service", "obligation", and "otherwise." As such, it is not clear what is intended by the term "otherwise", or what services the request is intended to cover. To the extent that this request seeks information about Comcast's video/cable services the company also objects on the grounds that such a request is outside the scope of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. Comcast further objects to the extent this request calls for a legal opinion.

Subject to the foregoing objections, Comcast responds as follows:

Response:

With respect to local exchange services, the Commission has imposed certain legal build-out obligations upon competitive local carriers ("CLCs") that provide competitive local exchange services in California. Specifically, such providers are "required to serve customers requesting service within their designated service territory" and "serve all customers who request service and whose premises are within 300 feet of the CLC's transmission facilities used to provide service so long as the CLC can reasonably obtain access to the point of demarcation on the customer's premises, but the CLC shall not be required to build out facilities beyond such 300 feet." *See* D.95-07-054. Comcast's common carrier subsidiary, Comcast Phone of California, LLC ("Comcast Phone") is certified as a CLC, but does not provide local exchange services to retail customers in California

With respect to broadband services, Comcast is not aware of a legal obligation to provide service to any area within California upon request for service.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:35. Please provide Your five-year forecasted capital investment in California by county.

Objection:

Comcast object to this request on the grounds that the request is vague and ambiguous; further, the request seeks the production of documents not in existence.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:36. Will Your existing build-out plans be affected by the planned merger? If yes, what considerations are involved? Please state specifically how Your build-out plans will be affected by the planned merger.

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning build-out plans outside of California, Comcast further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:37. Are there any build-out projects for which further action would be dependent on the merger happening? If yes, how will the timelines for these projects be set?

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning build-out plans outside of California, Comcast further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:38. Please identify any and all backhaul services You offer in California, including:

a. Type of service

b. Description

c. Speeds

d. Price

e. Terms and Conditions

f. Capacity utilized

g. Capacity available

Response:

a. Comcast provides fiber Ethernet Virtual Private Line ("EVPL") as its standard product for cell tower backhaul.

b. EVPL provides an Ethernet Virtual Connection between multiple customer locations. This service supports Service Multiplexed User Network Interfaces, which enables a single physical connection to Customer Premise Equipment for multiple virtual connections.

c. Comcast provides cell backhaul in speeds ranging from 50M to 1G.

d. Prices are established on an individual case basis depending upon the specific characteristics of the arrangement.

e. Comcast offers cell backhaul pursuant to individualized terms and conditions that vary by customer and contract.

f. Cell backhaul capacity is dedicated to each customer as a committed information rate, and utilization on each individual circuit is managed by the customer, not Comcast.

g. Cell backhaul capacity is dedicated to each customer as a committed information rate and utilization on each individual circuit is managed by the customer, not Comcast.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:39. Please provide a map of the location of Your backhaul cable/fiber in California.

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:40. How many customers do You currently provide backhaul services to in California?

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:41. Please identify the entities/customer names that obtain backhaul services from Comcast in California.

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. Comcast further objects to this request on the grounds that the request seeks the production of confidential information concerning Comcast's customers which is protected by numerous privacy laws, and which may not be disclosed without prior consent.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's backhaul service agreements contain non-disclosure provisions that prevent Comcast from disclosing the agreement without providing notice, and/or obtaining the other party's consent. Comcast has communicated with its backhaul services customers to determine if they will consent to the disclosure of this information. If such entities consent to such disclosure, this information will be provided as a supplement to this response.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:42. Please identify all of Your competitors for backhaul services in California and types of services they offer.

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. Comcast further objects on the grounds that the request seeks the production of information not in Comcast's possession or control.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's response to this request is based on information obtained through reasonable inquiry of knowledgeable employees of the company and from publicly available sources. Subject to the foregoing, while Comcast does not maintain a comprehensive list of all of the company's competitors for backhaul services, the company is generally aware that the following non-exhaustive list of entities also provide backhaul services in California: ANPI, AT&T, CenturyLink, Cogent, Earthlink, Global Capacity, iKano, Integra, Level 3, Mammoth Networks, MegaPath, Nitel, Pac West, Sprint, Surewest, TelePacific, TW Telecom, Verizon, Windstream, XO Communications, and Zayo.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:43. Identify the number of cell sites in California that You provide cellular backhaul services to.

Response:

Comcast provides cellular backhaul services to **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** cell sites in California.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:44. Does Comcast obtain backhaul services from other providers in California?

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:45. Identify the entity name(s) from which Comcast obtains backhaul services.

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:46. Please provide all contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to, Netflix, Amazon, and Hulu. Please include all appendices and attachments to the agreements.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

Q-1:47. Please provide all contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to Level 3, AT&T, AT&T Wireless, Verizon, Verizon Wireless, and Cogent. Please include all appendices and attachments to the agreements.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Further, to the extent that this request seeks production of voice network interconnection agreements subject to Section 251 of the Communications Act, such documents are already filed with the Commission. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

Q-1:48. Please identify any and all wholesale services You currently provide to third parties, including:

a. Name of product/service

b. Description

c. Speeds, where applicable

d. Price

e. Number of subscribers per product/service

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

a. (1) Wholesale Voice Termination Services
(2) E-Access Ethernet Private Line ("EPL") Over Fiber and Hybrid Fiber Coax ("HFC")
(3) Ethernet Virtual Private Line ("EVPL")

b. (1) **Wholesale Voice Termination Services:** This service is offered on an as-available basis and provides Customer with combined transport and termination for the purpose of delivering certain voice communications traffic received from Customer to the Public Switched Telephone Network (PSTN) and/or to Voice-over-IP service providers including Comcast's affiliated retail interconnected VoIP providers. This service does not provide the delivery of inbound calls, or outbound calls to certain telephone numbers, including but not limited to Dial Around (101XXX), 976, 900, 700, 500, 950, 8YY toll-free, N11 (including 911), outbound shore-to-ship calling, 0+ local, operator assistance, calls utilizing Telephone Relay Service (TRS), directory assistance, or any calls destined to invalid singe numbers or formats or invalid NPA/NXXs.

(2) **E-Access EPL:** Metro Ethernet Forum Carrier Ethernet 2.0 compliant last mile access product with three class of service tiers for fiber (Premium, Priority, Basic) and two class of service tiers for Ethernet over HFC (Priority, Basic)

(3) **EVPL:** Point-to-multipoint layer 2 Ethernet Virtual Private LAN service

c. (1) **Wholesale Voice Termination Services**: Not applicable. This service is not sold or provisioned in terms of speeds.

(2) **E-Access EPL & EVPL:**

- **E-Access EPL:** (a) Over HFC: 2M-10M; (b) Over Fiber: 2M-1G
- **EVPL:** 2M – 1G

d. (1) **Wholesale Voice Termination Services:** There are no service rate cards. Pricing and commercial terms are negotiated on a customer-by-customer basis and can change on a frequent basis.

(2) **E-Access EPL & EVPL:** Varies based upon each customer's Master Service Agreement.

e. (1) **Wholesale Voice Termination Services: [BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

(2) **E-Access EPL: [BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]**

(3) **EVPL: [BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:49. Please identify all of Your competitors in the wholesale services in California.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast objects on the grounds that the request exceeds the established scope of the proceeding. Comcast objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. Comcast further objects on the grounds that the request seeks the production of information not in Comcast's possession or control.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's response to this request is based on information obtained through reasonable inquiry of knowledgeable employees of the company and from publicly available sources. Subject to the foregoing, while Comcast does not maintain a comprehensive list of all of the company's competitors for wholesale services, the company is generally aware that the following non-exhaustive list of entities that also provide wholesale services in California:

a. **Wholesale Voice Termination Services:** Level 3, Intelepeer/Peerless, Certain Communications, Airespring, O1 Communications, CenturyLink, Verizon, and AT&T.

b. **E-Access EPL & EVPL:** ANPI, AT&T, CenturyLink, Cogent, Earthlink, Global Capacity, iKano, Integra, Level 3, Mammoth Networks, MegaPath, Nitel, Pac West, Sprint, Surewest, TelePacific, TW Telecom, Verizon, Windstream, XO Communications, and Zayo.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:50. Provide full details on Your integration plans with Joint Applicants.

a. How will Joint Applicants facilities be integrated into Comcast facilities?

b. How will Joint Applicants operations be integrated into Comcast operations?

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:51. How will these integration plans affect Your business operationally?

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:52. Please provide all specific benefits You claim will result from the proposed merger for California customers? Please provide justification for Your claims.

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Please see the Application on file with the CPUC in docket A.14-04-013, which describes the public interest benefits of the transaction for California customers. Further, the Public Interest Statement on file with the FCC describes other public interest benefits of the merger.

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:53. Please provide Comcast's revenue in California for the years 2011, 2012 and 2013, and projections for 2014. Also provide annual revenues for these same periods for the following categories:

a. Residential: video, high-speed internet, and Voice Services

b. Business: video, high-speed internet, and Voice Services

c. Enterprise Ethernet Services

d. Wholesale IP Services

e. Carrier Backhaul Services

f. Advertising

g. Other (Describe)

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Attached hereto as Confidential Exhibit ORA/Comcast R:1-53 is Comcast Cable Communications' unaudited income statements for the company's systems with telephony operations in California, for years 2013, 2012 and 2011. This exhibit, which has been excerpted from Comcast's annual report on file with the Commission contains confidential and proprietary information and is subject to Public Utility Code 583. Note that these income statements include revenues that are not subject to regulation by the CPUC. Included in Exhibit ORA/Comcast R-1:53 is a 2014 revenue projection for those services subject to regulation by the CPUC. Additional revenue projections will be provided as a supplement to this response, if such projections are available.

Sponsor: Warren Fitting, Director, Government and Regulatory Affairs

Q-1:54. Please provide Comcast's operating costs and expenses in California for the years 2011, 2012 and 2013, and projections for 2014. Also show revenues for the following categories:

a. Residential: video, high-speed Internet, and Voice Services

b. Business: video, high-speed Internet, and Voice Services

c. Enterprise Ethernet Services

d. Wholesale IP Services

e. Carrier Backhaul Services

f. Advertising

g. Other (Describe)

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Response to Q-1:53.

Sponsor: Warren Fitting, Director, Government and Regulatory Affairs

Q-1:55. Please provide anticipated merger-related and restructuring impacts on Comcast's financial structure in California, including details on residential and business cable communications services, i.e., video, high-speed Internet and Voice Services.

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. Finally, Comcast also objects on the grounds that the request seeks information about "anticipated" facts or circumstances which may arise in the future, and which would require the company to create a document not in existence.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast has not determined whether there will be any merger-related and restructuring impacts on Comcast's financial structure in California.

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-1:56. What is the current participation level of residential customers in Lifeline in California with respect to services offered by Comcast?

Response:

Comcast does not provide Lifeline services in California at this time.

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-1:57. Please provide a detailed list of all mergers and acquisitions of Comcast of companies operating in California from 1990 to 2013.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the docket. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast provides the following list of the company's mergers and acquisition involving voice or broadband service providers within the last five years.

- 2010 - Comcast Phone of California, LLC acquisition of CIMCO Communications, Inc. California assets.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:58. Have You previously offered service to customers in the service territories of any of the Joint Applicants in this application?

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request is vague, ambiguous, and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

At no time has Comcast or TWC offered facilities-based services in precisely the same service area and in direct competition with one another. Comcast did previously serve portions of the greater Los Angeles area when it was the franchised operator in several communities in the greater Los Angeles area. However, in 2006 during the sale of certain Adelphia cable systems Comcast "swapped" its greater Los Angeles area properties with Time Warner Cable, which then became the franchised operator in those communities.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:59. If the answer to Question #58 is yes, and You do not currently offer service, state all the reasons why You ceased offering service there and provide the details of the transfer transaction.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request is vague and ambiguous in that it requests details of the "transfer transaction"—a term which is not defined.

Subject to the foregoing objections, Comcast responds as follows:

Response:

As explained in response to Q-1:58, Comcast has never offered facilities-based services in precisely the same service area and in direct competition with TWC. Comcast previously served areas adjacent to TWC in the greater Los Angeles area but no longer does because it swapped the franchised cable systems in such areas with Time Warner Cable in 2006.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:60. If the answer to Question #58 is no, state all reasons why You have not offered service Joint Applicants territories.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request is vague, ambiguous, and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

As explained in the Application, Time Warner Cable and Comcast Corporation do not engage in direct facilities-based competition with one another in California.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:61. Provide the total number of commercial buildings "lit" by Comcast – i.e., where Comcast- owned fiber optic cable facilities are in place – in Comcast's California operating areas. For purposes of this request, "owned" facilities also includes Indefeasible Rights of Use ("IRUs") issued to Comcast.

Response:

As of August 2014, there are a total of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** commercial buildings lit by Comcast in Comcast's California operating areas.

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:62. Provide the number of Comcast-owned "lit" buildings in Comcast's California operating areas that are also served by fiber optic facilities owned by Time Warner Cable, Bright House Networks, and Charter. For purposes of this request, "owned" facilities also include facilities under the control of Comcast, Time Warner Cable, Bright House Networks, or Charter via IRUs.

Response:

[BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL]

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:63. Provide the number of Comcast-owned "lit" buildings in Comcast's California operating areas at which fiber optic facilities owned by any other non-ILEC service provider other than Time Warner Cable, Bright House Networks, and Charter. For purposes of this request, "owned" facilities also includes IRUs.

Objection:

Comcast objects to this request on the grounds that it is vague, ambiguous, unduly burdensome and overbroad. The request appears to be incomplete and the drafter's intent is unclear. Further the company also objects on the grounds that the request seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, the company also objects on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company.

Response:

[BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL]

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:64. Indicate the total number of locations in Comcast's California operating areas at which at least one service provider other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:65. Indicate the total number of locations in Comcast's California operating areas at which at least two different service providers other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:66. Please identify all operating areas in which Comcast offers cable television service in California in which Comcast provides broadcast television stations on an encrypted basis.

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further object to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

Q-1:67. To the extent that any of the other merging entities currently does not encrypt broadcast television stations, is it Comcast's intention to convert those systems to encryption of broadcast television stations following the merger?

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further object to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

Q-1:68. Using the attached Broadband Services spreadsheet template, please identify each Census Block where Comcast business Ethernet services are currently available in California. Business Ethernet Services include Comcast Ethernet Virtual Private Line Service ("EVPL"), Comcast Ethernet Network Service, Comcast Business Ethernet for Branch Offices, and Comcast Ethernet Private Line Service.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See ORA Broadband Services Spreadsheet Propounded to Comcast, attached hereto as Confidential Exhibit ORA/Comcast R:1-1, at Column P. Data provided in Column P of the Broadband Services Spreadsheet is as of August 28, 2014. Notwithstanding the foregoing, the availability of Comcast business Ethernet services are subject to certain technical and operational limitations, such as the completion of internal cost and rate of return analyses. Comcast must consider multiple additional economic and other factors in determining whether it can deploy service to any location within its footprint. As such, these services are not necessarily available upon request.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:69. Indicate which of the business Ethernet services identified at No. 68 are also being offered in California, perhaps under different descriptions or brand names, by any of the merging parties. Provide the name and description of each such service, and identify to which Comcast service the other parties' services is equivalent to.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Information concerning business Ethernet services identified in Q-1:68, offered by any of the other merging parties includes, but is not limited to, California Teleconnect Fund services offered pursuant to a tariff by Time Warner Cable and Charter Communications.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:70. With respect to each of the services identified at No. 68 and 69 and for each Census Block where the service is currently available in California, identify all of Your current competitors offering similar services at each such location, including the parties to the proposed merger and all other providers.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response: Comcast's response to this request is based on information obtained through reasonable inquiry of knowledgeable employees of the company and from publicly available sources, but does not provide a comprehensive list of all competitors. Subject to the foregoing, Comcast does not maintain a comprehensive list of all of the company's competitors for Ethernet services at each location. However, the company is generally aware that the following non-exhaustive list of entities also provide Ethernet services in California: AT&T, CenturyLink, Level 3, Sprint, TW Telecom, Verizon, Windstream, XO Communications, and Zayo.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:71. With respect to each of the services identified at No. 68 and 69, does Comcast offer such services in situations where a customer's geographic coverage requirements extend beyond current Comcast operating areas? If yes, please describe in detail the nature of the relationship between Comcast and any connecting provider involved in the furnishing of the service to such customer, including the manner in which such multi-provider services are priced, the entity that acts as the prime contact for the customer, the process for coordination of installation and ongoing maintenance of the service, revenue-sharing or revenue-splitting arrangements between Comcast and such other provider(s). If such multi-provider arrangements are documented in formal written agreements, provide copies of all such agreements, including all appendices and attachments.

Response:

[BEGIN CONFIDENTIAL] [redacted]

[redacted] **[END CONFIDENTIAL]**

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:72. With respect to the multi-provider arrangements referenced at No. 71 above, identify all providers with which such arrangements have been established. Indicate whether and if so which of the merging parties Comcast currently provides multi-provider business Ethernet, backhaul, or other telecommunications services.

Response:

Comcast purchases services from the following Ethernet Providers for E-Access Services solely to serve Comcast customer locations that are located outside of Comcast's local franchise areas:

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

Q-1:73. With respect to the multi-provider arrangements of the type referenced at No. 71 above, identify all providers with which such arrangements have been established by any of the other merging entities, and identify the providers with which such entities have entered into such multi-provider arrangements.

Objection:

Comcast objects to this request to the extent that it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted]

[redacted]

[END CONFIDENTIAL]

Sponsor: Kevin O'Toole, Senior Vice President and General Manager, New Business Solutions

By: _/s/_____

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Dated: September 11, 2014

PUBLIC VERSION/REDACTED

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

CONFIDENTIAL EXHIBIT ORA/COMCAST R-1:1

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

EXHIBIT ORA/COMCAST R-1:8

TRIPLE PLAY PACKAGES[1]

TRIPLE PLAY PACKAGES[2]

Starter XF Triple Play Bundle
Includes Digital Starter for primary outlet, Performance Internet and XFINITY Voice Unlimited™ — $149.95
SurePrice[3] — $119.99

Preferred XF Triple Play Bundle
Includes Digital Preferred for primary outlet, Performance Internet and XFINITY Voice Unlimited™ — $159.95
SurePrice[3] — $129.99

HD Preferred XF Triple Play Bundle
Includes Digital Preferred for primary outlet, HD Technology Fee, Starz®, Performance Internet and XFINITY Voice Unlimited™ — $169.95
SurePrice[3] — $139.99

HD Preferred Plus XF Triple Play Bundle
Includes Digital Preferred for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet and XFINITY Voice Unlimited™ — $189.95
SurePrice[3] — $159.99

HD Premier XF Triple Play Bundle
Includes Digital Premier with HD DVR Service or AnyRoom® DVR Service for primary outlet, HD Technology Fee, Blast!® Internet and XFINITY Voice Unlimited™ — $219.95
SurePrice[3] — $179.99

HD Complete XF Triple Play Bundle
Includes Digital Premier, The Movie Channel® and AnyRoom® DVR Service for primary outlet, Digital Additional Outlet Service on up to 3 TVs, HD Technology Fee, Blast!® Internet, Wireless Gateway, and XFINITY Voice Unlimited™ — $249.95
SurePrice[3] — $219.99

XH PF Starter Triple Play Bundle[4]
Includes Digital Starter for primary outlet, Performance Internet and XFINITY Home - Secure 300 — $149.95
SurePrice[3] — $119.99

XH PF Preferred Triple Play Bundle[4]
Includes Digital Preferred for primary outlet, Performance Internet and XFINITY Home - Secure 300 — $159.95
SurePrice[3] — $129.99

XH PF HD Preferred Triple Play Bundle[4]
Includes Digital Preferred for primary outlet, HD Technology Fee, Starz®, Performance Internet and XFINITY Home - Secure 300 — $169.95
SurePrice[3] — $139.99

XH PF HD Preferred Plus Triple Play Bundle[4]
Includes Digital Preferred for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet and XFINITY Home - Secure 300 — $189.95
SurePrice[3] — $159.99

XH PF HD Premier Triple Play Bundle[4]
Includes Digital Premier with HD DVR Service or AnyRoom® DVR Service for primary outlet, HD Technology Fee, Blast!® Internet and XFINITY Home - Secure 300 — $219.95
SurePrice[3] — $179.99

XH PF HD Complete Triple Play Bundle[4]
Includes Digital Premier, The Movie Channel® and AnyRoom® DVR Service for primary outlet, Digital Additional Outlet Service on up to 3 TVs, HD Technology Fee, Blast!® Internet, Wireless Gateway and XFINITY Home - Secure 300 — $249.95
SurePrice[3] — $219.99

XH PM Starter Triple Play Bundle[5]
Includes Digital Starter for primary outlet, Performance Internet and XFINITY Home - Secure 350 — $159.95
SurePrice[3] — $129.99

XH PM Preferred Triple Play Bundle[5]
Includes Digital Preferred for primary outlet, Performance Internet and XFINITY Home - Secure 350 — $169.95
SurePrice[3] — $139.99

XH PM HD Preferred Triple Play Bundle[5]
Includes Digital Preferred for primary outlet, HD Technology Fee, Starz®, Performance Internet and XFINITY Home - Secure 350 — $179.95
SurePrice[3] — $149.99

XH PM HD Preferred Plus Triple Play Bundle[5]
Includes Digital Preferred for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet and XFINITY Home - Secure 350 — $199.95
SurePrice[3] — $169.99

XH PM HD Premier Triple Play Bundle[5]
Includes Digital Premier with HD DVR Service or AnyRoom® DVR Service for primary outlet, HD Technology Fee, Blast!® Internet and XFINITY Home - Secure 350 — $229.95
SurePrice[3] — $189.99

XH PM HD Complete Triple Play Bundle[5]
Includes Digital Premier, The Movie Channel® and AnyRoom® DVR Service for primary outlet, Digital Additional Outlet Service on up to 3 TVs, HD Technology Fee, Blast!® Internet, Wireless Gateway and XFINITY Home - Secure 350 — $259.95
SurePrice[3] — $229.99

Economy Triple Play XF
Includes Digital Economy for primary outlet, Economy Plus Internet and XFINITY Voice Local with More® — $89.85

MULTILATINO PAQUETE TRIPLE[6]

MultiLatino Max Paquete Triple
Includes MultiLatino Max for primary outlet, Performance Internet, XFINITY Voice Unlimited™ and Carefree Minutes Mexico 300. Can substitute Carefree Minutes Latin America 300. — $149.95
SurePrice[3] — $119.99

MultiLatino Ultra Paquete Triple
Includes MultiLatino Ultra for primary outlet, Performance Internet, XFINITY Voice Unlimited™ and Carefree Minutes Mexico 300. Can substitute Carefree Minutes Latin America 300. — $159.95
SurePrice[3] — $129.99

MultiLatino Ultra HD Paquete Triple
Includes MultiLatino Ultra for primary outlet, HD Technology Fee, Starz®, Performance Internet, XFINITY Voice Unlimited™ and Carefree Minutes Mexico 300. Can substitute Carefree Minutes Latin America 300. — $169.95
SurePrice[3] — $139.99

MultiLatino Ultra HD Plus Paquete Triple
Includes MultiLatino Ultra for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet, XFINITY Voice Unlimited™ and Carefree Minutes Mexico 300. Can substitute Carefree Minutes Latin America 300. — $189.95
SurePrice[3] — $159.99

MultiLatino Total HD Paquete Triple
Includes MultiLatino Ultra and HD DVR Service or AnyRoom® DVR Service for primary outlet, HD Technology Fee, HBO®, Showtime®, Starz®, Cinemax®, Sports Entertainment Package, Blast!® Internet, XFINITY Voice Unlimited™ and Carefree Minutes Mexico 300. Can substitute Carefree Minutes Latin America 300. — $219.95
SurePrice[3] — $179.99

MultiLatino Plus Bundle XF
Includes MultiLatino Plus for primary outlet, Economy Plus Internet and XFINITY Voice Local with More® — $84.85

MultiLatino Extra Bundle XF
Includes MultiLatino Extra for primary outlet, Economy Plus Internet and XFINITY Voice Local with More® — $94.85

DOUBLE PLAY PACKAGES[2]

Internet Plus
Includes Limited Basic, HBO®, Streampix™, standard definition digital converter and remote for primary outlet and Performance Internet — $69.95

Blast Plus™
Includes Digital Economy and Streampix™ for primary outlet and Blast!® Internet — $79.95

Preferred XF Double Play
Includes Digital Preferred for primary outlet and Performance Internet — $134.95
SurePrice[14] — $119.99

MultiLatino Max XF Double Play
Includes MultiLatino Max for primary outlet and Performance Internet — $114.95
SurePrice[14] — $104.99

MultiLatino Ultra XF Double Play
Includes MultiLatino Ultra for primary outlet and Performance Internet — $129.95
SurePrice[14] — $114.99

XF/XH TRIPLE PLAY PACKAGE REWARDS / MULTILATINO PAQUETE TRIPLE REWARDS

	Regular Price	HD Preferred XF, MultiLatino Ultra HD, XH PF HD Preferred and XH PM HD Preferred	HD Preferred Plus XF, MultiLatino Ultra HD Plus, XH PF HD Preferred Plus and XH PM HD Preferred Plus	HD Premier XF, MultiLatino Total HD, XH PF HD Premier and XH PM HD Premier[7]	HD Complete XF, XH PF HD Complete and XH PM HD Complete[7]
HBO®	$19.99	$15.00	Included	Included	Included
Showtime®	$19.99	$10.00	$10.00	Included	Included
Starz®	$19.99	Included	Included	Included	Included
Cinemax®	$19.99	$10.00	$10.00	Included	Included
The Movie Channel®	$19.99	$10.00	$10.00	$10.00	Included
HD DVR Service[8]	$17.95	$9.95	$9.95	Included	N/A
AnyRoom® DVR Service[9]	$19.95	$13.95	$13.95	Included	Included
Digital Additional Outlet Service (SD or HD)[10]	$9.25	$9.25	$9.25	$9.25	Included for three additional outlets
with HD[11]	9..25	$9.25	$9.25	$9.25	Included for three additional outlets
with HD DVR Service[8]	$17.95	$17.95	$17.95	$17.95	$17.95
with AnyRoom® DVR Service	$9.25	$9.25	$9.25	$9.25	Included for three additional outlets
HD Technology Fee[12]	$10.00	Included	Included	Included	Included
3D Technology Fee[11]	$0.00	$0.00	$0.00	$0.00	$0.00
Blast!® Speed Upgrade	$76.95	$10.00	Included	Included	Included
Extreme 105 Upgrade[13]	$114.95	$50.00	$40.00	$40.00	$40.00

Refer to the last page for additional information.
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XFINITY® TV[1]

BASIC SERVICES

Limited Basic

Berkeley	$17.04
Crockett, Port Costa, Rodeo, portions of El Sobrante	$20.95
Hercules, Pinole	$29.96
Portions of El Sobrante	$16.92
San Pablo, Albany, Kensington, portions of El Sobrante	$19.14
Richmond, El Cerrito	$18.30
Broadcast TV Fee	$1.50

DIGITAL SERVICES

Digital Economy Includes Limited Basic, additional digital channels and a standard definition digital converter and remote for the primary outlet, access to Pay-Per-View programming and Music Choice® — $34.95

Digital Starter Includes Limited Basic, additional digital channels, standard definition digital converter and remote for the primary outlet, MoviePlex, access to Pay-Per-View and On Demand programming and Music Choice — $70.49

Digital Preferred Includes Digital Starter, additional digital channels, Encore®, access to Pay-Per-View and On Demand programming and Music Choice® — $88.49

Digital Preferred Plus Includes Digital Preferred, HBO® and Starz® — $123.49

Digital Premier Includes Digital Preferred, HBO®, Showtime®, Starz®, Cinemax® and Sports Entertainment Package — $143.49

MultiLatino Plus Includes Limited Basic, MultiLatino, standard definition digital converter and remote for primary outlet — $29.95

MultiLatino Extra Includes Digital Economy and MultiLatino for primary outlet — $39.95

MultiLatino Max Includes MultiLatino Extra, additional digital channels, access to Pay-Per-View and On Demand programming — $64.95

MultiLatino Ultra Includes MultiLatino Max and additional digital channels — $82.95

BASIC AND DIGITAL ANCILLARY SERVICES

HBO®[15]	$19.99
Showtime®[15]	$19.99
Starz®[15]	$19.99
Cinemax®[15]	$19.99
The Movie Channel®[15]	$19.99
Playboy®[15]	$19.99
MultiLatino[15] Includes up to 60 channels of Spanish language programming	$16.95
Family Tier[16] Includes up to 72 channels including C-SPAN, The Hub, Food Network, HGTV, PBS Kids Sprout, National Geographic Channel and The Weather Channel	$14.95
Sports Entertainment Package[17] Includes up to 20 channels including Big Ten Network, CBS Sports Network, FCS Atlantic, FCS Central and Fox Movie Channel	$9.99
AnyPlay®[18]	$10.00
HD Technology Fee[12]	$10.00
3D Technology Fee[11]	$0.00
HD DVR Service[8]	$17.95
AnyRoom® DVR Service[9]	$19.95
Digital Additional Outlet Service (SD or HD)[10]	$9.25
with HD[11]	$9.25
with HD DVR Service[8]	$17.95
with AnyRoom® DVR Service	$9.25
Digital Adapter Additional Outlet Service (SD or HD)[19]	$1.99

INTERNATIONAL SELECTIONS[15]

Antenna (Greek)	$14.99
DW (German)	$9.99
Rai Italia (Italian)	$10.99
TV5 MONDE (French)	$10.99
TV Japan (Japanese)	$24.99
SBTN (Vietnamese)	$14.99
TVB Jade (Chinese/Cantonese)	$10.95
CTI-Zhong Tian Channel & CCTV-4 (Chinese/Mandarin)	$12.99
Dragon Pack (Chinese/Mandarin) Includes CCTV-4, CTI-Zhong Tian Channel, Phoenix Info News, Phoenix Nth America and ET-Super	$19.99
GMA Pinoy TV (Filipino)	$12.99
TFC (Filipino)	$12.99
GMA Life TV (Filipino)	$6.99
TFC & GMA Pinoy TV (Filipino)	$19.99
GMA Pinoy TV & GMA Life TV (Filipino)	$16.99
Filipino Elite Pack (Filipino) Includes GMA Pinoy TV, GMA Life TV and TFC	$22.99
Channel One Russia (Russian)	$14.99
RTN (Russian)	$14.99
Channel One Russia & RTN (Russian)	$21.99
Vijay (South Asian/Tamil)	$9.99
Willow Plus (South Asian/Cricket Sport)	$14.99
Willow Plus with any Desi 3, 4 or Mega Pack	$7.00
STAR India PLUS (South Asian)	$11.99
SET Asia (Sony) (South Asian)	$14.99
TV Asia (South Asian)	$14.99
Zee TV (South Asian)	$14.99
SET Asia (Sony) & Zee TV (South Asian)	$24.99
SET Asia (Sony) & STAR India PLUS (South Asian)	$24.99
TV Asia & Zee TV (South Asian)	$24.99
Zee TV & STAR India PLUS (South Asian)	$24.99
STAR 4 Pack Includes ABP News, STAR India PLUS, Life OK and STAR India GOLD	$24.99
Desi 3 Pack Includes STAR India PLUS, Life OK and ABP News	$19.99
Desi 3 Pack Includes STAR India PLUS, Life OK and STAR India GOLD	$19.99
Desi 3 Pack Includes SET Asia (Sony), Zee TV and STAR India PLUS	$29.99

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Desi 3 Pack Includes SET Asia (Sony), Zee TV and TV Asia	$29.99
Desi 4 Pack Includes SET Asia (Sony), Zee TV, TV Asia and STAR India PLUS	$32.99
Desi 4 Pack Includes SET Asia (Sony), Zee TV, STAR India PLUS and Life OK	$32.99
Desi Mega Pack Includes SET Asia (Sony), Zee TV, TV Asia, STAR India PLUS, ABP News, Life OK and STAR India GOLD	$42.99
RTPi (Portuguese)	$9.99
TV Globo (Portuguese/Brazilian)	$19.99
PFC (Portuguese/Brazilian)	$19.99
Band Internacional (Portuguese/Brazilian)	$14.99
TV Globo & PFC (Portuguese/Brazilian)	$25.99
TV Globo & Band Internacional (Portuguese/Brazilian)	$25.99
Brazilian Elite Package Includes TV Globo, PFC and Band Internacional	$34.99

PAY-PER-VIEW AND ON DEMAND SUBSCRIPTION SERVICES[20]

Bollywood Hits On Demand	$12.99
Bollywood Hits On Demand w/a South Asian international selection	$9.99
here! TV On Demand	$7.99
Filipino On Demand	$7.99
Filipino On Demand w/a Filipino international selection	$5.99
The Jewish Channel On Demand	$6.99
Too Much for TV On Demand	$14.99
Disney Family Movies On Demand	$5.99
Pay-Per-View and On Demand Movies and Events[21] (per title or event)	Prices Vary
Streampix™[22]	$4.99

SPORTS PACKAGES[20]

MLB Extra Innings®	Call 1-800-XFINITY for pricing
MLS Direct Kick	Call 1-800-XFINITY for pricing
NHL® Center Ice®	Call 1-800-XFINITY for pricing
NBA League Pass	Call 1-800-XFINITY for pricing
ESPN GamePlan	Call 1-800-XFINITY for pricing
ESPN Full Court	Call 1-800-XFINITY for pricing

VIDEO EQUIPMENT

Limited Basic Only Converter	$2.50
Digital Converter	$2.50
Remote Control	$0.15
HD Digital Converter (Limited Basic Only)	$2.50
Digital Adapter (Limited Basic Only — Primary Outlet, SD or HD)	$0.00
Digital Adapter (Limited Basic Only — 1st and 2nd Additional Outlet, SD or HD)	$0.00
Digital Adapter (Limited Basic Only — 3rd Additional Outlet and above, SD or HD)	$0.50
CableCARD (first card in device)	$0.00
CableCARD (second card in same device)	$1.50
Customer-Owned Video Equipment Credit See www.comcast.com/equipmentpolicy for additional information	$2.50

Refer to the last page for additional information.
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INSTALLATION FEES
(PER OCCURRENCE UNLESS NOTED)

	Initial Installation of Service	After Initial Installation of Service
XFINITY TV[23,24]	$50.00	N/A
Miscellaneous Services (additional outlet, additional device, DVD, VCR, computer, including in-home service visit)	$25.00	$50.00
Relocate Additional Outlet	$25.00	$50.00

XFINITY TV Upgrade/Downgrade of Service (No in-home visit required)	$5.00
XFINITY TV Upgrade of Service (In-home visit required)	$50.00
XFINITY TV Downgrade of Service (In-home visit required)	$50.00
Hourly Service Charge[24] (Custom Installation)	$50.00
In-Home Service Visit (XFINITY TV)	$50.00

REACTIVATION FEES
(NO IN-HOME VISIT REQUIRED—PER OCCURRENCE UNLESS NOTED)

Video, Voice or Internet	$6.00

MISCELLANEOUS FEES (PER OCCURRENCE UNLESS NOTED)

Service Protection Plan[25] (per month) Inside home wiring protection for cable TV, high-speed Internet and phone services	$3.99
XFINITY Home - Secure 300 Installation Fee	$499.99
XFINITY Home - Secure 350 Installation Fee	$899.99
Field Collection Charge Visit to customer's residence required to collect past due balance or unreturned equipment	$9.45
Returned Payment Item (each)	$25.00
Late Fee	$4.75
Convenience Fee—Agent For payment made by phone with a Customer Care Representative	$5.99
Unreturned or Damaged Equipment Fees[26] (per piece)	Replacement Cost
Self Install Kit[27]	$15.00
Self Install Kit Shipping and Handling	$15.00
Self Install Kit Shipping and Handling (Priority Shipping)	$30.00
Handset/Remote Shipping and Handling	$10.00

XFINITY® VOICE[1,28]

XFINITY Voice—Unlimited™	$44.95
With TV and Internet Service	$39.95
XFINITY Voice—Local with More®	$34.95
With TV or Internet Service	$24.95

CAREFREE MINUTES® INTERNATIONAL CALLING PLANS

Carefree Minutes International Calling Plans are additional call plans to specific countries or international regions

Carefree Minutes Asia 100	$4.95
Carefree Minutes Latin America 300	$9.95
Carefree Minutes Mexico 300	$9.95
Carefree Minutes Mexico 100	$4.95
Carefree Minutes Western Europe 100	$4.95

Refer to the last page for additional information.
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Carefree Minutes Worldwide 300	$14.95

OTHER CHARGES (PER MONTH UNLESS OTHERWISE INDICATED)

Voicemail	$3.95
Additional Line with Calling Features	$21.95
Additional Line without Calling Features	$11.95
Voice/Data Modem	$8.00
4 Line Voice/Data Modem	$8.00
Voice/Data Modem DOCSIS 2.0 Kit (for purchase, one-time charge)	$79.00
Voice/Data Modem DOCSIS 3.0 Kit (for purchase, one-time charge)	$99.00
New Activation Fee (one-time charge)	$29.95
Standard Installation (per occurrence)	$99.99
XFINITY Voice Relocate additional outlet At time of initial installation (per occurrence)	$19.99
XFINITY Voice Relocate additional outlet Requiring a separate trip (per occurrence)	$20.99
In-Home Repair Charge (per occurrence)	$50.00
XFINITY Voice Upgrade/Downgrade of Service No In-home visit required (per occurrence)	$5.00
Unreturned or Damaged Equipment Fees[26] (per piece, per occurrence)	Replacement Cost

XFINITY® INTERNET[1,29]

	XFINITY Internet Service Only	with XFINITY TV or Voice Service
Economy Plus	$39.95	$29.95
Performance Starter[30]	$49.95	$49.95
Performance	$66.95	$52.95
Blast!®	$76.95	$62.95
Extreme 105[13]	$114.95	$99.95

Voice/Data Modem	$8.00
Wireless Gateway	$8.00
XFINITY Internet Relocate additional outlet At time of initial installation (per occurrence)	$19.99
XFINITY Internet Relocate additional outlet Requiring a separate trip (per occurrence)	$20.99
XFINITY Internet Upgrade/Downgrade of Service No In-home visit required (per occurrence)	$5.00
Additional IP Address (first)	$4.95
Additional IP Address (each additional, up to 3 additional)	$9.00
Voice/Data Modem DOCSIS 2.0 Kit (for purchase, one-time charge)	$79.00
Voice/Data Modem DOCSIS 3.0 Kit (for purchase, one-time charge)	$99.00
Ethernet Card (each, one-time charge)	$20.00
Mac Compatible Card or Adapter (one-time charge)	$79.99
Wireless Adapter (each, one-time charge)	$30.00
N Class Wireless PCMCIA Adapter (for purchase, one-time charge)	$60.00

Refer to the last page for additional information.
For information about XFINITY policies and terms of service, go to www.comcast.com/policies.

Wireless Networking On-Site Professional Set-Up (with installation of XFINITY TV, XFINITY Voice or XFINITY Internet, per occurrence)	$49.95
Wireless Networking On-Site Professional Set-Up (Separate Trip, per occurrence)	$99.95
Wireless Networking On-Site Professional Set-Up (Additional Device, per occurrence)	$29.95
Professional Internet Installation (per occurrence)	$99.99
Extreme 105 Professional Internet Installation (per occurrence)	$249.00
Unreturned or Damaged Equipment Fees[28] (per piece, per occurrence)	Replacement Cost

[1] *Certain services available separately or as a part of other levels of service. Comcast service is subject to Comcast's standard terms and conditions of service. Unless otherwise specified, prices shown are the monthly charge for the corresponding service, equipment or package. Prices shown do not include applicable taxes, franchise fees, FCC fees, Regulatory Recovery Fee, Public Access fees, other state or local fees or other applicable charges (e.g., per-call toll or international charges). Prices, services and features are subject to change. If you are a video service customer and you own a compatible digital converter or CableCARD device, please call 1-800-XFINITY for pricing information or visit www.comcast.com/equipmentpolicy.©2013 Comcast. All rights reserved.*
[2] *Requires a Voice/Data Modem, except for the Complete Triple Play Packages.*
[3] *SurePrice only available for 12 months to XF Triple Play, XH Triple Play or MultiLatino Paquete Triple Play customers after 12 month promotional package.*
[4] *XFINITY Home - Secure 300 requires 3 year minimum term agreement with early termination fee if terminated prior to end of term. For additional information on XFINITY Home Security go to www.xfinity.com/home.*
[5] *XFINITY Home - Secure 350 requires 3 year minimum term agreement with early termination fee if terminated prior to end of term. For additional information on XFINITY Home Security go to www.xfinity.com/home.*
[6] *Requires a Voice/Data Modem.*
[7] *AnyRoom® DVR Service is included with HD Premier Triple Play, MultiLatino Total HD Paquete Triple, HD Complete Triple Play, XH PF HD Premier Triple Play, XH PF HD Complete Triple Play, XH PM HD Premier Triple Play and XH PM HD Complete Triple Play if AnyRoom® DVR Service is installed on primary outlet.*
[8] *Includes HD Technology Fee. HD DVR Service on additional outlets includes Digital Additional Outlet Service.*
[9] *Sold only with Digital Additional Outlet Service for up to 3 TVs, maximum 3 clients per household. Requires HD Technology Fee and professional installation. Not available to customers with Limited Basic only.*
[10] *Not available to Limited Basic only customers. Digital service tier on additional outlet corresponds to digital service tier on primary outlet.*
[11] *Requires HD Technology Fee.*
[12] *Not available to customers with Limited Basic only.*
[13] *Not available in all areas. May require installation and non-refundable installation charge.*
[14] *SurePrice only available for 12 months to Preferred XF Double Play, MultiLatino Max XF Double Play and MultiLatino Ultra XF Double Play customers after 12 month promotional package. HBO® and Streampix™ available at no extra cost during 12 month promotional package and 12 month SurePrice period. After end of the promotional and SurePrice periods, HBO® and Streampix™ will be billed at the then current retail rate.*
[15] *Requires digital converter or CableCARD and Limited Basic.*
[16] *Requires digital converter and purchase of Limited Basic. Family Tier programming included in Digital Services except for MultiLatino.*
[17] *Requires Digital Starter.*
[18] *Requires Digital Starter and Performance Internet.*
[19] *Includes digital adapter and remote. Digital service tier on additional outlet corresponds to digital service tier on primary outlet. Does not include access to On Demand content, premium channels or programming guide. Not available to customers with Limited Basic only.*
[20] *Requires digital converter and Limited Basic.*
[21] *Price of Pay-Per-View and On Demand Movie or Event is displayed prior to the completion of the Pay-Per-View or On Demand ordering process.*
[22] *Requires digital converter and Limited Basic to receive Streampix™ on television. Streampix™ included with the following tiers of service: Blast Plus®, HD Preferred Plus XF Triple Play, HD Premier XF Triple Play, HD Complete XF Triple Play, XH PF HD Preferred Plus Triple Play, XH PF HD Premier Triple Play, XH PF HD Complete Triple Play, XH PM HD Preferred Plus Triple Play, XH PM HD Premier Triple Play, XH PM HD Complete Triple Play, MultiLatino Ultra HD Plus Paquete Triple and MultiLatino Total HD Paquete Triple. HD content requires subscription to HD Technology Fee. Streaming to iOS device requires XFINITY™ TV app, Internet service with bandwidth of at least 600 Kbps and a subscription to Limited Basic. Streaming to laptop/computer requires equipment meeting minimum requirements posted at http://customer.comcast.com/help-and-support/internet/requirements-to-run-xfinity-internet-service/, Internet service with bandwidth of at least 600 Kbps and a subscription to Limited Basic.*
[23] *Does not include installation charges for Extreme 105 Internet Service, XFINITY Home Security, Wireless Networking, XFINITY Voice or activation fees.*
[24] *Product installations include installations up to 125 feet from existing Comcast plant. Custom installations include installations which require in-wall wiring or installations in extensive drop ceilings, basements or crawl spaces.*
[25] *See http://www.comcast.com/sgp for information on Service Protection Plan.*
[26] *Contact 1-800-XFINITY for questions regarding equipment replacement charges.*
[27] *Does not apply to CableCARD Self Install Kit.*
[28] *Requires a Voice/Data Modem. Unlimited Local and Long Distance package pricing applies only to direct dialed calls from home to locations in U.S., Canada, Puerto Rico and certain other U.S. territories. Plans do not include other international calls. For more information regarding XFINITY Voice pricing go to http://www.comcast.com/corporate/about/phonetermsofservice/comcastdigitalvoice/chrstatepricing.html.*
[29] *Voice/Data modem required. For more information regarding XFINITY Internet go to http://www.comcast.com/highspeedinternet.*
[30] *Download speed up to 6 Mbps and upload speed up to 1 Mbps. Many factors affect speed. Actual speeds may vary and are not guaranteed.*

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xfinity®

Services & Pricing

Effective January 1, 2014

Berkeley

Berkeley, Crockett, Hercules, Pinole, Port Costa, Rodeo and portions of Contra Costa County
(CAL-020)

1-800-XFINITY | xfinity.com

COMCAST

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Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

EXHIBIT ORA/COMCAST R-1:9

Pay-Per-View

Pay-Per-View Movies (digital only)	4.99 each
Special Events (analog & digital)	Prices Vary
Playboy - Adult Pay-Per-View (digital) [per 90 min. block]	10.99
Other Adult Digital Pay-Per-View★	13.99

Equipment Rental (If required/requested)

Digital receiver (Non-Basic only)	3.20 each
Remote control	0.20 each
Limited Basic only receiver	1.00 each
HDTV equipment fee (without digital package)	8.00 mo.
HDTV equipment fee (with digital package)	7.00 mo.
Dual cable-card digital access	1.79 mo.
Modem/EMTA	3.00 mo.
Home Network Router	2.00 mo.

Installation Fees

Unwired home installation	38.99
Wired home installation	25.99
Additional outlet connection (at time of initial install)	13.99 each
Additional outlet connection (requiring separate trip)	20.99 each
Upgrade/downgrade of optional services (addressable service)	1.99
Upgrade of optional services (requiring separate trip)	15.99
Downgrade of optional services (requiring separate trip)	10.99
Connect VCR (at time of initial installation)	5.99
Connect VCR (requiring separate trip)	13.99
Hourly service charge	30.99
Flat Rate service charge	19.99

Reactivation Fee ✓

Video only receiver reactivation	1.99
CDV modem reactivation	3.00
HSI modem reactivation	3.00
Video receiver / CDV modem reactivation	4.99
Video receiver / HSI modem reactivation	4.99
CDV modem / HSI modem reactivation	6.00
Video receiver / CDV modem / HSI modem reactivation	7.99

Miscellaneous Fees

Service Protection Plan (for Video/HSI/CDV) ⋊	0.99 mo.
Assisted Payment Fee	3.99
Field Collection Charge	9.45
Non-Sufficient Funds Charge	25.00/check
Late fee	4.75

Applied to your account if you have a past due balance of $13.01 or more remaining unpaid 15 days after the end of the billing period to which that balance applies. If Comcast personnel engage in collection attempts in the field, a separate $9.45 fee will be charged.

Unreturned, lost, stolen, or destroyed cable equipment

Receivers

Standard Receiver	40.00
Addressable Receiver	60.00
DCT 700 - Receiver	80.00
DCT 2000 - Telco w/RF Return Receiver	160.00
DCT 2000 - Telco w/RF Return & Dolby 5.1	160.00
DCT 2500 - Receiver	150.00
DCT 5100 - Receiver	320.00
DCT 6200 - Receiver	310.00
SD/DVR Pace (Vegas) - Advanced Receiver	310.00
HD/DVR 3412 - Advanced Receiver	380.00
HD/DVR 3416 - Advanced Receiver	380.00
HD/DVR 6208 - Advanced Receiver	420.00
HD/DVR 6412 - Advanced Receiver	470.00
HD/DVR Moxi - Advanced Receiver	570.00
CableCARD - Motorola	30.00
CableCARD - (SA)	60.00
DMX - Analog Receiver	54.00
SD-DCH-70/100 Dig (Motorola)	160.00
HD-DCH-3200-Dig (Motorola)	250.00
Digital Transport Adapter	50.00

Remotes

Standard/Addressable - Remote	5.00
DCT - Remote	5.00
DVR/Moxi - Remote	5.00

Modems

HSD - Cable Modem	40.00
HSD - CHSI Cable Modem	40.00
HSD - Gateway CHM Cable Modem	100.00
HSD - CHN Wireless Adapter	50.00
HSD - eMTA (HSD Modem & CDV capacity)	120.00
HSD - Commercial Router	100.00

Please Note: In addition to prices noted, taxes and fees may apply in some areas. All prices and fees listed on this schedule are subject to change by Comcast after notice to our customers.

- ◆ May not be purchased separately
- ⌇ Cannot be combined with Expanded Basic
- ❖ Customers must have a digital receiver to receive Digital FM Service
- ❊ Customers must have a digital receiver and subscribe to Limited Basic service level or above in order to receive related ON DEMAND content
- ❑ International Premium Networks and Selecto Total are available separately at an extra cost
- ★ Price of program will show when ordered.
- ✓ These fees are for non-pay soft status customers
- ⋊ Additional fees may be charged for non-covered work
- ✪ Taxes and franchise fees will be charged where applicable.

If you have any questions, please call us at 1-800-COMCAST

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March 2009

Berkeley / Hercules

Pricing

comcast

The following monthly prices for Limited Basic and Expanded Basic cable service include service on all TVs in your home. Limited Basic Cable is required to receive any other services. Cost of equipment is not included in the monthly service price, except otherwise stated. Digital receivers required for services other than Limited Basic & Expanded Basic.

Services

	Berkeley	Hercules
Limited Basic	11.90	22.35
Expanded Basic ◆	48.05	37.60
Digital Starter	59.95	59.95

Includes Limited Basic, Expanded Basic, Pay-Per-View, On Demand, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

Family Tier 14.95

Digital Programming Access Fee (Each Additional Digital Outlet) .. 6.99
Required for access to digital programming, Digital Premium Services, multiplexed programming, On Demand for each applicable Digital and Non-Digital Premium purchased. Fee includes one Digital Receiver and remote.

Digital to Analog Service Additional Outlet (1st and 2nd outlet) 0.00
Digital to Analog Service Additional Outlet (3rd, 4th, 5th, etc. outlet) 1.99

Digital FM Services❖

Included with primary outlet and Digital Programming Access Fee for additional outlets. (30 channels of FM, commercial-free music)

Digital A-La-Carte Tiers

You must subscribe to Limited Basic and any level of Digital Service. May not be available in all areas.

Sports Entertainment Package 4.99
DVR Service (with HD) 15.95
DVR Standard Service (without HD) 8.99

Premium Services

Digital receiver at additional charge required for each TV with Premium Channels and/or Digital Cable. These monthly prices include premium service on all TVs in your home.

HBO 18.99
Showtime 18.99
The Movie Channel (TMC) 18.99
Cinemax 18.99
Starz 18.99
Encore 15.99
Playboy TV 19.99

On Demand Subscription Services ✻

Bollywood On Demand 12.99
Bollywood On Demand (if you subscribe to Zee TV and/or TV Asia) 9.99
Howard Stern On Demand (per show) ala carte 7.99
Howard Stern On Demand (monthly subscription) 10.99
Howard Stern On Demand (yearly subscription) 119.99
WWE 24/7 On Demand 7.99
Here TV On Demand (monthly subscription) 7.99
Filipino On Demand 7.99
Filipino On Demand
(If you subscribe to the Filipino Channel and/or GMA Pinoy TV) 5.99
Too Much For TV 14.99

Best Digital Value Packages

Digital Preferred 16.95
Includes Digital Classic Channels, Encore and Multiplexes, Pay-Per-View, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

Digital Preferred Plus 51.95
Includes Digital Classic Channels, Encore, HBO & Starz!, Multiplex Premium Channels, Pay-Per-View, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

Digital Premier 66.95
Includes Digital Classic Channels, Encore and Multiplexes, Five Premium Services, Pay-Per-View, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

3 Product Bundles

HD Starter Bundle 129.99
Includes: Digital Starter Cable (w/HD-Only box and remote), Performance HighSpeed Internet (6M/1M), Comcast Unlimited Digital Voice*

HD Preferred Bundle 144.94
Includes: Digital Preferred Cable (w/HD-Only box and remote), Performance High-Speed Internet (6M/1M), Comcast Unlimited Digital Voice*

HD Plus Bundle 159.99
Includes: Digital Preferred Cable & HBO (w/HD-Only box and remote), Blast!® High-Speed Internet (16M/2M), Comcast Unlimited Digital Voice*

HD Preferred Plus Bundle 169.99
Includes: Digital Preferred Cable, HBO & Starz (w/HD-Only box and remote), Blast!® High-Speed Internet (16M/2M), Comcast Unlimited Digital Voice*

HD Premier Bundle 199.99
Includes: Digital Premier Cable, Sports Entertainment Package, HBO, Starz, Cinemax & Showtime (w/HD DVR box and remote), Blast!® High-Speed Internet (16M/2M), Comcast Unlimited Digital Voice*

Paquetes en Español ❑

Selecto A La Carte 16.99
Includes up to 18 Hispanic Language channels like Discovery en Español, Fox Sports en Español, History en Español, CineMexicano and more.

CableLatino 32.95
Includes Limited Basic Service, Music Choice Channels (includes 5 Spanish Channels), Access to Digital Pay-Per-View Channels, On Demand, Selecto, One (1) Digital Receiver and One (1) Remote Control.

CableLatino con HBO 42.95
Includes Limited Basic Service, Music Choice Channels, Access To Digital Pay-Per-View Channels, On Demand, Selecto, HBO & Multiplexes, One (1) Digital Receiver and One (1) Remote Control.

CableLatino Completo 59.95
Includes Limited Basic and Expanded Basic Channels, Music Choice Channels, Access to Digital Pay-Per-View Channels, On Demand, Selecto, One (1) Digital Receiver and One (1) Remote Control.

CableLatino Completo con HBO 69.95
Includes Limited Basic and Expanded Basic Channels, Selecto, HBO & Multiplexes, Access to Digital Pay-Per-View Channels, On Demand, Music Choice Channels, One (1) Digital Receiver and One (1) Remote Control.

High-Speed Internet

Performance (6M/1M) for Comcast Digital Video/CDV Customers 42.95
Performance (6M/1M) Only 58.95
Blast! (16M/2M) for Comcast Digital Video/CDV Customers 52.95
Blast! (16M/2M) Only 68.95

Comcast Digital Voice

Unlimited local and domestic long distance calling including Canada & US Territories.

For Comcast Video and High-Speed Internet Customers 39.95
For Comcast Video OR High-Speed Internet Customers 44.95
Non-Comcast Customers 44.95

Local With More

Free local calling, long distance billed at $.05 per minute.

For Comcast Video and High-Speed Internet Customers 24.95
For Comcast Video OR High-Speed Internet Customers 24.95
For Local with More only 34.95
A la Carte Voicemail 3.95

International Premium Networks ❑

CTI-Zhong Tian Channel & CCTV-4 (Chinese/Mandarin) 12.99
Desi 3-Pack - (SONY/Zee TV/STAR India PLUS) 29.99
Desi 3-Pack (SONY/Zee TV/TV Asia) 29.99
Desi 4-Pack - (SONY/Zee TV/STAR India PLUS/BHOD) 39.99
Desi 4-Pack - (SONY/Zee TV/TV Asia/STAR India PLUS) 32.99
Desi 4-Pack (SONY/Zee TV/TV Asia/Bollywood Hits On Demand) 39.99
Desi 5-Pack - (SONY/Zee TV/TV Asia/STAR India PLUS/BHOD) 42.99
Dragon Pack (5 channels - Chinese/Mandarin) 19.99
GMA Pinoy TV (Filipino) 12.99
Jade Channel (Chinese/Cantonese) 10.95
Raitalia (Italian) 10.99
Russian Television Network (Russian) 14.99
SBTN (Vietnamese) 14.99
SONY & STAR India PLUS 24.99
SONY (SET) 14.99
SONY (SET)/Zee TV Combo 24.99
STAR India PLUS 11.99
The Filipino Channel & GMA Pinoy TV Combo (Filipino) 19.99
The Filipino Channel (Filipino) 12.99
TV Asia (South Asian) 14.99
TV Japan (Japanese) 25.99
TV5 Monde (French) 10.99
Zee TV & STAR India PLUS 24.99
Zee TV & TV Asia Combo (South Asian) 24.99
Zee TV (South Asian) 14.99

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High-Speed Internet

Performance (12M/2M)
for Comcast Digital Video/Comcast Digital Voice Customers.. $42.95
Performance (12M/2M) Only $57.95
Blast! (16M/2M)
for Comcast Digital Video/Comcast Digital Voice Customers.. $52.95
Blast! (16M/2M) Only $67.95
Ultra (22M/5M)
for Comcast Digital Video/Comcast Digital Voice Customers.. $62.95
Ultra (22M/5M) Only $77.95
Extreme (50M/5M)
for Comcast Digital Video/Comcast Digital Voice Customers $99.95
Extreme (50M/5M) Only $114.95

Comcast Digital Voice

Unlimited local and domestic long distance calling including Canada & US Territories.
For Comcast Video and High-Speed Internet Customers $39.95
For Comcast Video OR High-Speed Internet Customers $44.95
Non-Comcast Customers $44.95

Local With More

Free local calling, long distance billed at $.05 per minute.
For Comcast Video and High-Speed Internet Customers $24.95
For Comcast Video OR High-Speed Internet Customers $24.95
For Local With More Only $34.95
A la Carte Voicemail $3.95

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Pay-Per-View

Pay-Per-View Movies ..... $4.99 each
Special Events ..... Prices Vary
Playboy - Adult Pay-Per-View (digital) [per 90 min. block] .. $10.99
Other Adult Digital Pay-Per-View★ $13.99

Equipment Rental (If required/requested)

Remote Control (all types) $0.20
Converter – Limited Basic Only Subscribers $1.00
Converter – All Other Subscribers $3.20
HDTV Equipment Fee $8.00
HDTV Equipment Fee (with Digital) $7.00
Dual Cable-Card Digital Access $1.70
High Speed Internet Modem $5.00
EMTA $5.00
Phillips Digital Transport Adapter (DTA) $3.00
UEI Digital Transport Adapter (DTA) $3.00

Installation Fees

Unwired home installation $38.99
Wired home installation $25.99
Additional outlet connection (at time of initial install).. $19.99 each
Additional outlet connection (requiring separate trip) . $20.99 each
Upgrade/downgrade of optional services (addressable service) $1.99
Upgrade of optional services (requiring separate trip) $15.99
Downgrade of optional services (requiring separate trip) $10.49
Connect VCR (at time of initial installation) $5.99
Connect VCR (requiring separate trip) $13.99
Comcast Digital Voice - change of service call $49.95
High-Speed Internet relocate additional outlet (at time of initial installation) $19.99
High-Speed Internet relocate additional outlet (requiring separate trip) $20.99
Hourly service charge $30.99
Customer trouble call $27.99
Self Install Kit $9.95
Self Install Kit Shipping & Handling Fee $9.95

Reactivation Fee ✓

Video only receiver reactivation $1.99
Comcast Digital Voice modem reactivation $4.00
High-Speed Internet modem reactivation $4.00
Video receiver / Comcast Digital Voice modem reactivation .. $4.99
Video receiver / High-Speed Internet modem reactivation $4.99
Comcast Digital Voice modem / High-Speed Internet modem reactivation $6.00
Video receiver / Comcast Digital Voice modem / High-Speed Internet modem reactivation $7.99

Miscellaneous Fees

Service Protection Plan (for Video/High-Speed Internet/Comcast Digital Voice)⋊ $1.45 mo.
Assisted Payment Fee $4.99
Assisted PPV Ordering Fee $4.99
HD Technology Fee $7.00
Field Collection Charge $9.45
Non-Sufficient Funds Charge $25.00/check
Late fee $4.75

Applied to your account if you have a past due balance of $13.01 or more remaining unpaid 15 days after the end of the billing period to which that balance applies. If Comcast personnel engage in collection attempts in the field, a separate $9.45 fee will be charged.

Unreturned, lost, stolen, or destroyed equipment

Unreturned Digital Receiver Charge (DCT 700) $80.00
Unreturned Digital Receiver Charge (DCT 2000 – Telco w/RF Return) $160.00
Unreturned Digital Receiver Charge (DCT 2000 – Telco w/RF Return & Dolby 5.1) $160.00
Unreturned Digital Receiver (DCT2500) $150.00
Unreturned Digital Receiver Charge (DCT 5100) $320.00
Unreturned Digital Receiver Charge (DCT 6200) $310.00
Unreturned Digital Receiver Charge (HD/DVR 6208) $420.00
Unreturned Digital Receiver Charge (HD/DVR 6412) $450.00
Unreturned Digital Receiver Charge (HD/DVR Moxi) $570.00
Unreturned Digital Receiver Charge (SD/DVR Pace) $270.00
Unreturned Digital Receiver Charge (SD-DCH-70/100 Dig) $140.00
Unreturned Digital Receiver Charge (HD-DCH-6200-Dig) . $360.00
Unreturned Digital Receiver Charge (HD-DCH-3200-Dig) . $250.00
Unreturned Digital Receiver Charge (HD-DCX3200-Dig) ... $220.00
Unreturned High Speed Internet Modem $40.00
High Speed Internet - Gateway CHM Cable Modem $100.00
High Speed Internet - CHN Wireless Adapter (G) $40.00
High Speed Internet - CHN Wireless Adapter (N) $80.00
High Speed Internet - EMTA (High Speed Internet Modem & Comcast Digital Voice capacity) $120.00
High Speed Internet - Commercial Router $100.00
Motorola CableCARD $30.00
Unreturned CableCARD $50.00
Unreturned Addressable Receiver Charge $60.00
Unreturned Standard Receiver Charge $40.00
Unreturned DCT Remote $5.00
Unreturned Standard Remote $5.00
Unreturned DVR Remote $5.00
Digital Transport Adapter $50.00

Please Note: In addition to prices noted, taxes and fees may apply in some areas. All prices and fees listed on this schedule are subject to change by Comcast after notice to our customers.

◆ May not be purchased separately
⌁ Cannot be combined with Expanded Basic
❖ Customers must have a digital receiver to receive Digital FM Service
✻ Customers must have a digital receiver and subscribe to Limited Basic
$ service level or above in order to receive related ON DEMAND content
❑ International Premium Networks and Selecto Total are available separately at an extra cost
★ Price of program will show when ordered.
✓ These fees are for non-pay soft status customers
⋊ Additional fees may be charged for non-covered work

If you have any questions, please call us at 1-800-COMCAST

comcast

Pricing

January 2010

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The following monthly price for Limited Basic cable service includes service on all TVs in your home. Limited Basic Cable is required to receive any other services. Cost of equipment is not included in the monthly service price, except where otherwise stated. Digital receivers required for services other than Limited Basic.

Services

	Berkeley	Hercules
Limited Basic	**$12.99**	**$24.45**
Expanded Basic ◆	**$49.00**	**$37.54**
Digital Starter	**$61.99**	**$61.99**

Includes Limited Basic, Expanded Basic, Pay-Per-View Access, On Demand, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

Family Tier **$14.95**

Digital Programming Access Fee (Each Additional Digital Outlet) **$7.50**

Required for access to digital programming, Digital Premium Services, multiplexed programming, On Demand for each applicable Premium purchased. Fee includes one Digital Receiver and remote.

Digital to Analog Service Additional Outlet (1st and 2nd outlet) **$0.00**

Digital to Analog Service Additional Outlet (3rd, 4th, 5th, etc. each outlet) **$1.99**

Digital FM Services❖

Included with primary outlet and Digital Programming Access Fee for additional outlets. (30 channels of FM, commercial-free music)

Digital A-La-Carte Tiers

You must subscribe to Limited Basic and any level of Digital Service. May not be available in all areas.

Sports Entertainment Package **$4.99**
DVR Service (with HD) **$15.95**
DVR Standard Service (without HD) **$8.99**

Premium Services

Digital receiver at additional charge required for each TV with Premium Channels and/or Digital Cable. These monthly prices include premium service on all TVs in your home.

HBO $18.99
Showtime $18.99
The Movie Channel (TMC) $18.99
Cinemax $18.99
Starz $18.99
Playboy TV $19.99

On Demand Subscription Services ⁜

Bollywood Hits On Demand $12.99
Bollywood Hits On Demand (when you subscribe to a South Asian International Premium Network) $9.99
Disney Family Movies $5.99
Filipino On Demand $7.99
Filipino On Demand (when you subscribe to a Filipino International Premium Network) $5.99
Here TV On Demand (monthly subscription) $7.99
Howard Stern On Demand (per show) ala carte $7.99
Howard Stern On Demand (monthly subscription) $10.99
Howard Stern On Demand (yearly subscription) $119.99
Too Much For TV $14.99
WWE 24/7 On Demand $7.99

Best Digital Value Packages

Digital Preferred **$16.95**

Includes Digital Classic Channels, Encore and Multiplexes, Pay-Per-View, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

Digital Preferred Plus **$51.95**

Includes Digital Classic Channels, Encore, HBO & Starz, Multiplex Premium Channels, Pay-Per-View, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

Digital Premier **$66.95**

Includes Digital Classic Channels, Encore and Multiplexes, Cinemax and Multiplexes, HBO and Multiplexes, Showtime and Multiplexes, Starz and Multiplexes, Pay-Per-View, Digital Music Channels, One (1) Digital Receiver, and One (1) Remote.

3 Product Bundles

HD Starter Bundle **$129.99**

Includes: Digital Starter Cable (w/HD-Only box and remote), Performance HighSpeed Internet (6M/1M), Comcast Unlimited Digital Voice*

HD Preferred Bundle **$144.94**

Includes: Digital Preferred Cable (w/HD-Only box and remote), Performance High-Speed Internet (6M/1M), Comcast Unlimited Digital Voice*

HD Plus Bundle **$159.99**

Includes: Digital Preferred Cable & HBO (w/HD-Only box and remote), Blast!® High-Speed Internet (16M/2M), Comcast Unlimited Digital Voice*

HD Preferred Plus Bundle **$169.99**

Includes: Digital Preferred Cable, HBO & Starz (w/HD-Only box and remote), Blast!® High-Speed Internet (16M/2M), Comcast Unlimited Digital Voice*

HD Premier Bundle **$199.99**

Includes: Digital Premier Cable, Sports Entertainment Package, HBO, Starz, Cinemax & Showtime (w/HD DVR box and remote), Ultra High-Speed Internet (22M/5M), Comcast Unlimited Digital Voice*

Paquetes en Español ❑

Selecto A La Carte **$18.99**

Includes up to 36 Hispanic Language channels like Discovery en Español, Fox Sports en Español, History en Español, CineMexicano and more.

CableLatino **$29.95**

Includes Limited Basic Service, Music Choice Channels (includes 5 Spanish Channels), Access to Digital Pay-Per-View Channels, On Demand, Selecto Total, One (1) Digital Receiver and One (1) Remote Control.

CableLatino con HBO **$39.95**

Includes Limited Basic Service, Music Choice Channels, Access To Digital Pay-Per-View Channels, On Demand, Selecto Total, HBO & Multiplexes, One (1) Digital Receiver and One (1) Remote Control.

CableLatino Completo **$63.99**

Includes Limited Basic and Expanded Basic Channels, Music Choice Channels, Access to Digital Pay-Per-View Channels, On Demand, Selecto Total, One (1) Digital Receiver and One (1) Remote Control.

CableLatino Completo con HBO **$73.99**

Includes Limited Basic and Expanded Basic Channels, Selecto Total, HBO & Multiplexes, Access to Digital Pay-Per-View Channels, On Demand, Music Choice Channels, One (1) Digital Receiver and One (1) Remote Control.

International Premium Networks ❑

South Asian Pricing and Packaging

VIJAY (South Asian - Tamil) $9.99
STAR India PLUS $11.99
SET Asia $14.99
TV Asia $14.99
Zee TV $14.99
Desi 3-pack (Star India PLUS/ STAR ONE/ STAR India GOLD) $19.99
Desi 3-pack (Star India PLUS/ STAR ONE/ STAR NEWS) $19.99
SET Asia & Zee TV $24.99
STAR India PLUS & SET Asia $24.99
STAR India PLUS & Zee TV $24.99
Zee TV & TV Asia $24.99
STAR India Pack (STAR India NEWS/ STAR India PLUS/ STAR ONE/ STAR India GOLD) $24.99
Desi 3-pack (SET Asia/ Zee TV/ TV Asia) $29.99
Desi 3-pack (STAR India PLUS/ SET Asia/ Zee TV) $29.99
Desi 4-pack (STAR India PLUS/ SET Asia/ Zee TV/ TV Asia) $32.99
Desi 4-pack (SET Asia/ Zee TV/ STAR India PLUS/ STAR ONE) $32.99
Mega Pack (SET Asia/ Zee TV/ TV Asia/ STAR India PLUS/STAR India NEWS/ STAR ONE/ STAR India GOLD) $42.99

Filipino Pricing and Packaging

GMA Life TV $6.99
GMA Pinoy TV $12.99
The Filipino Channel $12.99
GMA Pinoy TV & GMA Life TV $16.99
GMA Pinoy TV & The Filipino Channel $19.99
Filipino Elite Pack (The Filipino Channel/ GMA Pinoy TV/GMA Life TV) $22.99

Russian Pricing and Packaging

RTN $14.99
Channel 1 Russia $14.99
Channel 1 Russia & RTN $21.99

Chinese Pricing and Packaging

Jade Premium (Chinese - Cantonese) $10.95
CTI - Zhong Tian & CCTV-4 (Chinese-Mandarin) $12.99
Dragon Pack (5 Channels, Chinese-Mandarin) $19.99

Brazilian and Portuguese Pricing and Packaging

RTPi (Portuguese) $9.99
Band Internacional (Portuguese/Brazilian) $14.99
TV Globo (Portuguese/Brazilian) $19.99
PFC 100% Futebol (Portuguese/Brazilian) $19.99
TV Globo & PFC 100% Futebol $25.99
TV Globo & Band Internacional $25.99
Brazilian Elite Package (TV Globo/ PFC 100% Futebol/ Band Internacional) $34.99

Additional International A La Carte Networks

Deutsche Welle (German) $9.99
Raitalia (Italian) $10.99
TV5 MONDE (French) $10.99
Antenna One (Greek) $14.99
SBTN (Vietnamese) $14.99
Setanta Sports (English) $14.99
TV Japan (Japanese) $25.99

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XFINITY Internet 2go Mobile Internet Service

XFINITY Internet 2go Nationwide (3G)

3G Usage Allowance: 2GB (Without Comcast bundle that includes Performance XFINITY Internet) $60.00
3G Usage Allowance: 2GB (With Comcast bundle that includes Performance XFINITY Internet) $40.00

3G Usage Allowance: 4GB (Without Comcast bundle that includes Performance XFINITY Internet) $70.00
3G Usage Allowance: 4GB (With Comcast bundle that includes Performance XFINITY Internet) $50.00

XFINITY Internet 2go Nationwide Preferred (4G/3G)

3G Usage Allowance: 5GB (Without Comcast bundle that includes Performance XFINITY Internet) $75.00
3G Usage Allowance: 5GB (With Comcast bundle that includes Performance XFINITY Internet) $55.00

XFINITY Internet 2go Metro (4G) (where available)

Without Comcast bundle that includes Performance XFINITY Internet $60.00
With Comcast bundle that includes Performance XFINITY Internet $40.00

EQUIPMENT PURCHASE

3G Mobile Broadband device $125.00
4G Mobile Broadband device $125.00
4G/3G Mobile Broadband device $125.00
3G Mobile Hotspot $125.00
Mobile Broadband Device Protection (Monthly Charge) $4.99

ONE-TIME FEES

Wireless Activation Fee $49.00
Standard Shipping & Handling $9.95
Priority Shipping & Handling (optional) $29.95

USAGE CHARGES

3G Overage (after usage allowance) ..... $.05/MB
Domestic 3G Roaming (above 100MB/mo) $1.00/MB
International 3G Roaming: Canada $10/5MB
International 3G Roaming: Mexico $20/5MB
International 3G Roaming: Rest of World (where available) ... $20/5MB

Not available in all areas. XFINITY Internet 2go Mobile Internet Service does not include Mobile Broadband device which is sold separately for an additional charge. Performance XFINTY limited to service on a single outlet. Coverage areas between 4G and 3G vary and are not guaranteed. Usage and/or roaming charges apply on 3G network. For additional information on service and coverage areas, see www.comcast.com/2go.

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XFINITY Internet

Economy (1.5M/384K) for XFINITY TV/Voice Customers $26.95
Economy (1.5M/384K) Only. $40.95
Performance (12M/2M) for XFINITY TV/Voice Customers $44.95
Performance (12M/2M) Only $59.95
Blast! (20M/2M) for XFINITY TV/Voice Customers $54.95
Blast! (20M/2M) Only $69.95
Extreme (50M/5M) for XFINITY TV/Voice Customers $99.95
Extreme (50M/5M) Only $114.95
Extreme 105 (105M/10M) $199.95

XFINITY Voice Unlimited

Unlimited local and domestic long distance calling including Canada & US Territories.
For XFINITY TV and Internet Customers $39.95
For XFINITY TV or Internet Customers $44.95
Non-XFINITY Customers $44.95
Additional line w/ calling features $21.95
Additional line w/o calling features $11.95

XFINITY Voice Local With More

Free local calling, long distance billed at $.05 per minute.
For XFINITY TV and Internet Customers $24.95
For XFINITY TV or Internet Customers $24.95
For Local With More Only $34.95
A la Carte Voicemail $3.95

Equipment Rental (If required/requested)

Remote Control (All Units) $0.20
Digital Converter – Limited Basic Only Subscribers $0.95
Digital Converter – All Other Subscribers $2.50
HD Digital Converter (with Limited Basic) $2.50
CableCARD (first card in device) $0.00
CableCARD (additional card in same device) $1.50
Customer-Owned Equipment Credit ..... ($2.50)
XFINITY Internet Modem $5.00
eMTA (up to 2 lines) $5.00
Phillips Digital Adapter $3.00
UEI Digital Adapter $3.00

Installation Fees

XFINITY TV Installation-Unwired Home (within 125 feet) $42.00
XFINITY TV Installation-Prewired Home (within 125 feet) $29.00
Additional outlet connection (at time of initial install) $15.00
Additional outlet connection (requiring separate trip) $25.00
Outlet relocation (requiring separate trip) $22.00
Activate pre-existing outlet (at time of initial install) $8.00
Activate pre-existing outlet (requiring separate trip) $17.00
Upgrade/downgrade of optional services (addressable service) .. $1.99
Upgrade (requiring separate trip) $16.00
Downgrade (requiring separate trip) $12.00
Connect VCR (at time of initial installation) $8.00
Connect VCR (requiring separate trip) $16.00
XFINITY TV customer trouble call $28.00
Hourly service charge $31.00
XFINITY Internet or Voice installation – 1-product $50.00
XFINITY 2-products installation $80.00
XFINITY 3-products installation $99.00
Extreme 105 installation $249.00
Home Networking installation $150.00
XFINITY Internet/Voice activation $29.95
XFINITY Voice – change of service call $49.95
New, relocated or reconfigured phone jack $20.00
XFINITY Internet/Voice upgrade/downgrade (require separate trip) $40.00
XFINITY Internet/Voice upgrade/downgrade (addressable service) $5.00
XFINITY Internet relocate additional outlet (at time of initial installation) $19.99
XFINITY Internet relocate additional outlet (requiring separate trip) $20.99
XFINITY Internet and/or Voice customer trouble call $40.00
Self Install kit – 1-product $15.00
Self Install kit – multi-product $30.00
Self Install kit shipping and handling $9.95
Self Install kit priority shipping and handling $29.95
Shipping and handling (handsets/remotes) $6.00
N Class wireless PCMCIA adapter $60.00
HomePoint telephone handset (limit 5) ..... $39.95 ea
HomePoint $199.00

Reactivation Fee ✓

TV only converter reactivation $1.99
XFINITY Voice modem reactivation $4.00
XFINITY Internet modem reactivation $4.00
TV converter/XFINITY Voice modem reactivation $4.99
TV converter/XFINITY Internet modem reactivation $4.99
XFINITY Voice/Internet modem reactivation $6.00
TV converter/XFINITY Voice/Internet modem reactivation $7.99

Miscellaneous Fees

Service Protection Plan ✠ ..... $1.99 mo.
Assisted Payment Fee $5.99
Assisted PPV Ordering Fee $4.99
Field Collection Charge $9.45
Non-Sufficient Funds Charge $25.00/check
Late fee $4.75

Applied to your account if you have a past due balance of $13.01 or more remaining unpaid 15 days after the end of the billing period to which that balance applies. If Comcast personnel engage in collection attempts in the field, a separate $9.45 fee will be charged.

Unreturned, lost, stolen, or destroyed equipment

Digital Converter Charges

DCT 700 ..... $80.00
DCT 2000 – Telco w/RF Return $160.00
DCT 2000 – Telco w/RF Return & Dolby 5.1 ..... $160.00
DCT2500 ..... $150.00
DCT 5100 ..... $320.00
DCT 6200 ..... $310.00
HD/DVR 6208 ..... $420.00
HD/DVR 6412 ..... $450.00
HD/DVR Moxi $570.00
SD/DVR Pace $270.00
SD-DCH-70/100 Dig $140.00
HD-DCH-6200-Dig $360.00
HD-DCH-3200-Dig $250.00
HD-DCX3200-Dig $220.00
Addressable Converter Charge $60.00
Standard Converter Charge $40.00
DVR, DCT & Standard Remote $5.00
Digital Adapter $50.00
Motorola CableCARD $30.00
CableCARD $50.00

High-Speed Internet / Digital Voice Equipment

XFINITY Internet Modem $40.00
Gateway CHM Cable Modem $100.00
CHN Wireless Adapter (G) $40.00
CHN Wireless Adapter (N) $80.00
eMTA (XFINITY Internet Modem & XFINITY Voice capacity) $120.00
Commercial Router $100.00

Please Note: In addition to prices noted, taxes and fees may apply in some areas. All prices and fees listed on this schedule are subject to change by Comcast after notice to our customers.

◆ May not be purchased separately
Cannot be combined with Expanded Basic
❖ Customers must have a digital converter to receive Digital FM Service
✠ Customers must have a digital converter and subscribe to Limited Basic service level or above in order to receive related ON DEMAND content
❑ International Premium Networks and MultiLatino are available separately at an extra cost
★ Price of program will show when ordered.
✓ These fees are for non-pay soft status customers
✠ For TV/XFINITY Internet/XFINITY Digital Voice. Additional fees may be charged for non-covered work

If you have any questions, please call us at 1-800-XFINITY

xfinity®

XFINITY TV, Internet & Voice Pricing

January 2011
Berkeley/Hercules

comcast®

PC-003

The following monthly price for Limited Basic cable service includes service on all TVs in your home. Limited Basic Cable is required to receive any other services. Cost of equipment is not included in the monthly service price, except where otherwise stated. Digital converter required for services other than Limited Basic.

Services

	Berkeley	Hercules
Limited Basic	**$14.22**	**$25.00**
Expanded Basic ◆	**$50.77**	**$39.99**
Digital Starter	**$64.99**	**$64.99**

Includes Limited Basic, Expanded Basic, Pay-Per-View Access, On Demand, Music Choice Channels, One (1) Digital Converter, and One (1) Remote.

Digital Economy TV **$29.95**
Family Tier **$14.95**
Digital Programming Access Fee (Standard Definition only) **$8.00**
AnyRoom HD/DVR Service **$19.95**
Sold only with one or more AnyRoom HD outlets; requires professional installation
AnyRoom HD/DVR Service **$13.95**
When taken with an HD Triple Play Bundle. Included at no additional charge with HD Premier Triple Play Bundle.
AnyRoom HD Outlet Service (max. 3 per household) **$8.00**
HD/DVR Service (per outlet–includes HD Technology Fee) **$15.95**
HD Technology Fee Primary Outlet **$8.00**
HD Technology Fee Additional outlet (includes equipment) **$8.00**
Required for access to digital programming, Digital Premium Services, multiplexed programming, On Demand for each applicable Premium purchased. Fee Includes one Digital Converter and one remote.
Digital Adapter Additional Outlet (1st and 2nd outlet) **$0.00**
Digital Adapter Additional Outlet (3rd and greater) **$1.99**

Digital FM Services❖

Included with primary outlet and Digital Programming Access Fee for additional outlets. (30 channels of FM, commercial-free music)

Digital A-La-Carte Tiers

You must subscribe to Limited Basic and any level of Digital Service. May not be available in all areas.

Sports Entertainment Package **$6.95**

Pay-Per-View

Pay-Per-View Movies ..... $4.99 each
Special Events★ ..... Prices Vary
Playboy - Adult Pay-Per-View [per 90 min. block] $10.99
Other Adult Digital Pay-Per-View★ $13.99

Premium Services

Digital converter at additional charge required for each TV with Premium Channels and/or Digital Cable. These monthly prices include premium service on all TVs in your home.

Encore® $15.99
HBO® $19.99
Showtime® $19.99
The Movie Channel (TMC)® $19.99
Cinemax® $19.99
Starz® $19.99
Playboy TV® $19.99

On Demand Subscription Services ✻

Bollywood Hits On Demand $12.99
Bollywood Hits On Demand (w/subscription to a South Asian International Premium Network) $9.99
Disney Family Movies $5.99
Filipino On Demand $7.99
Filipino On Demand (w/subscription to a Filipino International Premium Network) $5.99
here! TV On Demand (monthly subscription) $7.99
Howard Stern On Demand (per show) ala carte $7.99
Howard Stern On Demand (monthly subscription) $10.99
Howard Stern On Demand (yearly subscription) $119.99
Too Much For TV $14.99
WWE 24/7 On Demand $7.99

Best Digital Value Packages

Digital Preferred **$16.95**
Includes Digital Preferred Channels, Pay-Per-View, Music Choice Channels, One (1) Digital Converter, and One (1) Remote.

Digital Preferred Plus **$52.00**
Includes Digital Preferred Channels, HBO® & Starz®, Pay-Per-View, Music Choice Channels, One (1) Digital Converter, and One (1) Remote.

Digital Premier **$69.00**
Includes Digital Preferred Channels, Cinemax®, HBO®, Showtime®, Starz®, Pay-Per-View, Music Choice Channels, One (1) Digital Converter, and One (1) Remote.

3 Product Bundles

Starter XF Triple Play **$129.99**
Includes: Digital Starter Video Service, MoviePlex®, Performance Internet and XFINITY Voice® Unlimited, One (1) Digital Converter, and One (1) Remote.

HD Preferred XF Triple Play **$149.99**
Includes: Digital Preferred Video Service with HD, Starz®, Performance Internet and XFINITY Voice® Unlimited, One (1) HD Digital Converter, and One (1) Remote.

HD Preferred Plus XF Triple Play **$169.99**
Includes: Digital Preferred Video Service with HD, HBO®, Starz®, Blast!® Internet and XFINITY Voice® Unlimited, One (1) HD Digital Converter, and One (1) Remote.

HD Premier XF Triple Play **$199.99**
Includes: Digital Premier Video Service with HD, HBO®, Showtime®, Starz®, Cinemax® and the Sports Entertainment Package, Blast!® Internet and XFINITY Voice® Unlimited, One (1) HD DVR Digital Converter, and One (1) Remote.

Paquetes en Español ❑

MultiLatino a la carte **$16.95**
Includes 45+ Spanish-language channels like Cinelatino, FOX Deportes, Discovery en español and more.

MultiLatino Plus **$29.95**
Includes Limited Basic, MultiLatino, Pay-Per-View Channels, One (1) Digital Converter and One (1) Remote.

MultiLatino Extra **$39.95**
Includes Limited Basic, 20+ Digital Channels, MultiLatino, Pay-Per-View, Music Choice Channels, One (1) Digital Converter and One (1) Remote.

MultiLatino Max **$59.95**
Includes MultiLatino Extra, 35+ Digital Channels and access to On Demand programming

MultiLatino Ultra **$76.90**
Includes MultiLatino Max, 35+ Digital Preferred Channels and Music Choice Channels.

MultiLatino Plus Paquete Triple **$79.85**
Includes MultiLatino Plus Video Service with digital converter and remote, Economy Internet and Digital Voice Local with More.

MultiLatino Extra Paquete Triple **$89.85**
Includes MultiLatino Extra Video Service with digital converter and remote, Economy Internet and Digital Voice Local with More.

MultiLatino Max Paquete Triple **$129.99**
Includes MultiLatino Max Video Service with Performance High-Speed Internet, and Digital Voice Unlimited.

MultiLatino Ultra Paquete Triple **$139.99**
Includes MultiLatino Ultra Video Service with Performance High-Speed Internet and Digital Voice Unlimited.

MultiLatino Ultra HD Paquete Triple **$149.99**
Includes MultiLatino Ultra Video Service, HD Technology Fee, Starz®, Performance High-Speed Internet and Digital Voice Unlimited.

MultiLatino Ultra Plus HD Paquete Triple **$169.99**
Includes MultiLatino Ultra Video Service, HD Technology Fee, HBO®, Starz®, Blast! High-Speed Internet and Digital Voice Unlimited.

MultiLatino Total HD Paquete Triple **$199.99**
Includes MultiLatino Ultra Video Service, HD/DVR Service, HBO®, Starz®, Showtime®, Cinemax®, the Sports Entertainment Package, and Blast! High-Speed Internet and Digital Voice Unlimited.

International Premium Networks ❑

South Asian Pricing and Packaging

VIJAY (South Asian - Tamil) $9.99
STAR India PLUS $11.99
SET Asia $14.99
NEO Cricket $14.99
NEO Cricket (w/ subscription to Desi 3 pack or above) $7.00
TV Asia $14.99
Zee TV $14.99
Desi 3-pack (Star India PLUS/ STAR ONE/ STAR India GOLD) $19.99
Desi 3-pack (Star India PLUS/ STAR ONE/ STAR NEWS) $19.99
SET Asia & Zee TV $24.99
STAR India PLUS & SET Asia $24.99
STAR India PLUS & Zee TV $24.99
Zee TV & TV Asia $24.99
STAR India Pack (STAR India NEWS/ STAR India PLUS/ STAR ONE/ STAR India GOLD) $24.99
Desi 3-pack (SET Asia/ Zee TV/ TV Asia) $29.99
Desi 3-pack (STAR India PLUS/ SET Asia/ Zee TV) $29.99
Desi 4-pack (STAR India PLUS/ SET Asia/ Zee TV/ TV Asia) $32.99
Desi 4-pack (SET Asia/ Zee TV/ STAR India PLUS/ STAR ONE) $32.99
Mega Pack (SET Asia/ Zee TV/ TV Asia/ STAR India PLUS/ STAR India NEWS/ STAR ONE/ STAR India GOLD) $42.99

Filipino Pricing and Packaging

GMA Life TV $6.99
GMA Pinoy TV $12.99
The Filipino Channel $12.99
GMA Pinoy TV & GMA Life TV $16.99
GMA Pinoy TV & The Filipino Channel $19.99
Filipino Elite Pack (The Filipino Channel/ GMA Pinoy TV/GMA Life TV) $22.99

Russian Pricing and Packaging

RTN $14.99
Channel One Russia $14.99
Channel One Russia & RTN $21.99

Chinese Pricing and Packaging

Jade Premium (Chinese - Cantonese) $10.95
CTI - Zhong Tian & CCTV-4 (Chinese-Mandarin) $12.99
Dragon Pack (5 Channels, Chinese-Mandarin) $19.99

Brazilian and Portuguese Pricing and Packaging

RTPi (Portuguese) $9.99
Band Internacional (Portuguese/Brazilian) $14.99
TV Globo (Portuguese/Brazilian) $19.99
PFC (Portuguese/Brazilian) $19.99
TV Globo & PFC $25.99
TV Globo & Band Internacional $25.99
Brazilian Elite Package (TV Globo/ PFC/ Band Internacional) $34.99

Additional International A La Carte Networks

Deutsche Welle (German) $9.99
Rai Italia (Italian) $10.99
TV5 MONDE (French) $10.99
Antenna Satellite (Greek) $14.99
SBTN (Vietnamese) $14.99
TV Japan (Japanese) $25.99

Your Local XFINITY Stores:

1936 University Ave., Ste. #103
Berkeley, CA 94704
Store Hours: Mon-Sat 9am to 6pm

3800 Klose Way, Suite J
Richmond, CA 94806
Store Hours: Mon-Sat 9am to 6pm

Your Local Franchise Authorities:

City of Berkeley
2180 Milvia Street
Berkeley, CA. 94704

City of Hercules
111 Civic Drive
Hercules, CA. 94547

H2298, H2175 8155-4000 (0500, 0640) BERKELEY 1/11

XFINITY Internet ✧

Economy for XFINITY TV/Voice Customers....$28.95
Economy Only (Not available for new subscriptions, except with Internet Essentials program)....$39.95
Economy Plus....$39.95
Performance Starter*....$49.95
Performance for XFINITY TV/Voice Customers....$46.95
Performance Only....$62.95
Blast! for XFINITY TV/Voice Customers....$56.95
Blast! Only....$72.95
Extreme 50 for XFINITY TV/Voice Customers....$99.95
Extreme 50 Only....$114.95
Extreme 105....$199.95

XFINITY Voice Unlimited

Unlimited local and domestic long distance calling including Canada & US Territories.
For XFINITY TV and Internet Customers....$39.95
For XFINITY TV or Internet Customers....$44.95
Non-XFINITY Customers....$44.95
Additional line w/ calling features....$21.95
Additional line w/o calling features....$11.95

XFINITY Voice Local With More

Free local calling, long distance billed at $.05 per minute.
For XFINITY TV and Internet Customers....$24.95
For XFINITY TV or Internet Customers....$24.95
For Local With More Only....$34.95
A la Carte Voicemail....$3.95

Equipment Rental (If required/requested)

Remote Control (All Units)....$0.20
Digital Converter – Limited Basic Only Subscribers....$0.60
Digital Converter – All Other Subscribers....$2.00
HD Digital Converter (with Limited Basic)....$2.50
Digital Adapter (Limited Basic Only – 1st and 2nd additional outlets)....$0.00
Digital Adapter (Limited Basic Only – 3rd, 4th, 5th etc. add'l outlets)....$0.50
CableCARD (first card in device)....$0.00
CableCARD (additional card in same device)....$1.10
Customer-Owned Equipment Credit....($2.50)
XFINITY Internet Modem....$7.00
eMTA (up to 2 lines)....$7.00
Phillips Digital Adapter....$3.00
UEI Digital Adapter....$3.00

Installation Fees

XFINITY TV Installation-Unwired Home (within 125 feet)....$43.90
XFINITY TV Installation-Prewired Home (within 125 feet)....$32.25
Additional outlet connection (at time of initial install)....$14.00
Additional outlet connection (requiring separate trip)....$31.50
Relocate Additional Outlet (at time of initial installation)....$13.50
Relocate Additional Outlet (requiring separate trip)....$32.00
Activate pre-existing outlet (at time of initial install)....$7.75
Activate pre-existing outlet (requiring separate trip)....$21.75
Upgrade/downgrade of optional services (addressable service)..$1.99

Upgrade (requiring separate trip)....$20.00
Downgrade (requiring separate trip)....$12.00
Connect VCR (at time of initial installation)....$8.50
Connect VCR (requiring separate trip)....$19.00
XFINITY TV customer trouble call....$33.50
Hourly service charge....$33.75
XFINITY Internet or Voice installation – 1-product....$50.00
XFINITY 2-products installation....$80.00
XFINITY 3-products installation....$99.00
Extreme 105 installation....$249.00
Wireless Networking On-Site Professional Set-Up (with TV, Voice or Internet)....$49.95
Wireless Networking On-Site Professional Set-Up (separate trip)....$99.95
Wireless Networking On-Site Professional Set-Up (additional device)....$29.95
XFINITY Internet/Voice activation....$29.95
XFINITY Voice – change of service call....$49.95
New, relocated or reconfigured phone jack....$25.00
XFINITY Internet/Voice upgrade/downgrade (require separate trip)....$40.00
XFINITY Internet/Voice upgrade/downgrade (addressable service)....$5.00
XFINITY Internet relocate additional outlet (at time of initial installation)....$19.99
XFINITY Internet relocate additional outlet (requiring separate trip)....$20.99
XFINITY Internet and/or Voice customer trouble call....$50.00
Self Install Kit....$15.00
Self Install Kit Shipping and Handling....$15.00
Self Install Kit Shipping and Handling (Priority Shipping)....$30.00
Self Install Kit Shipping and Handling (handsets/remotes)....$10.00
N Class wireless PCMCIA adapter....$60.00
HomePoint telephone handset (limit 5)....$39.95 ea
HomePoint....$199.00

Reactivation Fee ✓

TV only converter reactivation....$1.99
XFINITY Voice modem reactivation....$5.00
XFINITY Internet modem reactivation....$5.00
TV converter/XFINITY Voice modem reactivation....$4.99
TV converter/XFINITY Internet modem reactivation....$4.99
XFINITY Voice/Internet modem reactivation....$6.00
TV converter/XFINITY Voice/Internet modem reactivation....$7.99

Miscellaneous Fees

Service Protection Plan✂....$2.99 mo.
Assisted Payment Fee....$5.99
Field Collection Charge....$9.45
Non-Sufficient Funds Charge....$25.00/check
Late fee....$4.75

Applied to your account if you have a past due balance of $13.01 or more remaining unpaid 15 days after the end of the billing period to which that balance applies. If Comcast personnel engage in collection attempts in the field, a separate $9.45 fee will be charged.

Unreturned, lost, stolen, or destroyed equipment

Digital Converter Charges

DCT 700....$80.00
DCT 2000 – Telco w/RF Return....$160.00
DCT 2000 – Telco w/RF Return & Dolby 5.1....$160.00
DCT2500....$150.00
DCT 5100....$320.00
DCT 6200....$310.00
HD/DVR 6208....$420.00
HD/DVR 6412....$450.00
HD/DVR Moxi....$570.00
SD/DVR Pace....$270.00
SD-DCH-70/100 Dig....$140.00
HD-DCH-6200-Dig....$360.00
HD-DCH-3200-Dig....$250.00
HD-DCX3200-Dig....$220.00
Addressable Converter Charge....$60.00
Standard Converter Charge....$40.00
DVR, DCT & Standard Remote....$5.00
Digital Adapter....$50.00
Motorola CableCARD....$30.00
CableCARD....$50.00

High-Speed Internet / Digital Voice Equipment

XFINITY Internet Modem....$40.00
Gateway CHM Cable Modem....$100.00
CHN Wireless Adapter (G)....$40.00
CHN Wireless Adapter (N)....$80.00
eMTA (XFINITY Internet Modem & XFINITY Voice capacity)....$120.00
Commercial Router....$100.00

Please Note: In addition to prices noted, taxes and fees may apply in some areas. All prices and fees listed on this schedule are subject to change by Comcast after notice to our customers.

- Requires digital converter and purchase of Limited Basic and cannot be combined with any additional services or packages. Family Tier programming included in Digital services except for MultiLatino.
- ❖ Customers must have a digital converter to receive Digital FM Service.
- ❊ Customers must have a digital converter and subscribe to Limited Basic service level or above in order to receive related ON DEMAND content.
- ❑ International Premium Networks and MultiLatino are available separately at an extra cost.
- ★ Price of program will show when ordered.
- ✓ These fees are for non-pay soft status customers.
- ✂ For TV/XFINITY Internet/XFINITY Digital Voice. Additional fees may be charged for non-covered work.
- ✧ Many factors affect speed. Actual speeds may vary and are not guaranteed.
  *Download speed up to 6 Mbps and upload speed up to 1 Mbps. Does not include PowerBoost®.

xfinity®

XFINITY TV, Internet & Voice Pricing

January 2012
Berkeley/Hercules

comcast®

PC-003

The following monthly price for Limited Basic cable service includes service on all TVs in your home. Limited Basic Cable is required to receive any other services. Cost of equipment is not included in the monthly service price, except where otherwise stated. Digital converter required for services other than Limited Basic.

Services

	Berkeley	Hercules
Limited Basic	$14.22	$25.00
Digital Starter	$64.99	$64.99

Includes Limited Basic, Digital Starter and a standard definition digital converter and remote for the primary outlet, access to Pay-Per-View and On Demand programming and Music Choice.

Digital Economy TV **$29.95**
Includes Limited Basic, Digital Economy and a standard definition digital converter and remote for the primary outlet, access to Pay-Per-View programming and Music Choice.

Family Tier **$14.95**

Digital Programming Access Fee (Standard Definition only) **$8.00**

AnyRoom HD/DVR Service **$19.95**
Sold only with one or more AnyRoom HD outlets; requires professional installation

AnyRoom HD/DVR Service **$13.95**
When taken with an HD Triple Play Bundle. Included at no additional charge with HD Premier Triple Play Bundle.

AnyRoom HD Outlet Service (max. 3 per household) **$8.00**

HD/DVR Service (per outlet–includes HD Technology Fee) **$15.95**

HD Technology Fee Primary Outlet **$10.00**

HD Technology Fee Additional outlet (includes equipment) **$8.00**
Required for access to digital programming, Digital Premium Services, multiplexed programming, On Demand for each applicable Premium purchased. Fee Includes one Digital Converter and one remote.

Digital Adapter Additional Outlet (1st and 2nd outlet) **$0.00**

Digital Adapter Additional Outlet (3rd and greater) **$1.99**

Digital FM Services❖

Included with primary outlet and Digital Programming Access Fee for additional outlets. (30 channels of FM, commercial-free music)

Digital A-La-Carte Tiers

You must subscribe to Limited Basic and any level of Digital Service. May not be available in all areas.

Sports Entertainment Package **$7.99**

Pay-Per-View★

Pay-Per-View Movies and Events ..... Prices Vary

Premium Services

Digital converter at additional charge required for each TV with Premium Channels and/or Digital Cable. These monthly prices include premium service on all TVs in your home.

HBO® $19.99
Showtime® $19.99
The Movie Channel (TMC)® $19.99
Cinemax® $19.99
Starz® $19.99
Playboy TV® $19.99

On Demand Subscription Services ✻

Bollywood Hits On Demand $12.99
Bollywood Hits On Demand (w/subscription to a South Asian International Premium Network) $9.99
Disney Family Movies $5.99
Filipino On Demand $7.99
Filipino On Demand (w/subscription to a Filipino International Premium Network) $5.99
here! TV On Demand (monthly subscription) $7.99
Howard Stern On Demand (per show) ala carte $7.99
Howard Stern On Demand (monthly subscription) $10.99
Howard Stern On Demand (yearly subscription) $119.99
The Jewish Channel On Demand $6.99
Too Much For TV $14.99
WWE 24/7 On Demand $7.99

Best Digital Value Packages

Digital Preferred **$82.99**
Includes Digital Starter, Digital Preferred and a standard definition digital converter and remote for the primary outlet, access to Pay-Per-View and On Demand Programming and Music Choice.

Digital Preferred Plus **$117.99**
Includes Digital Preferred, HBO® & Starz®.

Digital Premier **$134.99**
Includes Digital Preferred, HBO®, Showtime®, Starz®, Cinemax®, and Sports Entertainment Package®.

3 Product Bundles

Starter XF Triple Play **$139.95**
Includes Digital Starter with digital converter and remote for primary outlet, Performance Internet Service and Digital Voice Unlimited.

Preferred XF Triple Play **$149.95**
Includes Digital Preferred with digital converter and remote for primary outlet, Performance Internet Service and Digital Voice Unlimited.

HD Preferred XF Triple Play **$159.95**
Includes Digital Preferred with HD digital converter for primary outlet, HD Technology Fee, Starz®, Performance Internet Service and Digital Voice Unlimited.

HD Preferred Plus XF Triple Play **$179.95**
Includes Digital Preferred with HD digital converter for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet Service and Digital Voice Unlimited.

HD Premier XF Triple Play **$209.95**
Includes Digital Preferred with HD/DVR or AnyRoom HD/DVR for primary outlet, HD Technology Fee, HBO®, Showtime®, Starz®, Cinemax®, Sports Entertainment Package®, Blast!® Internet Service and Digital Voice Unlimited.

HD Complete XF Triple Play Bundle **$239.95**
Includes Digital Preferred with AnyRoom HD/DVR service and 3 AnyRoom HD outlets, HD Technology Fee, HBO®, Showtime®, Starz®, Cinemax®, The Movie Channel®, Sports Entertainment Package®, Blast!® Internet Service with Wireless Networking and XFINITY Signature Support Wireless Networking Support And Digital Voice Unlimited.

Paquetes en Español ❑

MultiLatino a la carte **$16.95**
Includes 45+ Spanish-language channels like Cinelatino, FOX Deportes, Discovery en español and more.

MultiLatino Plus **$29.95**
Includes Limited Basic, MultiLatino, Pay-Per-View Channels, One (1) Digital Converter and One (1) Remote.

MultiLatino Extra **$39.95**
Includes Limited Basic, 20+ Digital Channels, MultiLatino, Pay-Per-View, Music Choice Channels, One (1) Digital Converter and One (1) Remote.

MultiLatino Max **$59.95**
Includes MultiLatino Extra, 35+ Digital Channels and access to On Demand programming

MultiLatino Ultra **$76.90**
IIncludes Digital Preferred channels and MultiLatino Max.

MultiLatino Plus Paquete Triple **$79.85**
Includes MultiLatino Plus, standard definition digital converter and remote, Economy Internet Service and Digital Voice Local With More.

MultiLatino Extra Paquete Triple **$89.85**
IIncludes MultiLatino Extra, standard definition digital converter and remote, Economy Internet Service and Digital Voice Local With More.

MultiLatino Max Paquete Triple **$139.95**
Includes MultiLatino Max, standard definition digital converter and remote, Performance Internet Service and Digital Voice Unlimited.

MultiLatino Ultra Paquete Triple **$149.95**
Includes MultiLatino Ultra, standard definition digital converter and remote, Performance Internet Service and Digital Voice Unlimited.

MultiLatino Ultra HD Paquete Triple **$159.95**
Includes MultiLatino Ultra, HD digital converter for primary outlet, HD Technology Fee, Starz®, Performance Internet Service and Digital Voice Unlimited.

MultiLatino Ultra Plus HD Paquete Triple **$179.95**
Includes MultiLatino Ultra, HD digital converter for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet Service and Digital Voice Unlimited.

MultiLatino Total HD Paquete Triple **$209.95**
Includes MultiLatino Ultra, HD DVR or AnyRoom DVR for primary outlet, HD Technology Fee, HBO®, Showtime®, Starz®, Cinemax®, Sports Entertainment Package®, Blast!® Internet Service and Digital Voice Unlimited.

International Premium Networks ❑

South Asian Pricing and Packaging

VIJAY (South Asian - Tamil) $9.99
STAR India PLUS $11.99
SET Asia $14.99
NEO Cricket $14.99
NEO Cricket (w/ subscription to Desi 3 pack or above) $7.00
TV Asia $14.99
Zee TV $14.99
Desi 3-pack (Star India PLUS/ STAR ONE/ STAR India GOLD) $19.99
Desi 3-pack (Star India PLUS/ STAR ONE/ STAR NEWS) $19.99
SET Asia & Zee TV $24.99
STAR India PLUS & SET Asia $24.99
STAR India PLUS & Zee TV $24.99
Zee TV & TV Asia $24.99
STAR India Pack (STAR India NEWS/ STAR India PLUS/ STAR ONE/ STAR India GOLD) $24.99
Desi 3-pack (SET Asia/ Zee TV/ TV Asia) $29.99
Desi 3-pack (STAR India PLUS/ SET Asia/ Zee TV) $29.99
Desi 4-pack (STAR India PLUS/ SET Asia/ Zee TV/ TV Asia) $32.99
Desi 4-pack (SET Asia/ Zee TV/ STAR India PLUS/ STAR ONE) $32.99
Mega Pack (SET Asia/ Zee TV/ TV Asia/ STAR India PLUS/ STAR India NEWS/ STAR ONE/ STAR India GOLD) $42.99

Filipino Pricing and Packaging

GMA Life TV $6.99
GMA Pinoy TV $12.99
The Filipino Channel $12.99
GMA Pinoy TV & GMA Life TV $16.99
GMA Pinoy TV & The Filipino Channel $19.99
Filipino Elite Pack (The Filipino Channel/ GMA Pinoy TV/GMA Life TV) $22.99

Russian Pricing and Packaging

RTN $14.99
Channel One Russia $14.99
Channel One Russia & RTN $21.99

Chinese Pricing and Packaging

Jade Premium (Chinese/Cantonese) $10.95
CTI-Zhong Tian & CCTV-4 (Chinese/Mandarin) $12.99
Dragon Pack (5 Channels), (Chinese/Mandarin) $19.99

Brazilian and Portuguese Pricing and Packaging

RTPi (Portuguese) $9.99
Band Internacional (Portuguese/Brazilian) $14.99
TV Globo (Portuguese/Brazilian) $19.99
PFC (Portuguese/Brazilian) $19.99
TV Globo & PFC $25.99
TV Globo & Band Internacional $25.99
Brazilian Elite Package (TV Globo/ PFC/ Band Internacional) $34.99

Additional International A La Carte Networks

Deutsche Welle (German) $9.99
Rai Italia (Italian) $10.99
TV5 MONDE (French) $10.99
Antenna Satellite (Greek) $14.99
SBTN (Vietnamese) $14.99
TV Japan (Japanese) $25.99

Your Local XFINITY Stores:

1936 University Ave., Ste. #103
Berkeley, CA 94704
Store Hours: Mon-Sat 9am to 6pm

3800 Klose Way, Suite J
Richmond, CA 94806
Store Hours: Mon-Sat 9am to 6pm

Your Local Franchise Authorities:

City of Berkeley
2180 Milvia Street
Berkeley, CA. 94704

City of Hercules
111 Civic Drive
Hercules, CA. 94547

If you have any questions, please call us at 1-800-XFINITY

H2298, H2175 8155-4000 (0500, 0640) BERKELEY 1/12

TRIPLE PLAY PACKAGES

XF TRIPLE PLAY PACKAGES[1]

Starter XF Triple Play Bundle
Includes Digital Starter for primary outlet, Performance Internet and XFINITY Voice Unlimited — $144.95
SurePrice[2] — $119.99

Preferred XF Triple Play Bundle
Includes Digital Preferred for primary outlet, Performance Internet and XFINITY Voice Unlimited — $154.95
SurePrice[2] — $129.99

HD Preferred XF Triple Play Bundle
Includes Digital Preferred for primary outlet, HD Technology Fee, Starz®, Performance Internet and XFINITY Voice Unlimited — $164.95
SurePrice[2] — $139.99

HD Preferred Plus XF Triple Play Bundle
Includes Digital Preferred for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet and XFINITY Voice Unlimited — $184.95
SurePrice[2] — $159.99

HD Premier XF Triple Play Bundle
Includes Digital Premier with HD DVR service or AnyRoom® DVR service for primary outlet, HD Technology Fee, Blast!® Internet and XFINITY Digital Voice Unlimited — $214.95
SurePrice[2] — $179.99

HD Complete XF Triple Play Bundle
Includes Digital Premier, The Movie Channel®, with AnyRoom® DVR Service for primary outlet, three Digital Additional Outlets with HD digital converters and remotes, HD Technology Fee, Blast!® Internet, Wireless Gateway, XFINITY Signature Support Wireless Network Support and XFINITY Voice Unlimited — $244.95
SurePrice[2] — $219.99

MULTILATINO PAQUETE TRIPLE[1]

MultiLatino Max Paquete Triple
Includes MultiLatino Max for primary outlet, Performance Internet and XFINITY Voice Unlimited — $139.95
SurePrice[2] — $119.99

MultiLatino Ultra Paquete Triple
Includes MultiLatino Ultra for primary outlet, Performance Internet and XFINITY Voice Unlimited — $149.95
SurePrice[2] — $129.99

MultiLatino Ultra HD Paquete Triple
Includes MultiLatino Ultra for primary outlet, HD Technology Fee, Starz®, Performance Internet and XFINITY Voice Unlimited — $159.95
SurePrice[2] — $139.99

MultiLatino Ultra HD Plus Paquete Triple
Includes MultiLatino Ultra for primary outlet, HD Technology Fee, HBO®, Starz®, Blast!® Internet and XFINITY Voice Unlimited — $179.95
SurePrice[2] — $159.99

MultiLatino Total HD Paquete Triple
Includes MultiLatino Ultra and HD DVR Service or AnyRoom® DVR Service for primary outlet, HD Technology Fee, HBO®, Showtime®, Starz®, Cinemax®, Sports Entertainment Package, Blast!® Internet and XFINITY Digital Voice Unlimited — $209.95
SurePrice[2] — $179.99

XF TRIPLE PLAY PACKAGE REWARDS / MULTILATINO PAQUETE TRIPLE REWARDS	Regular Price	HD Preferred XF and MultiLatino Ultra HD	HD Preferred Plus XF and MultiLatino Ultra HD Plus	HD Premier XF and MultiLatino Total HD[3]	HD Complete XF[3]
HBO®	$19.99	$15.00	Included	Included	Included
Showtime®	$19.99	$10.00	$10.00	Included	Included
Starz®	$19.99	Included	Included	Included	Included
Cinemax®	$19.99	$10.00	$10.00	Included	Included
The Movie Channel®	$19.99	$10.00	$10.00	$10.00	Included
HD DVR Service[4]	$16.95	$9.95	$9.95	Included	N/A
AnyRoom® DVR Service[5]	$19.95	$13.95	$13.95	$13.95	Included
Digital Additional Outlet Service[6]	$8.75	$8.75	$8.75	$8.75	Included for three additional outlets
with HD[7]	$8.75	$8.75	$8.75	$8.75	Included
with HD DVR Service[4]	$16.95	$16.95	$16.95	$16.95	$16.95
with AnyRoom® DVR Service	$8.75	$8.75	$8.75	$8.75	Included for three additional outlets
HD Technology Fee[8]	$10.00	Included	Included	Included	Included
3D Technology Fee[7]	$0.00	$0.00	$0.00	$0.00	$0.00
Blast!® Speed Upgrade	$10.00	$10.00	Included	Included	Included
Extreme 50 Upgrade[9,10]	$99.95	$50.00	$40.00	$40.00	$40.00
Extreme 105 Upgrade[9,10]	$199.95	$155.00	$145.00	$145.00	$145.00

Refer to the last page for additional information.
For information about XFINITY policies and terms of service, go to www.comcast.com/policies.

TRIPLE PLAY AND DOUBLE PLAY PACKAGES[1]

Economy Triple Play XF
Includes Digital Economy for primary outlet, Economy Plus Internet and XFINITY Voice Local with More® — $79.85

MultiLatino Plus Bundle XF
Includes MultiLatino Plus for primary outlet, Economy Plus Internet and XFINITY Voice Local with More® — $84.85

MultiLatino Extra Bundle XF
Includes MultiLatino Extra for primary outlet, Economy Plus Internet and XFINITY Voice Local with More® — $94.85

Blast Plus™
Includes Digital Economy and Streampix™ for primary outlet and Blast!® Internet — $79.95

Preferred XF Double Play
Includes Digital Preferred for primary outlet and Performance Internet — $134.95
SurePrice[11] — $119.99

XFINITY® TV

BASIC SERVICES

Limited Basic

Berkeley	$15.57
Crockett, Port Costa, Rodeo, portions of El Sobrante	$19.14
Hercules, Pinole	$27.37
Portions of El Sobrante	$15.46
San Pablo, Albany, Kensington, portions of El Sobrante	$17.49
Richmond, El Cerrito	$16.72

DIGITAL SERVICES

Digital Economy Includes Limited Basic, additional digital channels and a standard definition digital converter and remote for the primary outlet, access to Pay-Per-View programming and Music Choice — $34.95

Digital Starter Includes Limited Basic, additional digital channels, Movie Plex, access to Pay-Per-View and On Demand programming and Music Choice — $68.49

Digital Preferred Includes Digital Starter, additional digital channels, Encore®, access to Pay-Per-View and On Demand programming and Music Choice — $86.49

Digital Preferred Plus Includes Digital Preferred, HBO® and Starz® — $120.99

Digital Premier Includes Digital Preferred, HBO®, Showtime®, Starz®, Cinemax® and Sports Entertainment Package — $140.99

MultiLatino Plus Includes Limited Basic, MultiLatino, standard definition digital converter and remote for primary outlet — $29.95

MultiLatino Extra Includes Digital Economy and MultiLatino for primary outlet — $39.95

MultiLatino Max Includes MultiLatino Extra, additional digital channels, access to Pay-Per-View and On Demand programming — $59.95

MultiLatino Ultra Includes MultiLatino Max and additional digital channels — $76.90

Refer to the last page for additional information.
For information about XFINITY policies and terms of service, go to www.comcast.com/policies.

BASIC AND DIGITAL ANCILLARY SERVICES

HBO®[12]	$19.99
Showtime®[12]	$19.99
Starz®[12]	$19.99
Cinemax®[12]	$19.99
The Movie Channel®[12]	$19.99
Playboy®[12]	$19.99
MultiLatino[12] Includes up to 60 channels of Spanish language programming	$16.95
Family Tier[13] Includes up to 72 channels including C-SPAN, The Hub, Food Network, HGTV, PBS Kids Sprout, National Geographic Channel and The Weather Channel	$14.95
Sports Entertainment Package[14] Includes up to 20 channels including, Big Ten Network, CBS Sports Network, FCS Atlantic, FCS Central and Fox Movie Channel	$9.99
AnyPlay®[15]	$10.00
HD Technology Fee[8]	$10.00
3D Technology Fee[7]	$0.00
HD DVR Service[4]	$16.95
AnyRoom® DVR Service[5]	$19.95
Digital Additional Outlet Service[6]	$8.75
with HD[7]	$8.75
with HD DVR Service[4]	$16.95
with AnyRoom® DVR Service	$8.75
Digital Adapter Additional Outlet Service[16]	$1.99

INTERNATIONAL SELECTIONS[17]

Antenna (Greek)	$14.99
DW (German)	$9.99
Rai Italia (Italian)	$10.99
TV5 Monde (French)	$10.99
TV Japan (Japanese)	$24.99
SBTN (Vietnamese)	$14.99
TVB Jade (Chinese/Cantonese)	$10.95
CTI-Zhong Tian Channel & CCTV-4	$12.99
Dragon Pack (Chinese/Mandarin) Includes CCTV-4, CTI-Zhong Tian Channel, Phoenix Info News, Phoenix Nth America and ET-Super	$19.99
GMA Pinoy TV (Filipino)	$12.99
TFC (Filipino)	$12.99
GMA Life TV (Filipino)	$6.99
TFC & GMA Pinoy TV (Filipino)	$19.99
GMA Pinoy TV & GMA Life TV (Filipino)	$16.99
Filipino Elite Pack (Filipino) Includes GMA Pinoy TV, GMA Life TV and TFC	$22.99
Channel One Russia (Russian)	$14.99
RTN (Russian)	$14.99
Channel One Russia & RTN (Russian)	$21.99
Vijay (South Asian/Tamil)	$9.99
NEO Cricket	$14.99
NEO Cricket with any Desi 3, 4 or Mega Pack	$7.00
STAR India PLUS (South Asian)	$11.99
SET Asia (Sony) (South Asian)	$14.99
TV Asia (South Asian)	$14.99
Zee TV (South Asian)	$14.99
SET Asia (Sony) & Zee TV (South Asian)	$24.99
SET Asia & STAR India PLUS (South Asian)	$24.99
TV Asia & Zee TV (South Asian)	$24.99
Zee TV & STAR India PLUS (South Asian)	$24.99
STAR 4 Pack Includes STAR India NEWS, STAR India PLUS, Life OK and STAR India Gold	$24.99
Desi 3 Pack Includes STAR India PLUS, Life OK and STAR India NEWS	$19.99
Desi 3 Pack Includes STAR India PLUS, Life OK and STAR India Gold	$19.99
Desi 3 Pack Includes SET Asia, ZEE TV and STAR India PLUS	$29.99
Desi 3 Pack Includes SONY, ZEE TV and TV Asia	$29.99
Desi 4 Pack Includes SET Asia, ZEE TV, TV Asia and STAR India PLUS	$32.99
Desi 4 Pack Includes SET Asia, ZEE TV, STAR India PLUS and Life OK	$32.99
Desi Mega Pack Includes SET Asia, ZEE TV, TV Asia, STAR India PLUS, STAR India NEWS, Life OK and STAR India GOLD	$42.99
RTPi (Portuguese)	$9.99
TV Globo (Portuguese/Brazilian)	$19.99
PFC (Portuguese/Brazilian)	$19.99
Band Internacional (Portuguese/Brazilian)	$14.99
TV Globo & PFC (Portuguese/Brazilian)	$25.99
TV Globo & Band Internacional (Portuguese/Brazilian)	$25.99
Brazilian Elite Package Includes TV Globo, PFC and Band Internacional	$34.99

PAY-PER-VIEW AND ON DEMAND SUBSCRIPTION SERVICES[17] (MONTHLY EXCEPT AS NOTED)

Bollywood Hits On Demand	$12.99
Bollywood Hits On Demand w/ a South Asian international selection	$9.99
Howard Stern On Demand (per show)	$7.99
Howard Stern On Demand[18]	$10.99
Howard Stern On Demand[19] (one year subscription)	$119.99
WWE Classics On Demand	$7.99
here! TV On Demand	$7.99
Filipino On Demand	$7.99
Filipino On Demand w/a Filipino international selection	$5.99
The Jewish Channel On Demand	$6.99
Too Much for TV On Demand	$14.99
Disney Family Movies On Demand	$5.99
Pay-Per-View and On Demand Movies and Events[20] (per title or event)	Prices Vary
Streampix™[21]	$4.99

SPORTS PACKAGES[17]

MLB Extra Innings	Call 1-800-XFINITY for pricing
MLS Direct Kick	Call 1-800-XFINITY for pricing
NHL Center Ice	Call 1-800-XFINITY for pricing
NBA League Pass	Call 1-800-XFINITY for pricing
ESPN Game Plan	Call 1-800-XFINITY for pricing
ESPN Full Court	Call 1-800-XFINITY for pricing

VIDEO EQUIPMENT

Limited Basic Only Converter	$2.50
Digital Converter	$2.50
Remote Control	$0.20
HD Digital Converter (Limited Basic Only)	$2.50
Digital Adapter (Limited Basic Only — Primary Outlet)	$0.00
Digital Adapter (Limited Basic Only — 1st and 2nd Additional Outlet)	$0.00
Digital Adapter (Limited Basic Only — 3rd Additional Outlet and above)	$0.50
CableCARD (first card in device)	$0.00
CableCARD (second card in same device)	$1.50
Customer-Owned Video Equipment Credit See www.comcast.com/equipmentpolicy for additional information	$2.50

INSTALLATION FEES (PER OCCURRENCE UNLESS NOTED)	Initial Installation of Service	After Initial Installation of Service
One Product[22,23]	$50.00	N/A
Two Products[22,23]	$80.00	N/A
Three Products[22,23] (includes up to three outlets)	$90.00	N/A
Miscellaneous Services (additional outlet, additional device, DVD, VCR, computer, including in-home service visit)	$25.00	$50.00
Relocate Additional Outlet	$25.00	$50.00

Upgrade/Downgrade of Service No in-home visit required	$5.00
Upgrade of service In-home visit required	$50.00
Downgrade of service In-home visit required	$50.00
Hourly Service Charge[23] (Custom Installation)	$50.00
In-Home Service Visit	$50.00

REACTIVATION FEES (NO IN-HOME VISIT REQUIRED–PER OCCURRENCE UNLESS NOTED)

Video Only	$5.00
Internet or Voice Only	$5.00
Video and Voice -or- Video and Internet	$10.00
Voice and Internet	$10.00
Video, Voice and Internet	$15.00

MISCELLANEOUS FEES (PER OCCURRENCE UNLESS NOTED)

Service Protection Plan[24] (per month) Inside home wiring protection for your cable TV, high-speed internet and phone services	$3.99
Computer Protection Plus[25] (per month) Protection for computers, laptops and tablets. Includes Service Protection Plan	$9.95
TV Protection Plus[26] (per month) Protection for flat panel television. Includes Service Protection Plan	$14.95
Complete Protection[27] (per month) Protection for computers, laptops, tablets, flat panel televisions and home phones. Includes Service Protection Plan	$19.95
Computer Performance Tool[28] (per month) Automated computer diagnostic tool for improved speed, performance and security	$4.95
Wireless Networking Support (per month) 24/7 technical support for wireless home network	$5.95
Wireless Networking & Computer Performance Support (per month) 24/7 technical support for wireless home network plus PC optimization for improved speed and performance	$9.95
Help Desk[29] (per month) 24/7 technical support for computers, networks, WiFi, printers and more	$14.95
Help Desk Plus[30] (per month) 24/7 technical support for computers, networks, WiFi, printers, virus removal and more	$19.95
Wireless Networking Support Enrollment Fee (per occurrence)	$39.00
Wireless Networking & Computer Performance Enrollment Fee (per occurrence)	$39.00
Help Desk Enrollment Fee (per occurrence)	$39.00
Help Desk Plus Enrollment Fee (per occurrence)	$79.00
AnyRoom® DVR Activation Fee	$29.95
Field Collection Charge Visit to customer's residence required to collect past due balance or unreturned equipment	$9.45
Returned Payment Item (each)	$25.00
Late Fee	$4.75
Assisted Payment Fee For payment made by phone with a Customer Care Representative	$5.99
Unreturned or Damaged Equipment Fees[31] (per piece)	Replacement Cost
Self Install Kit[32]	$15.00
Self Install Kit Shipping and Handling	$15.00
Self Install Kit Shipping and Handling (Priority Shipping)	$30.00
Self Install Kit Shipping and Handling (handsets / remotes)	$10.00

XFINITY® VOICE[33]

XFINITY Voice—Unlimited™	$44.95
With TV and Internet Service $39.95	
XFINITY Voice—Local With More®	$34.95
With TV or Internet Service $24.95	

CAREFREE MINUTES® INTERNATIONAL CALLING PLANS

Carefree Minutes International Calling Plans are additional call plans to specific countries or international regions

Carefree Minutes Asia 100	$4.95
Carefree Minutes Latin America 300	$9.95
Carefree Minutes Mexico 300	$9.95
Carefree Minutes Mexico 100	$4.95
Carefree Minutes Western Europe 100	$4.95
Carefree Minutes Worldwide 300	$14.95

OTHER CHARGES (PER MONTH UNLESS OTHERWISE INDICATED)

Text Messaging For Local with More®	$2.95
Voicemail	$3.95
Additional Line with Calling Features	$21.95
Additional Line without Calling Features	$11.95
Voice/Data Modem	$7.00
4-line Voice/Data Modem	$7.00
Voice/Data Modem DOCSIS 2.0 Kit (for purchase, one-time charge)	$99.00
Voice/Data Modem DOCSIS 3.0 Kit (for purchase, one-time charge)	$149.00
New Activation Fee (one-time charge)	$29.95
Standard Installation (one-time charge)	$99.00
In Home Repair Charge (per occurrence)	$50.00
Upgrade/Downgrade of service (In-home visit required, per occurrence)	$40.00
Upgrade/Downgrade of service (No in-home visit required, per occurrence)	$5.00
Unreturned or Damaged Equipment Fees[31]	Replacement Cost

Refer to the last page for additional information.
For information about XFINITY policies and terms of service, go to www.comcast.com/policies.

XFINITY® INTERNET[34]

	XFINITY Internet Service Only	with XFINITY TV or Voice Service
Economy Plus[10]	$39.95	$29.95
Performance Starter[35]	$49.95	$49.95
Performance	$64.95	$49.95
Blast!®	$74.95	$59.95
Extreme 50[9,10]	$114.95	$99.95
Extreme 105[9,10]	$199.95	$199.95

Skype™ on XFINITY	$9.95
Voice/Data Modem (monthly)	$7.00
Wireless Gateway (monthly)	$7.00
Relocate additional outlet At time of initial installation (per occurrence)	$19.99
Relocate additional outlet Requiring a separate trip (per occurrence)	$20.99
Upgrade/Downgrade of service In-home visit required (per occurrence)	$40.00
Upgrade/Downgrade of service No in-home visit required (per occurrence)	$5.00
Professional Internet Installation (one-time charge)	$99.95
Additional IP Address (first, monthly)	$4.95
Additional IP Address (each, monthly, up to 3 additional)	$9.00
Voice/Data Modem DOCSIS 2.0 Kit (for purchase, one-time charge)	$79.99
Voice/Data Modem DOCSIS 3.0 Kit (for purchase, one-time charge)	$99.00
Ethernet Card (each, one-time charge)	$20.00
Mac Compatible Card or Adapter (one-time charge)	$79.99
Wireless Adapter (each, one-time charge)	$30.00
N Class Wireless PCMCIA Adapter (for purchase, one-time charge)	$60.00
Wireless Networking On-Site Professional Set-Up (with installation of XFINITY TV, XFINITY Voice or XFINITY Internet, per occurrence)	$49.95
Wireless Networking On-Site Professional Set-Up (Separate Trip, per occurrence)	$99.95
Wireless Networking On-Site Professional Set-Up (Additional Device, per occurrence)	$29.95
Extreme 105 Professional Internet Installation (one time charge)	$249.00
Unreturned or Damaged Equipment Fees[31]	Replacement Cost

Refer to the last page for additional information.
For information about XFINITY policies and terms of service, go to www.comcast.com/policies.

Certain services available separately or as a part of other levels of service. Comcast service is subject to Comcast's standard terms and conditions of service. Unless otherwise specified, prices shown are the monthly charge for the corresponding service, equipment or package. Prices shown do not include applicable taxes, franchise fees, FCC fees, Regulatory Recovery Fee, Public Access fees, other state or local fees or other applicable charges (e.g., per-call toll or international charges). Prices, services and features are subject to change. If you own a compatible digital converter or CableCARD device, please call 1-800-XFINITY for pricing information or visit www.comcast.com/equipmentpolicy.

1 *Requires a Voice/Data Modem, except for HD Complete Triple Play.*
2 *SurePrice only available for 12 months to XF Triple Play or MultiLatino Paquete Triple Play customers after 12 month promotional package.*
3 *AnyRoom® DVR service is included with HD Premier Triple Play and MultiLatino Total HD Paquete Triple if AnyRoom® DVR service is installed on primary outlet.*
4 *Includes HD converter and remote. Replaces standard definition converter and remote on primary outlet. Not available to customers with Limited Basic only.*
5 *Sold only with one or more Digital Additional Outlet Service with HD Converter, maximum 3 clients per household. Requires Professional install.*
6 *Not available to Limited Basic only customers. Digital service tier on additional outlet corresponds to digital service tier on primary outlet.*
7 *Requires HD Technology Fee.*
8 *HD converter replaces standard definition converter on primary outlet. Not available to customers with Limited Basic only.*
9 *Not available in all areas. May require installation and nonrefundableinstallation charge.*
10 *Does not include PowerBoost®.*
11 *SurePrice only available for 12 months to Preferred XF Double Play customers after 12 month promotional package.*
12 *Requires digital converter or CableCARD and Limited Basic.*
13 *Requires digital converter and purchase of Limited Basic and cannot be combined with Expanded Basic. Family Tier programming included in Digital services except for MultiLatino.*
14 *Requires Digital Starter.*
15 *Requires Digital Starter and Performance Internet.*
16 *Includes digital adapter and remote. Not available to customers with Limited Basic only.*
17 *Requires digital converter and Limited Basic.*
18 *If cancelled in the first month, you will be charged the greater of $5.00 or a prorate of the monthly rate for the number of days in the billing cycle before cancellation.*
19 *Automatically renewed annually at the then current price. If cancelled in the first month, you will charged $10.99 and any prepaid amount will be credited to your account. If cancelled between the 2nd and 6th month your account will be credited $25.00. If cancelled after the 6th month, no credit will be issued.*
20 *Price of Pay-Per-View and On Demand Movie or Event is displayed prior to the completion of the Pay-Per-View or On Demand ordering process.*
21 *Requires digital converter and Limited Basic to receive Streampix™ on television. Streampix™ included with the following tiers of service: Blast Plus®, HD Preferred Plus XF Triple Play, HD Premier XF Triple Play or HD Complete XF Triple Play. HD content requires subscription to HD Technology/ HD Service fee. Streaming to iOS device requires XFINITY™ TV app. Internet service with bandwidth of at least 600 Kbps and a subscription to Limited Basic. Streaming to laptop/computer requires equipment meeting minimum requirements posted at http://customer.comcast.com/help-and-support/internet/requirements-to-run-xfinity-internet-service.*
22 *Does not include Extreme 105 Internet Service installation charge,wireless networking, professional internet installation or activationfees.*
23 *Product installations include installations up to 125 feet from existing Comcast plant. Custom installations include installations which require in-wall wiring or installations in extensive drop ceilings, basements or crawl spaces.*
24 *See http://www.comcast.com/spp for information on Service Protection Plan.*
25 *See http://signaturesupport.xfinity.com/ for information on Computer Protection Plus.*
26 *See http://signaturesupport.xfinity.com/ for information on TV Protection Plus.*
27 *See http://signaturesupport.xfinity.com/ for information on Complete Protection.*
28 *See http://signaturesupport.xfinity.com/ for information on Computer Performance Tool.*
29 *See http://signaturesupport.xfinity.com/ for information on Help Desk.*
30 *See http://signaturesupport.xfinity.com/ for information on Help Desk Plus.*
31 *Please contact 1-800-XFINITY for questions regarding equipment replacement charges.*
32 *Does not apply to CableCARD Self Install Kit.*
33 *Requires a Voice / Data Modem Unlimited Local and Long Distance package pricing applies only to direct dialed calls from home to locations in U.S., Canada, Puerto Rico and certain other U.S territories. Plans do not include other international calls. For more information regarding XFINITY Voice pricing go to http://www.comcast.com/ corporate/about/phonetermsofservice/ comcastdigitalvoice/cdvrstatepricing.html.*
34 *Voice/Data modem required. For more information regarding XFINITY Internet go to http://www.comcast.com/ highspeedinternet.*
35 *Download speed up to 6 Mbps and upload speed up to 1 Mbps. Does not include PowerBoost®. Many factors affect speed. Actual speeds may vary and are not guaranteed.*

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H2075, H2175, H2298, H5357, H7279 8155-4000 (0420-0540, 0640)
CAL-020
PNCA405MV0-PNCA405MVB 0113

xfinity®

Services & Pricing

Effective January 2013

Albany/Berkeley/Crockett
El Cerrito/El Sobrante/Hercules
Kensington/Pinole/Port Costa
Richmond/Rodeo/San Pablo

1-800-XFINITY | xfinity.com

comcast

PUBLIC VERSION/REDACTED

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

CONFIDENTIAL EXHIBIT ORA/COMCAST R-1:21.1

Product	Tiers/Speeds	Description	Typically Marketed To	California Subs
SMB Data				[redacted]
Starter Package	16/3 Mbps	An asymmetrical internet access service provided over Comcast's HFC network	Small & Medium	[redacted]
Deluxe 50	50/10 Mbps	An asymmetrical internet access service provided over Comcast's HFC network	Small & Medium	[redacted]
Deluxe 75	75/15 Mbps	An asymmetrical internet access service provided over Comcast's HFC network	Small & Medium	[redacted]
Deluxe 100	100/20 Mbps	An asymmetrical internet access service provided over Comcast's HFC network	Small & Medium	[redacted]
Deluxe 150	150/20 Mbps	An asymmetrical internet access service provided over Comcast's HFC network	Small & Medium	[redacted]
Legacy Tiers		Various legacy speeds not sold anymore	Small & Medium	[redacted]
				[redacted]
Static IP	N/A	An optional add-on service for Business Internet customers wanting a dedicated IP address. no stand alone sub count information available.	Small & Medium	[redacted]
				[redacted]
Business Class Voice				[redacted]
Basic Class Voice	Basic	Telephone services that connects to analog handsets or key systems allowing for inbound and outbound calling through the PSTN. Unlimited local + metered long distance and ILD..	Small & Medium	[redacted]
Basic Class Voice	Full Featured Voice (up to 3 lines)	Telephone services that connects to analog handsets or key systems allowing for inbound and outbound calling through the PSTN. Unlimited local + unlimited long distance and metered ILD.	Small & Medium	[redacted]
Basic Class Voice	Full Featured Voice (4+ lines)	Discount available on the 4th line. Same service features as described with Full-Featured Voice.	Small & Medium	[redacted]
				[redacted]
Business Trunk PRI	Price per trunk	A digital trunking solution allowing PSTN connectivity through a customer owned PBX.	Medium	[redacted]
				[redacted]
Business Voice Edge				[redacted]
Business Voice Edge	Per Seat Pricing	A cloud based PBX solution managed by Comcast. A Seat is a user of the service.	Medium	[redacted]
Business Voice Edge	Per Line Pricing	A cloud based PBX solution managed by Comcast. A Line is a telephone service allowing for inbound and outbound calling through the PSTN. Unlimited local and long distance are included.	Medium	[redacted]
				[redacted]
Metro E (Ethernet)			Medium	[redacted]

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

EXHIBIT ORA/COMCAST R-1:21.2

COMCAST BUSINESS VOICE SERVICE
BUSINESS PRICING LIST (EFFECTIVE: AUGUST 01, 2014)
CALIFORNIA
VERSION 30

To modify/update this document contact David Lloyd

Comcast Business Service is for business customers located in Comcast serviceable areas only and is subject to availability. Multi-product discounts require continuous subscription to all specified Comcast products. Pricing shown does not include federal, state or local regulatory fees, taxes or surcharges. Service is subject to the Comcast Business Subscriber Agreement and other applicable terms and conditions. Prices shown are effective on the date specified and are subject to change. Other restrictions apply. For additional information, contact us at 1-800-391-3000.

A. BUSINESS VOICE LINE SERVICES

	MONTHLY RATE
Primary Line [1,2]	
• Full Featured Line	$59.95
• Full Featured Line [3]	39.95
Additional Line(s), per line [1]	
• Full Featured Lines 2 and 3 [2]	59.95
• Full Featured Lines 2 and 3 [2,3]	39.95
• Full Featured Lines 4 and above[2]	24.95
• Basic Line [4]	24.95
Hospitality Voice Service [1]	
• Full Featured Line [2]	$59.95
• Basic Additional Line [4]	24.95

[1] Comcast may enter into term agreements with prices that may vary subject to the availability of promotional offers and/or the customer's choice of term, number of lines purchased and associated special construction or related charges. Qualifying non-profit organizations may be eligible for discounted rates; contact Comcast for additional information.

[2] Includes unlimited nationwide direct-dial calling from your business location including calls to Puerto Rico, US Virgin Islands, Guam, Saipan/N. Mariana Islands, Canada, and American Samoa. The following calling features are also included: 3-way Calling, Anonymous Call Rejection, Call Forwarding Selective, Call Forwarding Variable, Call Return, Call Screening, Call Waiting, Caller ID, Caller ID Per-Call or Per-Line Blocking, Caller ID with Call Waiting, Repeat Dialing, Speed Dial 8, Speed Dial 30 and other enhanced features. Prices shown are for the Voice component only.

[3] Requires separate subscription to a qualifying Comcast core service.

[4] Comcast Business Voice Basic Line includes free local calling from your business location and Caller ID. (For information regarding your local calling area, call 1-800-391-3000.)

A. BUSINESS VOICE LINE SERVICES --(CONT'D)

	MONTHLY RATE
Vintage Pricing – Primary and Additional Lines [1,2]	
• V-Premium Line (with Voice Mail) [3]	$69.95
• V-Basic Line (without Voice Mail) [3]	64.95
• Fax Line (without calling features or Voice Mail) [3,4]	34.95
• V-Premium Line - with data or video subscription [3]	49.95
• V-Basic Line - with data or video subscription [3]	44.95
• Fax Line - with data or video subscription [3,4]	24.95
• Full Featured Lines 1-3 [5]	44.95
• Full Featured Lines 4 and above (includes Voice Mail) [6]	24.95
• Full Featured Hospitality Line (with Voice Mail) [5]	49.95
Optional Services	
• Call Trace, per call	No Charge
• Hunting	No Charge
• Domestic Toll Restriction, per line	No Charge
• Distinctive Ring	No Charge
• International Toll Restriction, per line	No Charge
• Prohibit Bill to Third Party, per line	No Charge
• Prohibit Collect Calls, per line	No Charge
• Auto Attendant, per license	Note [7]
• Remote Call Forwarding, per number	4.95
• Voice Mail, per line	5.00
Equipment Fee	
• Standard Rate	$9.95

	CHARGE
Equipment Replacement Fee [8]	
• 2-Line Modem DOCSIS 2.0	$ 70.00
• 2-Line Modem DOCSIS 3.0	110.00
• 4-Line Modem	120.00
• 8-Line Modem – Arris 608	170.00
• 8-Line Modem – Arris 508	340.00
• 8-Line Battery – Arris 508	140.00

[1] See Footnote [1] on Page 1.
[2] See Footnote [2] on Page 1.
[3] For contracts initiated on or before 2/4/08.
[4] Grandfathered 8/25/09.
[5] For contracts initiated before 4/22/13.
[6] For contracts initiated before 7/10/13.
[7] Service may not be available in all areas, contact Comcast for additional information.
[8] Fee applies for unreturned or customer-damaged equipment. Replacement equipment is Comcast (and not customer) owned.

A. BUSINESS VOICE LINE SERVICES --(CONT'D)

	CHARGE
Domestic Long Distance Usage Charges	
• Premium Line Direct-Dialed Domestic Long Distance	Included
• Basic Line Direct-Dialed Domestic Long Distance (includes DA Call Completion) [1]	$0.05/min.
Installation	
• Standard Service Installation [2]	
– 36 month term, per event	$ 49.00
– 24 month term, per event	99.00
– 12 month term, per event	199.00
• Service Activation [3], per line up to four lines	29.95
• Reactivation Fee, per event	6.00
• Auto Attendant Set-up, per license	Note [4]
• Remote Call Forwarding, per number	19.95
Repair	
• Service Charge – per technician, per hour	Note [5]
• Repair Visit (Truck Roll)	Note [5]
• Jack Charge (for new jacks), per jack	49.95
• Jack Change Charge, per jack	49.95
Change Charges	
• Auto Attendant Configuration Change	Note [4]
• Change of Billing Responsibility	Note [5]
• Feature Change	Note [5]
• Telephone Number Change	Note [5]
• Number Referral Service, (30 days)	9.95
– Extended Referral (additional 30 days)	Note [4]

[1] Domestic Long Distance includes non-local calls to 50 United States, D.C., Puerto Rico, US Virgin Islands, Guam, Saipan, N. Mariana Islands and American Samoa. Rate shown also applies to calls to Canada. Partial minutes are rounded up to the next whole minute.
[2] "Service Installation" includes premises-related field activities: dispatching a technical as well as time and materials for physical installation.
[3] "Service Activation" (Business Voice Provisioning) includes back-office activities associated with the establishment of an account: set-up, order processing, bill initiation, etc.
[4] Service may not be available in all areas, contact Comcast for additional information.
[5] Contact Comcast for rating information.

B. BUSINESS BRANCH OFFICE VOICE SERVICES

	MONTHLY RATE
Branch Office Voice [1]	
• Basic Line [2]	$ 36.95
• Premium Line [3]	49.95
• Alternate/Additional Number	2.95
Optional Services	
• Additional Voicemail Box	$ 5.00
• Auto Attendant [4]	24.95
• Call Trace, per call	No Charge
• Domestic Toll Restriction, per line	No Charge
• Distinctive Ring	No Charge
• Hunt Group [4]	19.95
Premises Equipment Lease Fees, per device	
• Cisco PAP2 ATA	$ 4.95
• Cisco SPA8000	9.95
• EdgeMarc Series 4500 (up to 8 lines)	9.95
• EdgeMarc Series 4500 (more than 8 lines)	19.95
• Adtran T912	19.95

	CHARGE
Premises Equipment Replacement Fee, per device [5]	
• Cisco PAP2 ATA	$ 52.00
• Cisco SPA8000	195.00
• EdgeMarc Series 4500	345.00
• Adtran T912	1200.00

[1] Effective 10/19/12 subscription to this service is limited to existing customers.
[2] Includes unlimited local calling, E911, Voicemail and 26 Calling Features. For information regarding features or your local calling area, call 1-800-391-3000.
[3] Includes E911, Voicemail and 46 Calling Features. Also includes unlimited nationwide direct-dial calling from your business location plus calls to Puerto Rico, US Virgin Islands, Guam, Saipan/N. Mariana Islands, Canada, and American Samoa. For additional information call 1-800-391-3000.
[4] Includes unlimited local calling.
[5] Fee applies for unreturned or customer-damaged equipment. Replacement equipment is Comcast (and not customer) owned.

B. BUSINESS BRANCH OFFICE VOICE SERVICES -- (CONT'D)

	CHARGE
Domestic Long Distance Usage Charges [1]	
• Basic Line (includes DA Call Completion) [2]	$0.05/min.
• Premium Line	Included
Audio Conferencing Service	
• Local and Domestic, per participant	$ 0.08/min.
• International, per participant	Note [3]
Installation	
• Basic Line	$ 24.95
• Premium Line	24.95
• Alternate/Additional Number	No Charge
• Premises Equipment	
– 36 month term, per event	$ 49.00
– 24 month term, per event	99.00
– 12 month term, per event	199.00
– Self-Install (PAP2 ATA Only)	0.00
• Auto Attendant Set-up	12.00
• Hunt Group	12.00
• Reactivation Fee, per event	6.00
Additional Fees/Charges	
• Technical Assistance (2-hour minimum applies)	$75.00/hr.
• Change of Billing Responsibility	No Charge
• Destination Unreachable	No Charge
• International Calling Activation	No Charge
• Number Referral Service (30 days), per number	$ 9.95
• Prohibit Bill to Third Party, per line	No Charge
• Prohibit Collect Calls, per line	No Charge
• Telephone Number Change	No Charge
• Vanity Number search	No Charge

[1] Rates shown apply to Direct-Dialed calls only. Additional charges apply for calls utilizing an Operator.
[2] Domestic Long Distance includes non-local calls to 50 United States, D.C., Puerto Rico, US Virgin Islands, Guam, Saipan, N. Mariana Islands and American Samoa. Rate shown also applies to calls to Canada. Partial minutes are rounded up to the next whole minute.
[3] For calls involving international participants, Comcast's published International and Global 800 Service rates apply in addition to the local and domestic rate shown above.

C. BUSINESS VOICE TRUNK SERVICES

	MONTHLY RATE
Primary Rate Interface Trunk [1]	
• Port (6 channels), per Port	$349.00
• Additional Channels, per Channel	14.00
• Full Capacity	489.00
Configuration Options/Features	
• Additional Block of 20 numbers, per block	$5.00
• Additional Block of 100 numbers, per block	20.00
• ANI/DNIS, per Trunk Group	50.00
• Call Forward Not Reachable, per Telephone Number	1.00
• DID/DOD Enable, per Trunk Group	No Charge
• Direct Trunk Overflow, per Trunk Group	10.00
• Monthly Call Detail Record, per location	50.00

	CHARGE
Domestic Long Distance Usage Charges [2]	
• Direct-Dialed Domestic Long Distance	
– 200 minute-per-channel allowance	Included
– Rate applicable beyond the per-channel allowance: [3]	
0 - 4,999 total minutes	$ 0.030/min.
5,000 – 7,499 total minutes	0.028/min.
7,500 – 9,999 total minutes	0.026/min.
10,000 – 14,999 total minutes	0.024/min.
15,000 – 49,999 total minutes	0.022/min.
50,000 – 99,999 total minutes	0.019/min.
100,000+ total minutes	0.016/min.
• Operator-Assisted Domestic Long Distance	$ 0.12/min.
Installation	
• Initial Port Installation	$500.00
• Additional Channel Installation	No Charge

[1] Includes first block of 20 telephone numbers, unlimited local calling, Caller ID, and E911 capability. For information regarding your local calling area, call 1-800-391-3000.
[2] Domestic Long Distance includes non-local calls to 50 United States, D.C., Puerto Rico, US Virgin Islands, Guam, Saipan, N. Mariana Islands and American Samoa. Rate shown also applies to calls to Canada. Long distance minutes are pooled on a per-location basis.
[3] Calls are billed on a 6 second basis rounded up to the next 6-second block. Final charges are rounded up to next full cent.

C. BUSINESS VOICE TRUNK SERVICES – (CONT'D)

	CHARGE
Additional Fees/Charges	
• Change of Billing Responsibility	No Charge
• Destination Unreachable	No Charge
• Direct Trunk Overflow	$ 9.95
• Prohibit Bill to Third Party, per trunk	No Charge
• Prohibit Collect Calls, per trunk	No Charge
• Technical Assistance (2-hour minimum applies)	$75.00/hr.
• Trunk Reconfiguration, per event	100.00
• Telephone Number Change	No Charge
• Vanity Number search	No Charge
Equipment Replacement Fee [1]	
• Integrated Access Device (IAD), per device	$ 890.00

[1] Fee applies for unreturned or customer-damaged equipment. Replacement equipment is Comcast (and not customer) owned.

D. BUSINESS VOICEEDGE™ SERVICE

	MONTHLY RATE
Voice Lines [1,2]	
• 5 Lines or less, per line	$34.95
• 6-24 Lines, per line	29.95
• 25+ Lines, per line	24.95
Standard Seats [2]	
• 1-50, per seat	$14.95
• 51+, per seat	9.95
Unified Communication Seats [2]	
• 1-50 seats	$19.95
• 51+ seats	14.95
Optional Services	
• Additional Hunt Group	$ 19.95
• Additional Voicemail Box	5.00
• Auto Attendant, per license	24.95
• Call Queue Agent	9.95
• Reception Console	29.95
• Shared Call Appearance	No Charge
Number Services	
• Alternate/Additional Telephone Number	$ 2.95
• 20 Local Telephone Numbers	5.00
• 100 Local Telephone Numbers, per group of 100	20.00
Equipment Fee	
• Polycom SoundPoint 335 HD	$4.95
• Polycom SoundPoint VVX 500 HD	6.95
• Polycom SoundPoint 670 HD	9.95
• Polycom Sidecar	4.95
• Polycom VVX 1500 HD	19.95
• Polycom Cordless DECT (1-Base Station & 1 Handset)	9.95
• Polycom Cordless DECT Handset (1 Handset)	4.95
• Polycom VVX 500 Camera	3.95
• Polycom Soundstation 5000	4.95
• Polycom Soundstation 6000	6.95
• Cisco 3102 ATA	4.95
• EdgeMarc 4550 (5-15 WAN Calls)	4.95
• EdgeMarc 4550 (5-10 WAN Upgrade)	6.95
• EdgeMarc 4550 (15-30 WAN Upgrade)	14.95
• EdgeMarc 4550 (30-70 WAN Upgrade)	19.95
• EdgeMarc 5300 (300 WAN Calls)	74.95

[1] Business VoiceEdge™ Service includes unlimited nationwide direct-dial calling from your business location including calls to Puerto Rico, US Virgin Islands, Guam, Saipan/N. Mariana Islands, Canada, and American Samoa.
[2] Business VoiceEdge™ is a feature-rich service. Contact Comcast for a complete listing of available complimentary features.

D. BUSINESS VOICEEDGE™ SERVICE -- (CONT'D)

	CHARGE
Equipment Replacement Fee, per device [1]	
• Polycom SoundPoint 335 HD	$ 97.00
• Polycom SoundPoint VVX 500 HD	216.00
• Polycom SoundPoint 670 HD	238.00
• Polycom Sidecar	123.00
• Polycom VVX 1500 HD	716.00
• Polycom Cordless DECT (1-Base Station & 1 Handset)	190.00
• Polycom Cordless DECT Handset (1 Handset)	89.00
• Polycom VVX 500 Camera	113.00
• Polycom Soundstation 5000	399.00
• Polycom Soundstation 6000	534.00
• Polycom Power Supply for Soundpoint	19.70
• Polycom Power Supply for VVX	15.78
• Polycom Combined Deskstand-Wallmount	7.00
• Polycom Handset and/or Cord for Soundpoint	11.00
• Polycom Handset and/or Cord for VVX	12.60
• Cisco 3102 ATA	72.00
• EdgeMarc 4550 (5 Wan Calls)	325.00
• EdgeMarc 4550 (15 Wan Calls)	702.00
• EdgeMarc 4550 (5 to 10 Wan Upgrade)	73.00
• EdgeMarc 4550 (10 to 15 Wan Upgrade)	123.00
• EdgeMarc 4550 (15 to 30 Wan Upgrade)	135.00
• EdgeMarc 4550 (30 to 70 Wan Upgrade)	287.80
• EdgeMarc 5300	2,325.00
• EdgeMarc 5300 (300 Wan Calls)	2,521.00

[1] Fee applies for unreturned or customer-damaged equipment. Replacement equipment is Comcast (and not customer) owned.

D. BUSINESS VOICEEDGE™ SERVICE -- (CONT'D)

	CHARGE
Installation	
• Additional Hunt Group	No Charge
• Additional Voicemail Box	No Charge
• Alternate/Additional Number	No Charge
• Auto Attendant Set-up	$ 24.95
• Auto Attendant Recording Edit	35.00
• Call Queue Agent	12.00
• Expedited Order	500.00
• Local Telephone Numbers	No Charge
• Premises Equipment	
– 60 month term, per event	No Charge
– 36 month term, per event	49.00
– 24 month term, per event	99.00
– 12 month term, per event	199.00
• Reception Console	12.00
• Remote Call Forward (Initial)	No Charge
• Remote Call Forward (Change)	9.95
• Shared Call Appearance/Busy Lamp	No Charge
• Standard Seats (1-51+)	9.95
• Truck Roll	100.00
• Unified Communication Seats (1-51+)	9.95
• Voice Line (1-25+)	29.95

E. MISCELLANEOUS SERVICES

	MONTHLY RATE
Directory Listing Services	
• Standard Directory Listing [1]	No Charge
• Non-published Directory Service, per product	Note [2]
• Non-published Directory Service, per product [3]	$2.00
• Non-listed Directory Service, per product	Note [2]
• Non-listed Directory Service, per product [3]	$2.00
• Computer/Fax Line Directory Exclusion, per line	No Charge
• Additional Listing, per listing	Note [2]
• Additional Listing, per listing	$4.50

	CHARGE
Directory Set-up/Change	
• Non-published Directory Service, per event	$24.95
• Non-listed Directory Service, per event	24.95
• Additional Listing Directory Service, per event	24.95
• Directory Listing Change	24.95
Directory Assistance Services	
• Domestic Directory Assistance [4,5]	
– Standard Directory Assistance	$ 2.49/call
– Enhanced Directory Assistance	2.49/call
– Directory Assistance with Call Completion [6]	2.99/call
• International Directory Assistance [7]	5.49/call
• International Call Completion	Note [8]
Domestic Operator Services	
• Operator Surcharge [5,9]	$ 2.99/call
• Operator Assisted Domestic Long Distance	0.12/minute
• Busy Line Verify and/or Interrupt	Note [8]

International Long Distance Usage Charges
(Rating information for direct-dialed and operator-assisted international calling is detailed in the Pricing Lists for those services.)

[1] Includes single listing in white and yellow pages.
[2] Contact Comcast for rating information prior to 10/22/12.
[3] For contracts on and after 10/22/12.
[4] Limit 3 number requests per call.
[5] Registered users with qualifying disabilities may be eligible for waived or discounted charges for calls originating from registered lines that utilize Domestic Directory Assistance, Domestic Call Completion, or Operator Services for Domestic Station-to-Station Sent-Paid calls.
[6] Usage rates apply to non-local DA Call Completion for Basic Line and Trunk subscribers.
[7] Limit 1 number request per call.
[8] Service is not currently available.
[9] Usage rate applies in addition to specified surcharge.

F. ADMINISTRATIVE/GENERAL

	CHARGE
Late Payment Fee	Note [1]
Payment Convenience Fee, up to [2]	$5.99
Returned Check Fee	Note [1]
Federal Universal Service Fund (USF) – Universal Connectivity Charge	Note [3]

Regulatory Recovery Fee [4]
The Regulatory Recovery Fee (RRF) is a Comcast service charge imposed on voice services to recover Comcast's contributions for federal, state and municipal regulatory programs and assessments, including, without limitation, universal service. The RRF is neither government mandated nor a tax or fee imposed on you by the government, but is an amount that Comcast retains. The aggregated fee may vary based on service usage patterns and program surcharge rates, and may change over time.

– State Universal Service Fund (USF)	1.15%
– State Telecom Relay Service	0.059%
– City Utility User's Tax, up to a maximum of	11.00%
– County Utility User's Tax, up to a maximum of	5.50%
– State PUC recovery fee	0.18%
– State Hearing Impaired Fund	0.20%
– High Cost Fund - A	0.18%
– High Cost Fund - B	0.00%
– CA Advanced Services Fund	0.464%
– Federal Cost Recovery Fee (TRS/Telecom Provider)	1.85%

[1] Contact Comcast for rating information.
[2] A Payment Convenience Fee may apply when a customer engages a Company employee or uses an Interactive Voice Response (IVR) System to complete a billing transaction.
[3] In calculating the Federal USF Universal Connectivity Charge, the Company uses a percentage equal to the FCC's current USF carrier contribution percentage.
[4] Items shown here under Regulatory Recovery Fee may be itemized in select markets.

PUBLIC VERSION/REDACTED

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

CONFIDENTIAL EXHIBIT ORA/COMCAST R-1:27

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

EXHIBIT ORA/COMCAST R-1:28

COMCAST XFINITY® VOICE SERVICE
RESIDENTIAL PRICING LIST (EFFECTIVE: AUGUST 01, 2014)
CENTRAL CALIFORNIA
VERSION 65

To modify/change this document contact David Lloyd.

Service is for residential customers located in Comcast serviceable areas only and is subject to availability. Multi-product discounts require continuous subscription to all specified Comcast products. Pricing shown does not include federal, state or local regulatory fees, taxes or surcharges. Service is subject to the Comcast Residential Subscriber Agreement and other applicable terms and conditions. Prices shown are effective on the date specified and are subject to change. Other restrictions apply. For additional information, contact us at 1-888-COMCAST.

MONTHLY SERVICES

	MONTHLY CHARGE
Xfinity Unlimited™ [1]	
• Comcast Unlimited with Comcast High-Speed Internet *and* Comcast Cable services	$39.95
• Comcast Unlimited with Comcast High-Speed Internet *or* Comcast Cable services	44.95
• Comcast Unlimited only	44.95
• Additional Premium Line (with Calling Features)	21.95
• Additional Basic Line (without Calling Features)	11.95
Local with More® [2]	
• Local with More with Comcast Internet *and/or* Comcast Video Services	$24.95
• Local with More only	34.95
• Enhanced Voice Mail	3.95
• Additional Premium Line (with Calling Features and Voice Mail)	21.95
• Additional Basic Line (without Calling Features and Voice Mail)	11.95

[1] Includes unlimited nationwide direct-dial calling from your home including calls to Puerto Rico, US Virgin Islands, Guam, Saipan/N. Mariana Islands, Canada, and American Samoa. The following calling features are also included: 3-way Calling, Anonymous Call Rejection, Call Forwarding Selective, Call Forwarding Variable, Call Return, Call Screening, Call Waiting, Caller ID, Caller ID Per-Call or Per-Line Blocking, Caller ID with Call Waiting, Repeat Dialing, Speed Dial 8, Enhanced Voice Mail and other enhanced features. Prices shown are for the Voice component only.

[2] Includes unlimited direct-dialed local calling from your home. (For information regarding your Local Calling Area, call 1-888-COMCAST.) The following calling features are also included: 3-way Calling, Anonymous Call Rejection, Call Forwarding Selective, Call Forwarding Variable, Call Return, Call Screening, Call Waiting, Caller ID, Caller ID Per-Call or Per-Line Blocking, Caller ID with Call Waiting, Repeat Dialing, Speed Dial 8 and other enhanced features. Prices shown are for the Voice component only. Usage charges apply for calls to (and calls forwarded to) non-local terminating numbers.

MONTHLY SERVICES – (CONT'D)

	MONTHLY CHARGE
Optional Services	
• Call Trace, per call	No Charge
• Domestic Toll Restriction	No Charge
• International Toll Restriction	No Charge
• Prohibit Bill to Third Party	No Charge
• Prohibit Collect Calls	No Charge
• Speed Dial 30	No Charge
• Text Messaging, Xfinity Unlimited – per line[1]	No Charge
• Text Messaging, Local with More – per line[1]	No Charge
Directory Listing Services	
• Standard Directory Listing[2]	No Charge
• Non-published Directory Service, per line	$1.50
• Non-listed Directory Service, per line	1.25 [3]
• Computer/Fax Line Directory Exclusion, per line	No Charge [4]
• Additional Listing, per line	Note [5]
Modem Lease Fee, up to a maximum of:	
• 2-line Modem	$8.00
• 4-line Modem	8.00

[1] Includes daily allowance of 250 messages. Contact Comcast at www.xfinity.com/textmessaging for text area description and additional information.
[2] The Standard Directory Listing will be made available at ecolisting.com and through the Comcast directory assistance operator. The Company is unable to guarantee inclusion (or the accuracy of information) in databases/directories controlled by other information providers.
[3] This service is grandfathered to existing service arrangements at existing locations for Customers of record as of 4-26-10.
[4] This service is grandfathered to existing service arrangements at existing locations for Customers of record as of 1-06-10.
[5] Service is not currently available.

TRANSACTIONAL CHARGES

	CHARGE
Directory Assistance Services	
• Domestic Directory Assistance [1,2]	
– Standard Directory Assistance	$2.49/call
– Enhanced Directory Assistance	2.49/call
– Directory Assistance with Call Completion [3]	2.99/call
• International Directory Assistance [4]	4.99/call
• International Call Completion	Note [5]
Domestic Operator Services	
• Operator Surcharge [2,6]	$2.49/call
• Busy Line Verify	Note [5]
• Busy Line Interrupt (includes busy line verify)	Note [5]
International Operator Services	
• Operator Surcharge [6]	$4.99/call
Domestic Long Distance Usage Charges	
• Direct-Dialed Domestic Long Distance [7]	Included
• Local with More Direct-Dialed Domestic Long Distance (includes DA Call Completion) [8]	$0.05/min.
• Operator-Assisted Domestic Long Distance	$0.12/min.

International Long Distance Usage Charges
(Rating information for direct-dialed and operator-assisted International calling is detailed in the Pricing Lists for those services.)

[1] Limit 3 number requests per call.
[2] Registered users with qualifying disabilities may be eligible for waived or discounted charges for calls originating from their home that utilize Domestic Directory Assistance, Domestic Call Completion, or Operator Services for Domestic Station-to-Station Sent-Paid calls.
[3] Usage rates apply to non-local DA Call Completion for Local with More subscribers.
[4] Limit 1 number request per call.
[5] Service is not currently available.
[6] Usage rate applies in addition to specified surcharge.
[7] Included Domestic Long Distance applies to Xfinity Unlimited service subscribers only.
[8] Domestic Long Distance includes non-local calls to 50 United States, D.C. Puerto Rico, US Virgin Islands, Guam, Saipan, N. Mariana Islands and American Samoa. Rate shown also applies to calls to Canada. Partial minutes are rounded up to the next whole minute.

INSTALLATION/REPAIR/CHANGE CHARGES

	CHARGE
Installation	
• Standard Service Installation [1], per event	Note [2]
• Service Activation [3], per event	$29.95
• Self Install Kit	15.00
• Reactivation Fee, per event	6.00
• Non-published Directory Service, per event	9.25
• Additional Listing Directory Service, per event	Note [4]
Repair	
• Service Charge – per technician, per hour	$31.00
• In-Home Repair – (trouble call)	50.00
• Jack Charge (for new jacks), per jack	25.00
• Jack Change Charge, per jack	20.00
Change Charges	
• Telephone Number Change	$20.00
• Feature Change	1.99
• Directory Listing Change	9.25
• Change of Billing Responsibility	No Charge
• Number Referral Service, (30 days)	No Charge
– Extended Referral (additional 30 days)	Note [4]

[1] "Service Installation" includes premises-related field activities: dispatching a technical as well as time and materials for physical installation.
[2] Contact Comcast for rate information.
[3] "Service Activation" includes back-office activities associated with the establishment of an account: set-up, order processing, bill initiation, etc.
[4] Service may not be available in all areas, contact Comcast for additional information.

COMCAST XFINITY® VOICE SERVICE
RESIDENTIAL PRICING LIST (EFFECTIVE: AUGUST 01, 2014)
CENTRAL CALIFORNIA
VERSION 65

ADMINISTRATIVE/GENERAL

	CHARGE
Late Payment Fee [1]	$4.75
Payment Convenience Fee, up to [2]	$5.99
Returned Check Fee	$25.00
Unreturned Equipment Fees [3]	
• 2-Line Modem (DOCSIS 2.0), up to	$ 70.00
• 2-Line Modem (DOCSIS 3.0), up to	90.00
• 4-Line Modem, up to	100.00
• ACG Base (including Data Card), up to	130.00
• Xfinity Voice Wireless Gateway, up to	100.00
Equipment Purchase Pricing [4]	
• 2-Line Modem (DOCSIS 3.0)	$ 149.00
• 2-Line Modem (DOCSIS 2.0)	99.00
Service Protection Plan	$ 2.99/mo.
Federal Universal Service Fund (USF)	
– Universal Connectivity Charge	Note [5]

Regulatory Recovery Fee
The Regulatory Recovery Fee (RRF) is a Comcast service charge imposed on voice services to recover Comcast's contributions for federal, state and municipal regulatory programs and assessments, including, without limitation, universal service. The RRF is neither government mandated nor a tax or fee imposed on you by the government, but is an amount that Comcast retains. The aggregated fee may vary based on service usage patterns and program surcharge rates, and may change over time.

– State Universal Service Fund (USF)	1.15%
– State Telecom Relay Service	0.059%
– City Utility User's Tax, up to a maximum of	11.00%
– County Utility User's Tax, up to a maximum of	5.50%
– State PUC recovery fee	0.18%
– State Hearing Impaired Fund	0.20%
– High Cost Fund - A	0.18%
– High Cost Fund - B	0.00%
– CA Advanced Services Fund	0.464%
– Federal Cost Recovery Fee (TRS/Telecom Provider)	1.85%

[1] Applied to unpaid balances of $13.01 or more, 15 days after end of billing period.
[2] A Payment Convenience Fee may apply when a customer engages a Company employee or uses an Interactive Voice Response (IVR) System to complete a billing transaction.
[3] Fee applies for unreturned or customer-damaged equipment. Replacement equipment is Comcast (and not customer) owned. Actual charge is a function of equipment in use and, in some cases, may be less than charge shown.
[4] Offer subject to product availability. Price shown does not include shipping and handling (where applicable). Contact Comcast for additional information.
[5] In calculating the Federal USF Universal Connectivity Charge, the Company uses a percentage equal to the FCC's current USF carrier contribution percentage.

COMCAST XFINITY® VOICE SERVICE
RESIDENTIAL PRICING LIST (EFFECTIVE: AUGUST 01, 2014)
BAY AREA, CALIFORNIA
VERSION 73

To modify/change this document contact David Lloyd.

Service is for residential customers located in Comcast serviceable areas only and is subject to availability. Multi-product discounts require continuous subscription to all specified Comcast products. Pricing shown does not include federal, state or local regulatory fees, taxes or surcharges. Service is subject to the Comcast Residential Subscriber Agreement and other applicable terms and conditions. Prices shown are effective on the date specified and are subject to change. Other restrictions apply. For additional information, contact us at 1-888-COMCAST.

MONTHLY SERVICES

	MONTHLY CHARGE
Xfinity Unlimited™ [1]	
• Comcast Unlimited with Comcast High-Speed Internet *and* Comcast Cable services	$39.95
• Comcast Unlimited with Comcast High-Speed Internet *or* Comcast Cable services	44.95
• Comcast Unlimited only	44.95
• Additional Premium Line (with Calling Features)	21.95
• Additional Basic Line (without Calling Features)	11.95
Local with More® [2]	
• Local with More with Comcast Internet *and/or* Comcast Video Services	$24.95
• Local with More only	34.95
• Enhanced Voice Mail	3.95
• Additional Premium Line (with Calling Features and Voice Mail)	21.95
• Additional Basic Line (without Calling Features and Voice Mail)	11.95

[1] Includes unlimited nationwide direct-dial calling from your home including calls to Puerto Rico, US Virgin Islands, Guam, Saipan/N. Mariana Islands, Canada, and American Samoa. The following calling features are also included: 3-way Calling, Anonymous Call Rejection, Call Forwarding Selective, Call Forwarding Variable, Call Return, Call Screening, Call Waiting, Caller ID, Caller ID Per-Call or Per-Line Blocking, Caller ID with Call Waiting, Repeat Dialing, Speed Dial 8, Enhanced Voice Mail and other enhanced features. Prices shown are for the Voice component only.

[2] Includes unlimited direct-dialed local calling from your home. (For information regarding your Local Calling Area, call 1-888-COMCAST.) The following calling features are also included: 3-way Calling, Anonymous Call Rejection, Call Forwarding Selective, Call Forwarding Variable, Call Return, Call Screening, Call Waiting, Caller ID, Caller ID Per-Call or Per-Line Blocking, Caller ID with Call Waiting, Repeat Dialing, Speed Dial 8 and other enhanced features. Prices shown are for the Voice component only. Usage charges apply for calls to (and calls forwarded to) non-local terminating numbers.

MONTHLY SERVICES – (CONT'D)

	MONTHLY CHARGE
Optional Services	
• Call Trace, per call	No Charge
• Domestic Toll Restriction	No Charge
• International Toll Restriction	No Charge
• Prohibit Bill to Third Party	No Charge
• Prohibit Collect Calls	No Charge
• Speed Dial 30	No Charge
• Text Messaging, Xfinity Unlimited – per line[1]	No Charge
• Text Messaging, Local with More – per line[1]	No Charge
Directory Listing Services	
• Standard Directory Listing[2]	No Charge
• Non-published Directory Service, per line	$1.50
• Non-listed Directory Service, per line	1.25 [3]
• Computer/Fax Line Directory Exclusion, per line	No Charge [4]
• Additional Listing, per line	Note [5]
Modem Lease Fee, up to a maximum of:	
• 2-line Modem	$8.00
• 4-line Modem	8.00

[1] Includes daily allowance of 250 messages. Contact Comcast at www.xfinity.com/textmessaging for text area description and additional information.
[2] The Standard Directory Listing will be made available at ecolisting.com and through the Comcast directory assistance operator. The Company is unable to guarantee inclusion (or the accuracy of information) in databases/directories controlled by other information providers.
[3] This service is grandfathered to existing service arrangements at existing locations for Customers of record as of 4-26-10.
[4] This service is grandfathered to existing service arrangements at existing locations for Customers of record as of 1-06-10.
[5] Service is not currently available.

TRANSACTIONAL CHARGES

	CHARGE
Directory Assistance Services	
• Domestic Directory Assistance [1,2]	
– Standard Directory Assistance	$2.49/call
– Enhanced Directory Assistance	2.49/call
– Directory Assistance with Call Completion [3]	2.99/call
• International Directory Assistance [4]	4.99/call
• International Call Completion	Note [5]
Domestic Operator Services	
• Operator Surcharge [2,6]	$2.49/call
• Busy Line Verify	Note [5]
• Busy Line Interrupt (includes busy line verify)	Note [5]
International Operator Services	
• Operator Surcharge [6]	$4.99/call
Domestic Long Distance Usage Charges	
• Direct-Dialed Domestic Long Distance [7]	Included
• Local with More Direct-Dialed Domestic Long Distance (includes DA Call Completion) [8]	$0.05/min.
• Operator-Assisted Domestic Long Distance	$0.12/min.

International Long Distance Usage Charges
(Rating information for direct-dialed and operator-assisted International calling is detailed in the Pricing Lists for those services.)

[1] Limit 3 number requests per call.
[2] Registered users with qualifying disabilities may be eligible for waived or discounted charges for calls originating from their home that utilize Domestic Directory Assistance, Domestic Call Completion, or Operator Services for Domestic Station-to-Station Sent-Paid calls.
[3] Usage rates apply to non-local DA Call Completion for Local with More subscribers.
[4] Limit 1 number request per call.
[5] Service is not currently available.
[6] Usage rate applies in addition to specified surcharge.
[7] Included Domestic Long Distance applies to Xfinity Unlimited service subscribers only.
[8] Domestic Long Distance includes non-local calls to 50 United States, D.C. Puerto Rico, US Virgin Islands, Guam, Saipan, N. Mariana Islands and American Samoa. Rate shown also applies to calls to Canada. Partial minutes are rounded up to the next whole minute.

INSTALLATION/REPAIR/CHANGE CHARGES

	CHARGE
Installation	
• Standard Service Installation [1], per event	Note [2]
• Service Activation [3], per event	$29.95
• Self Install Kit	15.00
• Reactivation Fee, per event	6.00
• Non-published Directory Service, per event	9.25
• Additional Listing Directory Service, per event	Note [4]
Repair	
• Service Charge – per technician, per hour	$31.00
• In-Home Repair – (trouble call)	50.00
• Jack Charge (for new jacks), per jack	25.00
• Jack Change Charge, per jack	20.00
Change Charges	
• Telephone Number Change	$20.00
• Feature Change	1.99
• Directory Listing Change	9.25
• Change of Billing Responsibility	No Charge
• Number Referral Service, (30 days)	No Charge
– Extended Referral (additional 30 days)	Note [4]

[1] "Service Installation" includes premises-related field activities: dispatching a technical as well as time and materials for physical installation.
[2] Contact Comcast for rate information.
[3] "Service Activation" includes back-office activities associated with the establishment of an account: set-up, order processing, bill initiation, etc.
[4] Service may not be available in all areas, contact Comcast for additional information.

COMCAST XFINITY® VOICE SERVICE
RESIDENTIAL PRICING LIST (EFFECTIVE: AUGUST 01, 2014)
BAY AREA, CALIFORNIA
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ADMINISTRATIVE/GENERAL

	CHARGE
Late Payment Fee [1]	$4.75
Payment Convenience Fee, up to [2]	$5.99
Returned Check Fee	$25.00
Unreturned Equipment Fees [3]	
• 2-Line Modem (DOCSIS 2.0), up to	$ 70.00
• 2-Line Modem (DOCSIS 3.0), up to	90.00
• 4-Line Modem, up to	100.00
• ACG Base (including Data Card), up to	130.00
• Xfinity Voice Wireless Gateway, up to	100.00
Equipment Purchase Pricing [4]	
• 2-Line Modem (DOCSIS 3.0)	$ 149.00
• 2-Line Modem (DOCSIS 2.0)	99.00
Service Protection Plan	$ 2.99/mo.
Federal Universal Service Fund (USF)	
– Universal Connectivity Charge	Note [5]

Regulatory Recovery Fee
The Regulatory Recovery Fee (RRF) is a Comcast service charge imposed on voice services to recover Comcast's contributions for federal, state and municipal regulatory programs and assessments, including, without limitation, universal service. The RRF is neither government mandated nor a tax or fee imposed on you by the government, but is an amount that Comcast retains. The aggregated fee may vary based on service usage patterns and program surcharge rates, and may change over time.

– State Universal Service Fund (USF)	1.15%
– State Telecom Relay Service	0.059%
– City Utility User's Tax, up to a maximum of	11.00%
– County Utility User's Tax, up to a maximum of	5.50%
– State PUC recovery fee	0.18%
– State Hearing Impaired Fund	0.20%
– High Cost Fund - A	0.18%
– High Cost Fund - B	0.00%
– CA Advanced Services Fund	0.464%
– Federal Cost Recovery Fee (TRS/Telecom Provider)	1.85%

[1] Applied to unpaid balances of $13.01 or more, 15 days after end of billing period.
[2] A Payment Convenience Fee may apply when a customer engages a Company employee or uses an Interactive Voice Response (IVR) System to complete a billing transaction.
[3] Fee applies for unreturned or customer-damaged equipment. Replacement equipment is Comcast (and not customer) owned. Actual charge is a function of equipment in use and, in some cases, may be less than charge shown.
[4] Offer subject to product availability. Price shown does not include shipping and handling (where applicable). Contact Comcast for additional information.
[5] In calculating the Federal USF Universal Connectivity Charge, the Company uses a percentage equal to the FCC's current USF carrier contribution percentage.

PUBLIC VERSION/REDACTED

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

CONFIDENTIAL EXHIBIT ORA/COMCAST R-1:39

PUBLIC VERSION/REDACTED

Comcast Corporation Response to

First Set of Discovery Requests from the Office of Ratepayer Advocates

CONFIDENTIAL EXHIBIT ORA/COMCAST ORA R-1:53

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matter.	A.14-06-012 (Filed June 17, 2014)

COMCAST'S RESPONSE TO SUPPLEMENTAL DATA REQUEST 1:9 FROM OFFICE OF RATEPAYER ADVOCATES

October 7, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matter.	A.14-06-012 (Filed June 17, 2014)

COMCAST'S RESPONSE TO SUPPLEMENTAL DATA REQUEST 1:9 FROM OFFICE OF RATEPAYER ADVOCATES

Pursuant to Rule 10.1 of the California Public Utilities Commission ("CPUC"), Comcast Corporation ("Comcast") provides responses to the fourth set of data requests ("DRs") served on it by the Office of Ratepayer Advocates, California Public Utilities Commission ("ORA").

These responses are subject to the general objections stated below and the specific objections posed in each response. Comcast's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this response.

GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, Comcast may restate one or more of these general objections. However, these general objections apply to each individual request and Comcast's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive Comcast's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality, privilege and admissibility as evidence for any purpose, or to other requests for production. Comcast reserves the right to object on appropriate grounds to the use of such information and documents. Comcast hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. Comcast objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. Comcast objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to Comcast together with any copies.

3. Comcast objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to Comcast.

4. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to Comcast.

5. Comcast objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

6. Comcast objects to each DR to the extent that it exceeds the requirements of applicable law or purports to impose upon Comcast any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of

litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that is publicly available or readily accessible to the requesting party(ies).

10. Comcast objects to each DR to the extent that it requests documents or materials not in the Comcast's possession, custody or control.

11. Comcast objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

12. Comcast objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are Comcast employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, Comcast generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following responses.

I. RESPONSES

<u>ORA 1:9 Supplemental Request</u>: Question 9 from the first set of data requests, ORA-A.14-04-013.PHH-001, please fill out the attached table to respond to the data request.

<u>Objection</u>:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, in that the company does not retain the request information for prior years. The company also objects on the grounds that the request seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

<u>Supplemental Response</u>:

Please see attached CONFIDENTIAL Exhibit ORA/Comcast Supplemental Response R-1:9.

By: /s/ Suzanne Toller_____

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Attorneys for Comcast Corporation

Dated: October 7, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matter.	A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION'S FIRST SUPPLEMENTAL AND AMENDED RESPONSES TO FIRST, THIRD AND FOURTH SET OF DATA REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES PURSUANT TO MEET AND CONFER PROCESS

[PUBLIC VERSION]

October 27, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matter.	A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION'S FIRST SUPPLEMENTAL AND AMENDED RESPONSES TO FIRST, THIRD AND FOURTH SET OF DATA REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES PURSUANT TO MEET AND CONFER PROCESS

[PUBLIC VERSION]

Comcast Corporation ("Comcast") provides the following supplemental and amended responses to the first, third and fourth set of data requests ("DRs") served on it by the Office of Ratepayer Advocates ("ORA"), California Public Utilities Commission ("CPUC"), pursuant to the CPUC's meet and confer process.

These supplemental responses are subject to, and without waiver of, the general objections previously stated to the requests and the specific objections posed in each response. Comcast's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this supplemental response.

CONTINUING GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, Comcast may restate one or more of these general objections. However, these general objections apply to each individual request and Comcast's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive Comcast's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality, privilege and admissibility as evidence for any purpose, or to other requests for production. Comcast reserves the right to object on appropriate grounds to the use of such information and documents. Comcast hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. Comcast objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. Comcast objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to Comcast together with any copies.

3. Comcast objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to Comcast.

4. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to Comcast.

5. Comcast objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

6. Comcast objects to each DR to the extent that it exceeds the requirements of applicable law or purports to impose upon Comcast any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that is publicly available or readily accessible to the requesting party(ies).

10. Comcast objects to each DR to the extent that it requests documents or materials not in the Comcast's possession, custody or control.

11. Comcast objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

12. Comcast objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are Comcast employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, Comcast generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following supplemental responses.

I. SUPPLEMENTAL RESPONSES

Q-1:1 Please identify the total number of households passed where Comcast broadband service is available in California.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously responded to ORA 1:1 on September 11, 2014. The following is an amended response to ORA 1:1 provided pursuant to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

As discussed during the meet and confer process, attached as CONFIDENTIAL Supplemental Exhibit ORA/Comcast R:1-1 is a revised version of the spreadsheet previously provided as Confidential Exhibit ORA/Comcast R:1:1. The information set forth in Cell # Q145099 identifies the total estimate of the number of households passed where Comcast's broadband service is available in California.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:3 Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of households passed.

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously responded to ORA 1:3 on September 11, 2014. The following is an amended response to ORA 1:3 provided pursuant to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

See CONFIDENTIAL Supplemental Exhibit ORA/Comcast R:1-1 at Column Q.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-1:8. Please list all Your residential broadband products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Supplemental Response:

Comcast previously responded to ORA 1:8 on September 11, 2014. The following is a supplemental response to ORA 1:8(d) provided pursuant to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

The standalone prices for Comcast's residential broadband services were stated on the Berkley, CA rate card provided to ORA as Exhibit ORA/Comcast R:1-8. Per ORA's request, attached hereto as Supplemental Exhibit ORA/Comcast R:1-8 are rate cards for all areas in California where Comcast offers residential broadband services.

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

Q-1:15. If the answer to Question #14 is yes, please identify the following:

a. Product/service name

b. Description

c. Terms and Conditions

d. Price

e. Number of households subscribed to stand-alone broadband service in California

Supplemental Response:

Comcast previously responded to ORA 1:15 on September 11, 2014. The following is a supplemental response to ORA 1:15(d) provided pursuant to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

The standalone prices for Comcast's residential broadband services were stated on the Berkley, CA rate card provided to ORA as Exhibit ORA/Comcast R:1-8. Per ORA's request, attached hereto as Supplemental Exhibit ORA/Comcast R:1-8 are rate cards for all areas in California where Comcast offers residential broadband services, which also set forth standalone prices for Comcast's residential broadband services.

Sponsor: Amalia O'Sullivan, Vice President, Xfinity Internet Product

EXHIBIT 8

Comcast's Response to ORA Data Request, Set 2

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014) A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION RESPONSES TO SECOND SET OF DATA REQUESTS FROM THE OFFICE OF RATEPAYER ADVOCATES (DATA REQUEST NO. ORA-A.14-04-013.A.14-06-012.PHH-4003)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014) A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION RESPONSES TO SECOND SET OF DATA REQUESTS FROM THE OFFICE OF RATEPAYER ADVOCATES (DATA REQUEST NO. ORA-A.14-04-013.A.14-06-012.PHH-4003)

Pursuant to Rule 10.1 of the California Public Utilities Commission ("CPUC"), Comcast Corporation ("Comcast") provides initial responses to the second set of data requests ("DRs") served on it by the Office of Ratepayer Advocates, California Public Utilities Commission ("ORA").

These responses are subject to the general objections stated below and the specific objections posed in each response. Comcast's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this response.

GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, Comcast may restate one or more of these general objections. However, these general objections apply to each individual request and Comcast's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive Comcast's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality,

privilege and admissibility as evidence for any purpose, or to other requests for production. Comcast reserves the right to object on appropriate grounds to the use of such information and documents. Comcast hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. Comcast objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. Comcast objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to Comcast together with any copies.

3. Comcast objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to Comcast.

4. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to Comcast.

5. Comcast objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

6. Comcast objects to each DR to the extent that it exceeds the requirements of applicable law or purports to impose upon Comcast any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that is publicly available or readily accessible to the requesting party(ies).

10. Comcast objects to each DR to the extent that it requests documents or materials not in the Comcast's possession, custody or control.

11. Comcast objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

12. Comcast objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are Comcast employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, Comcast generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following responses.

I. RESPONSES

Q-2:1. Please provide a complete copy of Comcast's response and all related data to the FCC's August 21, 2014 Request for Information and Data issued in response to the FCC Application. A complete copy of the FCC's Request for Information and Data is attached.

Objection:

Comcast objects to this request on the grounds that the request exceeds the established scope of this proceeding. The information presented to the Federal Communications Commission ("FCC") in response to that agency's Request for Information and Data covers a broad range of issues including cable/video service, programming, Internet transport and peering, intellectual property, and other issues that are both outside of the scope of this proceeding and outside of the scope of the Commission's jurisdiction. In addition, Comcast also objects to this request on the grounds that the request is unduly burdensome and overbroad to the extent that it seeks the production of information concerning Comcast's operations, policies, procedures, contracts, and other arrangements which arise from the company's operations in other jurisdictions. The company further objects to this request on the grounds that the request is not reasonably calculated to lead to the discovery of admissible evidence, and is intended for use in other proceedings or matters. Finally, Comcast also objects to this request on the grounds that the request improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets which are subject to heightened confidentiality protections under the FCC's proceeding, and which are not available to Comcast in this proceeding at this time.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Exhibit ORA/Comcast R-2:1 (public version).

Sponsor: Counsel

By: _/s/_____

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Dated: September 12, 2014

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REDACTED – FOR PUBLIC INSPECTION

October 23, 2014

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20544

Re: ***Applications of Comcast Corporation, Time Warner Cable Inc., Charter Communications, Inc., and SpinCo for Consent to Assign or Transfer Control of Licenses and Authorizations,*** **MB Docket No. 14-57**
REDACTED – FOR PUBLIC INSPECTION

Dear Ms. Dortch:

Comcast Corporation ("Comcast") hereby submits its final narrative answers and exhibits responsive to the Commission's August 21, 2014 Information and Data Request (the "Request").[1] These answers and exhibits provide revised and supplemental information responsive to certain Requests pursuant to the Media Bureau's October 3, 2014 Public Notice,[2] as clarified by subsequent discussions between representatives of Comcast and the Commission.[3] Specifically, Commission staff requested additional information regarding the following Requests:

- **Request 2(h)** – Staff requested that Comcast provide internal estimates of facilities-based overbuilder overlap going back to 2009 and requested reports or documents with overbuilder estimates where available. Comcast has provided the requested information to supplement its initial responses.

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[1] *See* Letter from William T. Lake, Chief, Media Bureau, to Kathryn A. Zachem, Comcast Corporation, MB Docket No. 14-57 (Aug. 21, 2014).

[2] *See Commission Announces Extension of Time to File Replies to Responses and Oppositions for its Review of Applications of Comcast Corporation, Time Warner Cable Inc., Charter Communications, Inc., and SpinCo to Assign and Transfer Control of FCC Licenses and Other Authorizations*, Public Notice, MB Docket No. 14-57, DA 14-1446, at 2 n.7 (Oct. 3, 2014).

[3] *See* Letter from Kathryn A. Zachem, Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 14-57 (Oct. 14, 2014); Letter from Kathryn A. Zachem, Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 14-57 (Oct. 9, 2014).

- **Request 12** – Staff requested that Comcast confirm that its initial responses reflected Comcast's own perspective and not that of the other applicants in this proceeding. Staff further requested that Comcast provide various additional information about actual and potential competitors for each of the relevant services. Comcast has provided a revised response to this Request in place of its initial response.

- **Request 13** – Staff requested that Comcast confirm that its initial responses reflected Comcast's own perspective and not that of the other applicants in this proceeding. Staff further requested that Comcast identify all requirements for entry into the provision of each relevant service and an estimate of the time required to meet each requirement. Comcast has provided a revised response to this Request in place of its initial response.

- **Request 15** – Staff requested that Comcast confirm that its initial responses reflected Comcast's own perspective and not that of the other applicants in this proceeding. Comcast has supplemented its initial response with the requested confirmation.

- **Request 19** – Staff requested that Comcast provide or indicate the location within Comcast's initial responses of certain annual data. Comcast has supplemented its initial response with the requested information.

- **Request 51 –** Staff requested that Comcast provide lists of conditions from the Comcast-NBCUniversal transaction that will and will not apply to the systems acquired by Comcast in this transaction, subject to the need for further clarification by the Commission. Comcast has provided a revised response to this Request in place of its initial response.

- **Request 52 –** Staff requested that Comcast indicate the conditions listed in response to Request 51 that have become a part of Comcast's "core" business ethics and operations. Comcast has supplemented its initial response with the requested information.

- **Request 59 –** Staff requested supplemental information regarding Comcast's usage based billing trials, including the costs and benefits of this program and its effects on customer behavior. Comcast has supplemented its initial response with the requested information.

- **Request 68 –** Staff requested that Comcast provide a more complete description of the contractual terms offered for its CDN service. Comcast has supplemented its initial response with the requested information.

- **Request 75 –** Staff requested that Comcast provide, to the extent possible, a measurement of how much traffic in a given DMA comes from a particular IP point of presence; staff acknowledged that such measurement may be impossible due to the nature of how the Internet works, but asked for confirmation. Comcast has supplemented its initial response with the requested information.

- **Request 80 –** Staff requested that Comcast provide a timeline for when transaction-related efficiencies, savings, new or improved products, and synergies will be generated and realized by Comcast. Comcast has supplemented its initial response with the requested information.

- **Request 84(a) –** Staff requested that Comcast provide more specifics regarding the timetable for actions necessary to finalize various financial transactions related to the Time Warner Cable merger. Comcast has supplemented its initial response with the requested information.

- **Request 86** – Staff requested that Comcast confirm that no additional economic analyses exist beyond what Comcast has previously provided. Comcast has supplemented its initial response with the requested information.

- **Request 88(b) –** Staff requested that Comcast provide or indicate the location within Comcast's initial responses of the referenced attachments. Comcast has supplemented its initial response with the requested information.

- **Request 89** – Staff requested various formatting revisions to and explanations of spreadsheet exhibits previously provided, and confirmation that all available data has been submitted. Comcast has provided revised versions of exhibits submitted with Comcast's initial responses and has supplemented its initial response with additional information.

Comcast also provides herewith clarifications and additional information with respect to Requests 4 and 8 that Commission staff separately requested. With the submission of this letter and the attached materials, Comcast now has addressed the Request in full.

Comcast submits herewith one copy of the redacted, public version of this filing. The **{{ }}** symbols denote where Highly Confidential Information has been redacted and the **[[ ]]** symbols denote where Confidential Information has been redacted. A Highly Confidential version of this filing, which includes additional, Highly Confidential exhibits, has been submitted to the Office of the Secretary pursuant to the terms of the Modified Joint Protective Order in effect in this proceeding.[4] The Confidential and Highly Confidential versions of this filing will be made available for inspection pursuant to the terms of the Modified Joint Protective Order.

If you have any questions or require further information, please do not hesitate to contact me.

Respectfully submitted,

/s/ Kathryn A. Zachem

Senior Vice President,
Regulatory and State Legislative Affairs
Comcast Corporation

[4] *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Assign or Transfer Control of Licenses and Authorizations*, Modified Joint Protective Order, MB Docket No. 14-57, DA 14-1464 (Oct. 7, 2014) ("Modified Joint Protective Order"); *see also Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Assign or Transfer Control of Licenses and Authorizations*, Order, MB Docket No. 14-57, DA 14-1463, ¶¶ 11-12 (Oct. 7, 2014).

OCTOBER 23, 2014 SUPPLEMENTAL RESPONSES OF COMCAST CORPORATION TO THE COMMISSION'S INFORMATION AND DATA REQUEST

2. Identify, as of December 31, 2009, December 31, 2010, December 31, 2011, December 31, 2012, December 31, 2013, and June 30, 2014, each cable system owned by, operated by, managed by, or attributed to the Company, and for each cable system identify the nature of the Company's interests, and state and identify the following:

h. any internal estimates of the percentage of homes passed that are overbuilt by any facilities-based competing provider of MVPD service and Internet access service separately for each such competing provider;

SUPPLEMENTAL RESPONSE:

2(h):

Supplemental information and data responsive to this subpart have been provided in machine-readable Excel spreadsheet format as Exhibit 2.10 (Revised). This supplemental Exhibit 2.10 provides the Company's internal historical estimates of the overbuild of Comcast's current footprint (and current number of homes passed) by AT&T and Verizon fiber-delivered Internet services for each of the requested dates. While the *percentage* of homes passed in Comcast's footprint reflects Comcast's best estimate, the *number* of homes passed by AT&T and Verizon is likely to be overstated as it reflects the percentage share of Comcast's current homes passed by zip code, which is typically higher today than in earlier periods. In addition, Comcast refers the FCC to Exhibit 2.6 and Exhibit 2.7, which were provided in response to subpart (g) of this Request and reflect the presence of video and Internet providers by service technology in zip codes in which Comcast operates (although Comcast notes that presence in a particular zip code does not necessarily indicate that such a provider has completely overbuilt Comcast's footprint).

4. For each zip code identified in Request 2(e) and for the Company as a whole, separately for residential subscribers and other subscribers, and for each month for the period beginning January, 2009, to the present, state and produce in CSV or Excel format:

a. the number of customer locations to which cable services are available, separately for residential customer locations and other customer locations, and the penetration rate;

b. the number of standalone services and bundled services subscribers as of the last day of the month;

c. the average revenue per subscriber in the month for standalone services and bundled services;

d. the number of subscribers who first began subscribing to any of the Company's standalone services and bundled services in the specified month who were not subscribers to any of the Company's cable services in the prior month;

e. the average revenue per new subscriber described in subpart (d) to standalone services and bundled services, and that churned from a competing provider, separately for each competing provider;

f. the number of subscribers discontinuing all subscriptions to the Company's cable services;

g. the average revenue per departing subscriber described in subpart (f) for standalone services and bundled services, and the number of subscribers that churned to competing provider, separately for each competing provider;

h. the number of the Company's current subscribers who first began subscribing to any of the Company's other standalone services or bundled services in the specified month;

i. the number of subscribers discontinuing their subscription to one or more of the Company's standalone services or bundled services, but who remain a subscriber to one or more of the Company's cable services at the end of the specified month;

j. the churn rate for standalone services and bundled services;

k. the per-subscriber acquisition cost or cost per gross addition for standalone services and bundled services and an explanation of how these values were calculated;

l. **the cost per subscriber to the Company's MVPD service of acquiring video programming distribution rights and an explanation of how these values were calculated;**

m. **the cost per subscriber to the Company's MVPD service of acquiring VOD and PPV distribution rights and an explanation of how these values were calculated;**

n. **the average gross and net advertising revenue per subscriber to the Company's MVPD service and an explanation of how these values were calculated;**

o. **other variable costs per subscriber for standalone services and bundled services and an explanation of how these values were calculated; and**

p. **the value of each additional subscriber to the Company for standalone services and bundled services and an explanation of how these values were calculated.**

SUPPLEMENTAL RESPONSE:

Comcast clarifies that the average revenue per user ("ARPU") data reflected in Exhibits 4.3(e)-(f) **[[ ]]**. Comcast also clarifies that with respect to the connect and disconnect data provided to the Commission, a customer who disconnects during the month and later reconnects his or her service the following month or thereafter is **[[ ]]**. If the activity occurs in the same month, however, **[[ ]]**.

Additionally, as requested by Commission staff, Comcast provides primary connects, disconnects, and churn for residential and commercial subscribers by product for each of Comcast's sub-regions in machine-readable Excel spreadsheet format as Exhibits 4.16(a) through 4.18(b). For these exhibits, Comcast provides the following clarification:

The data for new Comcast subscribers by product (i.e., "connects") are provided in separate worksheets as follows: (1) product level new connects are new customers of Comcast that have added the product; (2) product level upgrades are existing Comcast customers that had another product at the beginning of the month and added the product that is being upgraded (e.g., a Comcast customer with an Internet service at the beginning of the month who adds a video service is treated as a video "upgrade"); (3) total connects is the sum of (1) and (2) above. The data are provided by product.

The data for disconnecting subscribers by product are provided in separate worksheets as follows (and is the converse of what is provided and set forth above for connects): (1) product level disconnects are customers who removed the product and are no longer a customer of Comcast at the end of the month; (2) product level "downgrades" are existing Comcast customers that had the product at the beginning of the month and disconnected service for that product during the month but still have another product with Comcast; (3) total disconnects is the sum of (1) and (2) above.

The rate of "churn" has been calculated by dividing the number of subscribers that disconnected service in a given month by the total number of subscribers of that service at the beginning of the same month.

8. As of December 31, 2013, and June 30, 2014, and for each DMA, state and produce in CSV or Excel format:

a. the number of subscribers to the Company's MVPD service;

b. the number of the Company's subscribers who will become subscribers of Comcast's, SpinCo's, and Charter's MVPD service, stated as if the proposed TWC transaction and the proposed divestiture transactions had been consummated as of June 30, 2014;

c. the number of TV households, citing the source of this information and explaining how this number was calculated;

d. the number of Hispanic TV households, citing the source of this information and explaining how this number was calculated;

e. the number of Hispanic households that subscribe to MVPD service, citing the source of this information and explaining how this number was calculated;

f. the number of Hispanic households that subscribe to the Company's MVPD service; and

g. the number of the Company's Hispanic households who will become subscribers of Comcast's, Charter's and SpinCo's MVPD service, stated as if the proposed TWC transaction and the proposed divestiture transactions had been consummated as of June 30, 2014.

In the event that as a result of the proposed divestiture transactions, the assets, Hispanic households and the Hispanic subscribers in a single DMA will be divided between Comcast, Charter and SpinCo, for subparts (b) and (g), allocate the subscribers and Hispanic households to the receiving applicant, and provide an explanation of the methodology used to make the allocation.

CLARIFYING RESPONSE:

Comcast confirms that it provided to the Commission in its September 11, 2014 response to this Request all of the responsive data it has, and, therefore, no additional information is being submitted. Comcast further confirms that it provided internal estimates of Hispanic subscribers to its MVPD service for the periods requested in its September 11, 2014 response to this Request.

12. State the name and address of each person that has entered or attempted to enter into, or exited from, the provision of each relevant service, from January 1, 2009, to the present. For each such person, identify the services it provides or provided; the area in which it provided the services, including whether the person has sold or distributed the relevant service in the United States; and the date of its entry into or exit from the market. For each entrant, state whether the entrant built a new facility, converted assets previously used for another purpose (identifying that purpose), or began using facilities that were already being used for the same purpose.

REVISED RESPONSE:

This response replaces Comcast's initial response and includes more information regarding geographic scope and entry as requested by the FCC. This response to Request 12 represents the view of Comcast, as is the case with all of Comcast's responses to the FCC's Information and Data Request, unless otherwise noted.

Information and data responsive to this request have been provided in machine-readable Excel spreadsheet format as Exhibit 12.

Comcast's response to this request is based on information obtained through reasonable inquiry of knowledgeable employees of the company and from publicly available sources, but does not provide a comprehensive list of all entrants since 2009 in each relevant service. Although Comcast believes the sources on which its response is based to be generally reliable, it cannot fully verify the reliability of information obtained from third-party sources, many of which are self-reported.[1]

Comcast identifies the following companies that have entered or exited the provision of CDN service since 2009: Apple, Inc., Cotendo, Fastly, MaxCDN, Telestra, Deutsche Telekom, Telecom Italia, Level 3, British Telecom, AT&T, KDDI, TATA, CenturyLink, Orange, Telefonica, and Verizon. These companies are listed in Exhibit 12.[2] In general, CDNs face low entry barriers. Most major ISPs offer commercial CDN services along with Internet backbone services such as IP transit. Some ISPs partner with equipment vendors like Cisco, some partner with CDNs like Akamai, while others use their own technology. Comcast's IP CDN was **[[ ]]**.

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[1] Exhibit 12 does not include information that is already provided regarding Comcast-owned programming networks to the extent such information is already provided in response to Request 18.

[2] Comcast also refers the FCC to www.cdnlist.com, which provides an updated list of commercial CDN providers, including telecom or carrier-based CDN providers, and CDN-related vendor acquisitions and closures.

With respect to the geographic areas in which the entrants listed in Exhibit 12 provide service, CDN services are available on a nationwide basis. Comcast is unaware of any attempt to enter the provision of CDN service aside from the entrants mentioned herein and in Exhibit 12.

MVPD services provided by DBS providers are available on a nationwide basis, and the availability of other providers varies depending on the geographic reach of the cable systems deployed by cable operators and telephone companies that provide MVPD services. Information with respect to this geographic reach has been provided in Comcast's response to Request 2 above. Comcast is unaware of any attempt to enter the provision of MVPD service aside from the entrants mentioned herein and in Exhibit 12.

OVD services and other edge services are generally available on a nationwide basis to households that have access to the Internet. Comcast is unaware of any attempt to enter the provision of OVD and Internet Edge services aside from the entrants mentioned herein and in Exhibit 12.

Video programming services are generally available on a nationwide basis; the availability of certain specific video programming services may be regional or local (e.g., regional sports or local news networks). Comcast does not track whether any video programming service has attempted to enter the market and subsequently failed to do so. While Comcast does not reach an agreement with all video programmers that seek carriage, a video programming service that Comcast has not yet decided to carry may well be carried by or in the process of exploring carriage on other MVPDs (for example, Comcast is aware of ongoing efforts by the Back9Network to seek carriage from other MVPDs). A video programming distributor may also attempt entry through an OVD: YouTube, for example, is beginning to offer streaming online networks; a programming service might also decide to enter the market as a standalone OVD entrant such as The Blaze. Finally, a video programming service that has not garnered potential interest from MVPDs might repurpose itself (i.e., choose new content and new branding) and try again. Given the multitude of paths to gaining entry for a video programming service, it is difficult to determine whether any potential entrant has actually "failed" to enter in some manner.

Internet access service provided by mobile wireless or satellite providers are generally available on a nationwide basis, and the availability of other providers varies depending on the geographic reach of the cable and telephone company systems that provide these services. Comcast is unaware of any attempt to enter the provision of Internet access service aside from the entrants mentioned herein and in Exhibit 12.

Internet backbone services are generally available on a nationwide basis. Comcast is unaware of any attempt to enter the provision of Internet backbone service aside from the entrants mentioned herein and in Exhibit 12.

Comcast generally does not maintain information concerning the facilities used by the entities listed in Exhibit 12.

13. Provide a list of possible new entrants into the provision of, or a substitute for, each relevant service, stating why the Company believes each person is a possible entrant or could provide a substitute service, including but not limited to, mobile wireless broadband service, and what steps it has taken toward entry. Submit a list of all requirements for entry into the provision of, or a substitute for, a relevant service and an estimate of the time required to meet each requirement, and provide all documents relating to research and development, planning and design, production requirements, distribution systems, service requirements, patents, licenses, sales and marketing activities, and any necessary governmental and customer approvals for entry in to the provision of each relevant service.

REVISED RESPONSE:

This response replaces Comcast's initial response and includes more information regarding entry and timing as requested by the FCC. This response to Request 13 represents the view of Comcast, as is the case with all of Comcast's responses to the FCC's Information and Data Request, unless otherwise noted. Documents responsive to this request will be produced to the FCC.

Comcast's response to this request is based on information obtained through reasonable inquiry of knowledgeable employees of the company and from publicly available sources, but does not provide a comprehensive list of all possible new entrants or possible substitute services, nor of all requirements and timing variations of meeting them, which vary greatly depending on scope of entry (as discussed in greater detail in response to Request 15). Although Comcast believes the sources on which its response is based to be generally reliable, it cannot fully verify the reliability of information obtained from third-party sources, many of which are self-reported.

A. Video Programming Distribution

1. MVPD

MVPD services are currently provided by cable companies (also known as multiple system operators or "MSOs"), telephone companies, Satellite Master Antenna TV companies, and direct broadcast satellite ("DBS") companies. Entry into the MVPD market generally requires significant fixed-cost investment to build out the physical infrastructure (e.g., fiber-optic cables, satellites) needed to deliver multiple channels of content. Nevertheless, companies continue to make these investments and to launch new MVPD options for consumers. For example, CenturyLink, Inc. recently began offering its own MVPD service ("Prism TV") in select markets and has indicated its intention to expand these offerings. Google, Inc. also has begun offering MVPD service in select markets through its Google Fiber service, and has announced its intention to expand to up to 34 communities in nine metropolitan areas. AT&T has also announced plans to accelerate

expansion of its U-verse MVPD service across its footprint.[3] As discussed below with regard to Internet Access, municipal providers may also continue to enter the video programming distribution market.

Based on the success of AT&T U-verse, Verizon FiOS, and CenturyLink Prism, other telephone companies appear to be particularly well positioned to enter the MVPD market. Following Google's example, other technology companies may decide to enter the MVPD market as well, taking advantage of complementary products, brand recognition, customer relationships, and large cash positions.

Like the costs of entry, which are discussed in greater detail in response to Request 15, the time required for entry as an MVPD is variable and cannot be predicted in the abstract. A new MVPD would need to build or purchase a physical infrastructure, acquire the rights to distribute video programming, and meet often substantial regulatory requirements, in addition to marketing the product. The timing of each of these requirements is variable depending on factors such as the scope of entry (e.g., there are many MVPDs with only one thousand subscribers or fewer, and MVPDs may launch with access to comparatively many or few programming networks) or the manner of entry (e.g., creating a new MVPD versus purchasing existing one). In particular, the amount of time required to build physical infrastructure may vary widely depending on how much the new entrant intends to spend on construction (since the time required for a project is generally inversely proportional to the cost).

2. <u>OVD</u>

The OVD industry continues to grow and evolve, and video content available on the Internet has proliferated from numerous sources.[4] As the FCC noted in a recent report, the OVD industry continues to innovate, and "no single business strategy has emerged as the dominant model."[5] OVDs use various business strategies for offering access to content, including free access supported by advertising, subscription services (both with and without advertising), or on-demand purchases or rentals, with some OVDs offering more than one option.[6] OVDs are also increasingly popular among consumers. One OVD, Netflix, reportedly now has over 39 million U.S. subscribers (over 50 million worldwide),

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[3] Remarks of Randall Stephenson, Chairman & CEO, AT&T Inc., Morgan Stanley Technology, Media & Telecom Conference (Mar. 6, 2014) *available at* http://seekingalpha.com/article/2072813-at-and-ts-ceo-presents-at-morgan-stanley-technology-media-and-telecom-conference-transcript.

[4] *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Fifteenth Report, 28 FCC Rcd 10496 ¶ 223 & n.787 (2013) ("*Fifteenth Video Competition Report*") (noting that Sandvine, an Internet network equipment and software company, measured over 28,000 unique websites streaming multiple videos online in the U.S. in a single month during Fall 2011).

[5] *See id.* ¶ 269.

[6] *See id.* ¶ 270.

representing half of all Internet customers in the United States and almost twice as many subscribers as the largest MVPD, Comcast. As a result, Netflix accounted for approximately 34 percent of all peak-period Internet download traffic in North America as of May 2014.[7] Hulu, according to the FCC, is "the major player among advertiser-supported OVDs" and makes available over 1,500 TV shows, 21,000 TV episodes, and 1,700 movies.[8] Additionally, Amazon, Google, and Apple each offer their own robust OVD services.

Like the costs of entry, which are discussed in greater detail in response to Request 15, the time required for entry as an OVD is variable and cannot be predicted in the abstract. Launching an OVD requires providing or creating programming content, aggregating the content, transporting the content to the viewer, providing navigation tools to the viewer, and marketing the service. The timing of each of these steps, like the costs, is variable depending on the manner in which the OVD attempts to accomplish them, and each step necessarily depends on the specific characteristics of the proposed services. For example, an OVD may choose to offer programming it creates itself or may choose to negotiate with existing rights holders, each of which requires different time and initial investments. Moreover, the length of time needed to negotiate with content providers and other parties may vary greatly and involves inherently unknown factors. To the extent that a new entrant wished to offer a relatively simple OVD, for example a website that offered streaming standup comedy acts, such entry could be conducted in a matter of months if not weeks (though it would likely take longer to build awareness of the site). To the extent that a new entrant wished to launch a more complicated site with a more robust programming offering, then the variables mentioned above make it impossible to predict the timing in the abstract. Some entrants, like HBO and CBS, may already have all the content rights in place, and thus their time to entry could be shorter. To some extent, with the growth of online video distribution, there is more of an ecosystem around the service, particularly with technology, that can facilitate some of the entry requirements.

Several companies, inside and outside traditional media, are continuing to experiment with new business models and technology platforms, including business models that reportedly will be offered as a potential substitute for MVPD services. A partial list of possible future entrants in the provision of OVD services includes the following:

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[7] Sandvine, *Global Internet Phenomena Report 1H 2014*, at 6 (2014), *available at* https://www.sandvine.com/downloads/general/global-internet-phenomena/2014/1h-2014-global-internet-phenomena-report.pdf; *see also* Drew Fitzgerald, *Netflix's Share of Internet Traffic Grows*, Wall St. J., May 14, 2014, http://online.wsj.com/news/articles/SB10001424052702304908304579561802483718502. Four other OVD services (YouTube, iTunes, Amazon Video, and Hulu) were listed among the top ten applications driving peak period download traffic in North America as of May 2014. *See* Fitzgerald, *supra*.

[8] *See Fifteenth Video Competition Report* ¶ 271.

a. Start-up OVDs

The most popular OVD today, Netflix, launched as a DVD-by-mail company that evolved its business into an Internet start-up and is now the world's leading Internet television network offering more than a billion hours of TV shows and movies each month. Similarly, Machinima.com was founded in 2000 and now bills itself as "the dominant video entertainment network for young males around the world."[9] In addition to making its videos available through its own website, Machinima serves more than 2 billion monthly video views reaching over 175 million unique viewers each month, and features, among other things, scripted series, original content, and weekly and daily shows, all available through an app on a variety of Internet-connected devices. Other OVDs have had even more modest beginnings. Vimeo, for example, was founded by a group of filmmakers who wanted to share their creative work and personal moments of their lives; it enables consumers to produce their own content and share it with others on the Internet, including by developing "Channels" around common themes such as Documentary Films, Animation, Sports, etc. Given the low barriers of entry to distribution of video on the Internet, start-up OVDs are likely to continue to emerge on an ongoing basis.

b. Consumer Electronics Manufacturers

Consumer electronics manufacturers are potential entrants into the provision of OVD services. These manufacturers can use OVD services to stimulate sales of their consumer electronics or diversify their businesses. Manufacturers may also have strong brand recognition and existing marketing and advertising channels that could provide an advantage in starting a new OVD service. Indeed, multiple consumer electronics manufacturers have launched OVDs in recent years. Apple, Inc., for example, primarily sells computers and other devices but also sells video content through its iTunes service. That service, in turn, drives demand for Apple products, including the Apple TV set-top device. Sony Corp. has launched its own OVD service and is developing original exclusive video programming content for Sony PlayStation consoles.[10] Sony also has announced plans to launch a full MVPD replacement service over the Internet and is actively negotiating carriage contracts with programmers.[11] Similarly, Microsoft offers an OVD service, Xbox Video, available on Xbox devices, mobile devices, and web

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[9] *About Machinima*, Machinima, Inc., https://www.machinima.com/overview/ (last visited Sept. 10, 2014).

[10] *See* Chris O'Brien, *E3: Sony VP talks 'Powers,' its first TV series for PlayStation*, L.A. Times, June 13, 2014, http://www.latimes.com/business/technology/la-fi-tn-sony-vp-talks-powers-its-first-tv-series-for-playstation--20140613-story html.

[11] Andrew Wallenstein, *Sony in Talks for Virtual MSO Service*, Variety, Jan. 3, 2013, http://variety.com/2013/digital/news/sony-in-talks-for-virtual-mso-service-1118064150.

browsers. Microsoft Xbox also supports multiple third-party OVD applications, including HBO GO, Netflix, Amazon Instant Video, and several others. Given the advantages that consumer electronics manufacturers can capitalize on and the success of OVDs launched by similar companies, these consumer electronics manufacturers may decide to expand or evolve their OVD services, and other consumer electronics manufacturers may decide to launch their own OVD services.

c. Video Programming Providers

A video content provider that decides it is in its business interest to do so can create an OVD service by allowing online access to its content, either through its own website or in partnership with an existing online video service. A substantial number of studios, broadcast networks, sports leagues, and programming networks offer content on the Internet or on mobile applications, including Sony, Warner Brothers, Paramount, ABC, CBS, FOX, NBC, ESPN, NBC Sports Network, Fox Sports, the NFL, NHL, NBA, and MLB, among others.[12] Video content providers that currently do not provide such access, and possess the rights to do so, may enter the provision of OVD services by providing such access.[13]

d. Internet Search Engines, Portals, and Social Networking Sites

Potential entrants into the OVD market may include other Internet-based companies such as Internet search engines, portals, and social networking sites. Online video distribution is complementary to these sites' existing users: online video can be used to attract, retain, and more effectively monetize website users. Moreover, Internet-based companies may be able to use existing servers, network infrastructure, and commercial relationships to facilitate storage and distribution of bandwidth-intensive high-definition online video.

Some existing search engines and social networking sites already distribute video content online. Facebook, for example, entered the OVD market in 2011, offering online movie rentals from Warner Brothers, Miramax, and Universal Studios through applications on Facebook.[14] Google, which already owns the largest

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[12] *See Fifteenth Video Competition Report* ¶ 224.

[13] For example, HBO just recently announced its intention to launch a standalone Internet streaming service in 2015. *See* Emily Steel, *HBO Plans New Streaming Service, with Eye on Cord Cutters*, N.Y. Times, Oct. 15, 2014, http://www.nytimes.com/2014/10/16/business/media/time-warner-chief-to-brief-investors-on-plans-for-growth html. CBS also recently launched an online subscription video service called CBS All Access that includes current and classic programming as well as a live stream of its broadcast network. *See* Joe Flint, *CBS Launches Online Subscription Video Service*, Wall St. J., Oct. 16, 2014, http://online.wsj.com/articles/cbs-launches-online-subscription-video-service-1413465013.

[14] *See id.* ¶ 230.

provider of online video in the world, YouTube,[15] launched an Internet-based entertainment store, Google Play, in March 2012, which includes thousands of episodes of television programs, including content from NBCUniversal, ABC Studios, and Sony Pictures.[16] Yahoo! likewise has an OVD service that includes original content and content from multiple video programming networks.[17] New search engines, Internet portals, and social networking sites are likely to emerge that will also launch OVDs to take advantage of the popularity of online video programming.

e. Retail Companies

Online and brick-and-mortar retailers also are current and potential entrants into the OVD market. Retail companies can use competitive advantages such as an established Internet presence, customer bases, and existing retail relationships with content providers and electronics manufacturers to successfully launch a new OVD service. Large retail companies may also have easy access to capital to finance such a venture.

Amazon, for example, is the leading online retail company, but also has a growing online video business. Amazon currently offers streaming and downloadable television programs and movies on a transactional basis through its Amazon Instant Video service and on a subscription basis through its Prime Instant Video Service. Amazon also has signed a series of agreements with HBO and other programmers for prior seasons of popular TV shows. Amazon recently launched the Amazon Fire TV set-top box, which includes multiple OVD applications in addition to Amazon Instant Video, and also sells a tablet device (the Kindle Fire) that allows for mobile viewing of HD video (either streamed in real time or downloaded to the device).

Similarly, Wal-Mart, primarily a brick-and-mortar consumer goods retailer, owns the OVD Vudu and makes Vudu available to electronics manufacturers to integrate into their products. Best Buy, with its nearly 2,000 retail locations, also has an OVD service, CinemaNow, which allows customers to rent or purchase TV or movie programming.

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[15] *See comScore Releases June 2014 U.S. Online Video Rankings*, comScore, Inc. (July 21, 2014), http://www.comscore.com/Insights/Market-Rankings/comScore-Releases-June-2014-US-Online-Video-Rankings.

[16] *See Fifteenth Video Competition Report* ¶ 235; *Google play*, Google, https://play.google.com/store (last visited Sept. 10, 2014).

[17] *See Fifteenth Video Competition Report* ¶ 229.

f. MVPDs

Cable operators and direct broadcast satellite companies can each offer their own over-the-top services.[18] MVPDs already maintain a presence on the Internet, and many already provide interactive online portals that allow their subscribers to view programming over-the-top or to schedule programs for recording on a digital video recorder ("DVR"), among other functions.

Indeed, several MVPDs, including Verizon and DirecTV, already have begun to offer, or announced plans to offer, such services. For example, earlier this year, Verizon purchased an online video streaming service from Intel that purportedly will enable it to provide a competitive MVPD substitute service over the Internet, including over wireless broadband networks.[19] Similarly, in 2012, DISH Network launched DISHWorld, which offers international movie content that customers can stream on various devices,[20] and more recently, announced that it would offer a new service allowing subscribers to stream live and on-demand content from A&E and Walt Disney networks such as ABC and ESPN over the Internet.[21] DISH is also reported to be considering acquiring T-Mobile, which could give DISH "a national wireless network over which it could deliver mobile video" and "challenge conventional cable television."[22] These recent trends suggest that MVPDs that do not already offer an over-the-top service, but possess online programming distribution rights, are potential candidates for entry into the provision of OVD service. Indeed, IPTV services such as Sky Angel now offer over-the-top access to various cable networks, similar to MVPDs.

In this manner, OVDs and MVPDs can, in some regards, be viewed as providing either complementary or substitute services.

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18 *See id.* ¶ 239 (noting that "[s]everal MVPDs offer services to non-subscribers").

19 Hayley Tsukayama, *Verizon buys Intel's cloud TV service*, Wash. Post, Jan. 21, 2014, http://www.washingtonpost.com/business/technology/verizon-buys-intels-cloud-tv-service/2014/01/21/67e94336-82a5-11e3-9dd4-e7278db80d86_story.html; Janko Roettgers, *Why Verizon is Buying Intel Media: It's All About Taking on Comcast*, Gigaom, Jan. 21, 2014, http://gigaom.com/2014/01/21/why-verizon-is-buying-intel-media-its-all-about-taking-on-comcast.

20 *See Fifteenth Video Competition Report* ¶ 239.

21 Press Release, Dish Network Corp., *ESPN and Disney/ABC Television Group Launch WATCH Authenticated Products to DISH Customers* (Apr. 1, 2014), http://about.dish.com/press-release/programming/espn-and-disneyabc-television-group-launch-watch-authenticated-products-di; Daniel Frankel, *Dish trademarks new name and logo, possible for online video service: 'Nutv'*, FierceCable, Sept. 2, 2014, http://www fiercecable.com/story/dish-trademarks-new-name-and-logo-possibly-online-video-service-nutv/2014-09-02.

22 Alex Sherman et al., *Dish Said to Discuss T-Mobile Deal with Deutsche Telekom*, Bloomberg, Sept. 5, 2014, http://www.bloomberg.com/news/2014-09-05/dish-said-to-discuss-t-mobile-deal-with-deutsche-telekom.html.

B. Video Programming

The number of video programming networks and the diversity of programming available have changed significantly over the last two decades. Looking only at cable television networks, the U.S. Court of Appeals for the D.C. Circuit observed in 2009 that "the number of cable networks has increased by almost 500 percent since 1992 and has grown at an ever faster rate since 2000."[23] Firms that have begun to provide video programming through new cable networks have included not only existing cable network providers and MVPDs, but also movie studios, television production companies, sports teams and associations, venture capital firms, and independent content producers. Moreover, new video programming distributed online or by video-on-demand ("VOD") services continues to emerge.

Like the costs of entry, which are discussed in detail in response to Request 15, the timing of launching a video programming service is based on a number of complex variables, and therefore Comcast is unable to offer a specific estimate of the time required for entry for a video programmer. In order to launch a new linear programming network, critical steps needed include providing content for the network (whether by creating it, acquiring it via license, or a combination of these), delivering the content as a technical matter, arranging for advertising sales (if the programmer anticipates selling advertising for revenue), contracting for distribution (whether via MVPDs as a traditional linear network or VOD service or online), and assembling an executive team. Many of these same steps are required for providing video programming services via online distribution, as the provider still needs to take the steps necessary to create a video product, but no longer has the additional requirement of negotiating distribution agreements with MVPDs. The timing of each of these steps depends upon the particular programming concept and delivery method chosen (e.g., linear networks, video on demand, online a la carte) and as a result cannot be predicted in the abstract. Moreover, each of these steps likely depend upon the result of negotiations between the new programming network and, for example, a content rights holder, a third-party vendor to assist with technical requirements, an MVPD or OVD service for distribution, or potential new executive hires. The length of time needed to negotiate with production studios, content distributors, advertising sale representatives, vendors, and key other parties may vary greatly and involves inherently unknown factors. Uploading video programming to a website like YouTube can be done in a relatively expeditious matter, depending on the nature of the programming. For example, a standup comedy routine created and uploaded to YouTube may generate significant viewership, and can be done in the space of a few hours (exempting the time it takes to create the performance). A more robust programming offering as would be required for a linear programming network would take longer; due to the variables discussed above, the exact timing cannot be predicted in the abstract.

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[23] *Comcast Corp. v. FCC*, 579 F.3d 1, 8 (D.C. Cir. 2009).

Based on recent trends and on the number of entities that have announced their interest in creating new video programming, and the increasing number of available outlets for video programming, it is reasonable to conclude that new video programmers will continue to emerge.

1. Demand for New Video Programming Networks

New video programming likely will be launched to address the changing needs of diverse audiences, evolving interests of the viewing public, and new technologies:

a. Affinity Groups

As the demographic composition of the United States shifts, new video programming will likely emerge to meet the needs of diverse audiences. Over the past 10 years, for example, a number of Spanish-language cable television networks have emerged to satisfy the needs and interests of the United States' growing Hispanic population. As various ethnic populations of the United States continue to grow, video programming options, including new video programming networks, will likely continue to emerge to meet demands for language- and culture-specific content.

b. Evolving Interests

New video programming also will likely emerge in response to viewers' evolving interests. A number of new cable television networks – including Wine TV, Crime & Investigation Network, and Retirement Living TV – have emerged in the past ten years to serve the special interests of niche audiences.[24] Based on these trends, it is likely that new networks will be introduced to address consumers' changing interests.

c. New Technology

New and existing video programming providers also are likely to harness emerging technologies to provide cutting-edge content to consumers. For example, advanced TV set-top boxes with interactive features could allow programmers to develop customizable channels. Viacom recently announced plans to launch a children's programming network that allows viewers to indicate preferences and personalize the content aired on the channel.[25] Other companies also likely will enter the video programming market to take advantage of new opportunities made available by improved technology.

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[24] OVDs such as YouTube have also begun developing video programming to cater to specific interest. *See* Lauren Indvik, *YouTube CEO: The Future of Content Is Niche Channels*, Mashable (Jan. 31, 2012), http://mashable.com/2012/01/31/youtube-niche-content-passive-viewing.

[25] *See* Amol Sharma, *Viacom to Launch Customized Kids' TV Channel*, Wall St. J., Jan. 14, 2014, http://online.wsj.com/news/articles/SB10001424052702303754404579312904182126302.

2. Possible Future Entrants

A partial list of possible future entrants to the provision of video programming includes the following:

a. Existing Video Programming Providers

Existing owners of cable television networks are likely in the future to launch new video programming networks and develop new video programming for distribution in other formats. Existing cable network providers enjoy the benefits of (a) carriage relationships with MVPDs, (b) relationships with advertisers, and (c) experiential knowledge derived from launching other programming networks. News Corp., for example, launched two new networks in 2013 (Fox Sports and FXX).[26] Other large, established cable television networks are likely to continue developing and launching new channels to cater to changing preferences of cable television audiences. Existing owners of cable television networks are also likely to develop new video programming specifically for online distribution. By launching an Internet-based video programming network, an existing video programmer can use existing production assets to develop content to reach specific audiences and broaden their reach. For example, Discovery Communications Inc., which owns a number of cable television networks, recently launched TestTube, a free, online video network targeted at the young male demographic.[27] Other existing video programming providers are likely pursue a similar strategy.

In addition, video programming providers that currently offer only online content may migrate their programming to cable television networks or television VOD services. Some video programming networks that began as VOD-only networks, such as Anime, Fearnet, and Sprout, have used that programming to launch a linear television network. Similarly, funnyordie.com, which began as an online-only viewing service, now distributes content on HBO.

b. Media Figures, Owners of Established Entertainment Brands, and Individual Entrepreneurs

The uncertainties of launching a new cable television network are diminished when the new network is able to leverage a recognized entertainment brand. Media personalities that enjoy such brand recognition are therefore potential entrants into the provision of cable television networks. For example, political commentator Glenn Beck recently launched The Blaze; musician Sean "Diddy"

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[26] Cynthia Littleton, *Congloms Firing up New Cable Channels as Climate Improves*, Variety, Sept. 13, 2013, http://variety.com/2013/tv/news/congloms-firing-up-new-cable-channels-as-climate-improves-1200609613.

[27] Keach Hagey, *Discovery to Launch 'TestTube' Online Video Network*, Wall St. J., May 23, 2013, http://online.wsj.com/news/articles/SB10001424127887323336104578499540671665824.

Combs recently launched Revolt, a music-oriented network showing music videos, live performances, and news and interviews; and filmmaker Robert Rodriguez recently launched El Rey.[28] Other high-profile media figures may also decide to develop their own video programming networks.

Existing media recognition also provides an advantage in developing new online or VOD content. Media figures with a presence on cable television may be particularly likely to develop new programming for distribution online to reach niche audiences. For example, Jeffrey Hayzlett of the Bloomberg TV show C-Suite is launching an over-the-top on-demand video service called C-Suite TV that provides new content that caters to existing C-Suite viewers.[29] Other media figures, including former Vice Presidential candidate and Alaska Governor Sarah Palin and comedian Louis CK, have also recently launched online-only video programming networks.[30] It is likely that other media figures, entrepreneurs, and owners of entertainment brands will pursue a similar strategy by launching video programming networks on the Internet to reach new audiences.

c. Sports Organizations

Much like established entertainment brands, sports teams and leagues may be able to leverage their current fan base to create new video programming networks. In recent years, several sports teams and leagues, including a number of collegiate sports conferences, have launched cable television networks. In the future, other sports organizations may likewise take advantage of their existing audiences to introduce new video programming networks.

d. Venture Capital Firms

Venture capital firms currently own interests in various video programming networks, including the Gospel Music Channel, Ovation TV, and Tennis Channel. Given their access to capital and existing carriage relationships, these and other venture capital firms could launch new video programming networks in the future.

To the extent that video programming is viewed primarily as a source of entertainment or information, any current or prospective provider of entertainment

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[28] *See* Jeanine Poggi, *New TV Networks Scorecard: Eight Cable Channels to Watch in 2014*, Advertising Age, Dec. 26, 2013, http://adage.com/article/media/tv-networks-scorecard-channels-watch-2014/245770.

[29] *See* Jim O'Neill, *C-Suite's Jeffrey Hayzlett launches an online, on-demand business TV network*, Ooyala, July 15, 2014, http://www.ooyala.com/es/videomind/blog/c-suite-s-jeffrey-hayzlett-launches-online-demand-business-tv-network.

[30] *See* Andrew Kirell, *Sarah Palin Launches Subscription-Based Online Video Channel*, Mediaite, July 27, 2014, http://www mediaite.com/tv/sarah-palin-launches-subscription-based-online-video-channel/; Louis CK, http://www.louisck.net (last visited Sept. 10, 2014).

or information, including many of the potential new entrants in video programming, could potentially be viewed as offering a substitute service.

C. Internet Access Services

1. Subscribers

Internet access services are currently provided by a variety of companies, including cable system operators, telephone companies, satellite companies, and mobile wireless providers. The availability of high-speed Internet access from multiple providers across the United States has increased significantly in recent years, and numerous companies are providing broadband Internet access services across a range of technological platforms.[31]

Telephone companies provide fiber-to-the-premises services to a growing number of American households and are upgrading their DSL-based services, in many cases by building fiber-to-the-node, to offer faster speeds across the country. Today, CenturyLink offers DSL speeds up to 40 Mbps, AT&T offers speeds up to 45Mbps, Verizon offers speeds up to 15 Mbps, and Frontier offers speeds up to 25 Mbps.[32]

CenturyLink has introduced 1 Gbps fiber-to-the-premises service to business and residential customers in 16 cities, including Denver, Seattle, and Minneapolis-St. Paul.[33] CenturyLink also continues to invest in DSL upgrades including VDSL2 and pair bonding to improve broadband speeds across its footprint.[34] Overall, telephone companies appear well-positioned to offer highly competitive broadband speeds well into the future.[35]

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[31] *See* Comcast Corp. and Time Warner Cable Inc., Applications and Public Interest Statement, MB Docket No. 14-57, at 42-56 (Apr. 8, 2014) ("Public Interest Statement").

[32] *See* Letter from Lynn R. Charytan, SVP, 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, at 10 (Feb. 21, 2014) (detailing competitive standalone broadband options in Comcast's top 30 markets).

[33] Press Release, CenturyLink, Inc., CenturyLink expands its gigabit service to 16 cities, delivering broadband speeds up to 1 gigabit per second (Aug. 5, 2014), http://news.centurylink.com/news/centurylink-expands-its-gigabit-service-to-16-cities-delivering-broadband-speeds-up-to-1-gigabit-per-second.

[34] *See, e.g.*, Glen F. Post, President and CEO, CenturyLink, Inc., Q4 2013 Earnings Call, Tr. at 5 (Feb. 12, 2014) ("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").

[35] 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 opportunit[y] against the cable companies continue to be a very good one").

Cable overbuilders, new entrants like Google fiber, municipal providers, fixed wireless providers, and satellite broadband providers also are competing vigorously. And well-capitalized and aggressive nationwide mobile broadband providers now offer services that provide speeds comparable to many of the fixed broadband services that consumers purchase.[36]

Broadband providers are racing to give consumers access to the Internet content and applications that they demand. For example, in 2010, AT&T offered only traditional ADSL service to the significant majority of the 76 million households in its wireline footprint[37] and had announced no plans to upgrade its network in these areas. Today, AT&T is well into the process of deploying a mix of fiber-to-the-premises, fiber-to-the-node, IP-DSLAM, and fixed wireless broadband technologies to as many as 70 million customer locations.[38] Google, CenturyLink, Cox, and others have also announced ambitious plans to roll out fiber-to-the-premises networks and have begun to set these plans into motion.[39]

Notably, in 2010, none of the four nationwide mobile broadband providers had even begun to deploy LTE networks until Verizon began its deployment in December of that year.[40] Now, all four major wireless providers operate LTE

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[36] *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Eighth Broadband Progress Report, 27 FCC Rcd 10342 ¶ 6 (2012) (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").

[37] Press Release, AT&T Inc., AT&T Reports Record 2.8 Million Wireless Net Adds, Strong U-verse Sales, Continued Revenue Gains in the Fourth Quarter (Jan. 27, 2011), http://www.att.com/gen/press-room?pid=18952&cdvn=news&newsarticleid=31519&mapcode=financial (indicating that U-Verse passed 27 million of the living units in AT&T's footprint in Q4 2010).

[38] *See* Press Release, AT&T Inc., AT&T to Acquire DIRECTV (May 18, 2014), http://about.att.com/story/att_to_acquire_directv.html ("*AT&T/DirecTV Press Release*").

[39] *See* Milo Medin, VP, Google Access Services, *Exploring New Cities for Google Fiber*, Google Fiber Blog (Feb. 19, 2014), http://googlefiberblog.blogspot.com/2014/02/exploring-new-cities-for-google-fiber.html; Press Release, CenturyLink, Inc., CenturyLink Brings 1 Gigabit Fiber Service to Las Vegas (Oct. 9, 2013), http://news.centurylink.com/news/centurylink-brings-1-gigabit-fiber-service-to-las-vegas-2598362; Press Release, Cox Commc'ns, Cox Communications Kicks Off Plan to Offer Residential Gigabit Speeds (May 22, 2014), http://cox.mediaroom.com/index.php?s=43&item=753.

[40] *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services*, Fifteenth Report, 26 FCC Rcd 9664 ¶¶ 108-14 (2011) (describing the four nationwide mobile broadband providers' initial efforts to test and deploy LTE services); *see also* Press Release, Verizon Wireless, Blazingly Fast: Verizon Wireless Launches the World's Largest 4G LTE Wireless Network on Sunday, Dec. 5 (Dec. 3, 2010), http://www.verizonwireless.com/news/2010/12/pr2010-12-03.html (touting Verizon's LTE network, which launched in 38 cities in December 2010, as "the world's largest").

networks that collectively blanket the nation.[41] And, the fastest mobile LTE network in the United States can achieve average download speeds close to 20 Mbps and peak speeds over 70 Mbps.[42]

These competitive developments are reflected in the FCC's Form 477 data. The tables below illustrate broadband competition at the 10 Mbps threshold. The most recently released round of this data is from June 2013 and thus does not account for significant additional progress that has been made in the past year, but even the June 2013 data reveal a significant increase in competition since the FCC's previous review:

Number of Fixed Broadband Providers[43]	% of Households as of December 31, 2009	% of Households in June 2013
At Least 3	2%	54%
At Least 2	22%	92%
At Least 1	80%	99%

[41] *See* The Verizon Wireless 4G LTE Network, Verizon Wireless, http://www.verizonwireless.com/news/LTE/Overview.html (last visited Sept. 10, 2014); *About Our Network*, AT&T, http://about.att.com/news/wireless-network.html (last visited Sept. 10, 2014); Press Release, Sprint Corp., 4G LTE Launched Markets (Sept. 9, 2014), http://newsroom.sprint.com/news-releases/4glte-launchedmarkets htm; *T-Mobile 4G LTE*, T-Mobile, http://t-mobile-coverage.t-mobile.com/4gcitylist.aspx (last visited Sept. 10, 2014). According to NTIA data, 97.3 percent of households in the United States have access to a mobile wireless provider offering downstream speed of at least 10 Mbps. *See* Mark A. Israel, Implications of the Comcast/Time Warner Cable Transaction for Broadband Competition ¶ 62 (Apr. 8, 2014), Exhibit 6, Applications and Public Interest Statement, MB Docket No. 14-57 ("Israel Decl."). The FCC recently noted in its Open Internet NPRM that LTE subscriptions grew by a factor of nearly 500 during this period, *see Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, 29 FCC Rcd 5561, ¶ 48 n.110 (May 15, 2014), and SNL Kagan predicts that there will be 224 million unique 4G subscriptions in the United States by 2018, *see* SNL Kagan, *Covered Pops & Subscribers by Technology in U.S. Wireless* (July 2013). Mobile broadband's share of the Internet ecosystem is rapidly growing; mobile data traffic is projected to grow three times faster than fixed IP data traffic between 2013 and 2018. *See Visual Networking Index: Forecast and Methodology, 2013-2018*, Cisco (June 10, 2014), http://www.cisco.com/c/en/us/solutions/collateral/service-provider/ip-ngn-ip-next-generation-network/white_paper_c11-481360 html.

[42] *See* Israel Decl. ¶ 61.

[43] This chart displays the number of households located in census tracts where fixed broadband providers reported offering broadband Internet access service speeds of at least 10 Mbps downstream and 1.5 Mbps upstream. *See* FCC, *Internet Access Services: Status as of December 31, 2009* (WCB Dec. 2010), 7 & fig. 3(a), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-303405A1.pdf; Internet Access Services: Status as of June 30, 2013, Ind. Analysis & Tech. Division, Wireline Competition Bureau, FCC, (June 2014), at 9 & fig. 5(a), *available at* http://transition fcc.gov/Daily_Releases/Daily_Business/2014/db0625/DOC-327829A1.pdf ("*June 2013 IAS Report*").

Furthermore, when accounting for mobile broadband providers the data show that competition is even more vibrant:

Number of Fixed or Mobile Broadband Providers[44]	% of Households in December 2009	% of Households in June 2013
At Least 3	2%	91%
At Least 2	22%	98%
At Least 1	80%	99%

Chairman Wheeler recently stressed the importance of targeting ever-higher broadband speeds in order to meet increasing consumer demand.[45] Although many online activities do not require higher speeds, the demand from consumers noted by Chairman Wheeler illustrates the strong incentives that broadband providers have to upgrade and deploy increasingly better technology, and improve and expand their offerings. Thus it is not surprising that various mobile and fixed broadband providers have undertaken significant investments in recent years and are likely to continue to do so.

Moreover, municipal governments also have begun offering Internet access service to local residents.[46] For example, Santa Cruz County recently announced a plan to build out Internet infrastructure to extend broadband service.[47] Indeed,

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[44] This chart displays the number of households located in census tracts where fixed broadband providers reported offering broadband Internet access service speeds of at least 10 Mbps downstream and 1.5 Mbps upstream *or* mobile broadband providers reported operating a network capable of such speeds. *See* Internet Access Services: Status as of December 31, 2009, Ind. Analysis & Tech. Division, Wireline Competition Bureau, FCC, (Dec. 2010), at 8 & fig. 3(b), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-303405A1.pdf; *June 2013 IAS Report* at 10 & fig. 5(b).

[45] Remarks of Chairman Tom Wheeler, FCC, "The Facts and Future of Broadband Competition," 1776 Headquarters, Washington, D.C. (Sept. 4, 2014), http://www.fcc.gov/document/chairman-remarks-facts-and-future-broadband-competition.

[46] *See* Edward Wyatt, *Fast Internet is Chattanooga's New Locomotive*, N.Y. Times, Feb. 3, 2014, http://www.nytimes.com/2014/02/04/technology/fast-internet-service-speeds-business-development-in-chattanooga.html?_r=0 (describing Chattanooga, Tennessee's taxpayer-owned fiber optic network).

[47] Jason Hoppin, *Santa Cruz County to get new Internet backbone*, Santa Cruz Sentinel, Apr. 11, 2014, http://www.santacruzsentinel.com/news/ci_25549462/santa-cruz-county-get-new-internet-backbone.

as of May 2013, there were approximately 135 municipal fiber-optic networks in the United States.[48]

Potential new entrants into the provision of Internet access services may include telephone companies, technology companies, cable overbuilders, wireless companies, or more government municipalities. DISH Network also has begun trials partnering with wireless providers such as Sprint to provide fixed wireless services.[49] In recent trials, DISH and Sprint achieved download speeds of 200 Mbps.[50] And, as innovations in wireless technology lead to faster speeds and greater capacity,[51] other wireless options are likely to emerge and begin offering high speed fixed and mobile broadband products. Indeed, the price per gigabyte of transmitting data over mobile wireless networks is likely to continue decreasing as available spectrum and spectral efficiency both increase.[52] These reductions in cost will likely cause reductions in prices for consumers and greater usage of mobile wireless broadband.[53]

Like the costs of entry, which are discussed in greater detail in response to Request 15, the time required for entry as an Internet access service provider is variable and cannot be predicted in the abstract. A new Internet access service provider would need to build or purchase a physical infrastructure; enter into interconnection relationships with other ISPs, CDNs, and content providers; and meet often substantial regulatory requirements, in addition to marketing the product. The timing of each of these requirements is variable depending on factors such as the scope of entry or the manner of entry (e.g., building new infrastructure versus purchasing existing systems). In particular, the amount of time required to build physical infrastructure may vary widely depending on how much the new entrant intends to spend on construction (since the time required for a project is generally inversely proportional to the cost).

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48 Masha Zager, *Number of Municipal FTTP Networks Climbs to 135*, Broadband Communities, May/June 2013, http://www.bbpmag.com/Features/0513feature-MuniCensus.php.

49 Press Release, Sprint Corp., Sprint and DISH to Trial Fixed Wireless Broadband Service (Dec. 17, 2013), http://newsroom.sprint.com/news-releases/sprint-and-dish-to-trial-fixed-wireless-broadband-service.htm.

50 Sarah Reedy, *Son: Dish Could be Sprint's Great Ally*, LightReading, Mar. 27, 2014, http://www.lightreading.com/mobile/4g-lte/son-dish-could-be-sprints-greatally/d/d-id/708408.

51 *See* Sacha Segan, *Fastest Mobile Networks 2014*, PC Magazine, June 11, 2014, http://www.pcmag.com/article2/0,2817,2459185,00.asp.

52 *See* Israel Decl. ¶ 67.

53 *Id.*

2. Edge Providers[54]

Comcast believes that the provision of Internet access services to edge providers is similar to that for subscribers. Accordingly, it incorporates by reference Section C.1 of this response. In addition, it notes that potential new entrants into the provision of Internet access services for edge providers may include telephone companies, technology companies, cable overbuilders, Internet backbone providers, or government municipalities.

Like the costs of entry, which are discussed in greater detail in response to Request 15, the time required for entry as an Internet access service provider to edge providers is variable and cannot be predicted in the abstract. A new Internet access service provider would need to build or purchase a physical infrastructure, enter into interconnection relationships with other ISPs, CDNs, and content providers, and meet often substantial regulatory requirements, in addition to marketing the product. The timing of each of these requirements is variable depending on factors such as the scope of entry or the manner of entry (e.g., building new infrastructure versus purchasing or leasing access to existing systems). In particular, the amount of time required to build physical infrastructure may vary widely depending on how much the new entrant intends to spend on construction (since the time required for a project is generally inversely proportional to the cost).

D. Internet Backbone Services

The Internet backbone service industries are dynamic and continue to evolve in response to changes in technology and consumer preferences. In the order approving the Level 3/Global Crossing merger, the FCC noted that "the number of Tier 1 ISPs appears to have grown since 2005" and that "[t]he emergence of several new Tier 1 peers . . . undercuts the argument that there are overwhelming barriers to entry into the Tier 1 market."[55] Several other companies in addition to traditional Tier 1 ISPs offer combinations of direct peering, transit, and Content Delivery Network ("CDN") services, and that number is likely to continue to grow. Indeed, evidence suggests that the traditional view of a "hierarchy" of Internet backbone services, in which Tier 1 ISPs typically peer with one another on a settlement-free basis and other ISPs purchase transit from the Tier 1 providers, no longer describes the range of relationships in Internet backbone services.[56] Instead, Internet companies in need of Internet backbone services have multiple alternatives, including CDNs, as well as direct peering or partial transit.[57]

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54 OVDs are discussed above under Video Programming Services.

55 *Fifteenth Video Competition Report* ¶ 28.

56 *See* Israel Decl. ¶ 74.

57 *Id.*

Internet-based companies including Google, Facebook, and Amazon have also begun investing in their own Internet backbone infrastructure.[58] By investing in fiber networks, Internet-based companies may be able to reduce their own content delivery costs and improve performance. As overall Internet traffic increases with the proliferation of high-definition streaming video and other bandwidth-intensive applications, more Internet-based companies are likely to invest in infrastructure and enter the Internet backbone service market, making them possible entrants into the CDN market as well.

Like the costs of entry, which are discussed in greater detail in response to Request 15, the time required for entry as an Internet backbone service provider is variable and cannot be predicted in the abstract. A new Internet backbone service would need to build or purchase network infrastructure, acquire server space in interconnection facilities, and enter into interconnection relationships with other Internet backbone service providers and Internet access service providers. The timing of each of these requirements is variable depending on factors such as the scope of entry (e.g., some Internet backbone providers operate globally while some have a more regional focus) or the manner of entry (e.g., building new Internet backbone infrastructure versus purchasing or leasing access to existing networks). In particular, the amount of time required to build a backbone network may vary widely depending on how much the new entrant intends to spend on construction (since the time required for a project is generally inversely proportional to the cost). The amount of time needed to negotiate peering and transit relationships with other Internet backbone service providers also involves inherently unknown factors.

Comcast's entry into Internet backbone services is just one example of the requirements, timing, and costs of entry, but each of these elements varies substantially from one provider to the next. In Comcast's case, it invested in and built out its Internet backbone network **[[** **]]** to support its cable operations. It began by developing the concept for an Internet backbone network **[[**

]] **{{**

}} It continued to **[[**

]] and completed [[

[58] *See* Drew Fitzgerald & Spencer E. Ante, *Tech Firms Push to Control Web's Pipes*, Wall St. J., Dec. 16, 2013, http://online.wsj.com/news/article_email/SB10001424052702304173704579262361885883936-lMyQjAxMTAzMDEwNjExNDYyWj.

]] Comcast has continued to **[[** **]]**.

E. Content Delivery Networks

CDNs are, like Internet Backbone services, part of the process of delivering content over the Internet to ultimate end users. As discussed with regard to Internet Backbone services, the industry for the process of delivering content over the Internet is in flux and dynamic. CDNs are part of a broader trend towards increasing the number of traffic delivery options beyond relying on transit services provided by traditional global backbone networks. In response to overall increases in Internet traffic and demand for higher quality, various companies have been developing innovative traffic exchange solutions. Indeed, the lines distinguishing among backbone networks, Internet access providers, and content providers are increasingly blurry.[59]

The companies discussed above as potential new entrants for providing Internet Backbone services are likely potential providers of CDNs as well. For example, Level 3 Communications began providing CDNs after having established an Internet Backbone service. Other Internet Backbone services providers, as well as other content providers, may begin investing in CDNs. Content providers that invest in a CDN for their own content (such as Google and Apple) may later be able to use that CDN in order to provide capacity to third parties.

Like the costs of entry, which are discussed in greater detail in response to Request 15, the time required for entry as a CDN is variable and cannot be predicted in the abstract. A new CDN would need to build or purchase network infrastructure, invest in equipment and software necessary to provide CDN services, acquire server space in interconnection facilities, and enter into interconnection relationships with other Internet backbone service providers, content providers, and Internet access providers. In general, many of the same factors affecting the time required for entry of an Internet backbone service provider apply to a CDN. Additionally, there are a variety of software components that have to be built or acquired and integrated into a unified platform to enable the core delivery of data and to allow for management of the CDN. For instance, software infrastructure is needed to log transactions and provide customer support and analytics.

The timing of each of these requirements is variable, depending on factors such as the scope of entry (some CDNs may only seek to serve smaller content providers while others may seek to carry larger traffic volumes), the manner of entry (e.g., creating a new CDN service versus acquiring an existing platform or partnering with an existing vendor or provider), and the amount of time needed to negotiate

[59] Dennis Weller, *The Internet Market For Quality*, 84 Comm. & Strategies 35, 38 (2011).

peering and transit relationships with other Internet backbone providers and potential customers (providers with Internet backbone networks can utilize existing relationships, while other providers will need to enter into interconnection arrangements).

Comcast's entry into content delivery network services is just one example of the requirements, timing, and costs of entry, but each of these elements varies substantially from one provider to the next depending on many factors described above. In Comcast's case, it began working on its latest IP CDN in **[[ ]]** Thus far, Comcast has spent **{{ }}** on IP CDN infrastructure, **{{ }}** on software development, and **{{ }}** on deployment and maintenance. These costs and the associated timeline relate to [[**]]**; Comcast [[**]]**.

15. Separately for each relevant service (i) describe the minimum viable scale necessary for entry, including but not limited to, hurdle rates, the capital required for entry, construction of new facilities, spectrum and/or licensing requirements, whether carriage on any particular MVPD or OVD is necessary and if so, the identity of each such provider, and the number of subscribers and advertisers needed to break-even, and to the extent not already produced, (ii) produce all documents relating to the Company's entry into each of the above services since January 1, 2009. Indicate in your response whether your response would vary based upon the type of video programming (e.g., movies, sports, Spanish-language).

SUPPLEMENTAL RESPONSE:

In addition to the information provided in response to Request 15 in its initial response, Comcast provides the following supplemental response:

This Response to Request 15 represents the view of Comcast, as is the case with all of Comcast's responses to the FCC's Information and Data Request, unless otherwise noted.

19. For each non-broadcast programming network identified in response to Request 18, state separately, and produce in CSV or Excel format, for each month from January, 2009, to the present:

a. the identity of any MVPD that carries the network, and for each MVPD state (1) the total and per subscriber license fee paid by the MVPD to the Company, (2) the total number of the MVPD's subscribers that receive the network, (3) the number of minutes per hour granted to the MVPD for local advertising sales and (4) the tier on which the network is carried;

b. for all MPVDs carrying the network, state (1) the total per subscriber license fees and average per subscriber license fees paid by all MVPDs to the Company, (2) the total number of MVPD subscribers that receive the network, and (3) the average number of minutes per hour granted to MVPDs for local advertising sales;

c. the average gross advertising revenue per subscriber and the average net advertising revenue per subscriber and an explanation of how these values were calculated; and

d. the identity of each OVD, including but not limited to Apple, Amazon.com, Google, Netflix, Hulu, and the Company that publishes, sells or distributes, in whole or part, content produced or distributed by the non-broadcast programming network, and the total fees paid each year by the OVD to the Company for the right to distribute such programming.

CLARIFYING RESPONSE:

As confirmed with FCC staff, and as indicated in Comcast's initial submission, annual data were provided in Exhibits 19.2(a) and 19.3(a). (Exhibits 19.2(b) and 19.3(b) additionally provide monthly data around any changes in Comcast's ownership interest of a particular programming network.)

51. On page 106 of the Public Interest Statement, the Applicants state that various Comcast-NBCU Order Conditions, commitments and obligations will be extended to the TWC cable systems. Provide the following information:

a. List all the conditions, commitments and obligations that will be extended to the assets acquired after consummation of the proposed TWC transaction, and after consummation of the proposed divestiture transactions, and the date the conditions, commitments and obligations will expire.

b. List all the conditions, commitments and obligations that will not be extended to the assets acquired after consummation of the proposed TWC transaction, and after consummation of the proposed divestiture transactions, and explain why each condition, commitment and obligation will not be extended to the acquired assets.

REVISED RESPONSE:

This response replaces Comcast's initial response.

51(a):

Conditions That Apply (Note that Conditions listed with an asterisk ("*") are those that would require additional clarification or transition time in order for Comcast to comply. Except where noted, each of these conditions expires on January 17, 2018.)

Condition II: Access to C-NBCU Programming

II. Access to programming.

Condition III: Carriage of Unaffiliated Video Programming

III.1. Nondiscriminatory Carriage.

III.2. Neighborhooding.* (Additional time for compliance).

III.3. Requirement to Launch Independently Owned-and-Operated Channels to the Digital Tier (required to be completed by January 17, 2019).

III.4. Online Program Access; Program Carriage Complaints.

Condition IV: Online Conditions

IV.A.1. Online Program Access; MVPDs.

IV.A.2.a. Online Program Access; Qualified OVDs, MVPD Price Condition.

IV.A.2.b. Online Program Access; Benchmark Condition.

IV.A.3. Online Program Access; Commercial Arbitration.

IV.A.4. Online Program Access; Conditions on Display of Online Video Programming.

IV.A.5. Online Program Access; Indemnification.

IV.B.1. Restrictions Regarding Exclusivity/Windowing, Prohibition on Limiting Distribution to OVDs.* (Clarification needed regarding December 3, 2009 date for determining what constitutes common, reasonable industry practices).

IV.B.2. Restrictions Regarding Exclusivity/Windowing, Permitting Petitions for Exclusivity.

IV.B.3. Restrictions Regarding Exclusivity/Windowing, Carriage on Comcast MVPD System.

IV.C.2. Continued Access to Online Content & Hulu; Honoring Existing Programming Agreements.* (Clarification needed regarding the January 17, 2011 date for honoring agreements).

IV.D.1. Standalone Broadband Internet Access Service.

IV.D.2. Marketing of Standalone Broadband Internet Access Service.* (Additional time for compliance).

IV.D.3. Standalone Broadband Internet Access Service, Reporting.* (Additional time for compliance).

IV.E.1. Broadband Internet Access Service; Specialized Services.

IV.E.2. Broadband Internet Access Service; Nondiscriminatory Access.

IV.E.3. Broadband Internet Access Service; 12 Mbps Tier.

Condition IV.F: Set-Top Boxes

IV.F. Set-Top Boxes.

Condition IV.G: Unfair Practices

IV.G.1. Unfair Practices.

IV.G.2. No Automatic Right to Access Video Programming.

Condition V: Notice of Conditions

V. Notice of Conditions.* (Additional time for compliance).

Condition VII: Commercial Arbitration Remedy

VII.A.Commercial Arbitration, Initiation of Arbitration.* (Clarification needed as to what constitutes a full bundle of cable programming made available to MVPDs as it relates to TWC and Charter).

VII.B. Commercial Arbitration, Rules of Arbitration.

VII.C. Commercial Arbitration, Provisions Applicable to Arbitrations Under Section IV (Online).

VII.D. Commercial Arbitration, Provisions Applicable to Small MVPDs.

VII.E. Commercial Arbitration, Review of Final Award by the Commission.

Condition VIII: Modifications to AAA Rules for Arbitration

VIII.1-7. Modifications to Arbitration Rules.

Condition IX: Broadcast Condition

IX. Broadcast Condition.

Condition X: Diversity

X.2. Telemundo Programming on VOD.* (Additional time for compliance).

X.3.a-b. Telemundo and mun2 Programming on VOD and Online.* (Additional time for compliance).

X.5. Independent Programming Reports.* (Additional time for compliance).

Condition XI: Localism

XI.6. Increased VOD Choices at No Additional Charge.* (Additional time for compliance).

XI.7. Broadcast Content on VOD at No Additional Charge.* (Additional time for compliance).

Condition XIII: Children's Programming

XIII.1.a-b. Children's VOD Programming.* (Additional time for compliance).

XIII.2.a. Improved Ratings Icons.* (Additional time for compliance).

XIII.2.b. Improved Parental Controls.* (Additional time for compliance).

XIII.2.c. Parental Dashboard.* (Additional time for compliance).

XIII.2.d. Blocking Capabilities of IP-based STBs.* (Additional time for compliance).

XIII.3. Partnership with Common Sense Media ("CSM").* (Additional time for compliance).

XIII.4. Interactive Advertising.

XIII.5. Definition of Interactive Advertising.

XIII.6. Public Service Announcements.

Condition XIV: PEG

XIV.1. No Migration to Digital Delivery.

XIV.2. PEG Carriage on Digital Starter Tier.

XIV.3. Quality of PEG Delivery.

Condition XV: Carriage of Programming of Non-Commercial Educational Stations

XV.1-3. Requirement to Carry.

XVII. General Condition

Condition XIX: Reporting Requirements

XIX. Reporting Requirements.

Open Internet Commitment. (*Comcast-NBCUniversal Order* ¶ 285)

51(b):

As noted, several conditions have expired and/or have been satisfied in full. In addition, a number of conditions have no particular applicability to the proposed transaction because they are specifically directed to the NBCUniversal assets.

A. Conditions That Have Expired

Condition VI: Replacement of Prior Conditions

VI. Replacement of Prior Conditions. This provision made clear that the conditions supersede the commercial arbitration remedy imposed in the Adelphia

Transaction. Because the Adelphia Order has now expired, this provision is moot.

Condition XIV: PEG

XIV.4.a-d. Platform to Host PEG Content On Demand and On Demand Online. Comcast was required to develop a platform to host PEG content On Demand and On Demand Online. Comcast has fully satisfied the terms of this Condition. In addition, this Condition expired at the end of 2013.

Condition XVI: Expanding Broadband Deployment and Adoption

XVI.1.a-c. Comcast Broadband Footprint Expansion. The Comcast-NBCUniversal Conditions required Comcast to expand its then-existing broadband network by at least 1,500 miles per year for each of the three years and to an additional 600 courtesy account locations following the closing the NBCUniversal Transaction (i.e., during 2011, 2012 and 2013). Comcast has fully satisfied the terms of this Condition. In addition, this Condition expired at the end of 2013.

XVI.2.a-m. Expanding Broadband Adoption. This Condition required that Comcast offer its Internet Essentials broadband adoption program for three school years. Comcast has fully satisfied this requirement, and the obligation to continue to offer the program to new customers has expired. Although Comcast is required to continue offering the service to families who enrolled during the past three years at the fixed $9.95 price, the Condition has otherwise expired. Nevertheless, as Comcast committed on the day the transaction was announced and in its Public Interest Statement, we are committed to expanding its highly successful Internet Essentials program to the acquired systems.

B. Conditions that Apply Specifically to the NBCUniversal Programming Assets

Condition IV.C: Continued access to online content and Hulu

IV.C.1. Continued Programming on nbc.com. Comcast must continue to provide programming over nbc.com. This Condition is applicable to nbc.com and has no applicability to the proposed transaction.

IV.C.3. Provision of Content to Hulu. Comcast must renew its agreements with Hulu on certain terms. This Condition is applicable to NBCUniversal's agreement with Hulu and has no applicability to the proposed transaction.

IV.C.4. Relinquishment of Control Over Hulu. Comcast must relinquish management control over Hulu. This Condition is applicable to NBCUniversal's agreement with Hulu and has no applicability to the proposed transaction.

Condition X: Diversity

X.1. Diversity Channel. Comcast-NBCUniversal was required to launch a new multicast channel on its Telemundo owned-and-operated broadcast television stations utilizing library programming that has had limited exposure. This Condition has been satisfied, and in any event applies only to Telemundo owned-and-operated broadcast television stations.

X.4. New Weekly Business Program. Comcast was required to work with an independent producer to project a new weekly business news program and assist to make the program available through syndication. Comcast has fulfilled the terms of this Condition.

Condition XI: Localism

XI.1. News, Public Affairs, and Other Local Public Interest Programming. Comcast was required to preserve and enrich the output of local news, local public affairs, and other public interest programming on the NBCUniversal-owned stations and cable programming networks. This Condition applies specifically to NBC and Telemundo owned-and-operated broadcast television stations.

XI.2-3. 1,000 Hours of Additional Local News and Information. The NBC owned-and-operated broadcast television stations were required to produce an additional 1,000 hours per year of original, local news and information programming. This Condition applies specifically to NBC owned-and-operated broadcast television stations.

XI.4. News and Information Programming Reports. Comcast is required to file quarterly reports regarding the news and information programming aired on the NBC and Telemundo owned-and-operated broadcast television stations. This Condition applies specifically to NBC and Telemundo owned-and-operated broadcast television stations.

XVI.5. Non-Profit News Partners. The Conditions require that half of the 10 NBC owned-and-operated broadcast television stations establish cooperative arrangements with locally focused non-profit news organizations. This Condition applies specifically to NBC owned-and-operated broadcast television stations.

Condition XII: Journalistic Independence Condition

XII. Journalistic Independence. Comcast is required to continue NBCUniversal's policy of journalistic independence with respect to the news programming organizations of all NBCUniversal networks and stations. This Condition applies only to NBCUniversal news.

Condition XIII: Children's Programming

XIII.1.c. Additional E/I Programming. Requirement to provide one additional hour per week of children's educational and informational programming over the primary channels of all Telemundo owned-and-operated broadcast television stations and over the primary or multicast channels of all NBC owned-and-operated broadcast television stations. This Condition applies only to NBC and Telemundo owned-and-operated broadcast television stations.

XIII.2.e. Online Ratings Icons. Program ratings information is required to be included in programming provided by NBCUniversal to nbc.com, to other NBCUniversal websites, and to Hulu.com. This Condition applies only to nbc.com and other NBCUniversal websites.

52. For each of the conditions and commitments contained in the Comcast-NBCU Order, state whether it has "become part of Comcast's core business ethics and operations," as described on page 107 of the Public Interest Statement, and explain how the Company has implemented each of the identified conditions and commitments.

SUPPLEMENTAL RESPONSE:

While, as described in detail in Comcast's initial response to this Request, each of the Commitments and Conditions contained in the *NBCUniversal Order* has been fully incorporated into the Company's business, operations, and practices, the following have become particularly core to Comcast's business ethics and operations:

- Condition III. Conditions Concerning Carriage of Unaffiliated Video Programming
- Condition IV.A. Online Conditions; Online Program Access
- Condition IV.B. Online Conditions; Restrictions Regarding Exclusivity/Windowing
- Condition IV.D. Online Conditions; Standalone Broadband Internet Access Service
- Condition IV.G. Online Conditions; Unfair Practices
- Condition IX. Broadcast Condition
- Condition X. Diversity
- Condition XII. Journalistic Independence
- Condition XVI. Conditions to Expand Broadband Deployment and Adoption
- Commitment Regarding Adherence to Open Internet Rules

59. Describe and produce all documents relating to data caps, including but not limited to: (i) any data caps imposed by the Company for each tier of Internet access service identified in response to Request 3 in any relevant area and the criteria used for imposing them and selecting the limit; (ii) the size of the data cap and the price of the Company's Internet access service both with and without the data cap; (iii) the Company's usage-based pricing (UBP) trials, rationale for them, and the findings or results of each such trial; (iv) video programming and other services subject to, and not subject to, the cap; (v) the cost, detriments and benefits to the Company and to the Company's subscribers of offering Internet access service with data caps, including the effect of the data caps on the Company's network; (vi) the effect of the data cap on the Company's customer's behavior (e.g., downloading of OVD content, purchase of the Company's PPV and VOD services); (vi) the effect of the data cap on competition for any relevant service and persons who provide video programming; and (vii) whether different UBP trials are planned, and if so, a description and timetable for each.

SUPPLEMENTAL RESPONSE:

The FCC requested additional information regarding (1) "the cost, detriments and benefits to the Company and to the Company's subscribers of offering Internet access service with UBP, including the effect of the data caps on the Company's network" and (2) "the effect of the UBP on the Company's customer's behavior (e.g., downloading of OVD content, purchase of the Company's PPV and VOD services)." (These responses have already been provided with regard to data caps in Comcast's response to the initial Request 59.)

With regard to part 1 of the amended request, Comcast provides the following information:

Comcast is not aware of any effect on its network from the implementation of UBP. As noted in Comcast's initial response, **{{**

}}. Across Comcast's footprint, from September 2013 to September 2014, median data use has grown by approximately **{{ }}** percent. Median usage in two of Comcast's larger trial markets, Atlanta and Nashville, also has grown by **{{ }}** percent over that same period. In general, median usage in the trial markets has generally approximately **{{**

}}. In terms of benefits from UBP, Comcast receives some incremental revenue from users who go over the data threshold in certain markets. Additionally, UBP helps to ensure that Comcast customers are treated fairly such that those customers who choose to use more, pay more, and customers that choose to use less, pay less. In terms of costs and detriments, administering the program in trial markets has some incremental expenses, there may be customers

that are unhappy if they have to pay for more usage, and UBP may be exploited by a competitor with no UBP to try to capture market share.

With regard to part 2 of the amended request, Comcast provides the following information:

The UBP practices in place in these trial markets **{{ }}**. As explained in Comcast's initial submission, usage behavior has generally **{{ }}** in markets where Comcast is conducting data usage trials. **{{ }}**, both in terms of overall usage growth, as well as median usage. **{{**

}}.

68. Describe the Company's CDN, including the products and services it offers, and the contractual terms, and produce all documents relating to the Company's CDN, including but not limited to, interconnection agreements with other networks, business plans, expansion plans, budgets, forecasts of sales, costs and profits, and analyses of the market, competition or competitors.

SUPPLEMENTAL RESPONSE:

Comcast stated in its initial response to this request that **{{ }}**. This supplemental response provides additional information and an update regarding this statement.

{{

}}.

In addition, since Comcast filed its initial response to this request, **{{**

}}.

75. For each day during the period from January 1, 2012, to May 31, 2014, and for each DMA where the Company provides VOD and PPV services, identify each IP point of presence through which traffic from (i) Cogent Communications Inc., and (ii) Level 3 Communications Inc., was delivered to the Company's Internet access service subscribers in that DMA.

CLARIFYING RESPONSE:

It is not possible to provide any reliable answer to this question. As Comcast explained in its September 11, 2014 response, **[[**

]]. That is equally true for all other senders of Internet traffic to Comcast's network, each of which determines directly or via its transit or CDN agents the IP point(s) of presence to which its traffic is delivered, which may or may not be the IP point of presence in the DMA closest to the ultimate traffic recipient. As the initial response to this request explains, for many providers, "the typical default behavior for Internet routing is to send traffic to the IP point of presence nearest to where it received the data, regardless of that traffic's ultimate destination. This action is commonly referred to as 'shortest exit' or 'hot potato' routing.[60]"

[60] Content delivery networks ("CDNs"), by contrast, typically work to deliver traffic to the IP point of presence closest to the requesting party.

80. To the extent the Applicants contend that the proposed TWC transaction and the proposed divestiture transactions will result in (i) savings in any costs or expenditures, (ii) geographic efficiencies, (iii) an enhanced ability to introduce new products, provide more products and services to customers and to improve service quality and management of communications security risks, and (iv) any other synergies:

a. describe in detail all of the claimed efficiencies, savings, new and improved products and synergies that are projected by the Applicants to result from the proposed TWC transaction and the proposed divestiture transactions, and submit a timeline for when these efficiencies, savings, new or improved products and synergies will be generated and recognized by the Company;

SUPPLEMENTAL RESPONSE:

Comcast provides the following supplemental response to subpart (a) of this request.

f. Timeline for Efficiencies and Synergies

As discussed in its initial response, Comcast estimates that the efficiencies resulting from the proposed transaction will total approximately $1.5 billion in operating expenses and approximately $400 million in capital expenditures by the third year, with operating expense efficiencies recurring at or above the $1.5 billion level each year thereafter (capital expenditure efficiencies are not expected to continue beyond year three). Comcast expects to achieve 50 percent of the operating efficiencies in the first year after closing, another 25 percent in year two, and the remaining 25 percent in year three. These efficiencies primarily represent savings from corporate overhead, cable operations, and programming costs. There are many unknowns when projecting the efficiencies of a transaction, both as to timing and as to amount of efficiencies ultimately realized, including regulatory uncertainty.

Based on planning efforts to date, Comcast provides the following additional information regarding the timing of benefits that can be achieved through investments and product rollout. These benefits, **[[**

]], will begin immediately after close. For example, Comcast is planning the transition of TWC systems to all-digital in three waves, **{{**

}}. Within the first year after closing, Comcast anticipates **{{**

}} Within the first 18 months after closing, Comcast expects to offer **{{**

}} in select major markets and **{{**
}} in as many markets as possible. During that period, it also expects to provide **{{**
}} Comcast anticipates **[[**
]] over the first 18 months, **{{**
}} Such synergies are examples of the greater investment in technology and new products over a broader footprint that would occur following the Transactions. These will begin immediately after close, but the precise timing of such synergies depends on a number of factors and objectives which are still being assessed.

The timeline for the efficiencies and synergies identified in connection with the Divestiture Transactions is still being determined. The timeline and realization of the efficiencies identified above is not expected to be impacted by the Divestiture Transactions. Synergies related to enhanced investments to deliver advanced products and services over an expanded footprint will likely follow a similar timeline as those related to the TWC transactions.

84. Produce all documents (except documents solely relating to environmental, tax, human resources, OSHA, or ERISA issues) relating to the proposed TWC transaction and the proposed divestiture transactions, and provide for each transaction:

a. a timetable for each transaction, a description of all actions that must be taken prior to consummation of each transaction, and any harm that will result if the transactions are not consummated;

SUPPLEMENTAL RESPONSE:

84(a):

Comcast provides the following supplemental response to subpart (a) of this request.

2. Divestiture Transactions

The Divestiture Transactions will require additional time to close following the close of the Time Warner Cable Transaction.

Even after all the regulatory approvals required for the divestiture transaction have been received, certain financing transactions will need to be finalized before the Divestiture Transactions can be completed, including the following sequence of events:

- a tender offer by third party financial institutions for outstanding Comcast debt, which tender offer will be open for a minimum of 10 business days and can be further extended up to a total of 30 business days;
- a period of 14 calendar days following completion of the tender offer, during which time the third party financial institutions will hold the tendered Comcast debt; and
- an exchange by Comcast of newly issued SpinCo notes for the tendered Comcast debt prior to the spin-off.

The financing transactions described above will not commence until after completion of the Time Warner Cable Transaction and will themselves take at least 30 days to complete. Accordingly, even if all regulatory approvals for the Divestiture Transactions are received prior to completion of the Time Warner Cable Transaction, the time necessary to execute the financing transactions means that the Divestiture Transactions cannot close until at least 30 days after completion of the Time Warner Cable Transaction.

Further, because Comcast and Charter recognized that the regulatory approval process and the financing transactions would require that the Divestiture

Transactions be completed sometime after completion of the Time Warner Cable Transaction, they agreed to an "end date" for the Divestiture Transactions (i.e., a date by which, if the Divestiture Transactions are not completed, either party can terminate the Divestiture Transactions) that comes after completion of the Time Warner Cable Transaction. The "end date" for the Divestiture Transactions has two prongs: (1) if all necessary regulatory approvals (FCC, DOJ, LFA, PUC) for the Divestiture Transactions are received on or before the completion of the Time Warner Cable Transaction, the parties have 60 days (from completion of the Time Warner Cable Transaction) to complete the Divestiture Transactions (or 90 days if the financing transactions have started by the 60th day); (2) alternately, if all necessary regulatory approvals for the Divestiture Transactions are not received on or before the completion of the Time Warner Cable Transaction, the parties have 150 days (from completion of the Time Warner Cable Transaction) to complete the Divestiture Transactions (or 240 days if by the 75th day the parties have received all approvals except for the LFA/PUC approvals).

86. Produce all vertical foreclosure analysis, or other vertical competitive effects analysis, econometric modeling, or similar analyses, including those regarding market concentration or pricing, that have been undertaken by the Company or any consultant or expert hired by the Company to analyze the effect of the proposed TWC transaction and the proposed divestiture transactions, including all documents and data used in these analyses.

CLARIFYING RESPONSE:

Comcast **[[ ]]** what Comcast previously provided in response to Requests 23-25 along with the backup data and documents submitted related to those responses[61] and the backup data and documents submitted related to the initial and reply declarations of Dr. Mark Israel and Drs. Gregory Rosston and Michael Topper in this proceeding.[62] Any other materials **[[ ]]** would have been provided in Comcast's production of responsive documents to the FCC.

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[61] *See* Letter from Kathryn A. Zachem, Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, MB. Docket No. 14-57 (Sept. 18, 2014) (enclosed CD-ROM).

[62] *See* Letter from Francis M. Buono, Counsel to Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, MB. Docket No. 14-57 (June 27, 2014) (enclosed CD-ROM); Letter from Francis M. Buono, Counsel to Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, MB. Docket No. 14-57 (Sept. 29, 2014) (enclosed CD-ROM).

88. Describe in detail the Company's plans to migrate subscribers acquired as a result of the proposed TWC transaction and the proposed divestiture transaction, including but not limited to:

b. any plans for relevant services and devices necessary to access the services to be offered to the acquired subscribers, including but not limited to (1) a detailed description of the Company's plans to provide these subscribers with devices that may be used on the Company's network and any associated charges to an acquired customer who is required to acquire such a device, and (2) the service plans, bundled services and pricing to be offered to the acquired customers;

CLARIFYING RESPONSE:

88(b):

Comcast hereby confirms that the "attached documentation" referred to in Comcast's September 11, 2014 response is a reference to Exhibits 88.1-88.4.

89. Provide the Company's data as specified in Attachment A, which seeks data relating: to active and potential business service addresses; internet traffic exchange and interconnection; subscriber and plan data; daily data on the capacity and use of IP points of presence; and, for Comcast, Charter and SpinCo after the consummation of the proposed divestiture transactions, monthly data for cable service on subscribers and locations served.

SUPPLEMENTAL RESPONSE:

Comcast provides the following responses to this request:

"CTWC Congestion spreadsheet table Final"

Information and data responsive to this exhibit request have been provided in machine-readable Excel spreadsheet and CSV format as Revised Exhibits 89.1 through 89.4. Revised Exhibits 89.1 through 89.3, which provide the data requested for Level 3 (Exhibit 89.1), Global Crossing (Exhibit 89.2), and Cogent (Exhibit 89.3), contain the following changes: (1) they conform the headers to the variable names set forth in the CTWC Congestion spreadsheet table Final, and also provide data for outbound traffic (i.e., traffic delivered by Comcast to Level 3, Global Crossing, and Cogent) that is marked "outbound"; (2) they list all dates from January 1, 2013, to May 31, 2014, for each IP point of presence in which Comcast exchanged traffic with the requested counterparty at any point during the requested period and provide data on all dates on which Comcast exchanged data traffic with each party **{{**

}}; (3) where Comcast did not interconnect with the party at a given IP POP on a particular date, entries contain a "dash"; where the parties did interconnect but data were not available (e.g., due to the unavailability of the measurement device), the entries contain a "dash"; otherwise, if the parties did interconnect but no traffic was actually exchanged, the entries would contain a "0."

Revised Exhibit 89.4 provides VOD and PPV revenue and usage. Transactional VOD and PPV revenue are provided in actual dollars; Free VOD usage is provided in the number of hours. PPV revenue has now been provided for all DMAs and for all days during the requested period where available.

"Interconnection Table – HB"

Information and data responsive to this exhibit request have been provided in machine-readable Excel spreadsheet as Revised Exhibit 89.5. Revised Exhibit 89.5 provides the following: traffic and capacity data are not available **[[**

]] and such entries contain a "dash"; where the parties did not interconnect and there was no revenue, such entries contain a "dash"; where the parties did interconnect but data were not available **[[**

]], the entries were left blank; otherwise, if the parties did interconnect but no traffic was actually exchanged or there was no revenue, non-recurring revenue, or recurring revenue, the entries contain a "0."

"CTWC Cable Services Final"

The FCC identified an error in Exhibit 89.12 as originally submitted, resulting in available Internet speeds being reported to exceed the maximum available speeds in some census blocks. This error was traced back to a coding error in the script that was used to create Exhibit 89.12 A revised version of Exhibit 89.12 is provided in machine-readable Excel spreadsheet format as Comcast FCC Exhibit 89.12 (Revised).

As stated in Comcast's Supplemental Responses dated September 19, 2014, Comcast maintains residential location data on a **[[**

]]. Consequently, the number of residential locations for each census block group is reported for every census block within the census block group. In other words, the residential location data reported in Exhibit 89.12 for an individual census block will be identical to the data reported for all other census blocks within the same census block group and will correspond to the residential location data for the census block group as a whole.

The residential location data reported in Exhibit 89.12 (Revised) were obtained by **[[**

]].

The subscriber information contained in Exhibit 89.12 (Revised) and Exhibit 89.13 was compiled as follows. For dates prior to 2011, subscriber data were sourced from the **[[** **]]** maintained by Comcast. To determine whether a customer subscribed to an Internet service, and if so, the speed of the customer's Internet service, data were provided by Comcast's Network Engineering & Technical Operations ("NE&TO") group. **[[**

]].

For dates subsequent to 2011, broadband subscriber data were obtained from the **[[**

]].

EXHIBIT 12

Exhibit 12

Entries to and Exits from Internet Traffic Exchange and CDN[1]			
Name and Address of Company	**Services Provided**	**Date of Entry Into and, if Applicable, Exit From the Market**	**Service Area**
Global Crossing	Transit and peering links, Virtual Private Network (VPN), Leased lines, Audio and Video conferencing, Long distance telephone, managed services, dialup, colocation and VoIP.	Exit: October 2011	National
Apple, Inc. 1 Infinite Loop Cupertino, CA 95014	CDN	Entry: 2014	National
Cotendo	CDN	Exit: 2011	National
Fastly PO Box 78266 San Francisco, CA 94107	CDN	Entry: 2011	National
MaxCDN 3575 Cahuenga Blvd. West Suite 330 Los Angeles, CA 90068	CDN	Entry: 2009	National
Telestra 500A Huntmar Park Drive Herndon, VA 20170	CDN	Entry: 2009	National
Deutsche Telekom Friedrich-Ebert-Allee 140 53113 Bonn Germany	CDN	Entry: 2009	National
Telecom Italia 622 3rd Ave New York, NY 10017	CDN	Entry: 2009	National
Level 3 1025 Eldorado Boulevard Broomfield, Colorado 80021	CDN	Entry: 2010	National
British Telecom 7301 N State Highway 161 Suite 400 Irving, TX 75039	CDN	Entry: 2010	National
AT&T (EdgeCast) 208 S. Akard Street Dallas, TX 75202	CDN	Entry: 2011	National
KDDI 825 Third Avenue, 3rd Floor New York, NY 10022	CDN	Entry: 2011	National
TATA 1700 North Moore St, Suite 1520 Arlington, VA 22209-1911	CDN	Entry: 2011	National
CenturyLink 100 CenturyLink Drive Monroe, Louisiana 7201	CDN	Entry: 2011	National
Orange S.A. 78 rue Olivier de Serres Paris 75015 France	CDN	Entry: 2012	National
Telefonica Ronda de la Comunicación, s/n, 28050 Madrid, Spain	CDN	Entry: 2012	National
Verizon 140 West Street New York, NY 10007	CDN	Entry: 2013	National

[1] Comcast also refers the FCC to www.cdnlist.com, which provides an updated list of commercial CDN providers, including telecom or carrier-based CDN providers, and CDN-related vendor acquisitions and closures.

Exhibit 12

Entries to and Exits from Internet Access Service		
Name and Address of Company	**Date of Entry Into and, if Applicable, Exit From the Market**	**Service Area[1]**
Google Fiber 1600 Amphitheatre Parkway Mountain View, CA 94043	Entry: 2011	Kansas City, MO; Austin, TX; Provo, UT
Qwest	Exit: 2011	
Towerstream Corp. Tech IV 88 Silva Lane Middletown, RI 02842	Entry: 2010	Boston, MA; Chicago; IL; Dallas, TX; Houston; TX; Los Angeles, CA; Miami, FL; New York, NY; San Francisco, CA; Seattle, WA; Philadelphia, PA; Nashville, TN; Las Vegas, NV; Reno, NV; Providence, RI
Leap Wireless International, Inc.	Exit: 2014	Nationwide
Clearwire Corporation	Exit: 2013	Various areas within the following states: California; Colorado; Connecticut; Delaware; Florida; Georgia; Hawaii; Idaho; Illinois; Kansas; Maryland; Massachusetts; Michigan; Minnesota; Minnesota; Missouri; Nevada; New Jersey; New York; North Carolina; Ohio; Oregon; Pennsylvania; Rhode Island; Tennessee; Texas; Utah; Virginia; and Washington
Insight Communications	Exit: August 2011	Various areas within the following states: Indiana; Kentucky; and Ohio
Knology Inc.	Exit: April 2012	Various areas within the following states: Alabama; Georgia; Florida; Iowa; Kansas; Minnesota; South Carolina; South Dakota; and Tennessee

[1] Company's footprint within each listed area may not reach all homes within that area.

Exhibit 12

Entries to and Exits from MVPD		
Name and Address of Company	**Date of Entry Into and, if Applicable, Exit From the Market**	**Service Area[1]**
Google Inc. (Google Fiber) 1600 Amphitheatre Parkway Mountain View, CA 94043	Entry: 2011	Kansas City, MO; Austin, TX; Provo, UT
Centurylink Prism TV 100 CenturyLink Drive Monroe, Louisiana 7201	Entry: 2010	Phoenix, Mesa, Chandler, and Gilbert, AZ; Colorado Spring, Eagle, and Highlands Ranch, CO; Fort Myers, Orlando, and Tallahassee, FL; Columbia and Jefferson City, MO; Omaha, NE; Las Vegas, NV; Fayetteville and Wake Forest, NC; La Crosse, WI
Insight Communications	Exit: August 2011	Various areas within the following states: Indiana; Kentucky; and Ohio
Knology Inc.	Exit: April 2012	Various areas within the following states: Alabama; Georgia; Florida; Iowa; Kansas; Minnesota; South Carolina; South Dakota; and Tennessee

[1] Company's footprint within each listed area may not reach all homes within that area.

Exhibit 12

Entries to and Exits from Online Video Distribution			
Name and Address of Company	**Services Provided**	**Date of Entry Into and, if Applicable, Exit From the Market**	**Service Area**
AOL, Inc. 770 Broadway New York, NY 10003	Internet-based video streaming through SlashControl	Entry: 2009	National
AT&T Inc. 208 S. Akard Street Dallas, TX 75202	Internet-based video streaming through AT&T Entertainment	Entry: September 2009	National
Clicker Media Inc. 6824 Melrose Avenue Los Angeles, CA 90038	Internet-based programming directory and video streaming at clicker.com	Entry: November 2009	National
Epix Studio 3 Partners LLC 1515 Broadway New York, NY 10036	Internet-based video streaming, VOD service, cable channel	Entry: October 2009	National
Home Box Office, Inc. 1100 Avenue of the Americas New York, NY 10036	Made-for-mobile television programming	Entry: February 2010	National
Ideal Media Financial Ltd. 6 The Coppens Stotfold, Hitchin Herts, SG5 4PJ United Kingdom	Internet-based video streaming at iReel.com	Entry: 2009	National
Jumpcut	Internet-based video streaming	Exit: June 2009	National
Vevo 825 8th Avenue, 23rd Floor New York, NY 10019	Internet-based video streaming	Entry: December 2009	National
Vreel Address Unknown	Internet-based video streaming	Exit: January 2010	National
National Geographic Channel 1145 17th Street NW Washington, DC 20036	Internet-based video streaming	Entry: March 2010	National
Better Black TV	Internet-based video streaming	Entry: November 2010	National
Joost c/o Adconion Media Group Ltd. 131-151 Great Tichfield Street London, W1W 5BB	Internet-based video streaming	Exit: 2012	National
Mediaflo Technologies 5775 Morehouse Drive San Diego, CA 92121	Internet-based video streaming through video console	Exit: 2011	National
MLB Advanced Media, LP 40 Hartz Way, Suite 10 Secaucus, NJ 07094	Internet-based video streaming	Entry: January 2009	National
Microsoft (Bing Video) One Microsoft Way Redmond, WA 98052	Internet-based video streaming	Entry: 2009	National
Net2Vu Harman Enterprises Ltd. C/o Trident Trust P.O. Box 146 Tortola, BVI	Internet-based video streaming	Exit: 2012	National
ZapmyTV 2207 Concord Pike Suite 619 Willmington, DE 19803	Internet-based video streaming	Entry: 2010	National

Entries to and Exits from Online Video Distribution			
Name and Address of Company	**Services Provided**	**Date of Entry Into and, if Applicable, Exit From the Market**	**Service Area**
Zillion TV 3131 Jay Street Suite 200B Santa Clara, CA 95054	Internet-based video streaming	Entry: 2009	National
Oprah Winfrey Network, LLC	Internet-based video streaming	Entry: January 2011	National
RightNetwork	Internet-based video streaming	Entry: September 2010 Exit: 2011	National
Better Black TV	Internet-based video streaming	Entry: November 2010	National
UltraViolet Paramount Pictures 5555 Melrose Ave. Los Angeles, CA 90038	Internet-based video streaming	Entry: January 2012	National
Facebook 1601 Willow Rd. Menlo Park, CA 94025	Internet-based video streaming	Entry: 2011	National
DirectTV 2230 E Imperial Hwy El Segundo, CA 90245	Internet-based video streaming	Entry: May 2011	National
DISH Network 9601 S Meridian Blvd. Englewood, CO 80112	Internet-based video streaming	Entry: March 2012	National
Barnes & Noble NOOK Video 122 Fifth Avenue New York, NY	Internet-based video streaming	Entry: 2012	National
Aereo 455 Broadway New York, NY 10013	Internet-based video streaming	Entry: 2012 Exit: (Temporarily Suspended)	National
Sky Angel	Internet-based video streaming	Exit: 2013	National
Bohemia Visual Music 2328 E Van Buren Street Phoenix, AZ 85006-3949	Internet-based video streaming	Entry: 2011	National
Discovery Communications One Discovery Place Silver Spring, MD 20910	Internet-based video streaming	Entry: 2013	National
The Hayzlett Group 101 South Main Avenue, Fourth Floor Sioux Falls, SD 57104	Internet-based video streaming	Entry: 2014	National
Louisck.net 3 Arts Entertainment Inc. 9460 Wilshire Boulevard Floor 7 Beverly Hills, CA 90212	Internet-based video streaming	Entry: Approximately 2011	National
CBS Corporation 51 W. 52nd Street New York, NY 10019	Internet-based video streaming	Entry: 2014	National

Exhibit 12

Entries to and Exits from Video Programming				
Name and Address of Company	**Name of Programming Service**	**Programming Provided**	**Date of Entry Into and, if Applicable, Exit From the Market**	**Service Area**
Black Entertainment Television 1235 W Street, NE Washington, DC 20018	Centric	General interest	Entry: September 2009	National
Discovery Communications One Discovery Place Silver Spring, MD 20910	TestTube	Internet-based educational programming	Entry: 2013	National
Studio 3 Partners LLC 1515 Broadway New York, NY 10036	Epix	Premium	Entry: October 2009	National
Liberman Broadcasting, Inc. 1845 Empire Avenue Burbank, CA 91504	Estrella TV	Spanish-language	Entry: September 2009	National
Fox Entertainment Group 10201 West Pico Boulevard Los Angeles, CA 90035	FOX Reality	Reality TV	Exit: March 2010	National
MLB Advanced Media, LP 40 Hartz Way, Suite 10 Secaucus, NJ 07094	MLB Network	Sports	Entry: January 2009	National
National Geographic Channel 1145 17th Street NW Washington, DC 20036	National Geographic Wild	Wildlife	Entry: March 2010	National
NHL Network 9 Channel Nine Court Scarborough, ON M1S 4B5 Canada	NHL Network	Sports	Entry: October 2007	National
Next One Interactive 2400 North Commerce Parkway, Suite 105 Weston, FL 33326	Resort & Residence TV	Lifestyle	Entry: November 2009	National
The Walt Disney Company 500 South Buena Vista Street Burbank, CA 91521	Disney XD	Children's Programming	Entry: February 2009	National
Oprah Winfrey Network, LLC 5700 Wilshire Blvd. Los Angeles, CA 90036	Oprah Winfrey Network	Entertainment	Entry: January 2011	National
RightNetwork	RightNetwork	News	Entry: September 2010 Exit: 2011	National
Better Black TV	Better Black TV	Entertainment	Entry: November 2010	National
Revolt TV 1800 N. Highland Avenue Los Angeles, CA 90028	Revolt TV	Music	Entry: October 2013	National
Participant Media 331 Foothill Rd. Beverly Hills, CA 90210	Pivot	Entertainment	Entry: May 2013	National
Magic Johnson Enterprises 9100 Wilshire Boulevard Suite 700 East Beverly Hills, CA 90212	Aspire	Entertainment	Entry: June 2012	National
The Walt Disney Company 500 South Buena Vista Street Burbank, CA 91521	Disney Junior	Children's Programming	Entry: February 2011	National
Discovery Communications 6505 Blue Lagoon Drive, Suite 190 Miami, FL 33126	Hub Network	Children's Programming	Entry: October 2010	National
Mint Entertainment 1918 N Mendell St. Chicago, IL 60642	Cinémoi	Movies	Entry: February 2009	National
Studio 3 Partners 1515 Broadway 43rd Floor New York, NY 10036	Epix	Movies	Entry: October 2009	National
Bohemia Visual Music 2328 E Van Buren Street Phoenix, AZ 85006-3949	Bohemia Visual Music	Music	Exit: March 2010	National
Cool Music Network 641 E. 22nd Street Lawrence, KS 66046	The CoolTV	Music	Entry: March 2009	National
Al Jazeera Media Network PO Box 23127 Doha - Qatar	Al Jazeera America	News	Entry: August 20, 2013	National
The Walt Disney Company 500 South Buena Vista Street Burbank, CA 91521	Fusion	News	Entry: October 28, 2013	National
Herring Networks	One America News Network	News	Entry: July 4, 2013	National
Weather Nation TV 8101 East Prentice Avenue Suite 700 Greenwood Village, CO 80111	Weather Nation TV	News	Entry: October 2010	National
Al Jazeera Media Network PO Box 23127 Doha - Qatar	BeIN Sports	Sports	Entry: August 2012	National

Entries to and Exits from Video Programming				
Name and Address of Company	Name of Programming Service	Programming Provided	Date of Entry Into and, if Applicable, Exit From the Market	Service Area
Channel Zero 2844 Dundas St. W Toronto, ON M6P 1Y7	Fight Now TV	Sports	Entry: May 2011	National
Fox Entertainment Group 10201 West Pico Boulevard Los Angeles, CA 90035	Fox Soccer Plus	Sports	Entry: March 2010	National
Fox Entertainment Group 10201 West Pico Boulevard Los Angeles, CA 90035	Fox Sports 1	Sports	Entry: August 2013	National
Fox Entertainment Group 10201 West Pico Boulevard Los Angeles, CA 90035	Fox Sports 2	Sports	Entry: August 2013	National
ESPN, Inc. ESPN Plaza 935 Middle Street Bristol, CT 06010	Longhorn Network	Sports	Entry: August 2011	National
Pac-12 Network 360 3rd Street 3rd Floor San Francisco, California 94107 United States	Pac-12 Network	Sports	Entry: August 2011	National
DIRECTV Sports Networks Seattle, WA 98101 United States	Root Sports	Sports	Entry: April 2011	National
The Genuine Gemstone Company Eagle Road Studios, Eagle Road Redditch Worcestershire B98 9HF	Rocks TV	Shopping	Entry: July 2012	National
Soundview Africa	Afrotainment	Movies	Entry: October 2012	National
Mercury Studios/TheBlaze P.O. Box 143189 Irving, TX 75014	The Blaze	News	Entry: 2012	National
El Rey Network Tres Pistoleros Studios 4900 Old Manor Road Austin, TX 78723	El Rey	General entertainment	Entry: 2013	National
The Hayzlett Group 101 South Main Avenue, Fourth Floor Sioux Falls, SD 57104	C-Suite TV	Internet-based news programming	Entry: 2014	National
TAPP Media LLC	Sarah Palin Channel	Internet-based news programming	Entry: 2014	National
Louisck.net 3 Arts Entertainment Inc. 9460 Wilshire Boulevard Floor 7 Beverly Hills, CA 90212	Louisck.net	Internet based general entertainment	Entry: approximately 2011	National

EXHIBIT 9

Comcast's Response to ORA Data Request, Set 3

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matters.	A. 14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION
RESPONSES TO
THIRD SET OF DATA REQUESTS FROM
THE OFFICE OF RATEPAYER ADVOCATES
(DATA REQUEST NO. ORA-A.14-04-013.PHH-002)

(PUBLIC VERSION)

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Dated: September 22, 2014

Attorneys for Comcast Corporation

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matters.	A. 14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION
RESPONSES TO
THIRD SET OF DATA REQUESTS FROM
THE OFFICE OF RATEPAYER ADVOCATES
(DATA REQUEST NO. ORA-A.14-04-013.PHH-002

(PUBLIC VERSION)

Pursuant to Rule 10.1 of the California Public Utilities Commission ("CPUC"), Comcast Corporation ("Comcast") provides responses to the data requests ("DRs") served on it by the Office of Ratepayer Advocates, California Public Utilities Commission ("ORA").

These responses are subject to the general objections stated below and the specific objections posed in each response. Comcast's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this response.

GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, Comcast may restate one or more of

these general objections. However, these general objections apply to each individual request and Comcast's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive Comcast's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality, privilege and admissibility as evidence for any purpose, or to other requests for production. Comcast reserves the right to object on appropriate grounds to the use of such information and documents. Comcast hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. Comcast objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. Comcast objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to Comcast together with any copies.

3. Comcast objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to Comcast.

4. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to Comcast.

5. Comcast objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

6. Comcast objects to each DR to the extent that it exceeds the requirements of applicable law or purports to impose upon Comcast any obligations broader than those set forth in the

California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that is publicly available or readily accessible to the requesting party(ies).

10. Comcast objects to each DR to the extent that it requests documents or materials not in the Comcast's possession, custody or control.

11. Comcast objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

12. Comcast objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are Comcast employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, Comcast generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following responses.

I. RESPONSES

Q-3:1. **Provide Your post-merger plans for network upgrades and enhancements, including but not limited to, any enhancement in broadband speeds to households, small and medium sized businesses. Please reference ORA Data Request No. ORA-A.14-04- 013.PHH-001, question 16 and 22, for definitions of small and medium sized businesses.**

Objection:

Comcast objects to this request to the extent that it seeks highly confidential information. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession.

Subject to the foregoing objections, Comcast responds as follows:

Response:

REDACTED

As explained in response to Q-1:50, **[BEGIN CONFIDENTIAL]** [redacted] . **[END CONFIDENTIAL]**

That said, generally speaking, Comcast is committed to adding substantial incremental investments to what TWC had planned for network and service upgrades and enhancements over the next three years. These additional investments in network infrastructure and enhancements will improve the reliability and security of the network and expand its bandwidth to deliver, for example, faster broadband speeds; increased Wi-Fi gateway and hotspot deployment; and enhanced voice services.

Comcast expects that one of the combined company's primary focuses will be upgrading TWC's broadband plant to Comcast's technical standards in order to deliver improved broadband services to consumers. Post-transaction, Comcast expects to increase standard broadband speeds for all TWC customers to standard speeds customers in Comcast systems enjoy, faster than TWC could do on its own. This will be achieved by accelerating investment in upgrading TWC's plant. For example, TWC customers on the 15 Mbps/1 Mbps tier will see their speeds increased to at least 25 Mbps/5 Mbps, and likely beyond that as Comcast continues to increase its broadband speeds as it has done consistently since it first began offering Internet service – most recently increasing its Performance Tier from 25 Mbps/5 Mbps to 50 Mbps/10 Mbps, its Blast Tier from 50 Mbps/10 Mbps to 105 Mbps/5 Mbps, and its Extreme Tier from 105 Mbps/10 Mbps to 150 Mbps/10 Mbps in almost all of its markets in California.

A critical step involves upgrading all of TWC's systems from a part-analog to an all-digital platform in order to provide improved quality as well as additional capacity for broadband and other advanced services. Several years ago, Comcast undertook a five-year all-digital effort called "Project Cavalry" to improve its quality and reclaim bandwidth by transitioning all Comcast systems to an all-digital platform. Comcast completed this transition two years ahead of schedule, and this effort has led to Comcast being able to bond more than eight QAM channels in most of its markets for the delivery of broadband services. With the introduction of CCAP-enabled CMTSes, which Comcast expects to deploy to **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** percent of its footprint by the end of 2015, Comcast will be able to bond 48 QAMs, and 96 QAMs in 2016 (after implementing DOCSIS 3.1). TWC has only begun deploying CCAP technology in a few discrete markets and has plans to roll it out to 75 percent of its footprint over several years. With TWC part of Comcast's efforts post-transaction, Comcast should be able to deploy CCAP-enabled equipment to TWC's systems on an accelerated and more cost-efficient basis than TWC could accomplish on its own.

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While TWC recently announced its TWC Maxx plans to upgrade its broadband speeds to 75 percent of its footprint over three years, Comcast intends to extend its higher speeds and related consumer benefits to all of the TWC systems on an accelerated and more cost-efficient basis than TWC could accomplish on its own. Comcast additionally plans to bring consumers the next generation of upgrades 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). The company as a whole will be able to scale such investments more efficiently than TWC or Comcast could do individually.

The transaction-related scale and scope efficiencies also will enable Comcast to expand Wi-Fi gateway distribution and hotspot deployment across the entire Comcast-TWC footprint, including in California. Comcast is driving deployment of Wi-Fi hotspots more aggressively than TWC, especially when considering Wi-Fi modem deployments that augment the Wi-Fi network with home hotspot locations. The company's intent is to fill in the gaps in the Wi-Fi network across Comcast's and TWC's combined footprint. Greater Wi-Fi access would mean that customers could use advanced devices and enjoy bandwidth-intensive applications in more places, and a more ubiquitous Wi-Fi network would also provide the combined company with a stronger platform for other potential innovation and offerings.

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-3:2. **Specify, using maps where required in order to provide a complete and accurate response, whether Your planned upgrades or enhancements noted above are occurring in Your current network area, Time Warner Cable network areas, Charter network areas and/or Bright House Networks network area.**

Objection:

Comcast objects to this request to the extent that it seeks highly confidential information. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's upgrades for its current cable systems are ongoing and will occur throughout its footprint. After the transaction, Comcast anticipates that it will upgrade all of Time Warner Cable's networks consistent with the goals outlined in the Response to Q-3:1. Charter and Bright House Networks are independent companies and Comcast is not privy to their upgrade plans.

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-3:3. **Provide the existing rules and requirements for Your Internet Essentials offered in California, including eligibility requirements.**

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

As proposed by Comcast in connection with the NBCUniversal transaction and set forth in the FCC order approving the NBCUniversal transaction, Comcast initially offered *Internet Essentials* based on the eligibility criteria outlined in Condition XVI.2.f: a household was eligible to participate in Internet Essentials if it (1) is located where Comcast offers Internet services (over 99% of the Comcast service area); (2) has at least one child eligible for a free school lunch through the National Lunch School Program ("NSLP"); (3) has not subscribed to Comcast Internet service within the last 90 days; and (4) does not have an overdue Comcast bill or unreturned equipment.[1] In April 2012, Comcast went beyond the initial eligibility criteria outlined in the Condition and extended eligibility to families with children eligible to receive *reduced-price* school lunches.[2] In April 2013, Comcast expanded the eligibility criteria yet again to include families with homeschooled, private, and parochial students who otherwise meet the NSLP eligibility criteria.[3] And, effective August 4, 2014, Comcast expanded the eligibility criteria to include any otherwise qualifying families with a delinquent balance of more than one year old.[4]

Sponsor: Angel Arocho, Senior Director, Product Management

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[1] *In the Matter of Applications of Comcast Corporation, General Electric Company, and NBC Universal Inc. for Consent to Assign Licenses and Transfer Control of Licensees*, Memorandum Opinion and Order, App. A, Condition XVI ("Condition").

[2] Internet Essentials Progress Report (Jan. 31, 2012), *available at* http://corporate.comcast.com/comcast-voices/internet-essentials-progress-report.

[3] Comcast's Internet Essentials Connects More Than 150,000 Families, (Mar. 5, 2013), http://corporate.comcast.com/news-information/news-feed/comcasts-internet-essentials-program-connects-more-than-150000-low-income-families-or-600000-americans-to-the-internet.

[4] Comcast to Offer Six Months of Free Internet Essentials Service and Announces Amnesty Plan for Back Due Balances (Aug. 4, 2014), *available at* http://corporate.comcast.com/comcast-voices/comcast-to-offer-six-months-of-free-internet-essentials-service-and-announces-debt-forgiveness-plan.

Q-3:4. **Provide a description of the enrollment process for Internet Essentials in California, including:**

a. All available methods of application submission,
b. Application requirements,
c. Application review procedures, and
d. Anticipated and actual time frames, from first request for application to activation of service.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

a.

The primary sign up mechanism used by *Internet Essentials* customers is the use of dedicated toll-free numbers – one in English and one in Spanish – that are staffed by specially-trained Customer Account Executives ("CAEs"). Comcast also has launched an online sign up mechanism available in English (http://apply.internetessentials.com) and Spanish (http://aplicar.internetessentials.com).[5]

b.

Applicants must meet the eligibility criteria set forth in Response to Q-3:3, above, and provide the following information: (a) applicant's name and contact information; and (b) the city, state, and name of the school and school district attended by the eligible student (the child can be designated as "homeschooled", if applicable).[6] To preserve customer security and ensure that access to billing and account information is limited to the account holder, and in compliance with Federal Trade Commission requirements,

[5] Eligible households may also receive *Internet Essentials* through a bulk registration program which allows non-profits, community-based organizations, faith-based organizations, school districts, and community colleges to make bulk purchases of *Internet Essentials* service for households that are "sponsored" by each organization. Comcast also started selling *Internet Essentials* Opportunity Cards so non-profit partners and others can purchase up to a year of *Internet Essentials* service for qualified families they wish to sponsor. Sponsored households must be verified through the call center process described above.

[6] The applicant must acknowledge that he or she is the eligible child's parent or legal guardian.

Comcast uses Social Security Numbers ("SSNs") to verify the identity of prospective customers of all of its products and services, not just *Internet Essentials*.[7]

c.

The phone call to the dedicated *Internet Essentials* call center is used to verify an applicant's eligibility for the program and ensure that they are cleared to apply. If they are eligible, Comcast pre-populates an application with all the information generated during the phone call, and, except in "instant approval" situations, where there is no need for an application to be returned, then sends that application – by regular mail or email, based on the customer's preference – to the caller. The pre-populated application is generated in either English or Spanish and sent to the customer within two business days from the initial call date. Because only qualified applicants are sent an application, every customer who receives an application is eligible for the program and will be enrolled as soon as they send back a complete, signed application with the required supporting documentation. Thus, "rejections" take place at the verification phone call stage (or online), not at the application stage.

As with telephone calls, the customer's eligibility is determined during the process of providing information online. If the customer enters insufficient data, he or she is asked to call the toll free number to complete the pre-screening eligibility process.

Although Comcast complied with the requirement that all applicants must submit proof of NSLP eligibility, in January 2012, Comcast created an instant approval process so that families with children who attend schools with high NSLP participation would not need to submit proof of eligibility for *Internet Essentials*.[8] As a result, students at tens of thousands of schools eligible for instant approval, and thus eliminated the need for applicants to provide supporting documentation with an application – an enhancement that is currently benefiting a majority of current applicants.[9]

d.

Under Comcast's standard approval approach, it takes on average approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** days from the time the

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[7] An *Internet Essentials* applicant who is not able to provide an SSN can provide over two dozen alternate sources of identification in person at a Comcast service location.

[8] Students qualify for instant approval if they attend a "Provision 2" school (generally those with a high percentage of low income students) and their school has 70% or more NSLP participation based on National Center for Education Statistics (NCES) data, irrespective of their Provision 2 status.

[9] Instant approvals account for 56% of all *Internet Essentials* orders received from December 22, 2013 through June 28, 2014.

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initial enrollment call is made to the time that a self-install kit (which includes the broadband service modem, cabling, and a self-install guide) is shipped to the customer. It generally takes only about **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** days for Comcast to process the returned *Internet Essentials* application and ship the self-install kit. However, the bulk of this overall timeframe covers the period after Comcast mails the application to the household, and then waits for it to be completed and returned; the period prior to receiving the self-install kit is much shorter for a household that returns the application promptly. Comcast also takes steps to encourage customers that have requested an application to actually return the application, including follow up postcards and telephone calls. Once the application is returned and processed, if Comcast knows that the *Internet Essentials* service address is not pre-wired for Comcast service, a professional install is scheduled and performed within an average of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** days after the order is processed.

Under Comcast's "instant approval" process, which eliminates the need for the individual to return an application to Comcast, it takes on average approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** days from the time an application is submitted to the time the self-install kit is shipped. Self-install kits are delivered to a customer's home within **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** days from shipping date.

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Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:5. **For each available sign-up method, list how many California Internet Essentials customers utilized each method to sign up, including unsuccessful sign up attempts.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response: REDACTED

Approximately **[BEGIN CONFIDENTIAL]** [redacted] **END CONFIDENTIAL]** of all *Internet Essentials* customers nationwide signed-up to the service by calling the toll free number. The remainder used the online verification tool. There are no "unsuccessful" sign-up attempts: if the caller or online user meets the eligibility criteria, he or she will be sent the completed application form for signature and return.[10] Online applicants who are unable to provide the information required in the online form are directed to contact the toll free number to complete the application.

Sponsor: Angel Arocho, Senior Director, Product Management

[10] Comcast voluntarily reports the dedicated toll free number's call annual intake statistics to the FCC. Copies of the reports are available at http://corporate.comcast.com/news-information/nbcuniversal-transaction.

Q-3:6. **Describe the mechanism whereby eligibility for Internet Essentials expires, and describe any procedures You undertake to continue providing services to households in California.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information, and information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

REDACTED

As proposed by Comcast in connection with the NBCUniversal transaction and set forth in the Condition, enrolled households will remain eligible for the program so long as at least one child in the household continues to meet the program's NSLP eligibility requirements (including the eligibility enhancements made by Comcast). **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:7. **Provide a list and description of services offered through Internet Essentials in California, including advertised and actual speeds of services offered.**

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

The only service offered through *Internet Essentials* nationwide is a standalone broadband Internet access service rated at 5 Mbps downstream and 1 Mbps upstream.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:8. **Describe Your assessment of Internet Essential's existing shortfalls in California, including enhancements needed.**

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast has not identified any shortfalls of *Internet Essentials* in California.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:9. **Provide Your plans to improve or enhance Internet Essentials in California, reflecting planned changes over the three years following the merger, including:**

a. Expansion of eligibility requirements,
b. Equipment improvements,
c. Expansion into wireless modem offerings, and
d. Speed upgrades.

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Although there are currently no plans to further enhance *Internet Essentials* as per the four criteria specified in this question, Comcast's trajectory over the past three years speaks for itself. Comcast voluntarily expanded and improved upon the program's initial design in multiple ways. With input from thousands of partners, including major service organizations like Big Brothers/Big Sisters, Easter Seals, the NAACP, and NCLR, Comcast increased the speed of the service, expanded eligibility, created an instant approval process, and made dozens of other enhancements. And, as has been publicly announced, Comcast has extended the program indefinitely – even though the Condition has now been fully satisfied. Enhancements made to the program since launch include:

- Extending the program indefinitely – beyond Comcast's initial three-year commitment.

- Expanding the eligibility criteria to include any otherwise qualifying families with a delinquent balance of more than one year old.

- Expanding the eligibility criteria for *Internet Essentials* twice, first by extending eligibility to families with children eligible to receive reduced-price school lunches, and then by including parochial, private, cyberschool, and homeschooled students.

- Increasing the broadband speeds for *Internet Essentials* customers twice in less than two years; *Internet Essentials* now offers up to 5 Mbps downstream, which is triple the speed offered at the beginning of the program, and faster than Comcast's entry-level service (3 Mbps) in most of its markets.

- Expanding an instant approval process for families whose students attend schools with 70 percent or more NSLP participation (previously, the threshold was 75 percent), which enhanced participation rates.

- Creating an online application tool on the *Internet Essentials* website to make it easier and faster for a family to apply for *Internet Essentials*. The online application form is now available in English and Spanish, was optimized for use on mobile devices, and now allows applicants to submit eligibility documentation (when required) through the online tool.

- Enabling Comcast's community partners to help connect low-income families to the Internet by purchasing Opportunity Cards that can be used toward the cost of paying for *Internet Essentials* service.

- Launching an enhanced version of its online Learning Center to provide families with enhanced and dynamic content, including interactive content in Spanish.

- Creating the Gold Medal Recognition Program to award grants to communities that have done the most to help close the digital divide and create *Internet Essentials* Learning Zones.

Comments addressing each of the sub-parts are set forth below.

a.

There are currently no plans to further expand the program's eligibility criteria. Nevertheless, Comcast regularly considers additional ways to reach less-connected populations. For example, with respect to seniors, the company participated in pilot adoption initiatives through the AARP Foundation and a group called Project GOAL (Project to Get Older Adults Online).11 Comcast is reviewing the results of these initiatives and exploring further opportunities to reach other unconnected populations.

b.

The modems provided to *Internet Essentials* customers at no charge are compatible with a variety of computing devices, including Wi-Fi routers that enable the use of tablets and other wireless devices, and Comcast does not restrict *Internet Essentials* customers from attaching such devices.

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[11] NPR: Helping Low-Income Seniors Build a Social Web Online (Nov. 25, 2013), *available at* http://www.npr.org/blogs/alltechconsidered/2013/11/25/247173249/helping-low-income-seniors-build-a-social-web-online.

c.

As stated in the answer to Set 9(b), above, the modems provided to *Internet Essentials* customers at no charge are compatible with a variety of computing devices, including Wi-Fi routers.

d.

Comcast has increased *Internet Essentials* speeds twice since launch: downstream speeds for all *Internet Essentials* customers have been increased twice since the launch of the program, first from 1.5 Mbps to 3 Mbps in 2012, and then from 3 Mbps to 5 Mbps in 2013, which is faster than Comcast's entry-level Economy service in most markets (and no lower than it is in any market). There are no plans for further speed increases at this time.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:10. **Describe how Your Internet Essentials outreach plans in California will make new customers aware of the Internet Essentials program, post-merger.**

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's will extend its comprehensive *Internet Essentials* promotional and stakeholder outreach campaign to cover its post-transaction service area in California. The components of this broad and ongoing promotional campaign include:

> ***Internet Essentials* Website and Partner Portal** − The *Internet Essentials* dedicated website serves as a one stop destination for information, resources, and collateral on *Internet Essentials*. Built into this website is a Partner Portal that allows *Internet Essentials* partner organizations to download program materials directly or order materials which are shipped for free regardless of the quantity ordered. Registered partners also receive program updates, including regular newsletters and other announcements. As of June 28, 2014, the dedicated website, including the *Internet Essentials* Learning Center, had received nearly 2.2 million visits, with nearly 25,000 individuals and organizations registered for the Partner Portal, and partners requested and received nearly 37 million pieces of promotional collateral – all at no charge.
>
> **"Hyper-local" Paid Media** − By the end of 2014, Comcast will have placed close to 24,000 radio spots and 1,500 print advertisements in hyper-local media to promote *Internet Essentials* among NSLP-eligible families. The 2013 campaign placed more than 6,100 spots on local radio stations and more than 410 print ads in 93 community and minority-owned print publications in 12 metropolitan areas. For 2014, the paid media campaign has been expanded to 15 metropolitan areas and will feature an estimated 6,400 radio spots, print ads in 104 community and minority-owned publications, 87 local community events, and a broader mobile and social media presence.
>
> **Earned Media** − Through June 28, 2014, Comcast has generated more than 3 billion media impressions for *Internet Essentials* through sustained media efforts across print, online, broadcast, and radio outlets. *Internet Essentials* launch events marking the start of the 2013-2014 school year were once again the centerpiece of the earned media strategy, galvanizing a broad range of stakeholders around the mission of urging as many eligible families as possible to enroll. The company held dozens of launch events across

the country at the beginning of each school year, including several across our California footprint, including San Francisco, Sacramento, and recently in Silicon Valley.[12] Nationwide, these events have generated over 3 billion earned media impressions for Internet Essentials − earned media that has helped generate program awareness and favorable publicity. In California, the *Internet Essentials* promotional campaign has generated over 88 million earned media impressions as of August 2014.

Public Service Announcements ("PSAs") and Comcast Newsmakers − Comcast has conducted a bilingual PSA campaign promoting the availability of *Internet Essentials* across its service area. Since August 2011, the Company has aired nearly 4 million PSA spots with a value of more than $51 million. In addition, Comcast has produced 49 "Comcast Newsmakers" public affairs segments in support of *Internet Essentials*, 17 of those in the last year. More than 242,000 of those PSA spots ran in Fresno, Monterrey, Sacramento, San Francisco, and other Comcast markets in California, for an estimated value of nearly $3.2 million (through the end of August 2014). In addition, the California region produced its own PSA spots and Newsmakers segments featuring local officials and in-state *Internet Essentials* partners.

School Professionals − Comcast made information about the program available at 30,000 schools and 4,000 school districts in the 39 states, plus the District of Columbia, and continues to do so today. The company engaged educators leading up to and through each back-to-school season through continued personal engagement and a direct mail campaign targeting superintendents and principals in the school districts in the Comcast footprint with the greatest NSLP participation. Teachers also receive access to the Partner Portal on the *Internet Essentials* website so they can sign up for program updates and newsletters, as well as download form notices to parents and other collateral. Comcast also engaged dozens of national education organizations to collaborate on best practices in student and educator engagement and to get their membership involved in publicizing the benefits of *Internet Essentials*.

Comcast also collaborated with thousands of schools to send literature to families before and during each school year. And notwithstanding the absence of any such requirement, Comcast also conducted a "spread the word" campaign featuring collateral created by Comcast in English, Spanish, and 12 other languages. Collateral is redesigned at least once a year to keep the content up-to-date and focus on the messaging theme chosen for each campaign.

Sponsor: Angel Arocho, Senior Director, Product Management

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[12] *See* Press Release: Comcast and Elected Officials Launch Year Three of Internet Essentials in Sacramento (Aug. 8, 2013), *available at* http://comcastcalifornia.mediaroom.com/index.php?s=43&item=688 (last visited Sept. 20, 2014); Press Release: Comcast Updates Silicon Valley On Internet Essentials Broadband Adoption Program At Youth Tech Summit Celebrating Education (Sept. 9, 2014), *available at* http://comcastcalifornia.mediaroom.com/index.php?s=43&item=752 (last visited Sept. 20, 2014).

Q-3:11. **Describe post-merger integration plans for customers who are already Time Warner Cable customers, Charter customers, or Bright House Networks customers who are also eligible for Internet Essentials.**

Objection:

Comcast objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast will offer *Internet Essentials* to all households in its post-transaction footprint that meet the eligibility criteria set forth in the Response to Q-3:3, above.[13]

Sponsor: Angel Arocho, Senior Director, Product Management

[13] Bright House Networks is not and will not be owned or controlled by Comcast after consummation of the transaction.

Q-3:12. **Where Comcast Broadband Services is available in California, list the total number of households currently eligible for Internet Essentials.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:
Response:

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As of June 2014, there were an estimated **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** eligible households in Comcast's California service footprint.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:13. **Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block where Comcast broadband service is available in California, the number of households currently eligible for Internet Essentials.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

REDACTED

Response:

Comcast does not generate, record, or maintain this information by census block. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:14. **List the anticipated number of households that will be eligible for Internet Essentials in California, post-merger.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast recently began the process of determining the number of eligible households that would be living in Comcast's service territory after consummation of the proposed TWC transaction and the proposed divestiture transactions. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

REDACTED

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:15. **Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block, the anticipated number of households that will be eligible for Internet Essentials in California by Census Block, post-merger.**

Objection:

Comcast objects to this request to the extent that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast further objects on the grounds that the request exceeds the established scope of the proceeding. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, Comcast objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not generate, record, or maintain this information by census block. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

REDACTED

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:16. **List the number of households currently subscribed to Internet Essentials in California.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

REDACTED

Response:

As of June 28, 2014, *Internet Essentials* connects in California totaled **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** households – a number that represents more than **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** California children and their families.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:17. **Using the attached updated Broadband Services spreadsheet, list the number of households currently subscribed to Internet Essentials in California by Census Block.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not generate, record, or maintain this information by census block.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:18. **Provide information describing Your yearly and total expenditures for Internet Essentials program operations for years 2010, 2011, 2012, 2013.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Internet Essentials is Comcast's top community investment priority. The company has invested hundreds of millions of dollars operationalizing and promoting the program. Major investments to date in the program include:

- Operationalizing *Internet Essentials* across more than 4,000 school districts in 39 states plus the District of Columbia months ahead of the FCC Order's deadline and in time to conduct a promotional campaign during the 2011 back-to-school season − one of the fastest new product rollouts in company history.

- Establishing a dedicated call center for English and Spanish speaking consumers.

- Launching www.InternetEssentials.com and www.InternetBasico.com to promote the service, inform potential customers of application requirements, and serve as a portal to information about the program, including certain digital literacy training materials and information. Built into this website is a unique Partner Portal that allows *Internet Essentials* partner organizations to download program materials directly or order materials.

- Distributing over 37 million pieces of collateral to the program's partners, at no cost to them.

- Subsidizing the cost of over 30,000 low price computers sold to *Internet Essentials* customers, and giving away hundreds more to students across the country.

- Dedicating more than $200 million in cash and in-kind support to fund digital readiness initiatives nationwide, reaching more than 1.75 million people through non-profit, digital literacy partners.

- Designing, producing, and distributing *Internet Essentials* promotional materials in English and Spanish, plus 12 other languages.

- Investing millions in promoting *Internet Essentials* in paid media, including tens of thousands of radio and print ads in local media, plus television and online advertising.

- Organizing dozens of launch events across the country at the beginning of each school year, including several in California.14 These events have generated over 3 billion earned media impressions for *Internet Essentials*.

- Airing nearly 4 million PSA spots in English and Spanish with a value of more than $51 million and produced 49 "Comcast Newsmakers" public affairs segments in support of *Internet Essentials*.

- Recruiting over 8,000 non-profit organizations, CBOs, libraries, school districts, members of faith-based organizations, as well as federal, state, and local elected officials to help build the digital literacy infrastructure of the communities served by *Internet Essentials*.

- Delivering the *Internet Essentials* message to more than 3,000 federal, state, and local elected or appointed officials.

- Creating the Gold Medal Recognition Program to award over $1 million in grants to communities that have done the most to help close the digital divide and create *Internet Essentials* Learning Zones.

The indefinite extension of the *Internet Essentials* program, including the planned expansion to the company's post-transaction footprint in California, means that Comcast's multi-million dollar investment in the program will continue to benefit low income families.

Sponsor: Angel Arocho, Senior Director, Product Management

[14] See, e.g., Press Release, Comcast and Elected Official Launch Year Three of Internet Essentials in Sacramento (Aug. 8, 2013), available at http://comcastcalifornia.mediaroom.com/index.php?s=43&item=688.

Q-3:19. **Provide any cost/benefit analyses made when creating or revising Internet Essentials eligibility criteria, including any analyses made which project costs of expanding eligibility to include low-income seniors, the disabled, or other groups predominately represented in unserved and underserved areas.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast has not performed any cost/benefit analyses when creating or revising Internet Essentials eligibility criteria.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:20. **Please provide Your definition of "line extension" and explain Your line extension policies.**

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Anytime Comcast plant is extended to serve new homes or businesses, Comcast considers that to be a "line extension." In California, the build out requirements generally range from 25 to 30 homes per linear mile.

As explained in Comcast's response to ORA 1:34, with respect to local exchange services, the Commission has imposed certain legal build-out obligations upon competitive local carriers ("CLCs") that provide competitive local exchange services in California. Specifically, such providers are "required to serve customers requesting service within their designated service territory" and "serve all customers who request service and whose premises are within 300 feet of the CLC's transmission facilities used to provide service so long as the CLC can reasonably obtain access to the point of demarcation on the customer's premises, but the CLC shall not be required to build out facilities beyond such 300 feet." See D.95-07-054. Comcast's common carrier subsidiary, Comcast Phone of California, LLC ("Comcast Phone") is certified as a CLC, but does not provide local exchange services to retail customers in California

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:21. **Using Your definition of line extension as provided in question 20, please identify the total number of line extensions requested in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess the requested information because **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

REDACTED

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:22. **Using Your definition of line extension as provided in question 20, please identify the total number of line extensions completed or built-out in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request to the extent that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] REDACTED

[redacted]

[END CONFIDENTIAL]

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:23. **Using Your definition of line extension as provided in question 20, using the attached updated Broadband Services spreadsheet, list the number of line extensions that Comcast has deployed in California by Census Block for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Response to Q-3:22 for information about how Comcast tracks line extensions. Comcast does not track the number of line extensions deployed by census block.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:24. **Using Your definition of line extension as provided in question 20, please identify the number of households that were not able to get a line extension in California because they could not afford it for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response: REDACTED

Comcast does not possess the requested information because **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:25. **What is the number of entities You serve using California Teleconnect Fund (CTF) funding?**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information.

Subject to the foregoing objections, Comcast responds as follows:

Response:

REDACTED

As of June 30, 2014, Comcast serves **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** using California Teleconnect Fund funding in California.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:26. **Please provide the percent of Your Network Availability in California, by county, for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

REDACTED

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Randal Burke, Vice President, CNOC

Q-3:27. **Please explain how You define quality of service for broadband and voice services.**

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not strictly define the term "quality of service." For voice services, dynamic quality of service ("DQoS") is a method, used by Comcast, to set and change priorities of different packets in the network depending on numerous configuration items in the network. Comcast uses PacketCable Multi-Media ("PCMM") to enable quality of service for customers on Comcast's XFINITY Voice product. This technology allows voice traffic to be prioritized during times of congestion to, among other things, ensure that emergency calls are processed.

For broadband services, Comcast does not provide a "quality of service" for any Internet traffic on its Internet access service – all traffic delivered over XFINITY Internet service is delivered on a "best efforts" basis. Comcast, however, ensures that it provisions sufficient capacity for its Internet access service to ensure that it delivers the speeds it advertises. Notably, the FCC's most recent *Measuring Broadband America* report released in June found that Comcast consistently delivers more than its advertised speeds every hour of the day, every day of the week, and even during peak usage periods. *See* Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the U.S. at 34, Office of Eng'g & Tech. & Consumer & Governmental Affairs Bureau, FCC (June 2014), http://data.fcc.gov/download/measuring-broadband-america/2014/2014-Fixed-Measuring-Broadband-America-Report.pdf (noting that Comcast demonstrated average of 113% of advertised download speeds).

Sponsor: Randal Burke, Vice President, CNOC

Q-3:28. **Please identify the types of quality of service metrics that You track and measure for broadband and voice services.**

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Response to Q-3:27 for information about how Comcast approaches quality of service for its voice and broadband services. DQoS is not measurable by a limited set of metrics, and all traffic delivered over XFINITY Internet service is delivered on a "best efforts" basis.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:29. **Please provide all procedures and protocols in place on how You track and measures the quality of service metrics identified in question 27.**

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Response to Q-3:27 for information about how Comcast enables DQoS for its voice services. All traffic delivered over XFINITY Internet service is delivered on a "best efforts" basis.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:30. **For all quality of service metrics You identified in response to questions 27 and 28, please provide the results separately for broadband and voice services in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess the information sought by this data request because DQoS is not measurable by a limited set of metrics, or on a state-by-state basis, and all traffic delivered over XFINITY Internet service is delivered on a "best efforts" basis.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:31. **Provide the number of Outages for Your voice services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:**

a. The number of service Outages by type of customer (residential, small or medium sized business)
b. Cause of service Outage
c. Response time (time it took to respond to an outage)
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e., resolve an Outage)
e. Total number of Outages by county

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not collect outage information by county, and generally does not differentiate by residential and business customers in its outage reporting. See Confidential Exhibit ORA/Comcast R-3:35 for voice service outage reports submitted to the FCC.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:32. **Provide the number of Outages for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:**

a. The number of Outages by type of customer (residential, small or medium sized business)
b. Cause of Outage
c. Response time (time it took to respond to an outage)
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)
e. Total number of Outages by county

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not maintain California-specific broadband outage reports. In some instances where a reportable VoIP outage was caused by a network equipment issue, broadband service may also have been affected. Comcast does maintain records of those instances in the ordinary course of its business.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:33. **How do You define service degradation for broadband service?**

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

As stated the Response to Q-3:27, Comcast's broadband service is delivered on a "best efforts" basis. Accordingly, Comcast does not have a strict definition for "service degradation." As a general matter, the redundancy of broadband networks, along with the multiplicity of backup communications alternatives, reduce the need for strictly defining the concept of service degradation. Strictly defining such concepts may undermine Comcast's continued work to develop technological innovations that support more robust and resilient networks.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:34. **Using Your definition of service degradation, provide the number of service degradations for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:**

a. The number of service degradation by type of customer (residential, small or medium sized business)
b. Cause of service degradation
c. Response time (time it took to respond to a service degradation)
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve a service degradation)
e. Total number of service degradations by county

Objection:

Comcast objects to this request on the grounds that the request is vague and ambiguous. Comcast also objects to this request to the extent it seeks the production of information that is not in Comcast's possession. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess the requested information because, as described in response to Q-3:33, Comcast does not utilize a strict definition of the term "service degradation" and does not maintain the information requested.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:35. **Please provide all outage reports submitted to the Federal Communications Commission as required by 47 C.F.R. Part 4 pertaining specifically to outages in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Confidential Exhibit ORA/Comcast R-3:35

Sponsor: Randal Burke, Vice President, CNOC

Q-3:36. **Please provide the Service Installation Intervals for Comcast orders for new voice service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. The Service Installation Interval excludes all orders having customer requested appointments later than the provider's commitment dates.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's service installation intervals for new voice service installations, year-to-date, are as follows:

REDACTED

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Jeff Mlcoch, Senior Director of Technical Operations

Q-3:37. **Please provide the Service Installation Intervals for Comcast orders for new broadband service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. This amount excludes all orders having customer requested appointments later than the provider's commitment dates).**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information.

Subject to the foregoing objections, Comcast responds as follows:

Response:

As of September 2014, Comcast's service installation intervals for new broadband service installations, year-to-date, are as follows:

REDACTED

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Jeff Mlcoch, Senior Director of Technical Operations

Q-3:38. **Please provide the total number of California service orders received for new voice services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):**

a. Total number of service orders received
b. Total number of service orders completed (i.e. commitment met)

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess the requested information for 2010.

REDACTED

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Jeff Mlcoch, Senior Director of Technical Operations

Q-3:39. **Please provide the total number of California service orders received for new broadband services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):**

a. Total number of service orders received
b. Total number of service orders completed (i.e. commitment met)

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess the requested information for 2010.

REDACTED

[BEGIN CONFIDENTIAL]

[redacted]

[END CONFIDENTIAL]

Sponsor: Jeff Mlcoch, Senior Director of Technical Operations

Q-3:40. **Please provide all customer-initiated complaints concerning unauthorized charges in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:**

a. Type of customer: residential, small or medium sized business
b. Type of service: voice or broadband
c. Date of complaint
d. Frequency of complaint by the same customer
e. Response time to customer for assistance
f. Location of customer by County

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track customer-initiated complaints by county, and does not maintain a report stating the frequency of complaints by the same customer. Comcast does not track complaints based on whether the business customer initiating the complaint subscribes to Comcast's products marketed to small or medium-sized businesses. Comcast does not track complaints that have not been escalated.

Further, Comcast does not track customer-initiated complaints based on an "unauthorized charge" category, and asserts that the term "unauthorized charge" is vague and subject to multiple interpretations. Comcast does track customer-initiated complaints by a "Wrong Price Quoted to Customer" category. Complaints initiated by customers during the requested years that fall within this category are listed in Confidential Exhibit ORA/Comcast R-3:40 at Tab # 40 Data, stating: (1) whether the complaint was initiated by a residential or business customer; (2) whether the complaint pertained to a voice or broadband service; (3) the date of complaint; (4) the number of days to resolve the complaint; (5) the customer's postal code; and (6) the related complaint categories tracked by Comcast.

Sponsor: Christina Stephens, Director, Customer Service Strategy and Operations

Q-3:41. **[[OMITTED FROM ORA THIRD SET OF DATA REQUESTS]]**

Response: ORA's third set of data requests appears to have unintentionally omitted request number 41. Thus, no response is required here.

Q-3:42. **Please provide Your current processes and/or procedures for handling customers complaints and/or dissatisfaction for:**

a. Voice services
b. Broadband services

Response:

See Confidential Exhibit ORA/Comcast R-3:42 for a diagram of how escalated customer complaints are generally handled by Comcast. The steps depicted in the diagram are used for both voice and broadband services.

Sponsor: Nicole Patel, Manager, Customer Services Strategy and Operations

Q-3:43. **Please provide any changes to Your current processes and/or procedures for handling customer complaints and/or dissatisfaction post-merger in California for:**

a. Voice services
b. Broadband services

Response:

As explained in response to Q-1:50, **[BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]**

REDACTED

Sponsor: Michael Kelman, Vice President, Competitive and Business Analytics

Q-3:44. **Please provide Data for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) on the number of Your California customers with billing complaints for:**

a. Voice services
b. Broadband services

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request requires the production of information that is outside the scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Confidential Exhibit ORA/Comcast R-3:40 at Tab # 44.

Sponsor: Christina Stephens, Director, Customer Service Strategy and Operations

Q-3:45. **Please provide all remaining customer-initiated complaints concerning Your voice services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:**

a. Type of customer: residential, small or medium sized business
b. Type and/or nature of complaint or dissatisfaction
c. Date of complaint
d. Frequency of complaint by the same customer
e. Response time to customer for assistance
f. Location of customer by County

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request requires the production of information that is outside the scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track customer-initiated complaints by county, and does not maintain a report stating the frequency of complaints by the same customer. Comcast does not track complaints based on whether the business customer initiating the complaint subscribes to Comcast's products marketed to small or medium-sized businesses. Comcast does not track complaints that have not been escalated.

See Confidential Exhibit ORA/Comcast R-3:40 at Tab # 45 Data for a list of customer-initiated complaints concerning Comcast's voice services not already addressed in questions in this Data Request, for the requested years, stating: (1) whether the complaint was initiated by a residential or business customer; (2) the date of complaint; (3) the number of days to resolve the complaint; (4) the customer's postal code; and (5) the related complaint categories tracked by Comcast.

Sponsor: Christina Stephens, Director, Customer Service Strategy and Operations

Q-3:46. **Please provide all remaining customer-initiated complaints concerning Your broadband services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:**

- **g. Type of customer: residential, small or medium sized business**
- **h. Type and/or nature of complaint or dissatisfaction (such as provision of new Installation/service, fault repair/restoration, cramming, quality of service/product/software/hardware, billing)**
- **i. Date of complaint**
- **j. Frequency of complaint by the same customer**
- **k. Response time to customer for assistance**
- **l. Location of customer by County**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request requires the production of information that is outside the scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not track customer-initiated complaints by county, and does not maintain a report stating the frequency of complaints by the same customer. Comcast does not track complaints based on whether the business customer initiating the complaint subscribes to Comcast's products marketed to small or medium-sized businesses. Comcast does not track complaints that have not been escalated.

See Confidential Exhibit ORA/Comcast R-3:40 at Tab # 46 Data for a list of customer-initiated complaints concerning Comcast's broadband services not already addressed in questions in this Data Request, for the requested years, stating: (1) whether the complaint was initiated by a residential or business customer; (2) the date of complaint; (3) the number of days to resolve the complaint; (4) the customer's postal code; and (5) the related complaint categories tracked by Comcast.

Sponsor: Christina Stephens, Director, Customer Service Strategy and Operations

Q-3:47. **Please provide Your current plans to improve the quality of service to California customers?**

Response:

Comcast has not made any determinations regarding the specific steps it may take to address post-transaction quality of service issues in California. However, as stated in the Joint Application on file with the California Public Utilities Commission ("Application"), Comcast Corporation has superior management capabilities gleaned through its experience providing high-quality service throughout California and other states. Time Warner Cable's subsidiary companies – including TWCIS (CA) – will benefit from this management expertise as a result of the transaction. Application at 23.

Further, as Comcast explained in its Public Interest Statement on file with the FCC,[15] Comcast's robust all-digital network has been integral to improving network reliability and service quality:

> 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. 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.

Finally, Comcast's intensified focus on customer service has resulted in improved service quality:

> 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. Since 2010, Comcast has improved its J.D. Power Overall Satisfaction by nearly 100 points

[15] Applications and Public Interest Statement, In the Matter of Applications of Comcast Corp. and Time Warner Cable Inc. For Consent To Transfer Control of Licenses and Authorizations, FCC MB Docket No. 14-57 (Filed April 8, 2014) ("Public Interest Statement").

> 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.[16]

Sponsors:

John Gutierrez, Director, Government and Regulatory Affairs
Randal Burke, Vice President, CNOC

[16] Public Interest Statement at 72; footnotes omitted.

Q-3:48. **Please provide any plans to improve Your quality of service to California customers post-merger.**

Response:

See Response to ORA-3:47.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:49. **Please provide Your levels of customer satisfaction compared to the five largest competing service providers (in California, where available) for the years 2009, 2010, 2011, 2012, and 2013 for:**

a. Voice services
b. Broadband services

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast has not independently conducted a satisfaction study that compares its levels of customer satisfaction in California against other service providers. Comcast relies on reports produced by J.D. Power & Associates for comparative customer satisfaction data, copies of which are attached in response to data requests Q-3:52 and Q-3:54. The following table provides information about Comcast's levels of customer satisfaction in California based on J.D. Power & Associate reports obtained by Comcast for 2010-13.

JDPA Customer Satisfaction Data for California (as defined by Comcast based on zip codes)

Broadband Services				
	2010	**2011**	**2012**	**2013**
California	598	617	632	682
Voice Services				
	2010	**2011**	**2012**	**2013**
California	654	627	693	693

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:50. **Please separately identify the source(s) of the Data (for example, J.D. Power & Associates, internal surveys, independent third-party surveys) for Your responses to Question 48**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See Response to Q-3:49.

Sponsor: John Gutierrez, Director, Government and Regulatory Affairs

Q-3:51. **Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Telephone Service Providers Customer Satisfaction Study?**

Response:

Yes.

Sponsor: Graham Tutton, Vice President, Customer Insights

Q-3:52. **Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Telephone Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's copies of the J.D. Power & Associates documents requested here are subject to non-disclosure terms that prevent Comcast from disclosing such documentation without providing notice, and/or obtaining the other party's consent. Comcast has communicated with J.D. Power & Associates representatives to determine if they will consent to the disclosure of this information. If consent to such disclosure is granted, this information will be provided as a supplement to this response.

Sponsor: Graham Tutton, Vice President, Customer Insights

Q-3:53. **Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study?**

Response:

Yes.

Sponsor: Graham Tutton, Vice President, Customer Insights

Q-3:54. **Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast's copies of the J.D. Power & Associates documents requested here are subject to non-disclosure terms that prevent Comcast from disclosing such documentation without providing notice, and/or obtaining the other party's consent. Comcast has communicated with J.D. Power & Associates representatives to determine if they will consent to the disclosure of this information. If consent to such disclosure is granted, this information will be provided as a supplement to this response.

Sponsor: Graham Tutton, Vice President, Customer Insights

Q-3:55. **Please provide the battery backup brand(s) provided by Your company. For each brand please provide the following:**

a. Average standby life of the backup battery
b. Average use life

Response:

Comcast provides the following for its residential services:

Modem Model	**Average standby life of the backup battery**	**Average use life**
Arris 402	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Arris 502	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Arris 602	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Arris 702	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Arris 852	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Motorola	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
SA	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Thompson 535	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Thompson 536	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Ubee	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Technicolor	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
SMC	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.
Cisco	8-hours of emergency telephony service during a power outage	Useful lifespan of 3-5 years.

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-3:56. **Please provide any educational materials provided to Your customers informing them that they will not have phone services in the instances of power outages.**

Response:

Comcast provides the following information for its residential services:

1. **Automated Call Notifications (Customers with Depleted Battery Only)**
   "This is Comcast calling from 1-800-COMCAST at 1701 JFK Boulevard in Philadelphia regarding an important message about your Digital Voice service. Your XFINITY Voice modem has a backup battery that helps maintain your Voice service in the event of a power outage. Our network monitoring system indicates that the battery in your voice modem is at a low level and may need to be replaced. If you have taken the battery out of your modem, please reinstall it now. You should know that, in an outage, the battery allows you to stay connected with up to 8 hours of battery life and 5 hours of talk time. If you want additional information regarding battery backup, please visit www.xfinity.com/voicebattery or call 1-888-972-1261. Thank you for being a Comcast customer."
   Note: Automated Calls are delivered to valid customer phone numbers only. Approximately 55% of the time a recorded message is left and 35% delivered to a live person. The balance of calls are: duplicate, invalid, or unanswered

2. **Welcome Kit**
   All new XFINITY Voice customers receive a welcome kit. Below is an excerpt of the Welcome Kit as it pertains to Backup Batteries.

BACKUP BATTERY

A battery backup and battery monitoring are not provided free of charge to new XFINITY Voice customers. Backup batteries (which include monitoring) are available for purchase. Please call **1-888-972-1261** for pricing and details. XFINITY Voice uses the electrical power in your home. If you do not have a battery backup, you will not be able to use this service, including the ability to make emergency 911 calls, during an electrical power outage. Backup batteries are not available for purchase from Comcast by Unlimited Select customers. An XFINITY Voice Backup Battery can be purchased at an additional cost, for you to install in your Voice device. This battery will provide additional hours of service during a power outage.

- Provides up to 8 hours of battery life in the event of an electrical outage.
- Maintains your ability to make and receive phone calls, including emergency 911 calls, during a power outage.
- Prevents interruptions with security systems and other devices that work with your phone service.
- Includes notifications for when your battery needs to be replaced.

For pricing and additional details on purchasing a battery backup, call **1-888-972-1261**.

UNLIMITED SELECT CUSTOMERS

- Calls to 911 will not be completed if there is a problem with network facilities, including network congestion, network/equipment/power failure on our network or another technical problem. 911 calls may be interrupted during a power outage to your home where power to Comcast's network remains available, if a battery backup in the associated voice/data modem is not installed or is exhausted.
- For information about Alarm Systems, Medical Monitoring Devices, Personal Emergency Alert Devices and Home Detention Devices, go to **customer.comcast.com/help-and-support/phone/xfinity-voice-unlimited-select**.

******Charged on a per-call basis.*

3. **E911 Notice Sticker for XFINITY Voice Welcome Kit**
   It is encouraged that customers or installation technicians place the E911 sticker on or near the XFINITY Voice modem used in the customers' household.

E911 Notice for XFINITY® Voice

FCC rules require that IP-based phone providers remind you about these important 911 facts: Comcast needs a correct service address to deliver your proper location information to E911. If you need to move XFINITY Voice equipment to a different address, call Comcast at 1-800-XFINITY before doing so. XFINITY Voice uses the electrical power in your home. You may not be able to make 911 calls if there is a power outage or XFINITY Voice experiences network or other technical problems. Backup batteries are available for purchase. Please visit xfinity.com/voicebattery for more information.

4. Online References & Help Pages

- Purchase a Battery for Your XFINITY Voice Phone Modem (http://customer.comcast.com/help-and-support/phone/getting-a-new-battery/)
    - This is the main backup battery page. It can also be accessed by xfinity.com/voicebattery (This URL is referenced in customer communications.)
- Battery Help (http://customer.comcast.com/help-and-support/phone/troubleshooting-battery-issues-with-digital-voice/)
- About E911 (http://customer.comcast.com/help-and-support/phone/about-e911/)
- Stay Connected Through Storms (http://customer.comcast.com/help-and-support/phone/stay-connected-through-storms/)
- Phone Terms of Service (http://www.comcast.com/Corporate/About/phonetermsofservice/phonetermsofservice.html - redirected from www.comcast.com/tariffs)
    - Note: No Battery language on this page.
- Search online Help: "Battery" (in order returned)
    - Install a Battery Into Your XFINITY Voice Modem
    - Install a Backup Battery in Your Wireless Gateway
    - Emergency Backup System
    - About the LED Indicators on Your XFINITY Voice Modem
    - Recycle Your Used Battery
    - About the XFINITY Wireless Gateway 1
    - About the XFINITY Wireless Gateway 2
    - About the Wireless Gateways

- Use Lifeline Alert with XFINITY Voice
- The Different Wireless Gateways for Your Home Network
- Reset Your Cable Modem or XFINITY Internet & Voice Modem

5. With each shipped battery, the customer receives an information card describing the value of the battery and how to recycle the battery along with the warranty information for their new battery.

   The customer information card content was crafted by Comcast and received legal review and approval. Arris prints the card and includes a card with each device shipment.

xfinity

IMPORTANT INFORMATION REGARDING YOUR BACK UP BATTERY

Dear Valued Customer:

Pursuant to your request, enclosed is a battery for your voice modem. This battery provides back up in the event of a power outage, so we encourage you to install the battery at your earliest convenience. The battery is easy to install as outlined in the installation instructions.

If you have any of the following, it is particularly important that you install the battery as soon as possible:

- A home alarm system
- A personal emergency alert device
- A phone that is not cordless and will continue to work during a power outage
- Another device that relies on your phone line for continuous operation

To protect our environment, please recycle your battery properly. For your convenience, these batteries are accepted at no charge for recycling at various locations. Please check **www.call2recycle.org** or call **1-800-8-Battery (1-800-8-228-8379)** for a battery recycling location near you. Please note that there is no unreturned equipment charge for your old battery.

If you have any questions, please contact us at **1.800.XFINITY**

Thank you for being an XFINITY™ Voice customer.

Sincerely,
Comcast

COMCAST

XFINITY™ Voice uses the electrical power in your home. If there is an electrical power outage, 911 calling and other calling may be interrupted if a battery backup in the associated voice modem is not installed, fails, or is exhausted after several hours. Furthermore, calls, including calls to 911/E911, may not be completed if there is a problem with network facilities, including network congestion, network/equipment/power failure, or another technical problem.

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-3:57. **Do You provide backup batteries at no charge to Your customers?**

Response:

No. Backup batteries (initial and replacement) for residential services are available for purchase from Comcast and include a 1-year warranty. The Voice Backup Battery is $35.00 and the Voice Backup Battery Shipping is $5.95. Battery and shipping fees will appear on a customer's bill as "Voice Backup Battery" and "Shipping & Handling Fee".

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-3:58. **Can Your customers get extra backup batteries from You?**

Response:

Yes. Customers can purchase extra backup batteries for residential services from Comcast. The customer will be charged $35 per backup battery. It is important to note that whether one or two batteries can be inserted into the modem depends on the model of the modem.

Sponsor: Patti Loyack, Vice President, Broadband Voice

Q-3:59. **Please provide processes and procedures on how You provision 911 services in California?**

Response:

Generally, Comcast uses a Dynamic ALI VoIP architecture leveraging NENA i2 standards in the State of California for both residential and business services customers. Consistent with the dynamic ALI architecture, Comcast utilizes a VoIP Positioning Center (VPC) database solution supported by TeleCommunication Systems ("TCS") and Intrado. This solution uses Comcast's highly reliable E9-1-1 call delivery network circuits to the selective routers while leveraging a scalable, flexible platform that can support an evolution into Next Generation 9-1-1. Comcast utilizes the geographically diverse and redundant VPC services for PSAP routing information and dynamic MSAG provisioning of customer information. This architecture provides several advantages over the legacy 9-1-1 network such as real time provisioning of customers, re-verification of MSAG address validity at the time of call, emergency call routing based on callers geo-coded location rather than telephone number and the ability to deliver a civic valid location to the PSAP if the PSAP desires when MSAG validation is not possible.

Comcast maintains redundant 9-1-1 trunking circuits to the selective routers used for residential 9-1-1 call delivery to PSAP's across its service footprint. These circuits are provisioned and tested in collaboration with the appropriate System Service Provider that serves as the gatekeeper to PSAP's across our service area. In the case of Business Services Comcast, leverages the 9-1-1 trunk circuit connectivity provided by our VoIP Positioning Vendor (VPC).

Comcast PSAP support contact information can be found at http://psap.comcast.com/.

Sponsor: Angel Arocho, Senior Director, Product Management

Q-3:60. **Please provide Data on any and all of Your 911 service outages in California by county for years 2010, 2011, 2012, 2013, and through August 31, 2014.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

See attached Confidential Exhibit ORA/Comcast R-3:35. If there is a complete voice outage, access to 911 is also affected.

Sponsor: Randal Burke, Vice President, CNOC

Q-3:61. **Please identify with specificity each and every source of economies of scale that You claim will be engendered by the merger. For each, indicate the anticipated annual savings, staff reductions, other workforce-related cost savings, and any other source of claimed cost reductions. For each source of scale economies identified, indicate why You believe that a similar savings could not be achieved in the absence of the proposed merger.**

Objection:

Comcast objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, programming costs, or other services or issues outside of the scope of this proceeding. Comcast further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

The proposed transaction between Comcast and TWC will bring important benefits to consumers nationwide by enhancing consumer choice; facilitating greater investment in Comcast's and TWC's combined network through greater scale; generating substantial transaction-specific efficiencies and cost savings; enhancing competition for small, medium, and large businesses; and accelerating investment in and the roll out of digital voice, and high-speed data services, greater Internet speeds and other advanced services. In particular, Comcast has concluded that the enhanced scale created by the transaction should result in synergies and related efficiencies that will lead to greater innovation and an enhanced consumer experience.

Comcast estimates that the efficiencies resulting from the proposed transaction will total approximately $1.5 billion in operating expenses and approximately $400 million in capital expenditures by the third year, with operating expense efficiencies recurring at or above the $1.5 billion level each year thereafter (capital expenditure efficiencies are not expected to continue beyond year three).

Comcast expects to achieve $750 million of the $1.5 billion in operating efficiencies in the first year after closing, another 25 percent in year two, and the remaining 25 percent in year three. These operating efficiencies fall into the following categories:

> **Corporate overhead:** The transaction will decrease the aggregate amount of overhead currently spent by Comcast and TWC in many duplicative areas that are related to corporate staff and operational functions. By consolidating such functions and services within a single corporate management structure, the combined company should realize significant expense efficiencies for corporate and operational overhead over a three-year period.

> **Cable Operations:** This integration of Comcast's and TWC's cable operations will also contribute to these operating expense efficiencies. Eliminating duplicative networks, assets, and functions and creating, for example, one backbone and one content delivery network, will yield significant operating expense efficiencies over a three-year period.

In addition to operating efficiencies, Comcast's business involves significant capital expenditures for network elements, such as fiber-optic cable, software, modems, set-top boxes, servers, and vehicles, as well as other customer equipment. Comcast expects that the combined company will likely enjoy a lower per-unit cost when purchasing network and customer equipment in larger quantities. The capital expenditure savings represent approximately 10 percent of TWC's total anticipated expenditures in 2014.

Finally, Comcast believes there are strong opportunities for revenue synergies through the combined entity's enhanced ability to compete for residential and business customers. Some of those opportunities are explained in detail below. Comcast operating and capital expenditure efficiencies described above do not include these revenue synergies.

There are three primary economic mechanisms that will drive benefits from the transaction: economies of scale, expanded geographic reach, and sharing of technologies and services. Scale can make the difference between investing in a new product and service and not investing, and it can speed up the pace of product and service introductions and enhancements, as discussed further below. Expanded geographic reach allows firms to compete more effectively for customers, especially business customers whose operations span multiple regions. Sharing best practices and services can increase consumers' access to cutting edge services.

<u>Increased Ability to Deploy Advanced Technologies and to Develop New and Innovative Products and Services</u>

By creating additional efficiencies, economies of scale, and an expansion of Comcast's geographic footprint, the proposed transaction 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 more effectively to the increasing competitive forces that Comcast faces. Comcast, which employs over 1,000 engineers and developers, needs to continue to invest in advanced technologies and in developing innovative products and services. The bulk of Comcast's approximately $1 billion in annual spending on intangible assets is devoted to software research, development, and deployment. The transaction will allow the combined company to spread the cost of these investments in new products and services over a larger customer base and more efficiently market these services. This additional base and scale increases the incentive to invest and take risks in developing innovative products and services.

The proposed transaction further enhances Comcast's ability to invest in new products and services and will extend the benefits of Comcast's scale to TWC's systems and customers. For example, increased scale may enable Comcast to justify additional investments in products and

services that are speculative and have high fixed costs. Moreover, the ability to amortize development costs over more systems means that Comcast can deploy new products and services more rapidly. Indeed, an ongoing strategic priority in the cable industry is to find creative ways to increase scale to justify and enable higher levels of investment and innovation.

The transaction will also provide Comcast the added scope and scale to more fully realize the significant investment in human capital that Comcast – uniquely in the cable industry – has undertaken in recent years. As noted above, Comcast now employs over 1,000 engineers and developers and vigorously competes for new technology talent with the likes of Google, Apple, Facebook, Netflix, Microsoft, and Twitter. With greater scale in key markets, Comcast will have a broader base of subscribers over which to spread research and development costs and to test-market and ultimately deploy new and innovative products and services. And a larger team of engineers and developers facilitates faster innovation as they can work with third-party manufacturers to develop a range of technology solutions.

Finally, the transaction will provide geographic scope efficiencies. For example, following the transaction, Comcast will have access to several markets geographically aligned near existing markets, allowing Comcast to more efficiently invest in high-fixed-cost infrastructure to serve those areas. Denser geographic coverage will also create marketing efficiencies for services that may require extensive and expensive marketing campaigns to educate and attract consumers.

Transaction Efficiencies for Residential Customers

The transaction-related synergies and economies of scale described above will justify more investment and more cost-effective allocation of resources than either TWC or Comcast could do on its own in critical areas for consumers such as broadband, voice and other products and services beyond the scope of this proceeding. Comcast is committed to adding substantial incremental investments to what TWC had planned for network and service upgrades and enhancements over the next three years. These additional investments in network infrastructure and enhancements will improve the reliability and security of the network and expand its bandwidth to deliver, for example, faster broadband speeds; increased Wi-Fi gateway and hotspot deployment; and enhanced voice services.

Broadband. The acquired TWC systems – and the company as a whole – will benefit from the ability to translate large fixed-cost development and investments into better deployment and returns across a broader customer base. Comcast expects that one of the combined company's primary focuses will be upgrading TWC's broadband plant to Comcast's technical standards in order to deliver improved broadband services to consumers.

Post-transaction, Comcast intends to increase investment in TWC's systems, with the combined company able to scale these investments more efficiently.

Digital Voice. Post-transaction, the combined company will benefit from the best aspects of both companies' robust and innovative voice services. The post-transaction company will be

better suited to offer an array of advanced IP voice services in competition with ILECs and other providers, and to continue to drive innovation and competition in this market.

Transaction Efficiencies for Businesses

The synergies and scale and scope efficiencies discussed above will also significantly enhance the ability of the combined firm to compete for and serve business customers of all sizes.

Comcast and TWC are more recent entrants in the business services market, and Comcast believes that this market presents a significant growth opportunity. Comcast first entered the business services market in 2006, focusing primarily on small businesses (i.e., primarily those with fewer than 20 employees). TWC, on the other hand, has more experience with medium-sized businesses in its footprint. Despite the fact that both companies are growing in their respective segments, Comcast and TWC together represent a small share of the small and medium-sized business market segment (maybe 10 to 15 percent within their footprints) for telecom voice and data services, and a *de minimis* share of national (enterprise) businesses.

This transaction will provide the combined company the scale and scope needed to invest and compete more effectively against well-established incumbents for two business customer categories: (1) medium-sized, regional, super-regional, and even enterprise businesses; and (2) wireless backhaul services.

Medium-Sized, Regional, Super-Regional, and Enterprise Business. The proposed transaction will help establish the combined company as a significant competitor with a stronger foothold in the medium-sized, regional, and super-regional business marketplace. As discussed above, the transaction will enable Comcast to accelerate and enhance the build-out of its network infrastructure in its service areas, bolstering its ability to compete for business customers. In particular, medium-sized businesses generally require more "on-net" building connections. Historically, these businesses have had to rely on companies like AT&T, Verizon, and CenturyLink, which have been the only providers with the scale and scope to provide these connections.

Economies of scale will enable the combined company to drive down the costs of procurement and network build-out, and will help achieve the marketing and operating efficiencies that are necessary for Comcast to be a more effective competitor. In addition, the companies will be able to combine their complementary service offerings (e.g., hosted voice service, cloud-based services) and further develop advanced service offerings like point-to-point and multi-point Ethernet services, in order to provide a more attractive suite of services to potential business customers.

The transaction will also enable the combined company to serve super-regional companies with operations that span Comcast's and TWC's existing footprints. In the past, geographic constraints have limited cable companies from competing effectively against incumbent LECs that have served this market for decades given their greater scale and scope. Today, neither

Comcast nor TWC can generally provide services to businesses that cross territories as efficiently as either can provide services to businesses within their respective territories. Thus, businesses with operations in both Comcast's and TWC's footprints that seek an alternative to the incumbent LEC face two equally unappealing options: (1) rely on an aggregator that pieces multiple services together (at a markup) or (2) negotiate and manage multiple accounts with separate providers. The transaction will help address this lack of choice, bringing greater competition to this marketplace.

Post-transaction, Comcast will be able to compete more effectively with incumbent LECs by offering a unified set of seamless products and services throughout its extended footprint with greater operational and cost efficiencies. For example, Comcast will be able to serve larger multi-site customers in a uniform fashion, and will also be able to build super-regional Metro Ethernet clusters, thereby further consolidating key parts of the company's network and fostering more efficient delivery of services. Comcast also will be able to increase the number of "on-net" sites the company serves, which will further reduce the costs and operational barriers for businesses with multiple sites and facilitate investment in adding sites to Comcast's network.

For the same reasons, Comcast's larger geographic reach post-transaction will also make it a meaningful option for enterprise companies that have multiple locations throughout the combined Comcast-TWC footprint, and currently rely either on incumbent LECs or third-party aggregators. With more of these companies' locations covered by Comcast's expanded geography, it will now make more economic sense for the company to pursue this national business. This market segment should benefit from a new near-national competitive entrant that can provide superior service and value.

Wireless Backhaul Services. With mobile data traffic growing rapidly, wholesale wireless backhaul is emerging as a national service. Comcast and TWC have both recognized that the increasing need for wireless carriers to offload wireless traffic from their cell towers onto high-capacity fiber facilities presents a business opportunity for the companies. Currently, TWC and Comcast provide wireless backhaul to only a small fraction of the total number of cell sites (less than three percent).

The transaction will improve Comcast's ability to compete in the wireless backhaul market, particularly because of its larger geographic footprint and scale post-transaction. TWC's expertise and assets in this market factor into this strategic assessment. For example, with its acquisition of DukeNet, TWC obtained an 8,700-mile regional fiber-based network that provides wholesale wireless backhaul and other business services to customers in North Carolina, South Carolina, and five other states in the Southeast. The combined company's additional scale after the transaction will provide it with the resources and expertise to build fiber even further and make substantial reinvestments in provisioning and backhaul infrastructure.

Finally, investment in this area not only creates competition for critical cell backhaul and wholesale carrier infrastructure, but directly benefits medium-sized and enterprise business customers by accelerating the deployment of a more redundant and resilient network. More

generally, the combined investments and network upgrades that are necessary to serve medium-sized, enterprise, and wholesale wireless backhaul customers across the combined company's footprint will also inure to the benefit of small business and residential customers in a number of ways. For example, 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. Moreover, small businesses and residential customers will enjoy the "spillover effects" from investments, plant upgrades, and network reliability enhancements made to serve larger businesses.

Absent the Transaction, Comcast Will Not Be Able to Achieve the Same Efficiencies

Based on the above factors and analysis, Comcast has concluded that the meaningful consumer and business benefits described above can be achieved only by combining Comcast and TWC. Each of the benefits outlined above is based in part on increased scale, substantial investment, innovation and experience, and an expanded geographic scope for the combined company. In Comcast's considered judgment, there is no other reasonable or attainable pathway to achieve these types of substantial benefits for consumers and businesses.

Contracting is a common mechanism to achieve some of the benefits of increased scale, expanded geographic reach, and sharing of technologies and services. However, in many cases contracting does not achieve all of the potential benefits because of well-known difficulties that arise in contracting, including transactional frictions and costs, differences in strategy, double marginalization, and the requirement for large investments specific to collaboration with another company in which returns hinge on the future behavior of the other company. Indeed, as discussed below, Comcast and TWC have sought to achieve efficiencies via contracting or consortium approaches in several contexts with mixed results, and the complexity and uncertainty of such arrangements has reduced the benefits relative to what the parties can achieve through the transaction.

Comcast has not quantified the dollar amount of the merger synergies attributable to a particular State.

Sponsor:

Q-3:62. **Please indicate the number of California employees that will be eliminated by You.**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. The company also objects on the grounds that the request seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast has not made definitive determinations regarding post-merger operations and employee levels. However, as further explained by Comcast Executive Vice President David L. Cohen in testimony before the Judiciary Committee of the U.S. Senate, while Comcast does anticipate that the merger will have some impact on headcount, Comcast does not anticipate reductions in customer-facing jobs: "Most of our jobs are – are the customer facing jobs of technicians in call centers and local management and we don't anticipate any reductions in those jobs."

Sponsor: John Gutierrez, Government and Regulatory Affairs

Q-3:63. **Provide ORA with a copy of any materials provided to the FCC in support of the proposed merger transaction, including the FCC Application, any supporting attachments, and any confidential information or information provided under seal.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Public versions of materials submitted by Comcast in support of its Application before the FCC are available at: http://www.fcc.gov/transaction/comcast-twc (last visited September 17, 2014). Comcast has also produced a public version of the FCC's Requests for Information served to the FCC on September 11, 2014. Discussions pertaining to production of the confidential versions of those responses are on-going.

Sponsor: Counsel

Q-3:64. **Using the updated attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households subscribed by speed tier (upload and download speeds). Please clearly identify each speed tier and add any additional columns as necessary.**

Objection:

Comcast objects to this request to the extent it seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess the requested information by census block. Comcast will submit speed tier subscription information by census tract with its FCC Form 477 filing. Comcast will produce to ORA the California-specific speed tier information as reported in its FCC Form 477 promptly after it is filed on October 1, 2014. For the total number of subscribers in California for each of Comcast's residential broadband services, and the speed tiers associated with those services, see Response to Q-1:8.

Sponsor: Warren Fitting, Director, Government and Regulatory Affairs

Q-3:65. **For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest ISPs/transit providers/other networks with whom You interconnect.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:66. **For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest ISPs/transit providers/other networks with whom You interconnect.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:67. **For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest directly interconnected customers (if any).**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:68. **For your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest directly interconnected customers (if any).**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:69. **For Your network in California, please state the bandwidth capacity of Your backbone IP/mesh network.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:70. **For Your network in California, please state the bandwidth capacity of Your three highest traffic volume metro area (or Your network equivalent large geography) routers.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:71. **For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume metro area (or Your network equivalent large geography) routers.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:72. **For Your network in California, please state the bandwidth capacity of Your three highest traffic border routers.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:73. **For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume border routers.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

Q-3:74. **On May 14, 2014 at the Moffett Nathanson Media & Communications Summit in New York City, David Cohen, executive vice president of Comcast, stated that Comcast will roll out usage based pricing when trials are complete. How do You define "usage based pricing"? Please provide all of the areas nationwide where You are currently using or offering usage based pricing.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not have a formal definition for the term usage based pricing. Comcast has launched trials of new data usage plans in a limited number of markets that establish certain usage thresholds over which customers who want to use more can pay more, but are not in any way capped as to how much they are able to use.

Information about Comcast's various data usage trials and where the trials are being conducted is available on the following webpages:

- http://customer.comcast.com/help-and-support/internet/data-usage-trials (last visited Sept. 17, 2014)
- http://customer.comcast.com/help-and-support/internet/common-questions-datapolicy (last visited Sept. 17, 2014)
- http://customer.comcast.com/help-and-support/internet/exp-fdo-data-plan/ (last visited Sept. 17, 2014)
- http://customer.comcast.com/help-and-support/internet/data-usage-what-are-the-different-plans-launching (last visited Sept. 17, 2014)

Sponsor: Jim Janco, Director, Operations Compliance

Q-3:75. **Please provide all of the areas nationwide where You are currently using or offering usage based pricing.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Information about where Comcast's various data usage trials are being conducted is available via the webpages provided in the Response to Q-3:74.

Sponsor: Jim Janco, Director, Operations Compliance

Q-3:76. **Please identify the specific terms, conditions, and policies of Your usage based pricing offerings and plans, including but not limited to, speed tiers, data caps, and pricing.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Information about the terms, conditions and policies of Comcast's various data usage trials is available via the webpages provided in the Response to Q-3:74.

Sponsor: Jim Janco, Director, Operations Compliance

Q-3:77. **Please provide any and all of Your Plans to use, roll out and or implement usage based pricing nationwide.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Jim Janco, Director, Operations Compliance

REDACTED

Q-3:78. **Please provide, by Census Block, all of the areas in California where You are currently using or offering usage based pricing.**

Objection:

Comcast objects to this request on the grounds that the request seeks the production of information that is not in Comcast's possession, and is not normally generated or retained by the company, including information of this type at the census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

Comcast does not possess this information on a census block basis. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

REDACTED

Sponsor: Jim Janco, Director, Operations Compliance

Q-3:79. **Please provide any and all of Your plans to use, roll out and or implement usage based pricing in California.**

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Response:

[BEGIN CONFIDENTIAL] [redacted]
[END CONFIDENTIAL]

Sponsor: Jim Janco, Director, Operations Compliance

REDACTED

Q-3:80. **For ORA Data Request No. ORA-A.14-04-013.PHH-001 issued to You on August 27, 2014 and Data Request No. ORA-A.14-04-013.A.14-06-012.PHH-4003 issued to You on August 29, 2014, unless otherwise identified, You shall use the most recent information available for Your responses to the Data Requests and shall clearly identify the point in time the Data reflects.**

Response: Request is presented in the form of instruction(s); no response required.

Sponsor: Counsel

Q-3:81. **For ORA Data Request No. ORA-A.14-04-013.PHH-001 issued to You on August 27, 2014 and Data Request No. ORA-A.14-04-013.A.14-06-012.PHH-4003 issued to You on August 29, 2014, Comcast shall use the following definition of "Census Block": Census Block number(s) must be based on the 2010 Census. A census block is the concatenation of Census 2010 state Federal Information Processing Standards (FIPS) code, Census 2010 county FIPS code, Census 2010 census tract code and Census 2010 tabulation block number. For questions requesting information or Data on a Census Block level and such information or Data is not available by Census Block level, provide the information or Data in the smallest geographic unit available.**

Response: Request is presented in the form of instruction(s); no response required.

Sponsor: Counsel

Q-3:82. **For ORA Data Request No. ORA-A.14-04-013.PHH-001 issued to You on August 27, 2014 and Data Request No. ORA-A.14-04-013.A.14-06-012.PHH-4003 issued to Comcast on August 29, 2014, You shall provide all Responses to ORA and CD in an electronic format. All electronic documents submitted in response to this Data request, with exception to Excel spreadsheets, should be in PDF, readable, downloadable, printable, and searchable formats, unless use of such formats is infeasible. You do not need to provide any hard copies to ORA or CD unless providing an electronic copy is infeasible. For Data available only in hard copy, please clearly state so in Your email response and state when the hard copy response was sent.**

Response: Request is presented in the form of instruction(s); no response required.

Sponsor: Counsel

Q-3:83. **For all Data Requests from ORA to You, including ORA Data Request No. ORA- A.14-04-013.PHH-001 issued on August 27, 2014 and Data Request No. ORA-A.14- 04-013.A.14-06-012.PHH-4003 issued on August 29, 2014, You shall inform ORA immediately upon determining that there is a term in a Data Request that is unclear or ambiguous, that You do not believe it is required to provide the information, or that You will require more time to provide a complete response to the Data Request.**

Response: Request is presented in the form of instruction(s); no response required.

Sponsor: Counsel

By: _____/s/_____

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Attorneys for Comcast Corporation

Dated: September 22, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matter.	A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION'S FIRST SUPPLEMENTAL AND AMENDED RESPONSES TO FIRST, THIRD AND FOURTH SET OF DATA REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES PURSUANT TO MEET AND CONFER PROCESS

[PUBLIC VERSION]

October 27, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
And Related Matter.	A.14-06-012 (Filed June 17, 2014)

COMCAST CORPORATION'S FIRST SUPPLEMENTAL AND AMENDED RESPONSES TO FIRST, THIRD AND FOURTH SET OF DATA REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES PURSUANT TO MEET AND CONFER PROCESS

[PUBLIC VERSION]

Comcast Corporation ("Comcast") provides the following supplemental and amended responses to the first, third and fourth set of data requests ("DRs") served on it by the Office of Ratepayer Advocates ("ORA"), California Public Utilities Commission ("CPUC"), pursuant to the CPUC's meet and confer process.

These supplemental responses are subject to, and without waiver of, the general objections previously stated to the requests and the specific objections posed in each response. Comcast's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this supplemental response.

CONTINUING GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, Comcast may restate one or more of these general objections. However, these general objections apply to each individual request and Comcast's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive Comcast's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality, privilege and admissibility as evidence for any purpose, or to other requests for production. Comcast reserves the right to object on appropriate grounds to the use of such information and documents. Comcast hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. Comcast objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. Comcast objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to Comcast together with any copies.

3. Comcast objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to Comcast.

4. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to Comcast.

5. Comcast objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

6. Comcast objects to each DR to the extent that it exceeds the requirements of applicable law or purports to impose upon Comcast any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. Comcast objects to each DR to the extent that it seeks the production of information and/or documents that is publicly available or readily accessible to the requesting party(ies).

10. Comcast objects to each DR to the extent that it requests documents or materials not in the Comcast's possession, custody or control.

11. Comcast objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

12. Comcast objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are Comcast employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, Comcast generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following supplemental responses.

Q-3:18 Provide information describing Your yearly and total expenditures for Internet Essentials program operations for years 2010, 2011, 2012, 2013.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Comcast further objects on the grounds that the request exceeds the established scope of the proceeding.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously responded to ORA 3:18 on September 22, 2014. The following is a supplemental response to ORA 3:18 provided pursuant to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

This data request does not request nationwide expenditure data for the *Internet Essentials* program, and, as stated in Comcast's objections to this data request, any such data would be beyond the scope of this proceeding and not likely to lead to the discovery of admissible evidence relevant to the issues in this proceeding. Per ORA's request, Comcast has confirmed that it does not track expenditures for *Internet Essentials* by state. Since Comcast does not have California-specific information that is responsive to this data request, in the spirit of cooperation, Comcast provided general information about investments that it has made in the *Internet Essentials* program in its response to ORA 3:18 served on September 22, 2014.

Sponsor:

Angel Arocho, Senior Director, Product Management
Counsel

Q-3:32. Provide the number of Outages for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

a. The number of Outages by type of customer (residential, small or medium sized business)
b. Cause of Outage
c. Response time (time it took to respond to an outage)
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)
e. Total number of Outages by county

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously responded to ORA 3:32 on September 22, 2014. The following is a supplemental and amended response to ORA 3:32 provided pursuant to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

Per ORA's request, Comcast has confirmed that it does not maintain a national broadband outage report.

Further, the last sentence of Comcast's Response to ORA 3:32, served on September 22, 2014, should read: "Comcast does not maintain records of those instances in the ordinary course of its business."

Sponsor: Randal Burke, Vice President, CNOC

Q-3:65. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest ISPs/transit providers/other networks with whom You interconnect.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:65 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:65 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

Comcast's California metro networks do not directly connect to other ISPs/transit providers. Internet interconnection arrangements occur at a national level in multiple IP points-of-presences across multiple states. Therefore, there is no California-specific information responsive to this request.

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:66. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest ISPs/transit providers/other networks with whom You interconnect.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:66 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:66 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

Comcast's California metro networks do not directly connect to other ISPs/transit providers. Internet interconnection arrangements occur at a national level in multiple IP points-of-presence across multiple states. Therefore, there is no California-specific information responsive to this request.

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:67. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest directly interconnected customers (if any).

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:67 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:67 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

Comcast's California metro networks do not directly connect to other ISPs/transit providers. Internet interconnection arrangements occur at a national level in multiple points-of-presence across multiple states. Therefore, there is no California-specific information responsive to this request.

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:68. For your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest directly interconnected customers (if any).

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:68 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:68 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

Comcast's California metro networks do not directly connect to other ISPs/transit providers. Internet interconnection arrangements occur at a national level in multiple IP points-of-presence across multiple states. Therefore, there is no California-specific information responsive to this request.

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:69. For Your network in California, please state the bandwidth capacity of Your backbone IP/mesh network.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:69 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:69 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

Comcast's California metro networks do not directly connect to other ISPs/transit providers. Internet interconnection arrangements occur at a national level in multiple IP points-of-presence across multiple states. Therefore, there is no California-specific information responsive to this request.

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:70. For Your network in California, please state the bandwidth capacity of Your three highest traffic volume metro area (or Your network equivalent large geography) routers.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:70 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:70 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:71. For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume metro area (or Your network equivalent large geography) routers.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:71 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:71 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:72. For Your network in California, please state the bandwidth capacity of Your three highest traffic border routers.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:72 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:72 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Robert Rockell, Vice President, Network Engineering

Q-3:73. For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume border routers.

Objection:

Comcast objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, Comcast responds as follows:

Supplemental Response:

Comcast previously objected to ORA 3:73 on September 22, 2014 without providing a response. The following supplemental response to ORA 3:73 is provided in response to discussions with ORA during the "meet and confer" process and subject to the general and specific objections set forth here and in the original response:

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**

Sponsor: Robert Rockell, Vice President, Network Engineering

By: /s/_____

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Attorneys for Comcast Corporation

Dated: October 27, 2014

EXHIBIT 10

Time Warner Cable's Response to ORA Data Request, Set 1

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CC), LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CC), LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851	A. 14-06-012 (Filed June 17, 2014)

TIME WARNER CABLE RESPONSES TO FIRST SET OF DISCOVERY REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

[REDACTED VERSION]

GENERAL OBJECTIONS

1. Time Warner Cable ("TWC") objects to each Question to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the California Public Utilities Commission ("Commission") or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the Commission, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, broadcast cable television, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. TWC objects to each Question as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the ground that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to TWC together with any copies.

3. TWC objects to each Question to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to TWC.

4. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are not readily available to TWC.

5. TWC objects to each Question insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these Questions.

6. TWC objects to each Question to the extent that it exceeds the requirements of applicable law, purports to impose upon TWC any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are publicly available or readily accessible to the requesting party(ies).

10. TWC objects to each Question to the extent that it requests documents, materials or information not in the TWC's possession, custody or control.

11. TWC objects to each Data Request to the extent that it requests documents or materials outside the established scope of this proceeding.

Each of the foregoing general objections is incorporated by reference into the following responses.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Indrajit Ponnambalam
Title: Group Vice President, Revenue and Marketing, Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 1:

Please identify the total number of households passed where Time Warner Cable broadband service is available in California.

Response to Question 1:

There are 5,489,665 households passed where TWC broadband service is available in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Indrajit Ponnambalam
Title: Group Vice President, Revenue and Marketing, Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 2:

Please identify the total number of households subscribed to Time Warner Cable broadband services in California.

Response to Question 2:

There are 2,133,609 households subscribed to TWC broadband services in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Monique Crawford
Title: Corporate Division Administrator, Regulatory Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 3:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the number of households passed.

Response to Question 3:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC also objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Broadband Services spreadsheet, attached as Exhibit 1, Bates # 000001–003224, at Column B. Exhibit 1 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Monique Crawford
Title: Corporate Division Administrator, Regulatory Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 4:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the number of households subscribing to Time Warner Cable broadband service.

Response to Question 4:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC also objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Broadband Services spreadsheet, attached as Exhibit 1, Bates # 000001–003224, at Column C. Exhibit 1 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Monique Crawford
Title: Corporate Division Administrator, Regulatory Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 5:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the maximum advertised download speeds (Mbps) for residential Time Warner Cable broadband services.

Response to Question 5:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC also objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Broadband Services spreadsheet, attached as Exhibit 1, Bates # 000001–003224, at Column D. Exhibit 1 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Monique Crawford
Title: Corporate Division Administrator, Regulatory Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 6:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the maximum advertised upload speeds (Mbps) for residential Time Warner Cable broadband services.

Response to Question 6:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC also objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Broadband Services spreadsheet, attached as Exhibit 1, Bates # 000001–003224, at Column E. Exhibit 1 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Pam Murrin
Title: Corporate Group Vice President, Marketing, Analytics & In Marketing
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 7:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the price associated with the maximum advertised speed tier for residential Time Warner Cable broadband services including:

a. Average initial promotional price of service ($ per month and number of months during which the promotional price remains in effect) within the Census Block,

b. Average price of service following the expiration of the initial promotional cost of service ($ per month) within the Census Block.

Response to Question 7:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC further objects on the grounds that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC, including information of this type at the census block level.

Subject to the foregoing, TWC responds as follows:

a. TWC has provided this information in a spreadsheet attached as Exhibit 2, Bates # 003225–003289. TWC does not have this data on a census block level, but pricing and products remain the same throughout the entire TWC service area.

b. The table below shows TWC's internet retail rates. TWC notes that the retail price does not represent what most individuals pay following the end of the initial promotion period. After expiration of the initial promotional service, most individuals continue to pay an amount that is less than the retail price because they add other services or upgrades or otherwise qualify for different promotional packages.

INTERNET RETAIL RATES

Standard Internet	$	57.99
Basic Internet	$	47.99
Everyday Low Price Internet	$	14.99
Turbo Upgrade	$	10.00
Extreme Upgrade	$	20.00
Ultimate Upgrade	$	50.00

Turbo, Extreme or Ultimate Upgrade can be added to Standard Internet.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Monique Crawford; Christine Dzujna
Titles: Corporate Division Administrator, Regulatory Affairs;
Senior Director, Compliance & Legal Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 8:

Please list all Your residential broadband products/services offered in California, including:

a. Product/service name;
b. Description;
c. Speed Tier;
d. Price;
e. Terms and Conditions; and
f. Total number of subscribers for each product/service offered.

Response to Question 8:

a. Product/service name. See the spreadsheet attached as Exhibit 3, Bates # 003290–003292. Exhibit 3 contains confidential information.

b. Description. See the spreadsheet attached as Exhibit 3, Bates # 003290–003292. Exhibit 3 contains confidential information.

c. Speed Tier. See the spreadsheet attached as Exhibit 3, Bates # 003290–003292. Exhibit 3 contains confidential information.

d. Price. See the spreadsheet attached as Exhibit 3, Bates # 003290–003292. Exhibit 3 contains confidential information.

e. Terms and Conditions. Terms and Conditions are publicly available at: http://help.twcable.com/. For historical terms and conditions from 2009 to 2014, see Exhibit 4, Bates #003293–003373.

f. Total number of subscribers for each product/service offered. See the spreadsheet attached as Exhibit 3, Bates # 003290–003292. Exhibit 3 contains confidential information.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Pam Murrin; Monique Crawford; Christine Dzujna
Titles: Corporate Group Vice President, Marketing, Analytics & In Marketing;
Corporate Division Administrator, Regulatory Affairs;
Senior Director, Compliance & Legal Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 9:

Please provide the information requested in items (7) and (8) separately for each year over the period 2009 through and including 2014.

Response to Question 9:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC further objects on the grounds that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC, in that TWC does not retain the requested information for prior years.

Subject to the foregoing, TWC responds as follows:

See responses to Questions 7 and 8 for historical data relating to those questions. TWC does not maintain the historical data relating to Question 7 in any readily accessible format prior to Q2 2012 and cannot provide this information.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Indrajit Ponnambalam
Title: Group Vice President, Revenue and Marketing, Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 10:

Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps in California.

Response to Question 10:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects on the ground that the request seeks the production of information not in TWC's possession or control.

Subject to the foregoing, TWC responds as follows:

We do not conduct speed tests to determine the actual average download speeds of households on a census block level. See the tables contained in our Network Management Disclosures, available at http://help.twcable.com/description_of_network_management_practices.html, for available information regarding download speeds.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Indrajit Ponnambalam
Title: Group Vice President, Revenue and Marketing, Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 11:

Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps during peak times in California.

Response to Question 11:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects on the ground that the request seeks the production of information not in TWC's possession or control.

Subject to the foregoing, TWC responds as follows:

We do not conduct speed tests to determine the actual average download speeds of households on a census block level. See the tables contained in our Network Management Disclosures, available at http://help.twcable.com/description_of_network_management_practices.html, for available information regarding download speeds.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Indrajit Ponnambalam
Title: Group Vice President, Revenue and Marketing, Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 12:

Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps in California.

Response to Question 12:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects on the ground that the request seeks the production of information not in TWC's possession or control.

Subject to the foregoing, TWC responds as follows:

We do not conduct speed tests to determine the actual average download speeds of households on a census block level. See the tables contained in our Network Management Disclosures, available at http://help.twcable.com/description_of_network_management_practices.html, for available information regarding download speeds.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Indrajit Ponnambalam
Title: Group Vice President, Revenue and Marketing, Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 13:

Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps during peak times in California.

Response to Question 13:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects on the ground that the request seeks the production of information not in TWC's possession or control.

Subject to the foregoing, TWC responds as follows:

We do not conduct speed tests to determine the actual average download speeds of households on a census block level. See the tables contained in our Network Management Disclosures, available at http://help.twcable.com/description_of_network_management_practices.html, for available information regarding download speeds.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 14:

Is Time Warner Cable broadband service offered as a stand-alone service in California?

Response to Question 14:

Yes.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Monique Crawford; Christine Dzujna
Titles: Corporate Division Administrator, Regulatory Affairs;
Senior Director, Compliance & Legal Affairs
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 15:

If the answer to Question #14 is yes, please identify the following:

a. Product/service name;
b. Description;
c. Terms and Conditions;
d. Price; and
e. Number of households subscribed to stand-alone broadband service in California.

Response to Question 15:

a.-d. See response to Question 8.

e. The number of households subscribed to stand-alone broadband service in California is 716,739 (as of June 2014).

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 16:

Does Time Warner Cable define small businesses as a business with up to 20 employees?

Response to Question 16:

No. Small business is defined as a business with 0-24 employees.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 17:

Please identify the total number of small-sized businesses passed by Time Warner Cable facilities.

Response to Question 17:

TWC objects to this request on the grounds that the request is vague, ambiguous, and overbroad. To the extent this request seeks information concerning small-sized businesses outside of California, TWC further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing, TWC responds as follows:

TWC maintains data based on service locations, rather than the total number of small businesses. The total number of small business locations passed by TWC in California is 1,290,407.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 18:

Please identify the total number of small-sized business subscribed to Time Warner Cable broadband services in California.

Response to Question 18:

The total number of small-sized businesses subscribed to TWC in California is 49,518.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 19:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the number of all small-sized businesses passed where Time Warner Cable broadband service is available.

Response to Question 19:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC also objects on the ground that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC, including information of this type at the census block level.

Subject to the foregoing, TWC responds as follows:

Unlike residential service, we do not have business service data on a census block level. For the total number of small-sized business locations passed where TWC broadband service is available, see the response to Question 17.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 20:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the number of all small-sized business subscribed to Time Warner Cable broadband service.

Response to Question 20:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC also objects on the ground that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC, including information of this type at the census block level.

Subject to the foregoing, TWC responds as follows:

Unlike residential service, we do not have business service data on a census block level. For the total number of small-sized businesses subscribed to TWC broadband service, see the response to Question 18.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 21:

Please list all Your small business products/services offered in California, including:

a. Product/service name;
b. Description;
c. Speed Tier;
d. Price;
e. Terms and Conditions; and
f. Total number of subscribers for each product/service offered.

Response to Question 21:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

a. Product/service name. Business Internet Access.

b. Description.

1. High-bandwidth, asymmetrical, internet access delivered over our HFC network.

2. Includes a Cable modem which can support multiple IP addresses and DHCP.

3. The service also includes McAfee Personal Security Suite which provides anti-spam, anti-virus and anti-spyware protection for PCs.

c. Speed Tier. See below in the price list.

d. Price.

PAC WEST Business Internet MRC				
Speed	Term	HSD Only	Double	Triple
5x512	MTM	$89.99	$84.99	$79.99
	1 Yr.	$79.99	$74.99	$69.99
	2 Yr.	$74.99	$69.99	$64.99
	3 Yr.	$69.99	$64.99	$59.99
	4 Yr.	$64.99	$59.99	$54.99
	5 Yr.	$59.99	$54.99	$49.99
7x768	MTM	$99.99	$94.99	$89.99
	1 Yr.	$89.99	$84.99	$79.99
	2 Yr.	$84.99	$79.99	$74.99
	3 Yr.	$79.99	$74.99	$69.99
	4 Yr.	$74.99	$69.99	$64.99
	5 Yr.	$69.99	$64.99	$59.99
10x1	MTM	$129.99	$124.99	$119.99
	1 Yr.	$119.99	$114.99	$109.99
	2 Yr.	$114.99	$109.99	$104.99
	3 Yr.	$109.99	$104.99	$99.99
	4 Yr.	$104.99	$99.99	$89.99
	5 Yr.	$99.99	$94.99	$89.99
12x1.5	MTM	$169.99	$164.99	$159.99
	1 Yr.	$159.99	$154.99	$149.99
	2 Yr.	$154.99	$149.99	$144.99
	3 Yr.	$149.99	$144.99	$139.99
	4 Yr.	$144.99	$139.99	$134.99
	5 Yr.	$139.99	$134.99	$129.99
15x2	MTM	$219.99	$214.99	$209.99
	1 Yr.	$209.99	$204.99	$199.99
	2 Yr.	$204.99	$199.99	$194.99
	3 Yr.	$199.99	$194.99	$189.99
	4 Yr.	$194.99	$189.99	$184.99
	5 Yr.	$189.99	$184.99	$179.99

PAC WEST Business Internet MRC				
Speed	Term	HSD Only	Double	Triple
35x5	MTM	$400.00	$400.00	$400.00
	1 Yr.	$350.00	$332.50	$315.00
	2 Yr.	$340.00	$323.00	$306.00
	3 Yr.	$320.00	$304.00	$288.00
	4 Yr.	$310.00	$294.50	$279.00
	5 Yr.	$290.00	$275.50	$261.00
50x5	MTM	$465.00	$465.00	$465.00
	1 Yr.	$415.00	$394.25	$373.50
	2 Yr.	$405.00	$384.75	$364.50
	3 Yr.	$385.00	$365.75	$346.50
	4 Yr.	$375.00	$356.25	$337.50
	5 Yr.	$355.00	$337.50	$319.50
75x5*	MTM	$545.00	$545.00	$545.00
	1 Yr.	$485.05	$463.25	$436.00
	2 Yr.	$474.15	$452.35	$425.10
	3 Yr.	$452.35	$430.55	$408.75
	4 Yr.	$441.45	$419.65	$397.85
	5 Yr.	$414.20	$397.85	$376.05
100x5*	MTM	$625.00	$625.00	$625.00
	1 Yr.	$556.25	$531.25	$500.00
	2 Yr.	$543.75	$518.75	$487.50
	3 Yr.	$518.75	$493.75	$468.75
	4 Yr.	$506.25	$481.25	$456.25
	5 Yr.	$475.00	$456.25	$431.25
100x10*	MTM	$609.99	$609.99	$609.99
	1 Yr.	$559.99	$537.99	$515.99
	2 Yr.	$549.99	$529.99	$509.99
	3 Yr.	$529.99	$509.99	$489.99
	4 Yr.	$519.99	$499.99	$479.99
	5 Yr.	$499.99	$479.99	$459.99
	7 Yr.	$499.99	$479.99	$459.99
200x20*	MTM	$679.99	$679.99	$679.99
	1 Yr.	$629.99	$607.99	$585.99
	2 Yr.	$619.99	$599.99	$579.99
	3 Yr.	$599.99	$579.99	$559.99
	4 Yr.	$589.99	$569.99	$549.99
	5 Yr.	$569.99	$549.99	$529.99
	7 Yr.	$569.99	$549.99	$529.99
300x20*	MTM	$729.99	$729.99	$729.99
	1 Yr.	$679.99	$657.99	$635.99
	2 Yr.	$669.99	$649.99	$629.99
	3 Yr.	$649.99	$629.99	$609.99
	4 Yr.	$639.99	$619.99	$599.99
	5 Yr.	$619.99	$599.99	$579.99
	7 Yr.	$619.99	$599.99	$579.99

*Availability varies by location.

e. Terms and Conditions. TWC's Business Internet Access services are subject to the Time Warner Cable Business Class Terms and Conditions, located at the following link:

http://business.timewarnercable.com/legal/terms-conditions.html.

f. Total number of subscribers for each product/service offered.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 22:

Does Time Warner Cable define medium-sized business as a business with 21 and up to 500 employees?

Response to Question 22:

No. Medium business is defined as a business with 25-499 employees.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 23:

Please identify the total number of medium-sized businesses passed by Time Warner Cable facilities.

Response to Question 23:

TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning medium-sized businesses outside of California, TWC further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing, TWC responds as follows:

TWC maintains data based on service locations, rather than the total number of medium-sized businesses. The total number of medium-sized business locations passed by TWC in California is 51,935.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 24:

Please identify the total number of medium-sized business subscribed to Time Warner Cable broadband services in California.

Response to Question 24:

The total number of medium-sized businesses subscribed to TWC in California is 3,766.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 25:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the number of all medium sized business passed by Time Warner Cable facilities.

Response to Question 25:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. TWC also objects on the ground that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC, including information of this type at the census block level.

Subject to the foregoing, TWC responds as follows:

Unlike with residential service, we do not have business service data on a census block level. For the total number of medium-sized business locations passed by TWC facilities, see the response to Question 23.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 26:

Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Time Warner Cable broadband service is available in California, the number of all medium sized business subscribed to Time Warner Cable broadband service.

Response to Question 26:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad. TWC also objects on the ground that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC, including information of this type at the census block level.

Subject to the foregoing, TWC responds as follows:

Unlike residential service, we do not have business service data on a census block level. For the total number of medium-sized businesses subscribed to TWC broadband service, see the response to Question 24.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 27:

Please list all Your medium-sized business broadband products/services offered in California, including:

a. Product/service name;
b. Description;
c. Speed Tier;
d. Price;
e. Terms and Conditions; and
f. Total number of subscribers for each product/service offered.

Response to Question 27:

See the response to Question 21. The business size or number of employees does not determine the characteristics of TWC's products, speed, or price.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King; Jeff Lindsay
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services; Group Vice President & GM, Digital Phone
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 28:

Please identify all voice services offered by Time Warner Cable:

a. Product/service name;
b. Description (include if your voice service is VoIP);
c. Is the product/service offered as a stand-alone service;
d. Price;
e. Terms and Conditions; and
f. Total number of subscribers for each product/service offered.

Response to Question 28:

<u>Residential Voice Services:</u>

Time Warner Cable offers several different Home Phone Calling Plans. All Home Phone Calling Plans include Call Waiting, Caller ID, Call Waiting ID, Call Forwarding, Speed Dialing, Three-Way Calling and Anonymous Call Rejection. Voice Mail and special features are available for an extra monthly charge. Current rates are available at http://www.timewarnercable.com.

a. Home Phone Service
   — Unlimited Nationwide
   — Unlimited In-State
   — Local
   — International One Price calling plan
   — Global Penny Phone Plan

b. Home Phone Service Plan Descriptions*:
   — Unlimited National: unlimited local, interstate and intrastate calling plus free calling to Mexico, Canada, Puerto Rico and Virgin Islands
   — Unlimited In-State: unlimited local, in-state and intra-state calls. Interstate calls cost $0.07 per minute.
   — Local: unlimited local calling and intrastate calling. Interstate calls cost $0.07 per minute.

— International One Price: $19.99 per month for 1000 ILD minutes
— Global Penny Phone Plan: $2.95 per month plus $0.01 per minute for calls made to any of 50 international destinations.

* Home Phone is a voice over Internet protocol ("VoIP") service.

c. All three primary phone service options (Unlimited Nationwide, Unlimited In-State and Local) are available as stand-alone services.

d. Product monthly pricing:
— Unlimited National
standalone $39.99
in double play $20
in triple play $10
— In-state
standalone only $29.99
— Local
standalone only $24.99
— International One Price
$19.99 per month for 1000 ILD minutes
— Global Penny Phone Plan
$2.95 per month for 50 international destinations at $0.01/min

e. Terms and Conditions
TWC's residential voice services are subject to the Time Warner Cable Residential Services Subscriber Agreement, located at the following link:
http://help.twcable.com/

f. Subscriber Numbers (as of August 22, 2014)
— [redacted]

Business Voice Services:

a. Business Class Phone, PRI and SIP services leverage Internet Protocol ("IP") technology to deliver data packets of voice signals over TWC's high-capacity fiber-coaxial network.
— Business Class Phone ("BCP")
— Business Class PRI Trunks ("PRI")
— Business Class SIP Trunks ("SIP")

b. Description*

— Business Class Phone: a business-centric IP-based phone service that replaces traditional "plain old telephone service" ("POTS") lines. The service is offered with three optional calling plans: Nationwide, In-State and Local. International pricing plans and advanced features are also available.

Included Service Features:

Account Codes, Call Forward, Call Waiting, Three Way Call Transfer, Hunting, Inbound and Outbound Call Restrictions Call Blocking, Online Account Detail, Selective Call Forward/Rejection, Call Scheduler, Custom Caller ID, Call Logs, Do Not Disturb, Last Number Redial, Hotline/Suspended Line, Voice Manager

Optional Features:

Auto Attendant, Voicemail (single, group, or shared), Remote Call Forward, Enhanced Toll Free, Business Group Feature Package, Mobility Package, Custom Ring, Intercept Message. Additional charges may apply for these features.

— Business Class PRI Trunks: an IP-enabled voice trunk solution supporting primary rate interface ("PRI") handoff to a customer's private branch exchange ("PBX"). This service supports simultaneous voice calls using an industry standard primary rate interface T-1, and it is offered as a full trunk service (23B+D) or fractional trunk service with 8, 12, 16 voice ('B') channels.

Features:

Unlimited local calling, optional long distance packages, Caller ID, Direct Inward Dialing ("DID"), Inbound/Outbound call blocking options, online access to account details and usage reports, advanced features including Remote Call Forwarding ("RCF"), and Trunk Overflow.

— Business Class SIP Trunks: an IP-based voice solution supporting session initiation protocol ("SIP") trunk handoff to a customer IP PBX; capacity is 6 to 200 simultaneous calls/call paths.

Features:

Unlimited local calling and optional long distance packages, Caller ID, Direct Inward Dialing (DID) service, Inbound/Outbound call blocking options, online access to account detail and usage reports, advanced features including RCF, and Trunk Overflow.

*All services include VoIP.

c. All voice services (BCP, PRI, SIP) are sold as standalone services or bundled with other services.

d. Below is the standard pricing list for TWC BCP, PRI and SIP services. Standard pricing is subject to promotional, volume, or individual case discounts.

BUSINESS CLASS PHONE

Business Class Phone, MRC	1 Year	2 Year	3,4,5 Year
Local	$ 24.95	$ 24.95	$ 24.95
Instate	$ 29.95	$ 29.95	$ 29.95
Nationwide Unlimited, LA & SD/DC - 1P	$ 56.95	$ 53.95	$ 51.95
- 2P	$ 48.95	$ 45.95	$ 43.95
- 3P	$ 45.95	$ 42.95	$ 40.95
Nationwide Unlimited Mountain West - 1P	$ 54.95	$ 50.95	$ 48.95
- 2P	$ 46.95	$ 42.95	$ 40.95
- 3P	$ 43.95	$ 40.95	$ 39.95

*1P - Single Play, 2P - Double Play, 3P - Triple Play

BCP LD Rates	Rate / Min
Outbound LD with Local BCP Line	$ 0.070
Outbound LD with Instate BCP Line	$ 0.050

BCP Intercept Messaging	One Time
First 30 Days	$ 0.00
60 Days Announcement	$ 3.95
90 Days Announcement	$ 7.90

BCP Features	MRC
Bus Group Feature Package	$ 3.95
Auto Attendant	$ 19.95
Custom Ring	$ 3.95
Mobility Package	$ 3.95
Voice Mail	$ 5.00
Group Voice Mail - First Mailbox	$ 5.00
Group Voice Mail - Add'l Mailboxes	$ 1.95
Shared Voice Mail	$ 12.95

BUSINESS CLASS TRUNKS (PRI / SIP)

	Contract Term				
PRI Trunks, MRC	1 Year	2 Year	3 Year	4 Year	5, 7 Year
8 Channel Fractional	$ 420.00	$ 360.00	$ 320.00	$ 305.00	$ 290.00
12 Channel Fractional	$ 450.00	$ 385.00	$ 345.00	$ 330.00	$ 315.00
16 Channel Fractional	$ 480.00	$ 410.00	$ 370.00	$ 350.00	$ 335.00
Full PRI (23 B Channels)	$ 550.00	$ 485.00	$ 440.00	$ 420.00	$ 405.00
SIP Trunks, MRC	1 Year	2 Year	3 Year	4 Year	5, 7 Year
Price Per Call Path	$ 18.00	$ 16.00	$ 15.00	$ 14.00	$ 14.00

Minimum 6 Call Paths, increments of 1, maximum of 200 (fiber), same pricing over Fiber or DOCSIS

Standard LD Rates (PRI or SIP)	Rate / Min
nterstate	$ 0.030
ntrastate (varies by state)	

DID Blocks and Trunk Overflow (PRI or SIP)	MRC
DID 20 Block	$ 3.00
DID 100 Block	$ 15.00
Trunk Overflow (optional)	$ 24.95

These are Monthly Recurring Charges co-terminus with contract.

Options (BCP or PRI/SIP Trunks)	MRC
Remote Call Forward (RCF)	$ 13.95
Additional Listing (*)	$ 3.15
Foreign Listing (*)	$ 3.15

(*) MRCs for Listings apply to BCP only. No Charge for Trunk.

e. TWC's Business Class Phone, PRI and SIP Services are subject to the Time Warner Cable Business Class Terms and Conditions, located at the following link: http://business.timewarnercable.com/legal/terms-conditions.html

f. TWC total number of subscribers with a billing address in California is presented below:

[redacted]

This data is current as of August 2014.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay
Title: Group Vice President & GM, Digital Phone
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 29:

Please identify the total number of households passed where Time Warner Cable voice service is available in California.

Response to Question 29:

There are 5,546,364 households where TWC voice service is available in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay
Title: Group Vice President & GM, Digital Phone
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 30:

Please identify the total number of households subscribed to Time Warner Cable voice services in California.

Response to Question 30:

There are 783,121 households subscribed to TWC voice services in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Peter Cunningham
Title: Vice President, Corporate Development & Delivery
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 31:

Please identify all Your existing current broadband and voice deployment projects currently underway in California that includes:

a. Name of project;
b. Description;
c. Speeds offered;
d. County/city/community name;
e. Status of project; and
f. Estimated time of completion.

Response to Question 31:

TWC currently has one major broadband and voice deployment project underway in California. The details for that project are as follows:

a. TWC Maxx.

b. The program focuses on upgrades to the company's network to enhance the video and Internet experience, as well as improve overall customer satisfaction. As part of the program, TWC customers will receive an increase in their internet speeds at no additional cost.

c. Speeds*:

Plan	Current Speed	New Speed
Everyday Low Price	2 x 1 Mbps	3 x 1 Mbps
Basic	3 x 1 Mbps	10 x 1 Mbps
Standard	15 x 1 Mbps	50 x 5 Mbps
Turbo	20 x 2 Mbps	100 x 10 Mbps
Extreme	30 x 5 Mbps	200 x 20 Mbps
Ultimate	100 x 5 Mbps	300 x 20 Mbps

*(download speeds x upload speeds)

d. Los Angeles, CA.

e. [redacted]

[redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: General Vice President Network Expansion and OSP Design
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 32:

Please identify all Your planned broadband and voice deployment in California in the next three years. Please include the following:

a. Description;
b. Speeds offered;
c. County/city/community name; and
d. Estimated deployment schedule.

Response to Question 32:

TWC objects to this request on the grounds that the request is vague and ambiguous; further, the request seeks the production of documents not in existence.

Subject to the foregoing objections, TWC responds as follows:

TWC does not prepare or maintain three-year broadband and voice deployment plans pertaining to California. Further, if TWC completes the merger as anticipated, any future broadband or voice deployment for the next three years in California will be determined by Comcast.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: General Vice President Network Expansion and OSP Design
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 33:

Please identify and describe how Time Warner Cable decides whether to invest and expand its network into a community and what criteria is considered in making this determination. Identify all locations falling generally within or proximate to Time Warner Cable's California operating areas where Time Warner Cable has specifically declined to furnish any service that had been requested by customers, developers, communities, or others at any time from and after 2009. For each such instance, provide the specific reason or reasons for Time Warner Cable's decision not to provide the requested service.

Response to Question 33:

TWC generally seeks to invest in expansion of its existing network footprint where the revenue opportunities from the provision of video, Internet, and voice services will enable the company to earn a reasonable rate of return on the investment. Within TWC's franchise areas, TWC furnishes services to any customers upon reasonable request. In cases where the construction costs would prevent TWC from earning a reasonable return on investment, TWC will seek a contribution from the customer, in accordance with standard industry practice and well-established law. Since 2009, TWC is not aware of any refusal to provide service to any customer or developer within TWC's franchise areas. To the extent that TWC has declined requests to expand its network outside its franchise areas, such decisions have resulted from the fact that the requested service would have exceeded TWC's acceptable return on investment and/or the customer was unwilling to aid in construction.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay
Title: Group Vice President & GM, Digital Phone
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 34:

Does Time Warner Cable believe that it has an obligation (legal or otherwise) to provide service to any area within California upon request for service?

Response to Question 34:

TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad. The request fails to define key terms, including "service," "obligation," and "otherwise." As such, it is not clear what is intended by the term "otherwise," or what services the request is intended to cover. To the extent that this request seeks information about TWC's video/cable services, the company also objects on the grounds that such a request is outside the scope of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. TWC further objects to the extent this request calls for a legal opinion.

Subject to the foregoing, TWC responds as follows:

TWC currently is providing its residential voice service as a non-common carrier VoIP provider and therefore has no legal duty to provide service upon request, but TWC plans to transfer its residential customers to its telecommunications carrier affiliate in the near future, at which point it will be obligated to provide service upon reasonable request as a competitive local carrier ("CLC"). As such, TWC will have an obligation to "serve all customers who request service and whose premises are within 300 feet of the CLC's transmission facilities used to provide service so long as the CLC can reasonably obtain access to the point of demarcation on the customer's premises, but the CLC shall not be required to build out facilities beyond such 300 feet." *See* D.95-07-054.

With respect to broadband services, TWC is not aware of a legal obligation to provide service to any area within California upon request for service.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: General Vice President Network Expansion and OSP Design
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 35:

Please provide Your five-year forecasted capital investment in California by county.

Response to Question 35:

TWC objects to this request on the grounds that the request is vague and ambiguous; further, the request seeks the production of documents not in existence.

Subject to the foregoing objections, TWC responds as follows:

TWC does not prepare or maintain five-year capital investment plans pertaining to California or specific to counties in California. Further, if TWC completes the merger as anticipated, any future capital investment in California will be determined by Comcast.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: General Vice President Network Expansion and OSP Design
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 36:

Will Your existing build-out plans be affected by the planned merger? If yes, what considerations are involved? Please state specifically how Your build-out plans will be affected by the planned merger.

Response to Question 36:

TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning build-out plans outside of California, TWC further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing objections, TWC responds as follows:

If TWC completes the merger as anticipated, any future build-out plans will be determined by Comcast. Until such time as the merger is consummated, TWC will continue to build out facilities in line with the policy described in Question 33.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: General Vice President Network Expansion and OSP Design
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 37:

Are there any build-out projects for which further action would be dependent on the merger happening? If yes, how will the timelines for these projects be set?

Response to Question 37:

TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning build-out plans outside of California, TWC further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing objections, TWC responds as follows:

No, we have no current build out plans that are dependent on the merger happening. If TWC completes the merger as anticipated, any future build-out plans will be determined by Comcast.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 38:

Please identify any and all backhaul services You offer in California, including:

a. Type of service;
b. Description;
c. Speeds;
d. Price;
e. Terms and Conditions;
f. Capacity utilized; and
g. Capacity available.

Response to Question 38:

a. TWC offers an Ethernet-based Cell Tower Backhaul (CTBH) service to backhaul traffic from a mobile operator cell site to their MTSO.

b. Ethernet over fiber transport service that provides backhaul for mobile data and voice traffic from a cell site to a MTSO (handoff location to the mobile provider) in a metro market.

c. Speeds vary from 10 Mbps to 1 Gbps.

d. Prices are negotiated on a customer by customer basis.

e. Terms and conditions are negotiated on a customer by customer basis.

f. CTBH service is delivered over a dedicated fiber connection from the cell site to a TWCBS Hub site, and the service is delivered over a shared connection from the Hub site to the MTSO. Based on the speed purchased by the customer and their level of use of the service the capacity utilized on the dedicated fiber connection and the shared connection from the Hub site to the MTSO would vary.

g. Capacity varies based on speed purchased by the customers and their utilization of the service.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: General Vice President Network Expansion and OSP Design
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 39:

Please provide a map of the location of Your backhaul cable/fiber in California.

Response to Question 39:

Please see Exhibit 5, Bates # 003374. Exhibit 5 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 40:

How many customers do You currently provide backhaul services to in California?

Response to Question 40:

TWC has [redacted] cell tower backhaul customers with services in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 41:

Please identify the entities/customer names that obtain backhaul services from Time Warner Cable in California.

Response to Question 41:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. TWC further objects to this request on the ground that the request seeks the production of confidential information concerning TWC's customers which is protected by numerous privacy laws, and which may not be disclosed without prior notice and/or consent.

Subject to the foregoing objections, TWC responds as follows:

The following service providers are TWC cell tower backhaul customers: [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 42:

Please identify all of Your competitors for backhaul services in California and types of services they offer.

Response to Question 42:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. TWC further objects on the ground that the request seeks the production of information not in TWC's possession or control.

Subject to the foregoing objections, TWC responds as follows:

TWC does not maintain a comprehensive list of all of the company's competitors for backhaul services. However, the company is generally aware that the following non-exhaustive list of key competitors also provide backhaul services in California:

- AT&T
- Verizon Business
- Zayo
- Edison Carrier Solutions
- Wilcon (formerly Freedom Fiber)
- Sunesys

These competitors provide a range of backhaul services (that vary by metro market and location), using transport technologies like IP, Ethernet, Wavelengths, SONET/TDM and dark fiber.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 43:

Identify the number of cell sites in California that You provide cellular backhaul services to.

Response to Question 43:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

The total number of cell sites in California is [redacted] (measured by towers, unique addresses).

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 44:

Does Time Warner Cable obtain backhaul services from other providers in California?

Response to Question 44:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

Subject to TWC's understanding of the term "backhaul services," TWC does not obtain backhaul services from other providers in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 45:

Identify the entity name(s) from which Time Warner Cable obtains backhaul services.

Response to Question 45:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

Question 45 is not applicable because TWC does not obtain backhaul services from other providers in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Counsel
Title: N/A
Employer: N/A
Date of Request: August 27, 2014

Question 46:

Please provide all contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to, Netflix, Amazon, and Hulu. Please include all appendices and attachments to the agreements.

Response to Question 46:

TWC objects on the ground that this request is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects to this request on the ground that the request is vague, ambiguous, unduly burdensome and overbroad.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Counsel
Title: N/A
Employer: N/A
Date of Request: August 27, 2014

Question 47:

Please provide all contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to Level 3, AT&T, AT&T Wireless, Verizon, Verizon Wireless, and Cogent. Please include all appendices and attachments to the agreements.

Response to Question 47:

TWC objects on the ground that this request is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects to this request on the ground that the request is vague, ambiguous, unduly burdensome and overbroad.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 48:

Please identify any and all wholesale services You currently provide to third parties, including:

a. Name of product/service;
b. Description;
c. Speeds, where applicable;
d. Price; and
e. Number of subscribers per product/service.

Response to Question 48:

a. Products/Services:
   — Carrier Access Services:
      Carrier Ethernet Last Mile Access
      Carrier Ethernet Transport
   — Value Added Reseller Services (VAR)
      Business Class Phone for VAR
      Shared Internet Access for VAR
      Dedicated Internet Access for VAR

b. Description:
   — Carrier Access Services
      Carrier Ethernet Last Mile Access: a MEF-compliant point to point Ethernet Private Line (EPL) from External Network to Network Interface (ENNI) to User Network Interface (UNI) using Operator Virtual Connection (OVC)
      Carrier Ethernet Transport: a MEF-compliant Point to Point EPL from ENNI to ENNI between TWC POP locations using OVC
   — VAR Services
      Business Class Phone (BCP): a business-centric digital phone service that replaces POTS lines; service leverages Internet Protocol (IP) technology to deliver data packets of voice signals over TWC's high-capacity fiber-coaxial network

Shared Internet Access (SIA): an asymmetrical internet access delivered over TWC's high-capacity fiber-coaxial network
Dedicated Internet Access (DIA): a symmetrical, dedicated Internet access over fibe

c. Speeds:
   — SIA: speed tiers ranging from 5x512 Mbps to 300x20 Mbps
   — DIA: speeds ranging from 3Mbps to 10Gbps

d. Price:

— Below is the standard list TWC pricing; standard list pricing is subject to volume, or individual, case-by-case negotiated discounts.

E-Access Metro (On Net)

List Price				
Years	1	2	3	5
MB				
5	$ 460	$ 391	$ 340	$ 316
10	$ 570	$ 489	$ 425	$ 395
20	$ 750	$ 645	$ 561	$ 522
50	$ 820	$ 709	$ 616	$ 573
100	$ 1,050	$ 904	$ 786	$ 731
200	$ 1,410	$ 1,222	$ 1,063	$ 988
500	$ 1,830	$ 1,588	$ 1,381	$ 1,285
1000	$ 2,450	$ 2,125	$ 1,848	$ 1,719
10G	ICB	ICB	ICB	ICB

Term	Installation
1 Year	$1000
2 Year & 3 Year	$500
5 Year	Waived

E-Access Wide-Area (On Net)

List Price				
Years	1	2	3	5
MB				
5	$ 520	$ 450	$ 391	$ 364
10	$ 650	$ 562	$ 489	$ 455
20	$ 860	$ 742	$ 645	$ 600
50	$ 940	$ 815	$ 709	$ 659
100	$ 1,200	$ 1,040	$ 904	$ 841
200	$ 1,620	$ 1,405	$ 1,222	$ 1,136
500	$ 2,100	$ 1,827	$ 1,588	$ 1,477
1000	$ 2,820	$ 2,444	$ 2,125	$ 1,976
10G	ICB	ICB	ICB	ICB

NNI Port	Monthly	Installation
< GigE	$500	$500
GigE	$1000	$1000
10G	$2500	$2500

List Price				
Years	1	2	3	5
MB				
50	$ 865	$ 750	$ 653	ICB
100	$ 1,100	$ 957	$ 833	ICB
200	$ 1,490	$ 1,294	$ 1,125	ICB
500	$ 1,720	$ 1,495	$ 1,300	ICB
1000	$ 2,540	$ 2,208	$ 1,920	ICB
10G	ICB	ICB	ICB	ICB

E-Access Metro (Near Net)

List Price				
Years	1	2	3	5
MB				
5	ICB	ICB	ICB	ICB
10	ICB	ICB	$ 585	$ 465
20	ICB	ICB	$ 660	$ 614
50	ICB	$834	$725	$674
100	ICB	$1,064	$925	$860
200	$1,650	$1,438	$1,250	$1,163
500	$2,150	$1,869	$1,625	$1,511
1000	$3,175	$2,760	$2,400	$2,232
10G	ICB	ICB	ICB	ICB

E-Access Wide-Area (Near Net)

List Price				
Years	1	2	3	5
MB				
5	ICB	ICB	ICB	ICB
10	ICB	ICB	$585	$535
20	ICB	$873	$759	$706
50	ICB	$959	$834	$775
100	$1,405	$1,223	$1,064	$989
200	$1,900	$1,653	$1,438	$1,337
500	$2,470	$2,149	$1,869	$1,738
1000	$3,650	$3,174	$2,760	$2,567
10G	ICB	ICB	ICB	ICB

E-Transport Wide-Area (On Net)

List Price				
Years	1	2	3	5
MB				
50	$ 775	$ 675	$ 587	ICB
100	$ 990	$ 862	$ 749	ICB
200	$ 1,340	$ 1,164	$ 1,013	ICB
500	$ 1,545	$ 1,346	$ 1,170	ICB
1000	$ 2,285	$ 1,987	$ 1,728	ICB
10G	ICB	ICB	ICB	ICB

— Below is the standard list TWC BCP VAR pricing; standard list pricing is subject to volume, or individual case discounts.

Phone (BCP Services) - Unlimited Local and LD				
	MTM	1 Year	2 Year	3 Year
BCP Stand Alone	$40.95	$39.15	$37.36	$35.56
BCP with SIA	$35.95	$34.15	$32.36	$30.56

Additional Phone Charges	MRC	Notes
Federal Subscriber Line Charge (FSLC)		State and Federal government end customers are exempt
Single Line	$6.50 / TN (all lines)	
Multi-Line	$7.50 / TN (all lines)	
Voice Mail	$5.00 / TN	Optional Service
Remote Call Forward	$13.95 / TN	Optional Service*

*Applied per ported TN

— Below is standard SIA for VAR list TWC pricing; standard list pricing is subject to volume, or individual case discounts

Business Internet Rate Table				
	MTM	1 Year	2 Year	3 Year
7 x 768	$69.95	$66.45	$62.96	$59.46
10 x 1	$89.95	$85.45	$80.96	$76.46
15 x 2	$189.95	$180.45	$170.96	$161.46
15 x 2	N/A	N/A	N/A	$110.00**
35 x 5	$229.95	$218.45	$206.96	$195.46
50 x 5	$259.95	$246.95	$233.96	$220.96
75 x 5*	$299.95	$284.95	$269.96	$254.96
100 x 5*	$359.95	$341.95	$323.96	$305.96

* Tiers only Available in LA Market

**Only available 3+ year term and to customers that have more than $200,000 in aggregate monthly fees. Not valid with any other % discount.

$100 Install Charge Per Circuit. On-net buildings only. Total construction costs must be charged for any opportunity that requires them.

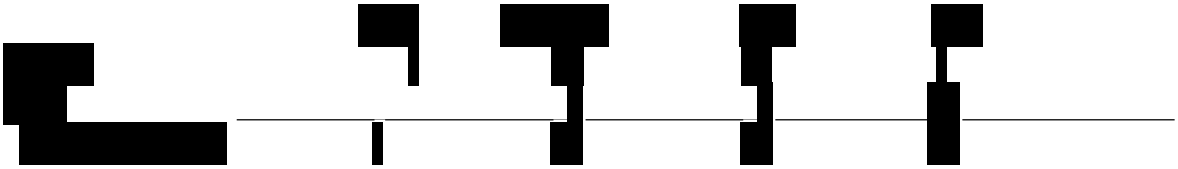
Aggregate Monthly Fees	Service Discount %
Level 1 - Less Than $60,000	Basic Discount
Level 2 - $60,001 to $90,000	10% Off Standard Monthly Fee
Level 3 - $90,001 to $130,000	12% Off Standard Monthly Fee
Level 4 - $130,001 to $170,000	15% Off Standard Monthly Fee
Level 5 - $170,001 to $200,000	20% Off Standard Monthly Fee
Level 6 - More Than $200,000	15 x 2 available for 3+ year term for $110.00

STATIC IP PRICING	MRC
1 Static IP	$20.00
Block of 5	$35.00
*Block of 13	$50.00
*Block of 29	$80.00
*Block of 61	$100.00
*Block of 125	$150.00
*Block of 253	$200.00
> *253	ICB
* IP Justification Form Required	

— Standard SIA for VAR list TWC pricing (cont'd)

WHOLESALE DIA						
	1 Year	2 Year	3 Year	4 Year	5 year	7 year
	MRC	MRC	MRC	MRC	MRC	MRC
5 Mbps	$580	$520	$470	$425	$385	$345
10 Mbps	$840	$755	$680	$610	$550	$495
20 Mbps	$1,315	$1,185	$1,065	$960	$865	$780
30 Mbps	$1,520	$1,370	$1,235	$1,110	$1,000	$900
40 Mbps	$1,735	$1,560	$1,405	$1,265	$1,140	$1,025
50 Mbps	$1,840	$1,655	$1,490	$1,340	$1,205	$1,085
60 Mbps	$1,945	$1,750	$1,575	$1,420	$1,280	$1,150
70 Mbps	$2,050	$1,845	$1,660	$1,495	$1,345	$1,210
80 Mbps	$2,155	$1,940	$1,745	$1,570	$1,415	$1,275
90 Mbps	$2,260	$2,035	$1,830	$1,645	$1,480	$1,330
100 Mbps	$2,365	$2,130	$1,915	$1,725	$1,555	$1,400
200 Mbps	$3,150	$2,835	$2,550	$2,295	$2,065	$1,860
300 Mbps	$3,670	$3,305	$2,975	$2,680	$2,410	$2,170
400 Mbps	$4,200	$3,780	$3,400	$3,060	$2,755	$2,480
500 Mbps	$4,720	$4,250	$3,825	$3,445	$3,100	$2,790
600 Mbps	$5,245	$4,720	$4,250	$3,825	$3,445	$3,100
700 Mbps	$5,770	$5,195	$4,675	$4,210	$3,790	$3,410
800 Mbps	$6,295	$5,665	$5,100	$4,590	$4,130	$3,715
900 Mbps	$7,345	$6,610	$5,950	$5,355	$4,820	$4,340
1 Gbps	$8,395	$7,555	$6,800	$6,120	$5,510	$4,960
ICB Special Pricing Desk						
2 Gbps	$14,690	$13,220	$11,900	$10,710	$9,640	$8,675
5 Gbps	$31,485	$28,335	$25,500	$22,950	$20,655	$18,590
10 Gbps	$36,730	$33,055	$29,750	$26,775	$24,100	$21,690

e. The number of TWC wholesale subscribers with a billing address in California is presented below:



This data is current as of August 2014.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 49:

Please identify all of Your competitors in the wholesale services in California.

Response to Question 49:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. TWC further objects on the grounds that the request seeks the production of information not in TWC's possession or control.

TWC does not maintain a comprehensive list of all of the company's competitors for wholesale services. However, the company is generally aware that the following, non-exhaustive list of key competitors also provide wholesale services in California:

- AT&T
- Verizon
- Level 3
- TW Telecom
- Windstream
- XO Communications
- Zayo Group
- Edison Carrier Solutions
- Wilcon (formerly Freedom Fiber)
- Sunesys
- Cogent
- MegaPath
- EarthLink
- Global Capacity/MegaPath
- Nitel
- Sprint
- TelePacific

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Christian Lee
Title: Senior Vice President, Mergers & Acquisitions, Investments
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 50:

Provide full details on Your integration plans with Joint Applicants.

a. How will Joint Applicants facilities be integrated with Time Warner Cable facilities?
b. How will Joint Applicants operations be integrated with Time Warner Cable operations?

Response to Question 50:

TWC objects to this request on the grounds that the request seeks the production of information that is not in TWC's possession.

Subject to the foregoing, TWC responds:

If the merger closes as planned, TWC will be acquired by Comcast. The integration plans post-closing are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 50.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Christian Lee
Title: Senior Vice President, Mergers & Acquisitions, Investments
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 51:

How will these integration plans affect Your business operationally?

Response to Question 51:

TWC objects to this request on the grounds that the request seeks the production of information that is not in TWC's possession.

Subject to the foregoing, TWC responds:

If the merger closes as planned, TWC will be acquired by Comcast. The integration plans post-closing are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 50.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Christian Lee
Title: Senior Vice President, Mergers & Acquisitions, Investments
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 52:

Please provide all specific benefits You claim will result from the proposed merger for California customers? Please provide justification for Your claims.

Response to Question 52:

Please see the Application on file with the CPUC in docket A.14-04-013, which describes the public interest benefits of the transaction for California customers. Further, the Public Interest Statement on file with the FCC describes other public interest benefits of the merger.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Neil Dozier; Mark Fitzpatrick
Titles: Corporate Division Vice President, Management Reporting & Programming; Corporate Senior Vice President, Chief Financial Officer, Residential Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 53:

Please provide Time Warner Cable's revenue in California for the years 2011, 2012 and 2013, and projections for 2014. Also provide annual revenues for these same periods for the following categories:

a. Residential: video, high-speed internet, and Voice Services

b. Business: video, high-speed internet, and Voice Services

c. Enterprise Ethernet Services

d. Wholesale IP Services

e. Carrier Backhaul Services

f. Advertising

g. Other (Describe)

Response to Question 53:

TWC objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. TWC further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See the spreadsheet attached as Exhibit 6, Bates # 003375. Please note that Exhibit 6 contains confidential information.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Neil Dozier
Title: Corporate Division Vice President, Management Reporting & Programming
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 54:

Please provide Time Warner Cable's operating costs and expenses in California for the years 2011, 2012 and 2013, and projections for 2014. Also show revenues for the following categories:

a. Residential: video, high-speed Internet, and Voice Services

b. Business: video, high-speed Internet, and Voice Services

c. Enterprise Ethernet Services

d. Wholesale IP Services

e. Carrier Backhaul Services

f. Advertising

g. Other (Describe)

Response to Question 54:

TWC objects on the ground that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. TWC objects to this request on the ground that the request is unduly burdensome and overbroad, and it requests information not in TWC's possession or control. To the extent the request seeks revenues for these categories, it is duplicative of Question 53.

Subject to the foregoing, TWC responds as follows:

In a discussion with ORA Counsel Brown and ORA Staff on September 5, 2014, TWC counsel explained that TWC does not record operating costs and expenses separately for California. During such call, ORA counsel agreed to accept national cost and expense figures.

Below are TWC's costs and expenses for 2011, 2012, and 2013. TWC has also attached as Exhibit 7, Bates # 003376, a document showing projections for 2014. Exhibit 7 is confidential in its entirety.

TIME WARNER CABLE INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Year Ended December 31,		
	2013	2012	2011
	(in millions, except per share data)		
Revenue	$ 22,120	$ 21,386	$ 19,675
Costs and expenses:			
Cost of revenue[a]	10,342	9,942	9,138
Selling, general and administrative[a]	3,798	3,620	3,311
Depreciation	3,155	3,154	2,994
Amortization	126	110	33
Merger-related and restructuring costs	119	115	70
Asset impairments	—	—	60
Total costs and expenses	17,540	16,941	15,606
Operating Income	4,580	4,445	4,069
Interest expense, net	(1,552)	(1,606)	(1,518)
Other income (expense), net	11	497	(89)
Income before income taxes	3,039	3,336	2,462
Income tax provision	(1,085)	(1,177)	(795)
Net income	1,954	2,159	1,667
Less: Net income attributable to noncontrolling interests	—	(4)	(2)
Net income attributable to TWC shareholders	$ 1,954	$ 2,155	$ 1,665

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Neil Dozier
Title: Corporate Division Vice President, Management Reporting & Programming
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 55:

Please provide anticipated merger-related and restructuring impacts on Time Warner Cable's financial structure in California, including details on residential and business cable communications services, i.e., video, high-speed Internet and Voice Services.

Response to Question 55:

TWC objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. TWC further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. Finally, TWC also objects on the grounds that the request seeks information about "anticipated" facts or circumstances which may arise in the future, and which would require the company to create a document not in existence.

Subject to the foregoing objections, TWC responds as follows:

If the merger closes as planned, TWC will be acquired by Comcast. The integration plans post-closing are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 55.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay
Title: Group Vice President & GM, Digital Phone
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 56:

What is the current participation level of residential customers in Lifeline in California with respect to services offered by Time Warner Cable?

Response to Question 56:

Currently Time Warner Cable does not offer Lifeline service and therefore has no subscribers in this category.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Nicholas Smolansky
Title: Vice President & Chief Counsel, M&A and Investments
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 57:

Please provide a detailed list of all mergers and acquisitions of Time Warner Cable of companies operating in California from 1990 to 2013.

Response to Question 57:

TWC objects to this request on the ground that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the ground that the request exceeds the established scope of the docket. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, TWC responds as follows:

TWC has not engaged in any mergers or acquisitions involving voice or broadband service providers located in California within the last five years with a purchase price in excess of $250,000.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 58:

Have You previously offered service to customers in the service territories of any of the Joint Applicants in this application?[1]

Response to Question 58:

Yes. TWC has offered business service in the service territories of the other Joint Applicants such as Ethernet and Cell Backhaul services.

---

[1] In a telephone conversation on September 5, 2014, ORA clarified that this question is limited to services offered in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 59:

If the answer to Question #58 is yes, and You do not currently offer service, state all the reasons why You ceased offering service there and provide the details of the transfer transaction.

Response to Question 59:

Not applicable. We currently offer business services in those territories such as Ethernet and Cell Backhaul services.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 60:

If the answer to Question #58 is no, state all reasons why You have not offered service Joint Applicants territories.

Response to Question 60:

Not applicable. See response to Question 58. For an explanation of TWC's investment decision process, see response to Question 33.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: George Gomez-Quintero
Title: Corporate Vice President, New Business Finance
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 61:

Provide the total number of commercial buildings "lit" by Time Warner Cable – i.e., where Time Warner Cable-owned fiber optic cable facilities are in place – in Time Warner Cable's California operating areas. For purposes of this request, "owned" facilities also includes Indefeasible Rights of Use ("IRUs") issued to Time Warner Cable.

Response to Question 61:

As of August 29, 2014, there are a total of [redacted] commercial buildings "lit" by TWC in TWC's California operating areas.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 62:

Provide the number of Time Warner Cable-owned "lit" buildings in Time Warner Cable's California operating areas that are also served by fiber optic facilities owned by Comcast, Bright House Networks, and Charter. For purposes of this request, "owned" facilities also include facilities under the control of Time Warner Cable, Comcast, Bright House Networks, or Charter via IRUs.

Response to Question 62:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the ground that the request seeks the production of information not in TWC's possession or control. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

We do not know the answer to this question and have no way to determine the answer. There is no master list available. However, to the extent there is any overlap, we suspect it is extremely small and immaterial.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 63:

Provide the number of Time Warner Cable-owned "lit" buildings in Time Warner Cable's California operating areas at which fiber optic facilities owned by any other non-ILEC service provider other than Comcast, Bright House Networks, and Charter. For purposes of this request, "owned" facilities also includes IRUs.

Response to Question 63:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the ground that the request seeks the production of information not in TWC's possession or control. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

We do not know the answer to this question and have no way to determine the answer. There is no master list available. However, to the extent there is any overlap, we suspect it is extremely small and immaterial.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 64:

Indicate the total number of locations in Time Warner Cable's California operating areas at which at least one service provider other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Response to Question 64:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the ground that the request seeks the production of information not in TWC's possession or control, and is not normally generated or retained by TWC. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

We do not know the answer to this question and have no way to determine the answer.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 65:

Indicate the total number of locations in Time Warner Cable's California operating areas at which at least two different service providers other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Response to Question 65:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the ground that the request seeks the production of information not in TWC's possession or control and is not normally generated or retained by TWC. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

We do not know the answer to this question and have no way to determine the answer.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Counsel
Title: N/A
Employer: N/A
Date of Request: August 27, 2014

Question 66:

Please identify all operating areas in which Time Warner Cable offers cable television service in California in which Time Warner Cable provides broadcast television stations on an encrypted basis.

Response to Question 66:

TWC objects to this request on the grounds that it exceeds the established scope of the proceeding to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. TWC further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Counsel
Title: N/A
Employer: N/A
Date of Request: August 27, 2014

Question 67:

To the extent that any of the other merging entities currently does not encrypt broadcast television stations, is it Time Warner Cable's intention to convert those systems to encryption of broadcast television stations following the merger?

Response to Question 67:

TWC objects to this request on the grounds that it exceeds the established scope of the proceeding to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. TWC further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 68:

Using the attached Broadband Services spreadsheet template, please identify each Census Block where Time Warner Cable business Ethernet services are currently available in California. Provide information including the service or brand names for business services offered by Time Warner Cable, including those that are substantially equivalent to the following Comcast service or brand names: Comcast Ethernet Virtual Private Line Service ("EVPL"), Comcast Ethernet Network Service, Comcast Business Ethernet for Branch Offices, and Comcast Ethernet Private Line Service.

Response to Question 68:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request seeks the production of census block information that is not in TWC's possession, and is not normally generated or retained by TWC. TWC also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC provides business Ethernet services anywhere it offers its core services.

As described in greater detail below, TWC Business Class ("TWCBC") Ethernet Services offers MEF defined E-Line and E-LAN service types with the following service configurations and brand names: Ethernet Private Line ("EPL"), Ethernet Virtual Private Line ("EVPL"), and Ethernet Private LAN ("EP-LAN").

<u>EPL – Ethernet Private Line</u>

- EPL is a private point-to-point network service delivered over an Ethernet platform.
- With EPL, a point-to-point EVC connects the two dedicated User Network Interface ("UNI") port endpoints enabling the transfer of Ethernet service frames between them.

<u>EVPL – Ethernet Virtual Private Line</u>

- EVPL is a private point-to-multipoint network service delivered via a multiplexed port.

- This provides a hub-and-spoke configuration where multiple point-to-point connections are homed to a single hub or aggregation point.
- This TWC Ethernet service provides the ability for users to select specific bandwidths for each location.

E-LAN Services (EP-LAN)

- EP-LAN (Ethernet Private Local Area Network) service is a carrier-grade Layer-2 Multipoint-to-Multipoint transport service that allows businesses to attach their internal LAN, by Router or Ethernet Switch, directly to a UNI provided by TWC.
- A common Ethernet Virtual Connection ("EVC") is used to interconnect each UNI participating in the E-LAN or Multipoint-to-Multipoint service. The EVC will allow each location to transfer Ethernet Frames between each of the locations in any-to-any fashion.

TWCBC Ethernet Services provide standard bandwidth tiers ranging from 512Kbps to 1Gbps. *See* Figure 1 below. Ethernet Services are delivered over the TWC fiber, hybrid-fiber-coax ("HFC") network[2], and Type II circuits.

Figure 1. Supported Bandwidth

Ethernet Services Standard Bandwidth Options	
512kbps	90Mbps
1.5Mbps	100Mbps
2Mbps[3]	200Mbps
5Mbps	300Mbps
10Mbps	400Mbps
20Mbps	500Mbps
30Mbps	600Mbps
40Mbps	700Mbps
50Mbps	800Mbps
60Mbps	900Mbps
70Mbps	1Gbps
80Mbps	

[2] EP-LAN configuration not supported over hybrid-fiber-coax (HFC) network.

[3] 2Mbps and below tiers are not available for E-LAN as Time Warner Cable does not support E-LAN over hybrid-fiber-coax (HFC) network.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 69:

Indicate which of the business Ethernet services identified at No. 68 are also being offered in California, perhaps under different descriptions or brand names, by any of the merging parties. Provide the name and description of each such service, and identify to which Time Warner Cable service the other parties' services is equivalent to.

Response to Question 69:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC also objects on the grounds that the information requested is not in TWC's possession or control. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

Below is a description of the business Ethernet services identified at No. 68 that are offered by other merging parties, followed by the equivalent service provided by TWC (the "TWC Equivalent Product"). The information in this response was derived from Comcast's and Charter's respective websites and other publicly available data.

1. <u>Comcast Ethernet Service</u>

   Comcast Ethernet Private Line service provides:

   - Scalable point-to-point configurations delivering high-capacity fiber connections between two sites.

   - Dedicated bandwidth configurable from 1Mbps to 10Gbps.

   The TWC Equivalent Product is EPL - Ethernet Private Line Service.

Comcast Ethernet Virtual Private Line:

- Provides an Ethernet Virtual Connection between multiple customer locations, and is an ideal replacement for frame relay or ATM services.

- Supports Service Multiplexed User Network Interfaces, which enables a single physical connection to Customer Premise Equipment for multiple virtual connections.

The TWC Equivalent Product is EVPL - Ethernet Private Line Service.

Ethernet Network Service:

- Enables customers to connect physically distributed locations across a Metropolitan Area Network ("MAN") as if they are on the same Local Area Network.

- Provides Virtual Local Area Network ("VLAN") transparency and enables customers to implement their own VLANs without coordination with Comcast.

- Can seamlessly network with 10Mbps, 100Mbps, 1Gbps, or 10Gbps Ethernet User-to-Network Interfaces that are Certified MEF Compliant.

TWC Equivalent Product is EP-LAN (Ethernet Private Local Area Network).

2. Charter Business Optical Ethernet

Charter Business Optical Ethernet service offers reliable, ultra-fast Layer 2 WAN connectivity with speeds ranging from 10 Mbps to 10 Gbps, in 10 Mbps increments.

"Charter Ethernet Private Line" is a point-to-point Ethernet Private Line configuration that offers a committed information rate connection to connect both metro and long haul optical locations.

The TWC Equivalent Product is EPL - Ethernet Private Line Service.

"Ethernet Virtual Private Line (Point to Multi-point)" is a point-to-multipoint connection to link a central headquarter or data center to multiple offices.

The TWC Equivalent Product is EVPL- Ethernet Private Line Service.

"Ethernet Private LAN (Multipoint) With Fiber Endpoint" is a multipoint-to-multipoint Ethernet Private LAN service that offers the ultimate in flexibility, connecting all locations to create a secure, shared-data network.

The TWC Equivalent Product is EP-LAN (Ethernet Private Local Area Network).

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 70:

With respect to each of the services identified at No. 68 and 69 and for each Census Block where the service is currently available in California, identify all of Your current competitors offering similar services at each such location, including the parties to the proposed merger and all other providers.

Response to Question 70:

TWC objects to this request on the grounds that the information requested is not in TWC's possession or control. TWC further objects on the grounds that the request seeks the production of census block information that is not in TWC's possession, and is not normally generated or retained by TWC. TWC also objects to this request on the ground that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC's current competitors for Business Ethernet services across service areas in California are listed below. This list is not exhaustive. In addition, competitor service availability is not publicly available at a census block level.

- AT&T
- Cogent
- Edison Carrier Solutions
- Level 3
- Sunesys
- TW Telecom
- Verizon
- Wilcon (formerly "Freedom Fiber")
- Windstream
- XO Communications
- Zayo Group

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 71:

With respect to each of the services identified at No. 68 and 69, does Time Warner Cable offer such services in situations where a customer's geographic coverage requirements extend beyond current Time Warner Cable operating areas? If yes, please describe in detail the nature of the relationship between Time Warner Cable and any connecting provider involved in the furnishing of the service to such customer, including the manner in which such multi-provider services are priced, the entity that acts as the prime contact for the customer, the process for coordination of installation and ongoing maintenance of the service, revenue-sharing or revenue-splitting arrangements between Time Warner Cable and such other provider(s). If such multi-provider arrangements are documented in formal written agreements, provide copies of all such agreements, including all appendices and attachments.[4]

Response to Question 71:

TWC objects on the ground that this request is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC offers Ethernet services to customers whose geographic coverage requirements extend beyond TWC's current operating areas. In areas outside of TWC's current operating areas, TWC uses Type II transport circuits from other service providers. In such cases, TWC is the prime customer contact, owns the customer relationship, and serves the customer as described below.

- For locations or addresses where TWC does not have facilities, TWC reaches out to other service providers (each a "Type II Vendor") with whom it has existing arrangements and requests quotes to purchase transport service from those locations or addresses to the

---

[4] In an email dated September 8, 2014, ORA clarified that a multi-provider arrangement is defined as "An arrangement where Time Warner Cable is collaborating or cooperating with another provider of Ethernet services to deliver a service to a business customer requiring service to points within or outside the service area of Time Warner Cable."

TWC Network to Network Interface ("NNI"). The NNIs are located where both TWC and the Type II Vendor have network (e.g., carrier hotels, meet-me-rooms, POPs, etc.).

- TWC then builds a solution that spans all of the customer locations and addresses and bills the customer for the entire service. On a monthly basis, TWC pays the Type II Vendor for all the transport circuits it has purchased as part of the solution.

- TWC is responsible for the delivery of the entire solution for the customer. For example, TWC personnel perform the installation for TWC locations and addresses, coordinates with the Type II Vendor operational teams for installation and maintenance of locations outside of TWC service areas, and handles the customer billing and care inquiries.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 72:
With respect to the multi-provider arrangements referenced at No. 71 above, identify all providers with which such arrangements have been established. Indicate whether and if so which of the merging parties Time Warner Cable currently provides multi-provider business Ethernet, backhaul, or other telecommunications services.[5]

Response to Question 72:
TWC has agreements with the following Type II Vendors nationally:

[redacted]

[5] In an email dated September 8, 2014, ORA clarified that Question 72 should read: "With respect to the multi-provider arrangements referenced at No. 71 above, identify all providers, e.g., Level 3, with which such arrangements have been established. Indicate ~~whether and if so~~which of the merging parties Time Warner Cable currently has entered into a ~~provides~~ multi-provider arrangement with ~~business~~ to deliver Ethernet, backhaul, or other telecommunications services."

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

To: Office of Ratepayer Advocates
Prepared By: Gregory King
Title: Senior Vice President and Chief Products & Strategy Officer, Commercial Services
Employer: Time Warner Cable
Date of Request: August 27, 2014

Question 73:

With respect to the multi-provider arrangements of the type referenced at No. 71 above, identify all providers with which such arrangements have been established by any of the other merging entities, and identify the providers with which such entities have entered into such multiprovider arrangements.

Response to Question 73:

In an email dated September 8, 2014, ORA stated that "[t] here is no need for Question No. 73 because it is asking about multi-provider arrangements that the other merging entities have entered into. Since there is a Data Request (Question No. 72) for each merging entity, there is no need to answer Question No. 73."

REDACTED

A.14-04-013 / A.14-06-012

Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.PHH001

EXHIBIT 3

Residential Broadband Products/Services

(a) Product/service name	(b) Description	(c) Speed Tier	(d) Price	(f) Total number of subscribers for each product/service offered
June 2014				
Everyday Low Price Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 2 Mbps Down Up to 1 Mbps Up	$14 99	[redacted]
Basic Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 3 Mbps Down Up to 1 Mbps Up	$47 99	[redacted]
Standard Internet	Internet offering includes 10 TWC email accounts, 2GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 15 Mbps Down Up to 1 Mbps Up	$57 99	[redacted]
Turbo Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 20 Mbps Down Up to 2 Mbps Up	$67 99	[redacted]
Extreme Internet	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 30 Mbps Down Up to 5 Mbps Up	$77 99	[redacted]
Ultimate 100	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 100 Mbps Down Up to 5 Mbps Up	$107 99	[redacted]
EarthLink Lite (TWC)	Internet access only	Up to 1 Mbps Down Up to 1 Mbps Up	$37 99	[redacted]
EarthLink Standard (TWC)	Internet access only	Up to 15 Mbps Down Up to 1 Mbps Up	$57 99	
EarthLink Max (TWC)	Internet access only	Up to 20 Mbps Down Up to 1 Mbps Up	$67 99	
December 2013				
Everyday Low Price Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 2 Mbps Down Up to 1 Mbps Up	$14 99 (Los Angeles) $34 99 (San Diego) $34 99 (Desert Cities) $34 99 (Barstow) $34 99 (El Centro)	[redacted]
Basic Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 3 Mbps Down Up to 1 Mbps Up	$44 99 (Los Angeles) $44 99 (San Diego) $44 99 (Desert Cities) $44 99 (Barstow) $44 99 (El Centro)	[redacted]
Standard Internet	Internet offering includes 10 TWC email accounts, 2GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 15 Mbps Down Up to 1 Mbps Up	$54 99 (Los Angeles) $54 99 (San Diego) $54 99 (Desert Cities) $54 99 (Barstow) $54 99 (El Centro)	[redacted]
Turbo Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 20 Mbps Down Up to 2 Mbps Up	$64 99 (Los Angeles) $64 99 (San Diego) $64 99 (Desert Cities) $64 99 (Barstow) $64 99 (El Centro)	[redacted]
Extreme Internet	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 30 Mbps Down Up to 5 Mbps Up	$74 99 (Los Angeles) $74 99 (San Diego) $74 99 (Desert Cities) $74 99 (Barstow) $74 99 (El Centro)	[redacted]
Ultimate 50	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 50 Mbps Down Up to 5 Mbps Up	$104 99 (Los Angeles) $104 99 (San Diego) $104 99 (Desert Cities) $104 99 (Barstow) $104 99 (El Centro)	[redacted]

EarthLink Lite (TWC)	Internet access only	Up to 1 Mbps Down Up to 1 Mbps Up	$34 99	[redacted]
EarthLink Standard (TWC)	Internet access only	Up to 15 Mbps Down Up to 1 Mbps Up	$54 99	
EarthLink Max (TWC)	Internet access only	Up to 20 Mbps Down Up to 2 Mbps Up	$64 99	
December 2012				
Lite Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 1 Mbps Down Up to 1 Mbps Up	$30 99 (Los Angeles) $23 99 (San Diego) $23 99 (Desert Cities) $30 99 (Barstow) $30 99 (El Centro)	[redacted]
Basic Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 3 Mbps Down Up to 1 Mbps Up	$40 99 (Los Angeles) $35 99 (San Diego) $35 99 (Desert Cities) $31 95 (Barstow) $40 99 (El Centro)	[redacted]
Standard Internet	Internet offering includes 10 TWC email accounts, 2GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 10 Mbps Down Up to 1 Mbps Up	$52 99 (Los Angeles) $52 99 (San Diego) $52 99 (Desert Cities) $46 95 (Barstow) $52 99 (El Centro)	[redacted]
Turbo Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 20 Mbps Down Up to 2 Mbps Up	$72 99 (Los Angeles) $72 99 (San Diego) $72 99 (Desert Cities) $66 95 (Barstow) $72 99 (El Centro)	[redacted]
Extreme Internet	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 30 Mbps Down Up to 5 Mbps Up	$82 99 (Los Angeles) $82 99 (San Diego) $82 99 (Desert Cities)	[redacted]
Ultimate 50	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 50 Mbps Down Up to 5 Mbps Up	$102 99 (Los Angeles) $102 99 (San Diego) $102 99 (Desert Cities)	[redacted]
EarthLink Lite (TWC)	Internet access only	Up to 1 Mbps Down Up to 1 Mbps Up	$30 99	[redacted]
EarthLink Standard (TWC)	Internet access only	Up to 10 Mbps Down Up to 1 Mbps Up	$52 99	
EarthLink Max (TWC)	Internet access only	Up to 20 Mbps Down Up to 2 Mbps Up	$62 99	
December 2011				
Lite Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 768 Kbps Down Up to 128 Kbps Up	$30 99 (Los Angeles) $30 99 (San Diego) $30 99 (Desert Cities) $30 99 (Barstow) $29 99 (El Centro)	[redacted]
Basic Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 3 Mbps Down Up to 512 Kbps Up	$40 99 (Los Angeles) $33 99 (San Diego) $33 99 (Desert Cities) $31 95 (Barstow) $39 99 (El Centro)	[redacted]
Standard Internet	Internet offering includes 10 TWC email accounts, 2GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 10 Mbps Down Up to 1 Mbps Up	$50 99 (Los Angeles) $52 99 (San Diego) $52 99 (Desert Cities) $46 95 (Barstow) $52 99 (El Centro)	[redacted]
Turbo Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 15 Mbps Down Up to 2 Mbps Up	$60 99 (Los Angeles) $65 94 (San Diego) $65 94 (Desert Cities) $59 90 (Barstow) $62 99 (El Centro)	[redacted]
Turbo Plus Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 20 Mbps Down Up to 2 Mbps Up	$70 99 (Los Angeles) $78 89 (San Diego) $78 89 (Desert Cities)	

Extreme Internet	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 30 Mbps Down Up to 5 Mbps Up	$80 99 (Los Angeles)	[redacted]
Wideband	Internet offering includes 30 TWC email accounts, 10GB of TWC email storage space, Internet security software & parental controls, Home WiFi and access to TWC WiFi® Hotspots	Up to 50 Mbps Down Up to 5 Mbps Up	$100 99 (Los Angeles)	[redacted]
EarthLink Lite (TWC)	Internet access only	Up to 768 Kbps Down Up to 128 Kbps Up	$30 99	[redacted]
EarthLink Standard (TWC)	Internet access only	Up to 10 Mbps Down Up to 1 Mbps Up	$50 99	
EarthLink Max (TWC)	Internet access only	Up to 20 Mbps Down Up to 2 Mbps Up	$60 99	
December 2010				
Lite Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 768 Kbps Down Up to 128 Kbps Up	$28 99 (Los Angeles) $28 99 (San Diego) $28 99 (Desert Cities) $29 99 (El Centro)	[redacted]
Basic Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 1 5 Mbps Down Up to 384 Kbps Up	$38 99 (Los Angeles) $32 99 (San Diego) $32 99 (Desert Cities) $39 99 (El Centro)	[redacted]
Standard Internet	Internet offering includes 10 TWC email accounts, 2GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 10 Mbps Down Up to 1 Mbps Up	$48 99 (Los Angeles) $51 95 (San Diego) $51 95 (Desert Cities) $52 99 (El Centro)	[redacted]
Turbo Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 15 Mbps Down Up to 2 Mbps Up	$58 99 (Los Angeles) $61 90 (San Diego) $61 90 (Desert Cities) $62 94 (El Centro)	[redacted]
EarthLink Lite (TWC)	Internet access only	Up to 768 Kbps Down Up to 128 Kbps Up	$28 99	[redacted]
EarthLink Standard (TWC)	Internet access only	Up to 10 Mbps Down Up to 1 Mbps Up	$48 99	
EarthLink Max (TWC)	Internet access only	Up to 15 Mbps Down Up to 2 Mbps Up	$58 99	
December 2009				
Lite Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 768 Kbps Down Up to 128 Kbps Up	$26 95 (Los Angeles) $26 95 (San Diego) $26 95 (Desert Cities) $24 99 (El Centro)	[redacted]
Basic Internet	Internet offering includes 5 TWC email accounts, 100 MB of TWC email storage space, Internet security software & parental controls	Up to 1 5 Mbps Down Up to 384 Kbps Up	$36 95 (Los Angeles) $31 95 (San Diego) $31 95 (Desert Cities) $34 99 (El Centro)	[redacted]
Standard Internet	Internet offering includes 10 TWC email accounts, 2GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 6 Mbps Down Up to 1 Mbps Up	$46 95 (Los Angeles) $46 95 (San Diego) $46 95 (Desert Cities) $49 99 (El Centro)	[redacted]
Turbo Internet	Internet offering includes 25 TWC email accounts, 5GB of TWC email storage space, Internet security software & parental controls and access to TWC WiFi® Hotspots	Up to 15 Mbps Down Up to 2 Mbps Up	$56 95 (Los Angeles) $59 90 (San Diego) $59 90 (Desert Cities) $59 94 (El Centro)	[redacted]
EarthLink Lite (TWC)	Internet access only	Up to 768 Kbps Down Up to 128 Kbps Up	$26 95	[redacted]
EarthLink Standard (TWC)	Internet access only	Up to 6 Mbps Down Up to 1 Mbps Up	$46 95	
EarthLink Max (TWC)	Internet access only	Up to 15 Mbps Down Up to 2 Mbps Up	$56 95	

EXHIBIT 11

Time Warner Cable's Response to ORA Data Request, Set 3

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CC), LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CC), LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851	A. 14-06-012 (Filed June 17, 2014)

TIME WARNER CABLE RESPONSES TO THIRD SET OF DISCOVERY REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

[REDACTED VERSION]

GENERAL OBJECTIONS

1. Time Warner Cable ("TWC") objects to each Question to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the California Public Utilities Commission ("Commission") or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the Commission, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, broadcast cable television, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

2. TWC objects to each Question as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the ground that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to TWC together with any copies.

3. TWC objects to each Question to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to TWC.

4. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are not readily available to TWC.

5. TWC objects to each Question insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these Questions.

6. TWC objects to each Question to the extent that it exceeds the requirements of applicable law, purports to impose upon TWC any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

7. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

8. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

9. TWC objects to each Question to the extent that it seeks the production of information and/or documents that are publicly available or readily accessible to the requesting party(ies).

10. TWC objects to each Question to the extent that it requests documents, materials or information not in the TWC's possession, custody or control.

11. TWC objects to each Data Request to the extent that it requests documents or materials outside the established scope of this proceeding.

12. TWC objects to instruction (e) of the DRs, which states that "[p]rovide the name and title of the person(s) who responded to the question(s) and his or her employer, and verify in each request that all responsive documents, found after a diligent inquiry and search, have been produced." The individuals stated as sponsors for each data request are TWC employees who are knowledgeable about the subject-matter of the data request, but their listing as a sponsor does not constitute a personal verification of the response. Further, TWC generally states that, to the extent responsive documents have been requested, a diligent inquiry and search for responsive documents has been conducted.

Each of the foregoing general objections is incorporated by reference into the following responses.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 1:

Provide Your post-merger plans for network upgrades and enhancements, including but not limited to, any enhancement in broadband speeds to households, small and medium sized businesses. Please reference ORA Data Request No. ORA-A.14-04-013.PHH-001, question 16 and 22, for definitions of small and medium sized businesses.

Response to Question 1:

If the merger closes as planned, TWC will be acquired by Comcast. The post-merger plans are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 1.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 2:

Specify, using maps where required in order to provide a complete and accurate response, whether Your planned upgrades or enhancements noted above are occurring in Your current network area, Comcast network areas, Charter network areas and/or Bright House Networks network area.

Response to Question 2:

If the merger closes as planned, TWC will be acquired by Comcast. The post-merger plans are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 2.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 3:

Provide the existing rules and requirements for Your low income program offered in California, including eligibility requirements.

Response to Question 3:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question is referring to broadband services, TWC does not have a low-income broadband program. To the extent this question is referring to phone services, TWC has not yet launched LifeLine service in California, pending tariff approval and establishing the necessary interface to the California LifeLine Administrator (CLA). Existing rules and requirements will be compliant with General Order 153, Procedures for Administration of The Moore Universal Telephone Service Act (California LifeLine Program) and the rules/regulations as established for New Carrier Interface to the California LifeLine Administrator (CLA).

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 4:

Provide a description of the enrollment process for Your low income program in California, including:

a. All available methods of application submission,

b. Application requirements,

c. Application review procedures, and

d. Anticipated and actual time frames, from first request for application to activation of service.

Response to Question 4:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question is referring to broadband services, TWC does not have a low-income broadband program. To the extent that this question is referring to phone services, TWC has not yet launched LifeLine service in California, pending tariff approval and establishing the necessary interface to the California LifeLine Administrator (CLA). Enrollment processes will be compliant with General Order 153, Procedures for Administration of The Moore Universal Telephone Service Act (California LifeLine Program) and the rules/regulations as established for New Carrier Interface to the California LifeLine Administrator (CLA).

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 5:

For each available sign-up method, list how many California Your low income program customers utilized each method to sign up, including unsuccessful sign up attempts.

Response to Question 5:

Zero. TWC does not offer a low-income broadband service and its LifeLine program is not yet in effect.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 6:

Describe the mechanism whereby eligibility for Your low income program expires, and describe any procedures You undertake to continue providing services to households in California.

Response to Question 6:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question is referring to broadband services, TWC does not have a low-income broadband program. To the extent that this question is referring to phone services, Time Warner Cable has not yet launched LifeLine service in California, pending tariff approval and establishing the necessary interface to the California LifeLine Administrator (CLA). Eligibility expiration and LifeLine recertification will be compliant with General Order 153, Procedures for Administration of The Moore Universal Telephone Service Act (California LifeLine Program) and the rules/regulations as established for New Carrier Interface to the California LifeLine Administrator (CLA).

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 7:

Provide a list and description of services offered through Your low income program in California, including advertised and actual speeds of services offered.

Response to Question 7:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question is referring to broadband services, TWC does not have a low-income broadband program. To the extent that this question is referring to phone services, Time Warner Cable's LifeLine program will be available to all customers who are certified as eligible by the California LifeLine Administrator and subscribing to any voice product in CA in compliance with General Order 153.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 8:

Describe Your assessment of Your low income program's existing shortfalls in California, including enhancements needed.

Response to Question 8:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question is referring to broadband services, TWC does not have a low-income broadband program. To the extent that this question is referring to phone services, it is not applicable with regard to the LifeLine Program, which has not yet launched.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 9:

Provide Your plans to improve or enhance Your low income program in California, reflecting planned changes over the three years following the merger, including:

a. Expansion of eligibility requirements,

b. Equipment improvements,

c. Expansion into wireless modem offerings, and

d. Speed upgrades.

Response to Question 9:

If the merger closes as planned, TWC will be acquired by Comcast. The post-merger plans are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 9.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 10:

Describe how Your low income program outreach plans in California will make new customers aware of the Your low income program, post-merger.

Response to Question 10:

TWC plans to file its proposed outreach plan in compliance with D.14-01-036 with the Commission within the next 30 days. If the merger closes as planned, TWC will be acquired by Comcast. The post-merger plans are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 10.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 11:

Describe post-merger integration plans for customers who are already Comcast customers, Charter customers, or Bright House Networks customers who are also eligible for Your low income program.

Response to Question 11:

If the merger closes as planned, TWC will be acquired by Comcast. The post-merger integration plans are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 11.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 12:

Where Your Broadband Services is available in California, list the total number of households currently eligible for Your low income program.

Response to Question 12:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question is referring to broadband services, TWC does not have a low-income broadband program. To the extent that this question is referring to phone services, TWC estimates that [redacted] households in its service area are currently eligible for the LifeLine benefits.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 13:

Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households currently eligible for Your low income program.

Response to Question 13:

TWC does not have a low-income broadband program. See TWC responses to Questions 3-6 of ORA's first set of data requests, submitted September 11, 2014, for broadband services Census Block data.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 14:

List the anticipated number of households that will be eligible for Your low income program in California, post-merger.

Response to Question 14:

See response to question 12 for the current number of eligible households. If the merger closes as planned, TWC will be acquired by Comcast. TWC cannot accurately or adequately respond to Question 14, as it is unable to forecast the number of eligible households in the Comcast service area post-merger.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 15:

Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block, the anticipated number of households that will be eligible for Your low income program in California by Census Block, post-merger.

Response to Question 15:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent this question refers to broadband services, TWC currently has no low-income broadband program. If the merger closes as planned, TWC will be acquired by Comcast. TWC cannot accurately or adequately respond to Question 15, as it is unable to forecast the number of eligible households in the Comcast service area post-merger.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 16:

List the number of households currently subscribed to Your low income program in California.

Response to Question 16:

Zero.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 17:

Using the attached updated Broadband Services spreadsheet, list the number of households currently subscribed to Your low income program in California by Census Block.

Response to Question 17:

Not applicable. TWC has no low-income broadband program.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 18:

Provide information describing Your yearly and total expenditures for Your low income program operations for years 2010, 2011, 2012, 2013.

Response to Question 18:

Zero, as the LifeLine Program did not exist in prior years.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Donna Kerschner; Jeff Lindsay
Title: Director, Regulatory; Group Vice President & General Manager, Phone Strategy & Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 19:

Provide any cost/benefit analyses made when creating or revising Your low income program eligibility criteria, including any analyses made which project costs of expanding eligibility to include low-income seniors, the disabled, or other groups predominately represented in unserved and underserved areas.

Response to Question 19:

See Exhibit 3- 1, Bates # 0003642–0003652. Please note that Exhibit 3-1 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 20:

Please provide Your definition of "line extension" and explain Your line extension policies.

Supplemental Response to Question 20:

TWC previously responded to Question 20 on September 25, 2014. Below is a supplemental and amended response to Question 20:

TWC objects on the ground that this request is outside the established scope of this proceeding to the extent it seeks information regarding any video/cable services, or any other services outside the scope of this proceeding. TWC also objects to this request on the ground that the request is vague, ambiguous, and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC would define "line extension" as an expansion of its plant beyond existing areas. The term "line extension" is typically defined by local franchise agreements and varies by local franchise authority. Where a line extension does not meet the requirements of the franchise, TWC conducts a rate of return analysis to determine if a specific plant expansion should be executed.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 21:

Using Your definition of line extension as provided in question 20, please identify the total number of line extensions requested in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 21:

TWC objects on the ground that this request is outside the established scope of this proceeding to the extent it seeks information regarding any video/cable services, or any other services outside the scope of this proceeding. TWC further objects to the extent that it seeks the production of information and/or documents that are not readily available to TWC. TWC also objects to this request on the ground that the request is vague, ambiguous, and overbroad.

Subject to the foregoing, TWC responds as follows:

There were [redacted] line extensions requested in California for 2013 and 2014. This information is not available for the years 2010 through 2012.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 22:

Using Your definition of line extension as provided in question 20, please identify the total number of line extensions completed or built-out in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 22:

TWC objects on the ground that this request is outside the established scope of this proceeding to the extent it seeks information regarding any video/cable services, or any other services outside the scope of this proceeding. TWC further objects to the extent that it seeks the production of information and/or documents that are not readily available to TWC. TWC also objects to this request on the ground that the request is vague, ambiguous, and overbroad.

Subject to the foregoing, TWC responds as follows:

The total number of line extensions completed in California for 2013 and 2014 is [redacted]. The balance of [redacted] are still open construction projects. This information is not available for the years 2010 through 2012.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 23:

Using Your definition of line extension as provided in question 20, using the attached updated Broadband Services spreadsheet, list the number of line extensions that You have deployed in California by Census Block for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 23:

TWC objects on the ground that this request is outside the established scope of this proceeding to the extent it seeks information regarding any video/cable services, or any other services outside the scope of this proceeding. TWC further objects to the extent that it seeks the production of information and/or documents that are not normally generated, retained, or readily available to TWC. TWC also objects to this request on the ground that the request is vague, ambiguous, and overbroad.

Subject to the foregoing, TWC responds as follows:

The number of line extensions that TWC has deployed in California is unavailable by Census Block.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Noel Dempsey
Title: Northeast/National Region Group Vice President, Network Exp & OSP Design Engineering
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 24:

Using Your definition of line extension as provided in question 20, please identify the number of households that were not able to get a line extension in California because they could not afford it for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 24:

TWC objects on the ground that this request is outside the established scope of this proceeding to the extent it seeks information regarding any video/cable services, or any other services outside the scope of this proceeding. TWC also objects to this request on the ground that the request is vague, ambiguous, and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC is not aware of any such households as TWC's line extension policy does not consider any particular household's economic situation. See response to Question 20.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Black
Title: Senior Director Finance Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 25:

What is the number of entities You serve using California Teleconnect Fund (CTF) funding?

Response to Question 25:

TWC has a total of [redacted] CTF customer accounts in California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 26:

Please provide the percent of Your Network Availability in California, by county, for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 26:

TWC objects on the ground that this request is outside the established scope of this proceeding. TWC further objects to the extent that it seeks the production of information and/or documents that are not normally generated, retained, or readily available to TWC. TWC also objects to this request on the ground that the request is vague, ambiguous, and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC does not maintain network availability percentages on a county level. For additional information, see response to Question 30 below.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 27:

Please explain how You define quality of service for broadband and voice services.

Response to Question 27:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

See responses to Questions 28–30 below.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 28:

Please identify the types of quality of service metrics that You track and measure for broadband and voice services.

Response to Question 28:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

For broadband, TWC tracks Modem/EMTA Performance, HFC Plant Performance, Edge Network Performance, and Customer Experience. For voice performance, TWC tracks conversation quality and successful call completion. For additional information, see responses to Questions 29–30 below.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 29:

Please provide all procedures and protocols in place on how You track and measure the quality of service metrics identified in question 27.

Response to Question 29:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

See Exhibit 3-11. Please note that Exhibit 3-11 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 30:

For all quality of service metrics You identified in response to questions 27 and 28, please provide the results separately for broadband and voice services in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 30:

TWC objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

See Exhibit 3-11. Please note that Exhibit 3-11 is confidential in its entirety. TWC is not able to provide the requested information for 2010 to 2012.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 31:

Provide the number of Outages for Your voice services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

a. The number of service Outages by type of customer (residential, small or medium sized business)

b. Cause of service Outage

c. Response time (time it took to respond to an outage)

d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e., resolve an Outage)

e. Total number of Outages by county

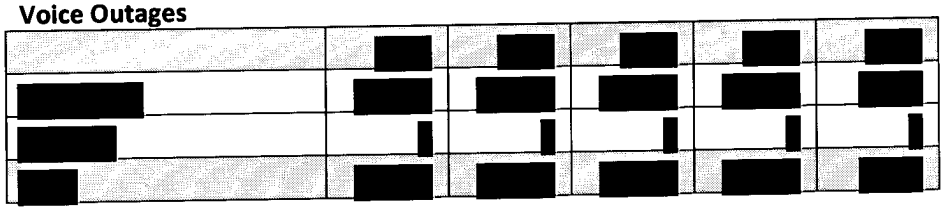
Response to Question 31:

TWC objects on the ground that this request seeks highly confidential information that is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to the extent the request seeks information not in TWC's possession or control, or records that the company does not normally keep. Finally, TWC objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

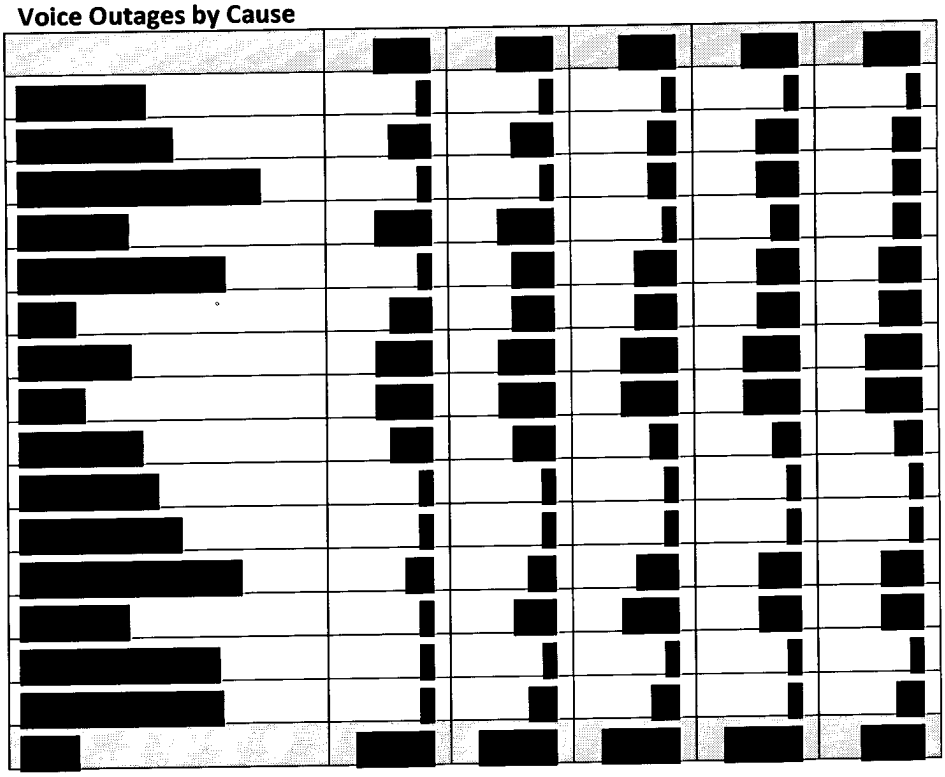
a. The number of customer service Outages by type of customer

Voice Outages



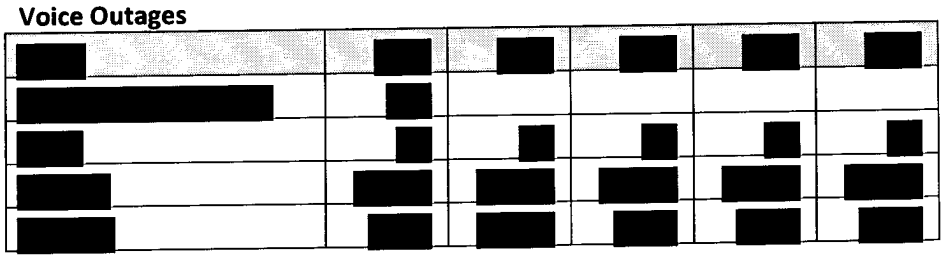
b. Cause of service Outage (Residential and Business)

Voice Outages by Cause



c. Time to Repair Service (TRS) in Hours (Residential and Business)

Voice Outages



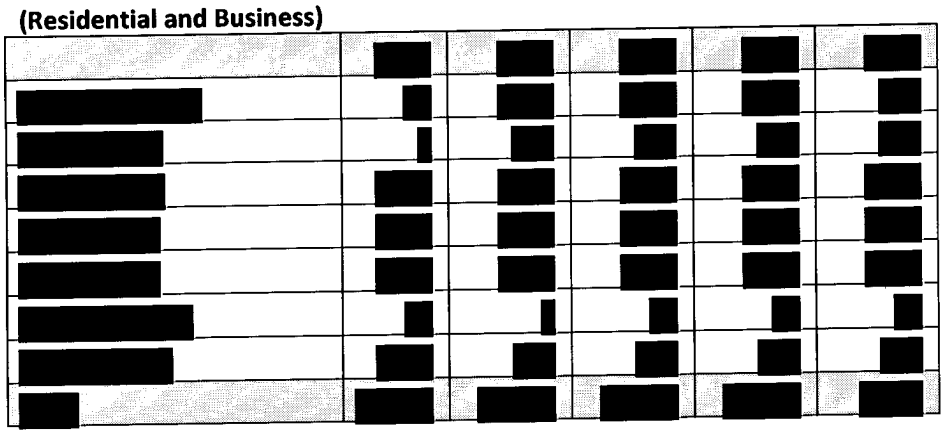
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e., resolve an Outage)

See response to subpart c. above.

e. Total number of Outages by county

TWC does not have data on the total number of outages by county. Instead, TWC provides the total number of customer outages by division.

Voice Outages by Division (Residential and Business)



Notes:

Voice outages include both "partial service" and "no service".

Residential	All categories except for "commercial" or "carrier"
Business	Includes "commercial" and "carrier" services.
TDFA	Time to Dispatch Fix Agent - the amount of time from ticket/outage create till the outage fix agent is assigned the ticket
MTRS	Mean Time to Restore Service - the mean elapsed time in hours from outage start to outage end
Min TRS	Time to Restore Service - the minimum amount of time in hours from outage start to outage end
Max TRS	Time to Restore Service - the maximum amount of time in hours from outage start to outage end

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 32:

Provide the number of Outages for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

a. The number of Outages by type of customer (residential, small or medium sized business)

b. Cause of Outage

c. Response time (time it took to respond to an outage)

d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)

e. Total number of Outages by county

Response to Question 32:

TWC objects on the ground that this request seeks highly confidential information that is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to the extent the request seeks information not in TWC's possession or control, or records that the company does not normally keep. Finally, TWC objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

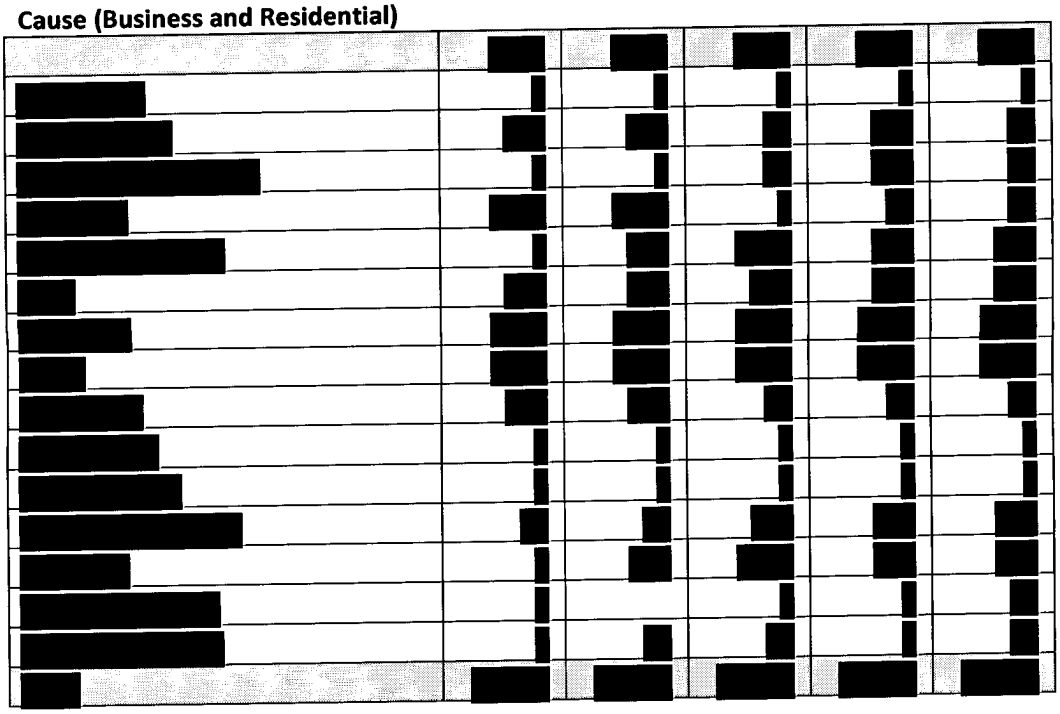
a. The number of Outages by type of customer type

Broadband Outages

	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

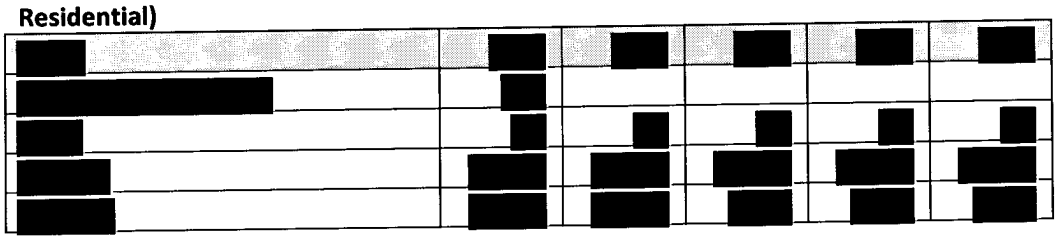
b. Cause of Outage

Broadband Customer Outages by Cause (Business and Residential)



c. Response time (time it took to respond to an outage)

Broadband Outages (Business and Residential)



d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)

See response to subpart c. above.

e. Total number of Outages by county

TWC does not have data on the total number of outages by county. Instead, TWC provides the total number of customer outages by division.

Broadband Customer Outages by Division (Business and Residential)

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Notes:

High Speed Data (HSD-Broadband) impact of "partial" or "no service".

Residential	All categories except for "commercial" or "carrier"
Business	Includes "commercial" and "carrier"
TDFA	Time to Dispatch Fix Agent - the amount of time from ticket/outage create till the outage fix agent is assigned the ticket
MTRS	Mean Time to Restore Service - the average elapsed time in hours from outage start to outage end
Min TRS	Time to Restore Service - the minimum amount of time in hours from outage start to outage end
Max TRS	Time to Restore Service - the maximum amount of time in hours from outage start to outage end

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 33:

How do You define service degradation for broadband service?

Response to Question 33:

TWC objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

TWC broadband service degradation is defined as an unscheduled period during which the broadband service is available but is not performing to standards; including but not limited to excessive delay, packet loss, or inability to access some websites or services.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 34:

Using Your definition of service degradation, provide the number of service degradations for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

a. The number of service degradation by type of customer (residential, small or medium sized business)

b. Cause of service degradation

c. Response time (time it took to respond to a service degradation)

d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve a service degradation)

e. Total number of service degradations by county

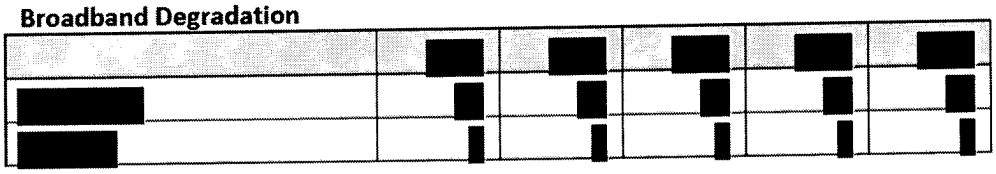
Response to Question 34:

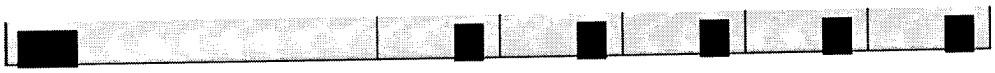
TWC objects on the ground that this request seeks highly confidential information that is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to the extent the request seeks information not in TWC's possession or control, or records that the company does not normally keep. Finally, TWC objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

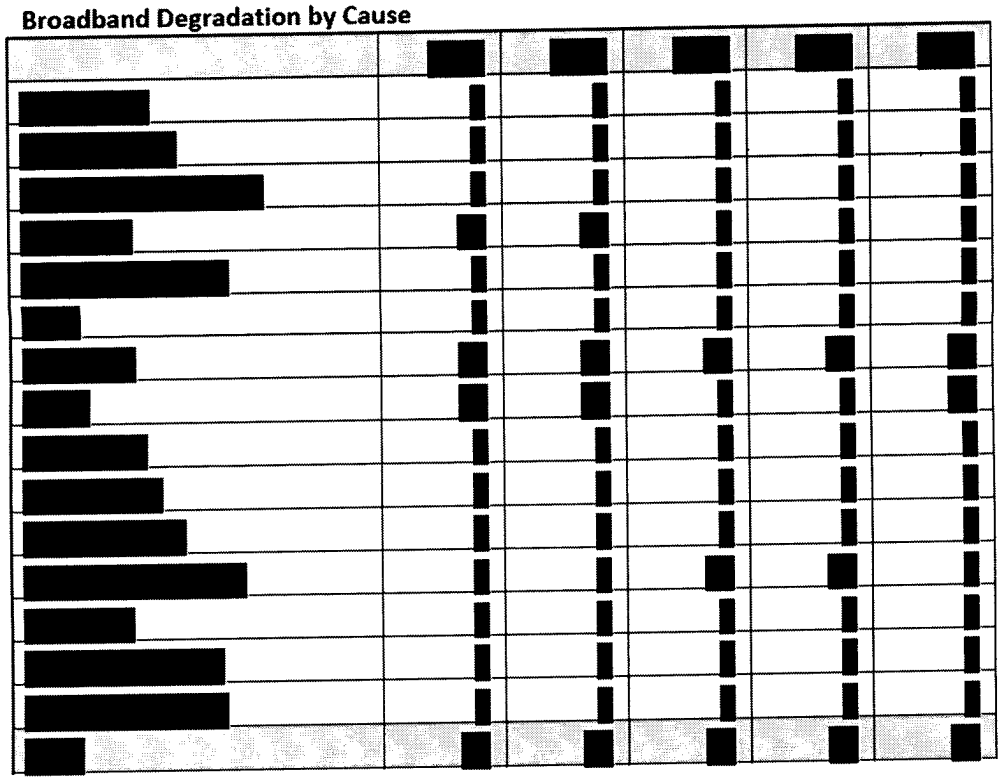
a. The number of service degradations by type of customer (residential and business)

Broadband Degradation

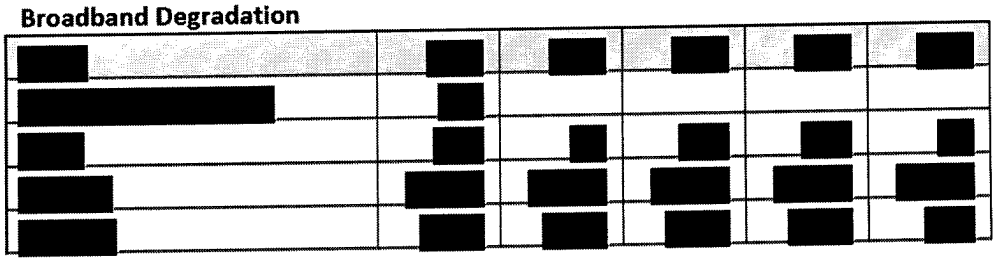




b. Cause of service degradation



c. Response time (time it took to respond to a service degradation)



d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve a service degradation)

See response to subpart c. above.

e. Total number of service degradations by county

TWC does not have data on the total number of service degradations by county. Instead, TWC provides the total number of service degradations by division.

Broadband Degradation by Division

[redacted]

Notes:

High Speed Data (HSD-Broadband)

Residential	All categories except for "commercial" or "carrier"
Business	Includes "commercial" and "carrier"
TDFA	Time to Dispatch Fix Agent - the amount of time from ticket/outage create till the outage fix agent is assigned the ticket
MTRS	Mean Time to Restore Service - the average amount of time in hours from outage start to outage end
Min TRS	Time to Restore Service - the minimum amount of time in hours from outage start to outage end
Max TRS	Time to Restore Service - the maximum amount of time in hours from outage start to outage end

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 35:

Please provide all outage reports You have submitted to the Federal Communications Commission as required by 47 C.F.R. Part 4 pertaining specifically to outages in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response to Question 35:

TWC objects on the ground that this request seeks highly confidential information that is outside the established scope of this proceeding. TWC also objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, TWC objects to this request on the ground that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Exhibit 3-2, Bates # 003653–003697. Please note that Exhibit 3-2 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Matthew Zelesko; Sully McConnell
Title: Senior Vice President, Converged Technology Group; Vice President, Business Intelligence & Information Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 36:

Please provide the Service Installation Intervals for Time Warner Cable orders for new voice service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. The Service Installation Interval excludes all orders having customer requested appointments later than the provider's commitment dates.

Response to Question 36:

The Service Installation Interval for new voice service is an average of [redacted], calculated from January 1, 2014 to September 18, 2014.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Matthew Zelesko; Sully McConnell
Title: Senior Vice President, Converged Technology Group; Vice President, Business Intelligence & Information Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 37:

Please provide the Service Installation Intervals for Time Warner Cable orders for new broadband service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. This amount excludes all orders having customer requested appointments later than the provider's commitment dates).

Response to Question 37:

The Service Installation Interval for new broadband service is an average of [redacted], calculated from January 1, 2014 to September 18, 2014.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Matthew Zelesko; Sully McConnell
Title: Senior Vice President, Converged Technology Group; Vice President, Business Intelligence & Information Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 38:

Please provide the total number of California service orders received for new voice services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):

a. Total number of service orders received

b. Total number of service orders completed (i.e. commitment met)

Response to Question 38:

a. Total number of service orders received

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

b. Total number of service orders completed (*i.e.*, commitment met)

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Matthew Zelesko; Sully McConnell
Title: Senior Vice President, Converged Technology Group Executive; Vice President, Business Intelligence & Information Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 39:

Please provide the total number of California service orders received for new broadband services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):

a. Total number of service orders received

b. Total number of service orders completed (i.e. commitment met)

Response to Question 39:

a. Total number of service orders received

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

b. Total number of service orders completed (*i.e.,* commitment met)

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Mounce; Satenik Abeshyan
Title: Vice President, Business Operations; Director, Office of the President
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 40:

Please provide all customer-initiated complaints concerning unauthorized charges in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

a. Type of customer: residential, small or medium sized business

b. Type of service: voice or broadband

c. Date of complaint

d. Frequency of complaint by the same customer

e. Response time to customer for assistance

f. Location of customer by County

Response to Question 40:

TWC objects to this question to the extent it seeks the production of information that is not normally generated or retained by the company in a readily accessible format. Further, TWC objects to this request on the grounds that it is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC's records do not distinguish customer complaints regarding unauthorized charges from other types of customer complaints. TWC is providing the records that it has regarding customer complaints. TWC interprets customer-initiated complaints to be matters requiring escalation.

Residential:

For subparts a.-c., e., and f. regarding residential customers, see the Escalation Detail Report, attached as Exhibit 3-7, Bates # 005171–007603. Please note that Exhibit 3-7 is confidential in its entirety.

d. Frequency of complaint by the same residential customer:

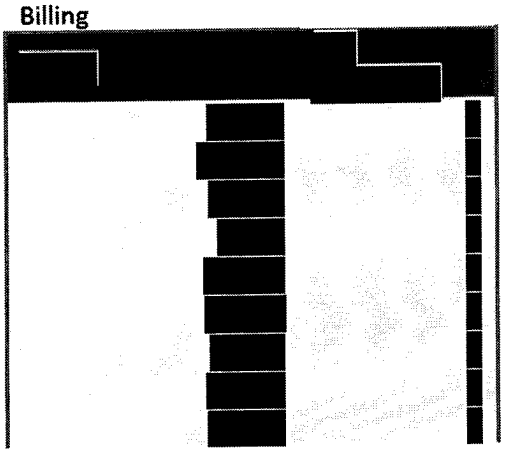
Multiple Complaints per subscriber - Summary
Date Range: 1/1/2010 to 8/31/2014
Report Date: 9/11/2014

Escalation Occurrence	# of Customers with multiple escalations
[redacted]	[redacted]

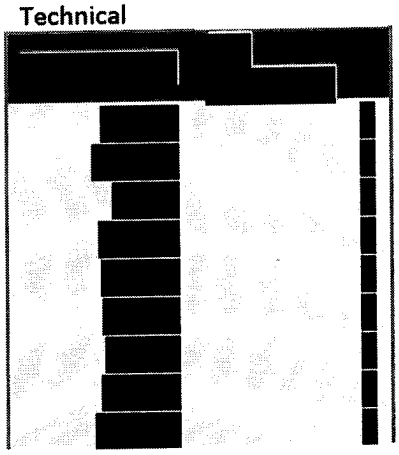
Business:

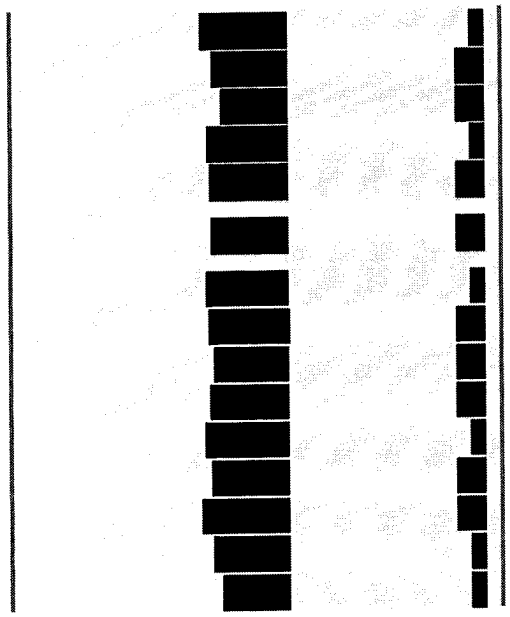
For business, the following tables show the number of escalations for billing and technical issues. The reasons for billing complaints may include: credit request, balance inquiry, misapplied payment, bulk billing request, and My Account issues.

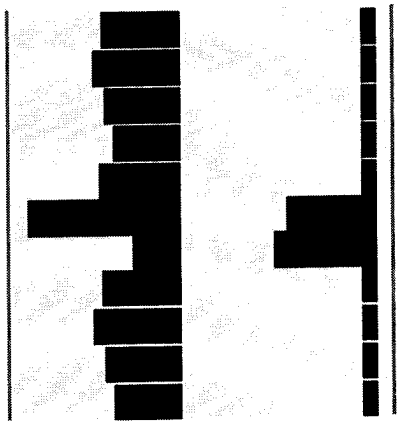
Billing



Technical







A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Mounce; Satenik Abeshyan
Title: Vice President, Business Operations; Director, Office of the President
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 42:

Please provide Your current processes and/or procedures for handling customers complaints and/or dissatisfaction for:

a. Voice services

b. Broadband services

Response to Question 42:

See Exhibit 3-8, Bates # 007604–007614. Please note that Exhibit 3-8 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Mounce; Satenik Abeshyan
Title: Vice President, Business Operations; Director, Office of the President
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 43:

Please provide any changes to Your current processes and/or procedures for handling customer complaints and/or dissatisfaction post-merger in California for:

a. Voice services

b. Broadband services

Response to Question 43:

If the merger closes as planned, TWC will be acquired by Comcast. The procedures for handling customer complaints and/or dissatisfaction post-merger are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 43.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Mounce; Satenik Abeshyan
Title: Vice President, Business Operations; Director, Office of the President
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 44:

Please provide Data for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) on the number of Your California customers with billing complaints for:

a. Voice services

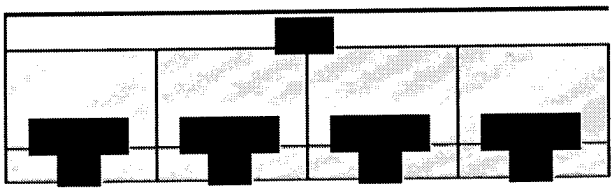
b. Broadband services

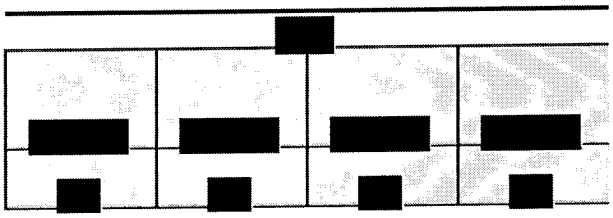
Response to Question 44:

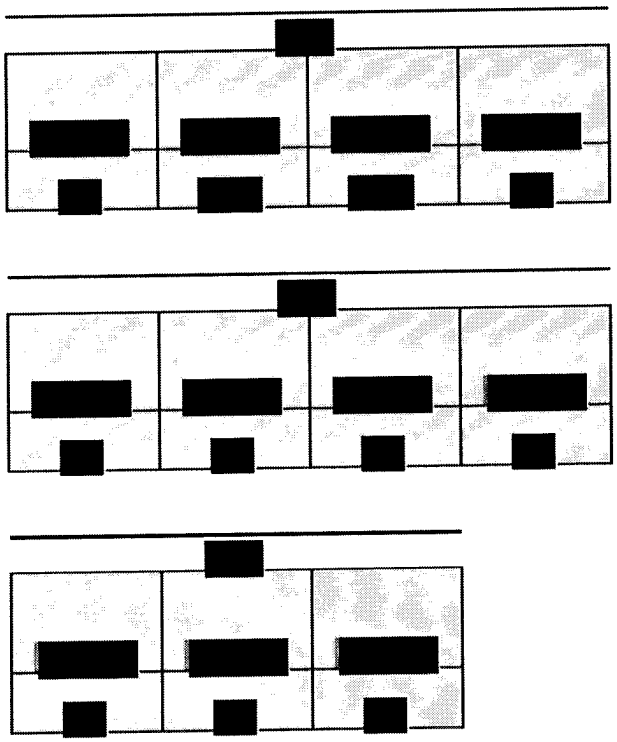
TWC objects to this question to the extent it seeks the production of information that is not normally generated or retained by the company in a readily accessible format. Further, TWC objects to this request on the grounds that it is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC's records are not broken down by voice and broadband services. Below are the combined data on the number of California customers with billing complaints.







A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Mounce; Satenik Abeshyan
Title: Vice President, Business Operations; Director, Office of the President
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 45:

Please provide all remaining customer-initiated complaints concerning Your voice services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

a. Type of customer: residential, small or medium sized business

b. Type and/or nature of complaint or dissatisfaction

c. Date of complaint

d. Frequency of complaint by the same customer

e. Response time to customer for assistance

f. Location of customer by County

Response to Question 45:

TWC objects to this question to the extent it seeks the production of information that is not normally generated or retained by the company in a readily accessible format. Further, TWC objects to this request on the grounds that it is unduly burdensome and overbroad. Finally, TWC objects to this request on the grounds that it is vague and ambiguous with respect to the meaning of "all remaining customer-initiated complaints," which TWC is construing to mean non-cramming complaints.

Subject to the foregoing, TWC responds as follows:

See response to Question 40.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Mounce; Satenik Abeshyan
Title: Vice President, Business Operations; Director, Office of the President
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 46:

Please provide all remaining customer-initiated complaints concerning Your broadband services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

g. Type of customer: residential, small or medium sized business

h. Type and/or nature of complaint or dissatisfaction (such as provision of new Installation/service, fault repair/restoration, cramming, quality of service/product/software/hardware, billing)

i. Date of complaint

j. Frequency of complaint by the same customer

k. Response time to customer for assistance

l. Location of customer by County

Response to Question 46:

TWC objects to this question to the extent it seeks the production of information that is not normally generated or retained by the company in a readily accessible format. Further, TWC objects to this request on the grounds that it is unduly burdensome and overbroad. Finally, TWC objects to this request on the grounds that it is vague and ambiguous with respect to the meaning of "all remaining customer-initiated complaints," which TWC is construing to mean non-cramming complaints.

Subject to the foregoing, TWC responds as follows:

See response to Question 40.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 47:

Please provide Your current plans to improve the quality of service to California customers?

Response to Question 47:

TWC objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

[redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Corporate Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 48:

Please provide any plans to improve Your quality of service to California customers post-merger.

Response to Question 48:

If the merger closes as planned, TWC will be acquired by Comcast. The post-merger plans are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 48.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Meador
Title: Senior Director, Competitive & Marketplace Intelligence
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 49:

Please provide Your level of customer satisfaction compared to the five largest competing service providers (in California, where available) for the years 2009, 2010, 2011, 2012, and 2013 for:

a. Voice services

b. Broadband services

Response to Question 49:

TWC objects to this request on the grounds that it is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

a. Please see the spreadsheet attached as Exhibit 3-3, Bates # 003698–003703. Please note that Exhibit 3-3 is confidential in its entirety.

b. Please see the spreadsheet attached as Exhibit 3-4, Bates # 003704–003709. Please note that Exhibit 3-4 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Meador
Title: Senior Director, Competitive & Marketplace Intelligence
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 50:

Please separately identify the source(s) of the Data (for example, J.D. Power & Associates, internal surveys, independent third-party surveys) for Your responses to Question 48.

Response to Question 50:

TWC objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

TWC assumes the intended cross reference in this request is to Question 49, not Question 48. All of the data provided in response to Question 49 was sourced from J.D. Power and Associates, and is only for the State of California.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Meador
Title: Senior Director, Competitive & Marketplace Intelligence
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 51:

Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Telephone Service Providers Customer Satisfaction Study?

Response to Question 51:

Yes.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Meador
Title: Senior Director, Competitive & Marketplace Intelligence
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 52:

Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Telephone Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.

Response to Question 52:

TWC objects to this request on the grounds that it is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Exhibit 3-5, Bates # 003710–004399. Please note that Exhibit 3-5 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Meador
Title: Senior Director, Competitive & Marketplace Intelligence
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 53:

Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study?

Response to Question 53:

Yes.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Scott Meador
Title: Senior Director, Competitive & Marketplace Intelligence
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 54:

Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.

Response to Question 54:

TWC objects to this request on the grounds that it is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

See Exhibit 3-6, Bates # 004400–005170. Please note that Exhibit 3-6 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Ingrid Simunic
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Senior Director, Product Management & Change Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 55:

Please provide the battery backup brand(s) provided by Your company. For each brand please provide the following:

a. Average standby life of the backup battery

b. Average use life

Response to Question 55:

TWC does not provide backup batteries, but consumers may purchase backup batteries for their compatible Home Phone modems from a variety of vendors. These batteries generally range in price from approximately $28 to $80, depending on equipment compatibility and performance features. The following websites provide specific cost, compatibility, and ordering information:

Arris: http://harpink--ar.rocketquotes.com/storefront/f_category.htm?r=1&i=13924

Motorola: http://www.motorola.com/us/Voice-Modem-Replacement-Battery/m-Voice-Modem-Replacement-Battery.html

Ubee: http://www.broadbandcpe.com/Batteries/b/6411380011?ie=UTF8&title=Batteries

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Ingrid Simunic
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Senior Director, Product Management & Change Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 56:

Please provide any educational materials provided to Your customers informing them that they will not have phone services in the instances of power outages.

Response to Question 56:

TWC provides information about backup power options, vendor availability and maintenance on its website, available at http://www.timewarnercable.com/en/support/phone/topics/phone-power-backup.html#

For additional materials that TWC provides to its customers, see Exhibit 3-9, Bates # 007615–007652.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Ingrid Simunic
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Senior Director, Product Management & Change Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 57:

Do You provide backup batteries at no charge to Your customers?

Response to Question 57:

See response to Question 55.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Ingrid Simunic
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Senior Director, Product Management & Change Management
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 58:

Can Your customers get extra backup batteries from You?

Response to Question 58:

See response to Question 55.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 59:

Please provide processes and procedures on how You provision 911 services in California?

Response to Question 59:

TWC objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

To the extent that this question seeks information about how TWC ensures that a phone customer's information is accurately identified when the customer's service is "provisioned" in response to a service order, the following description applies:

When TWC fills a customer's phone service installation order, its service-provisioning vendor, NeuStar, sends the customer's telephone number, service location and related information to TWC's 911 vendor, Intrado. Intrado then validates the customer's location in the Master Street Address Guide (MSAG) and "geocodes" or identifies the coordinates in the Geographic Information System (GIS) geospatial database of road centerlines, site/structure locations, and related spatial databases. The geocode is used to route a customer's 911 call to the correct PSAP. MSAG-validated addresses are provided to California Public Safety Answering Points ("PSAPs"), as required. If the customer's location cannot be confirmed in the MSAG or geocoded, it is manually researched and validated by Intrado and TWC personnel.

To the extent that the question seeks information regarding TWC's approach to providing 911 access to its California phone customers on a general basis, the following applies:

TWC utilizes an i2-based 911 solution that is provided by its vendor, Intrado.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: David Flessas
Title: Senior Vice President, Network Operations Center & Support
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 60:

Please provide Data on any and all of Your 911 service outages in California by county for years 2010, 2011, 2012, 2013, and through August 31, 2014.

Response to Question 60:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. TWC also objects to the extent the request seeks information that is not in TWC's possession or control. Finally, TWC objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing, TWC responds as follows:

The requested data do not exist for 2010. TWC does not have the requested data by county; instead, it is providing it by division. See Exhibit 3-10, Bates # 007653–007654. Please note that Exhibit 3-10 is confidential in its entirety.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By:
Title: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 61:

Please identify with specificity each and every source of economies of scale that You claim will be engendered by the merger. For each, indicate the anticipated annual savings, staff reductions, other workforce-related cost savings, and any other source of claimed cost reductions. For each source of scale economies identified, indicate why You believe that a similar savings could not be achieved in the absence of the proposed merger.

Response to Question 61:

TWC objects to this request on the grounds that the request exceeds the established scope of the proceeding. TWC also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

If the merger closes as planned, TWC will be acquired by Comcast. The determination of the economies of scale post-closing are the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 61.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By:
Title: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 62:

Please indicate the number of California employees that will be eliminated by You.

Response to Question 62:

TWC objects to this request on the grounds that it seeks the production of information that is neither relevant to the issues in this proceeding nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome, and overbroad.

Subject to the foregoing, TWC responds as follows:

If the merger closes as planned, TWC will be acquired by Comcast. The determination of the number of California employees that will be eliminated post-closing is the province of the acquirer, Comcast. Accordingly, TWC cannot accurately or adequately respond to Question 62.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 63:

Provide ORA with a copy of any materials provided to the FCC in support of the proposed merger transaction, including the FCC Application, any supporting attachments, and any confidential information or information provided under seal.

Response to Question 63:

TWC joins in Comcast's objection and response to ORA Set 3 Question 63.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 64:

Using the updated attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households subscribed by speed tier (upload and download speeds). Please clearly identify each speed tier and add any additional columns as necessary.

Response to Question 64:

See TWC's response to Question 8 in ORA's first set of data requests.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Dominic Pappagallo
Title: Vice President, Optics Network Implementation Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 65:

For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest ISPs/transit providers/other networks with whom You interconnect.

Response to Question 65:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this question to seek bandwidth capacity at the interconnection points with its three largest peers in California based on installed capacity. Based on that interpretation, the bandwidth capacities are [redacted].

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Dominic Pappagallo
Title: Vice President, Optics Network Implementation Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 66:

For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest ISPs/transit providers/other networks with whom You interconnect.

Response to Question 66:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this question to seek bandwidth capacity at the interconnection points with its three smallest peers in California based on installed capacity. Based on that interpretation, the bandwidth capacities are [redacted].

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Magesh Srinivasan
Title: Group Vice President, Commercial Engineering & Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 67:

For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest directly interconnected customers (if any).

Response to Question 67:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this question to seek bandwidth capacity at the interconnection points with the three largest customers that are connected to TWC's network. [redacted].

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Magesh Srinivasan
Title: Group Vice President, Commercial Engineering & Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 68:

For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest directly interconnected customers (if any).

Response to Question 68:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this question to seek bandwidth capacity at the interconnection points with the three smallest customers that are connected to TWC's network. [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jon Eikel
Title: Group Vice President, Core, Metro, & Market Network Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 69:

For Your network in California, please state the bandwidth capacity of your backbone IP/mesh network.

Response to Question 69:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this request as seeking data on its Core to Market connectivity in California. [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jon Eikel
Title: Group Vice President, Core, Metro, & Market Network Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 70:

For Your network in California, please state the bandwidth capacity of Your three highest traffic volume metro area (or Your network equivalent large geography) routers.

Response to Question 70:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this request as seeking data on the installed capacity of its three highest distribution hub routers. Based on that interpretation, the three highest distribution hub routers have installed capacities of [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jon Eikel
Title: Group Vice President, Core, Metro, & Market Network Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 71:

For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume metro area (or Your network equivalent large geography) routers.

Response to Question 71:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC interprets this request as seeking data on the installed capacity of its three lowest distribution hub routers. Based on that interpretation, the three lowest distribution hub routers have installed capacities of [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jon Eikel
Title: Group Vice President, Core, Metro, & Market Network Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 72:

For Your network in California, please state the bandwidth capacity of Your three highest traffic border routers.

Response to Question 72:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC has only two border routers for its network in California which both have installed capacity of [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jon Eikel
Title: Group Vice President, Core, Metro, & Market Network Operations
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 73:

For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume border routers.

Response to Question 73:

TWC objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, TWC objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing, TWC responds as follows:

TWC has only two border routers for its network in California which both have installed capacity of [redacted]

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 74:

How do You define "usage based pricing"? Please provide all of the areas nationwide where You are currently using or offering usage based pricing.

Response to Question 74:

TWC objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

TWC construes this question as referring to broadband services only. "Usage based pricing" is a payment system whereby the customer is charged for consumption or usage of a service rather than being charged a flat rate for the service, regardless of usage, usually for a given period of time. TWC offers usage-based pricing called Essentials Internet in all of its markets.

For information about TWC's internet service, including publicly available pricing, see

http://www.timewarnercable.com/en/internet/internet-service-plans.html

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 75:

Please provide all of the areas nationwide where You are currently using or offering usage based pricing.

Response to Question 75:

See the response to Question 74.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 76:

Please identify the specific terms, conditions, and policies of Your usage based pricing offerings and plans, including but not limited to, speed tiers, data caps, and pricing.

Response to Question 76:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

TWC offers usage based pricing called Essentials Internet.

- **Program Overview**: *Essentials Internet* is an opt-in program that gives customers on TWC's low cost, low speed plans—including Everyday Low Price or ELP (retail price of $14.99 per month), Basic (retail price of $47.99 per month), and Standard (retail price of $57.99 per month) plans—the option to choose an Internet plan with a lower data allotment and price point.
- **Plan Options**: Customers in ELP, Basic or Standard tiers who opt-in to *Essentials Internet* can choose from two options: (1) *Essentials* Plan 1, which has a 5 gigabyte monthly data allotment, and is available at an $8 discount off of the customer's retail/promotional Internet price; and (2) *Essentials* Plan 2, which has a 30 gigabyte monthly data allotment, and is available at a $5 discount off of the customer's retail/promotional Internet price.
- **Plan Exceptions**: *Essentials Internet* is not available to subscribers on higher cost, higher speed Internet plans, including TWC's Turbo (retail price of $67.99 per month), Extreme (retail price of $77.99 per month), and Ultimate (retail price of $87.99-$107.99 per month) plans.
- **Overage and Grace Period**: Once a customer chooses an *Essentials* plan, the customer has a grace period of two billing cycles to determine if the plan is appropriate. If the customer goes over the data limit during the grace period, the customer is not charged an overage fee. After the two-month grace period, customers that exceed the data allotment can continue to use the

service at a rate of $1.00 per gigabyte over the allotment. While TWC caps the overage fee at $25 per billing cycle, it does not cap or throttle usage.

- **Plan Flexibility**: The *Essentials* plan is flexible, allowing customers the ability to switch off the plan and avoid overages if they see they are going to go over their usage allotment in a given month. TWC chose the 5 gigabyte allotment for *Essentials* Plan 1 and the 30 gigabyte allotment for *Essentials* Plan 2 based on the usage trends of its subscribers.

Information on Essentials Internet and Usage Tracker is available at: http://www.timewarnercable.com/en/support/all-faqs.html (at the website, first choose "Internet" and then choose "Essentials Internet" and "Usage Tracker" for details).

TWC Terms & Conditions (that cover all services) are available at: http://help.twcable.com/policies.html.

TWC Residential Services Subscriber Agreement is available at: http://help.twcable.com/twc_sub_agreement.html.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 77:

Please provide any and all of Your Plans to use, roll out and or implement usage based pricing nationwide.

Response to Question 77:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

The Essentials Internet plan described in response to Question 76 was launched on February 27, 2012. TWC has no additional usage-based pricing trials planned at this time.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 78:

Please provide, by Census Block, all of the areas in California where You are currently using or offering usage based pricing.

Response to Question 78:

TWC objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. TWC further objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

Essentials Internet is offered across TWC's full footprint.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Jeff Lindsay; Daniel Stoller
Title: Group Vice President & General Manager, Phone Strategy & Corporate Development; Vice President, Corporate Strategy and Corporate Development
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 79:

Please provide any and all of Your plans to use, roll out and or implement usage based pricing in California.

Response to Question 79:

TWC objects to this request on the grounds that it is vague and ambiguous.

Subject to the foregoing, TWC responds as follows:

See response to Question 77.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Counsel
Title: Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 80:

For ORA Data Request No. ORA-A.14-04-013.PHH-001 issued to You on August 27, 2014 and Data Request No. ORA-A.14-04-013.A.14-06-012.PHH-103 issued to You on August 29, 2014, unless otherwise identified, You shall use the most recent information available for Your responses to the Data Requests and shall clearly identify the point in time the Data reflects.

Response to Question 80:

Request is presented in the form of instructions; no response required.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 81:

For ORA Data Request No. ORA-A.14-04-013.PHH-001 issued to You on August 27, 2014 and Data Request No. ORA-A.14-04-013.A.14-06-012.PHH-103 issued to You on August 29, 2014, You shall use the following definition of "Census Block": Census Block number(s) must be based on the 2010 Census. A census block is the concatenation of Census 2010 state Federal Information Processing Standards (FIPS) code, Census 2010 county FIPS code, Census 2010 census tract code and Census 2010 tabulation block number. For questions requesting information or Data on a Census Block level and such information or Data is not available by Census Block level, provide the information or Data in the smallest geographic unit available.

Response to Question 81:

Request is presented in the form of instructions; no response required.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 82:

For ORA Data Request No. ORA-A.14-04-013.PHH-001 issued to You on August 27, 2014 and Data Request No. ORA-A.14-04-013.A.14-06-012.PHH-103 issued to You on August 29, 2014, You shall provide all Responses to ORA and CD in an electronic format. All electronic documents submitted in response to this Data request, with exception to Excel spreadsheets, should be in PDF, readable, downloadable, printable, and searchable formats, unless use of such formats is infeasible. You do not need to provide any hard copies to ORA or CD unless providing an electronic copy is infeasible. For Data available only in hard copy, please clearly state so in Your email response and state when the hard copy response was sent.

Response to Question 82:

Request is presented in the form of instructions; no response required.

A.14-04-013 / A.14-06-012
Response of Time Warner Cable

Data Request No. ORA-A.14-04-013.A.-14-06-012PHH-002

To: Office of Ratepayer Advocates
Prepared By: Counsel
Employer: Time Warner Cable
Date of Request: September 4, 2014

Question 83:

For all Data Requests from ORA to You, including ORA Data Request No. ORA-A.14-04-013.PHH-001 issued on August 27, 2014 and Data Request No. ORA- A.14-04-013.A.14-06-012.PHH-103 issued to You on August 29, 2014, You shall inform ORA immediately upon determining that there is a term in a Data Request that is unclear or ambiguous, that You do not believe it is required to provide the information, or that You will require more time to provide a complete response to the Data Request.

Response to Question 83:

Request is presented in the form of instructions; no response required.

EXHIBIT 12

Charter's Response to ORA Data Request, Set 1

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.	Application 14-06-012 (Filed June 17, 2014)

RESPONSE BY CHARTER FIBERLINK CA-CCO, LLC (U6878C) TO THE FIRST SET OF DATA REQUESTS BY THE OFFICE OF RATEPAYER ADVOCATES

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September 12, 2014

Attorneys for Charter Fiberlink CA-CCO, LLC

PUBLIC VERSION

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.	Application 14-06-012 (Filed June 17, 2014)

RESPONSE BY CHARTER FIBERLINK CA-CCO, LLC (U6878C) TO THE FIRST SET OF DATA REQUESTS BY THE OFFICE OF RATEPAYER ADVOCATES

Pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure, Charter Fiberlink CA-CCO, LLC ("Charter") submits these responses to the first set of data requests (Data Request No. ORA-A.14-04-013.A-14-06-012 PHH-300) by the Office of Ratepayer Advocates ("ORA"), as subsequently restated or clarified by ORA. Charter's responses to these data requests are subject to the General Objections and Reservations set forth below, which are hereby incorporated by reference into each response below. In responding to these data requests, the term "Charter" includes such of its affiliates as is consistent with the context of specific requests.

GENERAL OBJECTIONS

1. Charter objects to these data requests to the extent they seek information that is neither relevant nor material to any claims or defenses in this action, nor reasonably calculated to lead to the discovery of admissible evidence in this action.

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2. Charter objects to these data requests to the extent they purport to apply to: (a) any person or entity that is not subject to the jurisdiction of the Commission or that does not conduct regulated operations in the State of California; or (b) services that are not subject to the jurisdiction of the Commission, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence.

3. Charter objects to these data requests to the extent they seek information protected from discovery by any applicable privilege, protection, immunity or other exemption from discovery under the California or United States Constitutions, statutes or case law, including, without limitation, the attorney-client privilege, attorney work-product doctrine, the right of privacy, trade secret protection, confidential information protection, or other exemption from discovery.

4. Charter objects to these data requests to the extent they are overbroad, unreasonably duplicative of other data requests, or beyond the scope of permissible discovery.

5. Charter objects to these data requests to the extent they call for information that is equally or reasonably available to ORA without undue burden.

6. Charter objects to the continuing nature of these data requests.

7. Charter objects to these requests to the extent they purport to impose requirements or burdens beyond the production of information and documents.

RESERVATIONS

1. The fact that any response is given to a particular data request should not be taken as an admission or other concession that the substance of the data request is properly within the scope of this proceeding or permissible discovery or inquiry.

2. Neither Charter's responding to a particular data request nor Charter's response should be taken as an admission or other concession as to any matter of law, including, without limitation, the extent of the Commission's jurisdiction or authority over any matter being investigated or considered in this proceeding.

3. Charter's investigation and discovery of the matters relating to this proceeding are continuing. The responses and objections herein are based upon information and or documents presently known to, and in the possession of, Charter. Charter reserves the right to rely on any documents or other evidence that may develop or subsequently come to its attention, to assert additional objections or supplemental responses should Charter discover that there is information or grounds for objections, and to supplement or amend these responses at any time.

4. Nothing contained in these responses is intended to be or should be considered a waiver of the attorney-client privilege, attorney work-product doctrine, or other applicable privilege, immunity, the right of privacy or other exemption from discovery. Charter specifically reserves

the right to assert privileges for any privileged or otherwise protected information that is disclosed inadvertently in response to these data requests.

5. Nothing contained in these responses is intended to be or should be considered a waiver of the attorney-client privilege, attorney work-product doctrine, or other applicable privilege, immunity, the right of privacy or other exemption from discovery. Charter specifically reserves the right to assert privileges for any privileged or otherwise protected information that is disclosed inadvertently in response to these data requests.

RESPONSES

1. Please identify the total number of households passed where Charter broadband service is available in California.

Response:

1,677,296

2. Please identify the total number of households subscribed to Charter broadband services in California.

Response:

[begin CONFIDENTIAL information: :end CONFIDENTIAL information]

3. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the number of households passed.

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

4. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the number of households subscribing to Charter broadband service.

Response:

The requested information is set forth in the Excel file named "CONFIDENTIAL CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in the attached CONFIDENTIAL CD-ROM.

5. **Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the maximum advertised download speeds (Mbps) for residential Charter broadband services.**

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

6. **Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the maximum advertised upload speeds (Mbps) for residential Charter broadband services.**

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

7. **Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the price associated with the maximum advertised speed tier for residential Charter broadband services including:**
   a. Average initial promotional price of service ($ per month and number of months during which the promotional price remains in effect) within the Census Block
   b. Average price of service following the expiration of the initial promotional cost of service ($ per month) within the Census Block.

Response:

Charter objects to this data request on the grounds that Charter has not compiled data in a manner that is responsive to this request, and doing so would be unduly burdensome. Further, Charter objects to this data request on the grounds that the requested information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Among other things, because Charter's initial promotional price of service has varied from time-to-time, as have the associated broadband speed tiers, the average initial promotional price of service currently provided in all or portions of Charter's service territory cannot reasonably be used for any relevant purpose. For the same reasons, identifying differentials between Charter's average initial promotional pricing and current average pricing is not relevant to any material issue.

Without waiving these objections, Charter will provide its current initial promotional prices and non-promotional prices for each of its residential broadband services having the maximum advertised speed tier in any Census Block. This information will be provided in a supplement to this response as soon as practicable.

8. Please list all Your residential broadband products/services offered in California, including:

a. Product/service name
b. Description
c. Speed Tier
d. Price
e. Terms and Conditions
f. Total number of subscribers for each product/service offered

Response:

Charter objects to this data request on the grounds that Charter does not track the number of subscribers by product package and compiling such information in a manner that is responsive to this request would be unduly burdensome. Further, Charter objects to providing such information on the grounds that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. The following chart identifies Charter's products currently provided in California. The current terms and conditions of service are available at: https://www.charter.com/browse/content/services?intcmp=footer_charterinfo_termsofservice#.

Product	Description	Speed Tier	Price	Stand-Alone Price	T&C
Lite Internet	Legacy Internet product	15/5 Mbps	$31.99	$36.99	no longer sold
Base/Express Internet	Legacy Internet product	15/3 Mbps	$47.99	$52.99	no longer sold
Plus Internet	Legacy Internet product	30/4 Mbps	$57.99	$62.99	no longer sold
Max Internet	Legacy Internet product	25/3 Mbps	$72.99	$77.99	no longer sold
Ultra Internet (Legacy)	Legacy Internet product	100/5 Mbps	$102.99	$107.99	no longer sold
Charter Internet	Current flagship product	30/4 Mbps	$49.99 bundled with another line of business	$54.99	
Charter Internet Ultra	Current product	100/5 Mbps	$109.99 bundled with another line of business	114.99	

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9. Please provide the information requested in items (7) and (8) separately for each year over the period 2009 through and including 2014.

Response:

Charter incorporates by reference its objections posed to request nos. 7 and 8. Charter further objects to providing the information sought by this data request on the grounds that the information requested for prior years has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding.

10. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps in California.

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

11. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps during peak times in California.

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

12. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps in California.

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

13. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps during peak times in California.

Response:

The requested information is set forth in the Excel file named "PUBLIC CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in both the attached PUBLIC CD-ROM and the attached CONFIDENTIAL CD-ROM.

14. Is Charter broadband service offered as a stand-alone service in California?

Response:

Yes

15. If the answer to Question #14 is yes, please identify the following:

a. Product/service name
b. Description
c. Terms and Conditions
d. Price
e. Number of households subscribed to stand-alone broadband service in California

Response:

Charter incorporates by reference, its Response, including objections, to request no. 8.

16. Does Charter define small businesses as a business with 1-19 employees?

Response:

Yes.

17. Please identify the total number of small-sized businesses passed by Charter facilities.

Response:

173,184 businesses

18. Please identify the total number of small-sized businesses subscribed to Charter broadband services in California.

Response:

Charter objects to this data request on the grounds that Charter does not have sufficient information to enable it to accurately determine the number of employees (and therefore

the size) of all of its business subscribers. Without waiving such objection, Charter states that it has identified **[begin CONFIDENTIAL information: :end CONFIDENTIAL information]** subscribers as small-sized businesses in California based on matching of its subscribers with its proprietary internal database (Palmprint), which is based on business data from GeoResults, an external firm that creates a proprietary dataset from a number of base sources (Dun & Bradstreet, InfoUsa and others). Charter believes that the actual number of its small-sized business subscribers in California is most likely higher.

19. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the number of all small-sized businesses passed where Charter broadband service is available.

Response:

The requested information is set forth in the Excel file named "CONFIDENTIAL CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in the attached CONFIDENTIAL CD-ROM.

20. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the number of all small-sized business subscribed to Charter broadband service.

Response:

Charter objects to this data request on the grounds that Charter does not have sufficient information to enable it to accurately determine the number of employees (and therefore the size) of all of its business subscribers. Charter is providing responsive information in the Excel file named "CONFIDENTIAL CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in the attached CONFIDENTIAL CD-ROM. The identification of small-sized business subscribers is based on a matching of its subscribers with its proprietary internal database (Palmprint), which is based on business data from GeoResults, an external firm that creates a proprietary dataset from a number of base sources (Dun & Bradstreet, InfoUsa and others). Charter believes that the actual number of its small-sized business subscribers in California is most likely higher.

21. Please list all Your small business products/services offered in California, including:

a. Product/service name
b. Description
c. Speed Tier
d. Price
e. Terms and Conditions
f. Total number of subscribers for each product/service offered

Response:

Charter objects to this data request on the grounds that Charter does not have sufficient information to enable it to accurately determine the number of employees (and therefore the size) of all of its business subscribers. Charter further objects to this data request on the grounds that Charter does not track the number of subscribers by specific service levels and compiling such information in a manner that is responsive to this request would be unduly burdensome. Further, Charter objects to providing such information on the grounds that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. The following chart identifies Charter's products currently provided in California. The current terms and conditions of service are available at: https://www.charter.com/browse/content/policies-comm-terms.

Product	Description	Speed Tiers	Price
Charter Business Internet	DOCSIS (cable modem) -based Internet service delivered over Charter's hybrid fiber/coaxial network	Essentials 60 (60M/4M down up) Pro 80 (80M/5M down/up) Pro 1100 (100M/7M down/up)	$55 to $200, depending on tier

22. Does Charter define medium-sized business as a business with 20-199 employees?

Response:

Yes.

23.Please identify the total number of medium-sized businesses passed by Charter facilities.

Response:

15,638 businesses

24. Please identify the total number of medium-sized business subscribed to Charter broadband services in California.

Response:

Charter objects to this data request on the grounds that Charter does not have sufficient information to enable it to accurately determine the number of employees (and therefore the size) of all of its business subscribers. Without waiving such objection, Charter states

that it has identified **[begin CONFIDENTIAL information: :end CONFIDENTIAL information]** subscribers as medium-sized businesses in California based on matching of its subscribers with its proprietary internal database (Palmprint), which is based on business data from GeoResults, an external firm that creates a proprietary dataset from a number of base sources (Dun & Bradstreet, InfoUsa and others). Charter believes that the actual number of its medium-sized business subscribers in California is most likely higher.

25. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the number of all medium sized business passed by Charter facilities.

Response:

The requested information is set forth in the Excel file named "CONFIDENTIAL CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in the attached CONFIDENTIAL CD-ROM.

26. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Charter broadband service is available in California, the number of all medium sized business subscribed to Charter broadband service.

Response:

Charter objects to this data request on the grounds that Charter does not have sufficient information to enable it to accurately determine the number of employees (and therefore the size) of all of its business subscribers. Charter is providing responsive information in the Excel file named "CONFIDENTIAL CA PUC Data Request_Broadband Services Spreadsheet.xls," which is included in the attached CONFIDENTIAL CD-ROM. The identification of medium-sized business subscribers is based on a matching of its subscribers with its proprietary internal database (Palmprint), which is based on business data from GeoResults, an external firm that creates a proprietary dataset from a number of base sources (Dun & Bradstreet, InfoUsa and others). Charter believes that the actual number of its medium-sized business subscribers in California is most likely higher.

27. Please list all Your medium-sized business broadband products/services offered in California, including:

a. Product/service name
b. Description
c. Speed Tier
d. Price
e. Terms and Conditions
f. Total number of subscribers for each product/service offered

Response:

Charter objects to this data request on the grounds that Charter does not have sufficient information to enable it to accurately determine the number of employees (and therefore the size) of all of its business subscribers. Charter further objects to this data request on the grounds that Charter does not track the number of subscribers by specific service levels and compiling such information in a manner that is responsive to this request would be unduly burdensome. Further, Charter objects to providing such information on the grounds that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. The following chart identifies Charter's products currently provided in California. The current terms and conditions of service are available at: https://www.charter.com/browse/content/policies-comm-terms.

Product	Description	Speed Tiers	Price
Charter Business Internet	DOCSIS (cable modem) -based Internet service delivered over Charter's hybrid fiber/coaxial network	Essentials 60 (60M/4M down up) Pro 80 (80M/5M down/up) Pro 1100 (100M/7M down/up)	$55 to $200, depending on tier

28. Please identify all voice services offered by your company:

a. Product/service name
b. Description (include if your voice service is VoIP)
c. Is the product/service offered as a stand-alone service?
d. Price
e. Terms and Conditions
f. Total number of subscribers for each product/service offered

Response:

Charter has no voice services that are within the Commission's jurisdiction. Therefore, Charter objects to providing the information sought by this data request on the grounds that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul service over which we have regulatory jurisdiction as well as

for broadband deployment in California." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

Charter's products and services, along with descriptions, availability, pricing, terms, and conditions, are published on Charter's website at:
https://www.charter.com/browse/content/policies_charter_tele_tariff

Charter's subscriber counts are set forth in the Excel file named "CONFIDENTIAL Charter Advanced Services (CA), LLC Voice Service Subscriber Count_091014.xlsx," which is included in the attached CONFIDENTIAL CD-ROM.

29. Please identify the total number of households passed where Charter voice service is available in California.

Response:

Charter has no voice services that are within the Commission's jurisdiction. Therefore, Charter objects to providing the information sought by this data request on the grounds that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul service over which we have regulatory jurisdiction as well as for broadband deployment in California." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

1,468,022

30. Please identify the total number of households subscribed to Charter voice services in California.

Response:

Charter has no voice services that are within the Commission's jurisdiction. Therefore, Charter objects to providing the information sought by this data request on the grounds that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

[begin CONFIDENTIAL information: :end CONFIDENTIAL information]

31. Please identify all Your existing current broadband and voice deployment projects currently underway in California that includes:

a. Name of project
b. Description
c. Speeds offered
d. County/city/community name
e. Status of project
f. Estimated time of completion

Response:

Charter objects to this request on the grounds that the term "deployment" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "deployment" as referring to significant extensions of its distribution network into geographic areas not currently served by Charter or conversions of significant portions of its existing distribution facilities to higher capacity facilities. Charter contends that activities, such as equipment upgrades, installations of new or upgraded distribution facilities of short length (e.g., less than five miles), and similar projects, cannot reasonably be considered of sufficient significance to be of relevance to this proceeding.

Charter further objects to this request on the grounds of relevance to the extent that it seeks information relating to projects in the service territory that Charter is planning to retain, and adjoining geographic areas. Charter also objects to this request to the extent it seeks information relating to the "deployment" (however defined) of voice services that are not within Commission jurisdiction, as such services are not topics identified by the Scoping Ruling as being within the scope of this proceeding.

Subject to these objections and clarifications, Charter responds to this data request as follows:

The only deployment project that currently is underway in California is Charter's Spectrum 60/4 Internet deployment project. This project increases available download speed to 60 Mbps and upload speed to 4 Mbps. This project has been completed for Charter service areas in the following Nielsen DMA regions: Eureka, CA; Chico-Redding, CA; and Los Angeles, CA. The project is expected to be completed on September 16, 2014, for Charter service areas in the following Nielsen DMA regions: Santa Barbara et al., CA, San Francisco, et al, CA; Monterey-Salinas, CA, and Fresno-Visalia, CA.

32. Please identify all Your planned broadband and voice deployment in California in the next three years. Please include the following:

a. Description
b. Speeds offered
c. County/city/community name
d. Estimated deployment schedule

Response:

Charter objects to this request on the grounds that the term "deployment" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "deployment" as referring to significant extensions of its distribution network into geographic areas not currently served by Charter or conversions of significant portions of its existing distribution facilities to higher capacity facilities. Charter contends that activities, such as equipment upgrades, installations of new or upgraded distribution facilities of short length (e.g., less than five miles), and similar projects, cannot reasonably be considered of sufficient significance to be of relevance to this proceeding. In addition, Charter is limiting this response to projects for which it has begun engineering, budgeting, or similar activities, as opposed to projects for which specific implementation activities have not yet begun, which continue to be speculative.

Charter further objects to this request on the grounds of relevance to the extent that it seeks information relating to projects in the service territory that Charter is planning to retain, and adjoining geographic areas. Charter also objects to this request to the extent it seeks information relating to the "deployment" (however defined) of voice services that are not within CPUC jurisdiction, as such services are not topics identified by the Scoping Ruling as being within the scope of this proceeding.

Subject to these objections and clarifications, Charter responds to this data request as follows:

No projects are planned for California.

33. Please identify and describe how Charter decides whether to invest and expand its network into a community and what criteria is considered in making this determination. Identify all locations falling generally within or proximate to Charter's California operating areas where Charter has specifically declined to furnish any service that had been requested by customers, developers, communities, or others at any time from and after 2009. For each such instance, provide the specific reason or reasons for Charter's decision not to provide the requested service.

Response:

Charter objects to this request on the grounds that the information sought is not relevant to this proceeding. How Charter makes network investment and expansion decisions is

variable and changes over time, depending on corporate strategies and goals, financial and market circumstances and projections, actual and anticipated technological developments, and other factors. Whether Charter would continue to use a specific decision-making process that it has followed in the past, is too speculative to be of any importance for the purposes of this proceeding.

34. Does Charter believe that it has an obligation (legal or otherwise) to provide service to any area within California upon request for service?

Response:

Charter objects to this request to the extent that it seeks a legal conclusion. Charter believes that it has an obligation to comply with lawful requirements applicable to its services, including Cal. PUC Code. § 5890.

35. Please provide Your five-year forecasted capital investment in California by county.

Response:

Charter objects to this request on the grounds that it is overly-broad insofar as it seeks information related to projects that Charter has not identified in its response to request no. 32, which, for the reasons stated in Charter's objections to that request, are not relevant. Charter incorporates by reference such objections and, further, objects to this data request on the grounds of relevance insofar as it seeks speculation on the part of Charter.

36. Will Your existing build-out plans be affected by the planned merger? If yes, what considerations are involved? Please state specifically how Your build-out plans will be affected by the planned merger.

Response:

Charter objects to this request on the grounds of relevance insofar as it seeks information relating to areas other than California. If this request is referring to the "merger" that is the subject of Application 14-04-013, Charter responds that it has not undertaken efforts to identify how its build-out plans in California might be affected by the merger; however, Charter speculates that any such plans would not be affected. If this request is referring to the asset sale that is the subject of Application 14-06-012, Charter responds that any plans for any projects in the California service areas affected by the asset sale will not be pursued by Charter. Charter has no information as to what plans would be pursued by the purchaser of those assets.

37. Are there any build-out projects for which further action would be dependent on the merger happening? If yes, how will the timelines for these projects be set?

Response:

Charter objects to this request on the grounds of relevance insofar as it seeks information relating to areas other than California. If this request is referring to the "merger" that is the subject of Application 14-04-013, Charter responds that there are no build-out projects in California that would depend on the merger taking place. If this request is referring to the asset sale that is the subject of Application 14-06-012, Charter responds that any plans for any build-out projects in the California service areas affected by the asset sale will not be pursued by Charter. Charter has no information as to what plans would be pursued by the purchaser of those assets.

38. Please identify any and all backhaul services You offer in California, including:

a. Type of service
b. Description
c. Speeds
d. Price
e. Terms and Conditions
f. Capacity utilized
g. Capacity available

Response:

Charter objects to this request on the grounds that the term "backhaul" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "backhaul" as referring to the provision of transport capacity or services between wireless cell sites and a wireless carrier's MTSO or core network. Charter also objects to this data request to the extent that it requests information relating to backhaul services that are outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

Jurisdictional and non-jurisdictional backhaul services provided by Charter include the provision of Optical Ethernet service on Charter's fiber optic network for the transmission of telecommunications between wireless cell sites and a wireless carrier's MTSO or core network. The specific services, speed or capacity provided, and the pricing and other terms and conditions for Charter's backhaul services are determined on a negotiated, individual case-by-case basis. **[begin CONFIDENTIAL information:**

:end CONFIDENTIAL information] Utilization and availability vary over time, depending on the contracts that are in place.

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39. Please provide a map of the location of Your backhaul cable/fiber in California.

Response:

Charter objects to this request on the grounds that the term "backhaul" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "backhaul" as referring to the provision of transport capacity or services between wireless cell sites and a wireless carrier's MTSO or core network. Charter also objects to this data request to the extent that it requests information relating to backhaul services that are outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

A map of Charter's fiber network is available at https://www.charterbusiness.com/content/fibermap

40. How many customers do You currently provide backhaul services to in California?

Response:

Charter objects to this request on the grounds that the term "backhaul" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "backhaul" as referring to the provision of transport capacity or services between wireless cell sites and a wireless carrier's MTSO or core network. Charter also objects to this data request to the extent that it requests information relating to backhaul services that are outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

[begin CONFIDENTIAL information: :end CONFIDENTIAL information]

41. Please identify the entities/customer names that obtain backhaul services from Charter in California.

Response:

Charter objects to this request on the grounds that the term "backhaul" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "backhaul" as referring to the provision of transport capacity or services between wireless cell sites and a wireless carrier's MTSO or core network. Charter also objects to this data request to the extent that it requests information relating to backhaul services that are

outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

[begin CONFIDENTIAL information: :end CONFIDENTIAL information]

42. Please identify all of Your competitors for backhaul services in California and types of services they offer.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding.

43. Identify the number of cell sites in California that You provide cellular backhaul services to.

Response:

Charter also objects to this data request to the extent that it requests information relating to backhaul services that are outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

[begin CONFIDENTIAL information: :end CONFIDENTIAL information]

44. Does Charter obtain backhaul services from other providers in California?

Response:

Charter objects to this request on the grounds that the term "backhaul" is vague and ambiguous. For the purpose of responding to this request, Charter construes the term "backhaul" as referring to the provision of transport capacity or services between wireless cell sites and a wireless carrier's MTSO or core network. Charter also objects to this data request to the extent that it requests information relating to backhaul services that are outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and

backhaul services over which we have regulatory jurisdiction . . . .” (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

No.

45. Identify the entity name(s) from which Charter obtains backhaul services.

Response:

Charter objects to this request on the grounds that the term “backhaul” is vague and ambiguous. For the purpose of responding to this request, Charter construes the term “backhaul” as referring to the provision of transport capacity or services between wireless cell sites and a wireless carrier’s MTSO or core network. Charter also objects to this data request to the extent that it requests information relating to backhaul services that are outside the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission’s inquiry will involve the “implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . .” (Scoping Ruling at p. 6.). Without waiving such objection, Charter responds as follows:

Not applicable.

46. Please provide all contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to, Netflix, Amazon, and Hulu. Please include all appendices and attachments to the agreements.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding: such agreements will remain in place following consummation of the proposed transaction in order to enable Charter to continue its operations in areas that are not affected by the proposed sale of California assets; therefore, the provisions of such agreements and related contracts are not relevant to an inquiry regarding the impacts of the proposed transaction on broadband deployment or any other issues that is within the scope of this proceeding. Charter also objects to this data request on the grounds that it is required by contract with the involved third parties to protect the requested contracts and other documents from disclosure to third parties.

47. Please provide all contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to Level 3, AT&T, AT&T Wireless, Verizon, Verizon Wireless, and Cogent. Please include all appendices and attachments to the agreements.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Charter further objects to this data request to the extent that it seeks documents relating to peering, transit, and transport agreements covering areas unaffected by the proposed sale of California assets. Charter also objects to this data request on the grounds that it is required by contract with the involved third parties to protect the requested contracts and other documents from disclosure and that production of the requested documents would be overly burdensome and expensive.

48. Please identify any and all wholesale services You currently provide to third parties, including:

a. Name of product/service
b. Description
c. Speeds, where applicable
d. Price
e. Number of subscribers per product/service

Response:

Charter incorporates its response to data request no. 38. Charter otherwise objects to this data request on the grounds that the requested information has no relevance to this proceeding.

49. Please identify all of Your competitors in the wholesale services in California.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding.

50. Provide full details on Your integration plans with Joint Applicants.

a. How will Joint Applicants facilities be integrated with Charter facilities?
b. How will Joint Applicants operations be integrated with Charter operations?

Response:

Charter objects to this data request on the grounds of relevance, insofar as it seeks information relating to operations outside of the areas affected by the proposed sale of California assets. Charter has not engaged in detailed discussions with the Joint

Applicants regarding such matters and, therefore, is unable to respond further to this data request at this time.

51. How will these integration plans affect Your business operationally?

Response:

Charter objects to this data request on the grounds of relevance, insofar as it seeks information relating to operations outside of the areas affected by the proposed sale of California assets. Charter has not engaged in detailed discussions with the Joint Applicants regarding such matters and, therefore, is unable to respond further to this data request at this time.

52. Please provide all specific benefits You claim will result from the proposed merger for California customers? Please provide justification for Your claims.

Response:

Charter objects to this data request on the grounds that Charter has made no such claim. Nonetheless, Charter responds that it does believe that benefits of its proposed sale of California assets will likely flow to affected customers in the form of reduced pricing and service enhancements stemming from the increased operating and network efficiencies that will result from the rationalization of the parties' respective service areas.

53. Please provide Charter's revenue in California for the years 2011, 2012 and 2013, and projections for 2014. Also provide annual revenues for these same periods for the following categories:

a. Residential: video, high-speed internet, and Voice Services
b. Business: video, high-speed internet, and Voice Services
c. Enterprise Ethernet Services
d. Wholesale IP Services
e. Carrier Backhaul Services
f. Advertising
g. Other (Describe)

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Charter has filed reports annually with the Commission that provides revenue information. Charter directs the ORA's attention to such reports.

54. Please provide Charter's operating costs and expenses in California for the years 2011, 2012 and 2013, and projections for 2014. Also show revenues for the following categories:

a. Residential: video, high-speed Internet, and Voice Services
b. Business: video, high-speed Internet, and Voice Services
c. Enterprise Ethernet Services
d. Wholesale IP Services
e. Carrier Backhaul Services
f. Advertising
g. Other (Describe)

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Charter has filed reports annually with the Commission that provides expense and revenue information. Charter directs the ORA's attention to such reports.

55. Please provide anticipated merger-related and restructuring impacts on Charter's financial structure in California, including details on residential and business cable communications services, i.e., video, high-speed Internet and Voice Services.

Response:

Charter is not currently aware of specific impacts on its financial structure in California that might result from the merger and restructuring contemplated by A.14-04-013. After consummation of the transaction contemplated by A.14-06-012, Charter's financial structure in California will be minimal. Its operations in California will be limited to providing services in certain areas on the Nevada border to be served from Charter operations located in Nevada, just as they currently are today. Charter will have a very small amount of plant remaining in California for the provision of such services after the close of the transaction.

56. What is the current participation level of residential customers in Lifeline in California with respect to services offered by Charter?

Response:

Charter does not currently seek or receive federal Lifeline or California LifeLine funding to support service to low-income subscribers. Nevertheless, Charter provided a discount equivalent to the combined federal Lifeline and California LifeLine support rate to **[begin CONFIDENTIAL information: :end CONFIDENTIAL information]** customers in California as of September 1, 2014.

57. Please provide a detailed list of all mergers and acquisitions of Charter of companies operating in California from 1990 to 2013.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Further, any mergers or acquisitions involving California public utilities or entities subject to DIVCA were previously reported to the Commission.

58. Have You previously offered service to customers in the service territories of any of the Joint Applicants in this application?

Response:

Yes.

59. If the answer to Question #58 is yes, and You do not currently offer service, state all the reasons why You ceased offering service there and provide the details of the transfer transaction.

Response:

Not applicable. Charter currently offers services to a very limited number of customers located in the service territories of other Joint Applicants.

60. If the answer to Question #58 is no, state all reasons why You have not offered service Joint Applicants territories.

Response:

Not applicable.

61. Provide the total number of commercial buildings "lit" by Charter – i.e., where Charter-owned fiber optic cable facilities are in place – in Charter's California operating areas. For purposes of this request, "owned" facilities also includes Indefeasible Rights of Use ("IRUs") issued to Charter.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding.

62. Provide the number of Charter-owned "lit" buildings in Charter's California operating areas that are also served by fiber optic facilities owned by Time Warner Cable, Bright House Networks, and Comcast. For purposes of this request, "owned" facilities also include facilities under the control of Comcast, Time Warner Cable, Bright House Networks, or Charter via IRUs.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Further, Charter cannot provide information on the locations served by Time Warner, Bright House or Comcast – this data should be obtained directly from those entities.

63. Provide the number of Charter-owned "lit" buildings in Comcast's California operating areas at which fiber optic facilities owned by any other non-ILEC service provider other than Time Warner Cable, Bright House Networks, and Comcast. For purposes of this request, "owned" facilities also includes IRUs.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Further, Charter cannot provide information on the locations served by its competitors – this data should be obtained directly from those entities.

64. Indicate the total number of locations in Charter's California operating areas at which at least one service provider other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Further, Charter cannot provide information on the locations served by its competitors – this data should be obtained directly from those entities.

65. Indicate the total number of locations in Charter's California operating areas at which at least two different service providers other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, owned" facilities also includes IRUs.

Response:

Charter objects to this data request on the grounds that the requested information has no relevance to this proceeding. Further, Charter cannot provide information on the

locations served by its competitors – this data should be obtained directly from those entities.

66. Please identify all operating areas in which Charter offers cable television service in California in which Charter provides broadcast television stations on an encrypted basis.

Response:

Charter objects to this data request on the grounds that responding would be overly burdensome. However, Charter can respond that the majority of California lineups have been converted to All Digital as of this filing and provide broadcast television stations on an encrypted basis. The following lineups, which will not be converted to All Digital, do not provide broadcast television stations on an encrypted basis:

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

67. To the extent that any of the other merging entities currently does not encrypt broadcast television stations, is it Charter's intention to convert those systems to encryption of broadcast television stations following the merger?

Response:

Charter objects to this question on the grounds that the reference to "other" merging entities is ambiguous -- Charter is not merging with any other entity in California. Otherwise, Charter responds as follows: No.

68. Using the attached Broadband Services spreadsheet template, please identify each Census Block where Charter business Ethernet services are currently available in California. Provide information including the service or brand names for business services offered by Charter, including those that are substantially equivalent to the following Comcast service or brand names: Comcast Ethernet Virtual Private Line Service ("EVPL"), Comcast Ethernet Network Service, Comcast Business Ethernet for Branch Offices, and Comcast Ethernet Private Line Service.

Response:

Charter can provide Ethernet services at any location that is served by either fiber or coaxial cable. **[begin CONFIDENTIAL information:**

:end CONFIDENTIAL information] Charter cannot identify Ethernet service availability for the fiber lit locations by block group.

69. Indicate which of the business Ethernet services identified at No. 68 are also being offered in California, perhaps under different descriptions or brand names, by any of the merging parties. Provide the name and description of each such service, and identify to which Charter service the other parties' services is equivalent to.

Response:

Charter cannot provide information on the services offered by the merging parties – this information should be obtained directly from those entities.

70. With respect to each of the services identified at No. 68 and 69 and for each Census Block where the service is currently available in California, identify all of Your current competitors offering similar services at each such location, including the parties to the proposed merger and all other providers.

Response:

Charter cannot provide information on the services offered by its competitors – this information should be obtained directly from those entities.

71. With respect to each of the services identified at No. 68 and 69, does Charter offer such services in situations where a customer's geographic coverage requirements extend beyond current Charter operating areas? If yes, please describe in detail the nature of the relationship between Charter and any connecting provider involved in the furnishing of the service to such customer, including the manner in which such multi-provider services are priced, the entity that acts as the prime contact for the customer, the process for coordination of installation and ongoing maintenance of the service, revenue-sharing or revenue-splitting arrangements between Charter and such other provider(s). If such multi-provider arrangements are documented in formal written agreements, provide copies of all such agreements, including all appendices and attachments. (Definition of Multi-provider arrangements: An arrangement where Charter is collaborating or cooperating with another provider of Ethernet services to deliver a service to a business customer requiring service to points within or outside the service area of Charter.)

Response:

Charter objects to this data request insofar as it seeks information regarding services furnished to customers with no presence in the area affected by the proposed transfer of California assets. Subject to such objection, Charter responds as follows:

Yes. Charter has established connections with other providers to enable Charter to serve customers with locations both within and outside of Charter's network footprints. Typically, these customers are located predominantly in Charter's service area. In such cases, Charter acquires service from the other provider and resells the service either separately or bundled with Charter's on-net services. The other provider is responsible for installation, operation, and maintenance of its services and facilities. Charter remains responsible to its customer for the overall service, including underlying services and facilities furnished by the other provider, and serves as the customer's point of contact for all provisioning, repairs, billing, and other matters relating to the service.

Charter objects to providing copies of its inter-service provider agreements. The terms and conditions of such agreements are determined on a negotiated, individual case-by-case basis, and Charter is required by contract with the involved third parties to protect the requested contracts and their provisions from disclosure. Further, Charter objects to producing such agreements on the grounds that they are not relevant to the identified scope of this proceeding.

72. With respect to the multi-provider arrangements referenced at No. 71 above, identify all providers, e.g., Level 3, with which such arrangements have been established. Indicate which of the merging parties Charter currently has entered into multi-provider arrangements to deliver Ethernet, backhaul, or other telecommunications services.

Response:

Charter objects to this data request insofar as it seeks information regarding services furnished to customers with no presence in the area affected by the proposed transfer of California assets. Further, Charter objects to producing such information on the grounds that it is not relevant to the identified scope of this proceeding.

73. [request withdrawn by ORA].

Dated: September 12, 2014

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3146/005/X166070.v1

PUBLIC VERSION

EXHIBIT 13

Charter's Response to ORA Data Request, Set 3

(includes supplemental submissions)

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.□	Application 14-06-012 (Filed June 17, 2014)

RESPONSE BY CHARTER FIBERLINK CA-CCO, LLC (U6878C) TO THE THIRD SET OF DATA REQUESTS BY THE OFFICE OF RATEPAYER ADVOCATES

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September 19, 2014

PUBLIC VERSION

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.□	Application 14-06-012 (Filed June 17, 2014)

RESPONSE BY CHARTER FIBERLINK CA-CCO, LLC (U6878C) TO THE THIRD SET OF DATA REQUESTS BY THE OFFICE OF RATEPAYER ADVOCATES

Pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure, Charter Fiberlink CA-CCO, LLC ("Charter") submits these responses to the third set of data requests (Data Request No. ORA-A.14-04-013.A-14-06-012 PHH-302) by the Office of Ratepayer Advocates ("ORA"), as subsequently restated or clarified by ORA. Charter's responses to these data requests are subject to the General Objections and Reservations set forth below, which are hereby incorporated by reference into each response below. In responding to these data requests, the term "Charter" includes such of its affiliates as is consistent with the context of specific requests.

GENERAL OBJECTIONS

1. Charter objects to these data requests to the extent they seek information that is neither relevant nor material to any claims or defenses in this action, nor reasonably calculated to lead to the discovery of admissible evidence in this action.

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2. Charter objects to these data requests to the extent they purport to apply to: (a) any person or entity that is not subject to the jurisdiction of the Commission or that does not conduct regulated operations in the State of California; or (b) services that are not subject to the jurisdiction of the Commission, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence.

3. Charter objects to these data requests to the extent they seek information protected from discovery by any applicable privilege, protection, immunity or other exemption from discovery under the California or United States Constitutions, statutes or case law, including, without limitation, the attorney-client privilege, attorney work-product doctrine, right of privacy, trade secret protection, confidential information protection, or other exemption from discovery.

4. Charter objects to these data requests to the extent they are overbroad, unreasonably duplicative of other data requests, or beyond the scope of permissible discovery.

5. Charter objects to these data requests to the extent they call for information that is equally or reasonably available to ORA without undue burden.

6. Charter objects to the continuing nature of these data requests.

7. Charter objects to these requests to the extent they purport to impose requirements or burdens beyond the production of information and documents.

RESERVATIONS

1. The fact that any response is given to a particular data request should not be taken as an admission or other concession that the substance of the data request is properly within the scope of this proceeding or permissible discovery or inquiry.

2. Neither Charter's responding to a particular data request nor Charter's response should be taken as an admission or other concession as to any matter of law, including, without limitation, the extent of the Commission's jurisdiction or authority over any matter being investigated or considered in this proceeding.

3. Charter's investigation and discovery of the matters relating to this proceeding are continuing. The responses and objections herein are based upon information and documents presently known to, and in the possession of, Charter. Charter reserves the right to rely on any documents or other evidence that may develop or subsequently come to its attention, to assert additional objections or supplemental responses should Charter discover that there is information or grounds for objections, and to supplement or amend these responses at any time.

4. Nothing contained in these responses is intended to be or should be considered a waiver of the attorney-client privilege, attorney work-product doctrine, or other applicable privilege, immunity, the right of privacy or other exemption from discovery. Charter specifically reserves

the right to assert privileges for any privileged or otherwise protected information that is disclosed inadvertently in response to these data requests.

RESPONSES

1. **Provide Your post-merger plans for network upgrades and enhancements, including but not limited to, any enhancement in broadband speeds to households, small and medium sized businesses. Please reference ORA Data Request No. ORA- A.14-04-013.PHH-001, question 16 and 22, for definitions of small and medium sized businesses.**

Response:

Charter objects to this request on the ground of relevance insofar as it seeks information relating to areas other than California. If this request is referring to the "merger" that is the subject of Application 14-04-013, Charter responds that it has no post-merger plans for network upgrades or enhancements in California. If this request is referring to the asset sale that is the subject of Application 14-06-012, Charter responds that it has no plans for network upgrades or enhancements in California following the asset sale.

2. **Specify, using maps where required in order to provide a complete and accurate response, whether Your planned upgrades or enhancements noted above are occurring in Your current network area, Comcast network areas, Time Warner Cable network areas and/or Bright House Networks network area.**

Response:

Not applicable - see response to data request 1, above.

3. **Provide the existing rules and requirements for Your low income program offered in California, including eligibility requirements.**

Response:

Charter does not offer a low income program for broadband in California.

4. **Provide a description of the enrollment process for Your low income program in California, including:**
   a. All available methods of application submission,
   b. Application requirements,
   c. Application review procedures, and
   d. Anticipated and actual time frames, from first request for application to activation of service.

Response:

Not applicable - see response to data request 3, above.

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5. **For each available sign-up method, list how many California Your low income program customers utilized each method to sign up, including unsuccessful sign up attempts.**

Response:

Not applicable - see response to data request 3, above.

6. **Describe the mechanism whereby eligibility for Your low income program expires, and describe any procedures You undertake to continue providing services to households in California.**

Response:

Not applicable - see response to data request 3, above.

7. **Provide a list and description of services offered through Your low income program in California, including advertised and actual speeds of services offered.**

Response:

Not applicable - see response to data request 3, above.

8. **Describe Your assessment of Your low income program's existing shortfalls in California, including enhancements needed.**

Response:

Not applicable - see response to data request 3, above.

9. **Provide Your plans to improve or enhance Your low income program in California, reflecting planned changes over the three years following the merger, including:**
   a. Expansion of eligibility requirements,
   b. Equipment improvements,
   c. Expansion into wireless modem offerings, and
   d. Speed upgrades.

Response:

Not applicable - see response to data request 3, above.

10. **Describe how Your low income program outreach plans in California will make new customers aware of the Your low income program, post-merger.**

Response:

Not applicable - see response to data request 3, above.

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11. Describe post-merger integration plans for customers who are already Comcast customers, Time Warner Cable customers, or Bright House Networks customers who are also eligible for Your low income program.

Response:

Not applicable - see response to data request 3, above.

12. Where Your Broadband Services is available in California, list the total number of households currently eligible for Your low income program.

Response:

Not applicable - see response to data request 3, above.

13. Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households currently eligible for Your low income program.

Response:

Not applicable - see response to data request 3, above.

14. List the anticipated number of households that will be eligible for Your low income program in California, post-merger.

Response:

Not applicable - see response to data request 3, above.

15. Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block, the anticipated number of households that will be eligible for Your low income program in California by Census Block, post-merger.

Response:

Not applicable - see response to data request 3, above.

16. List the number of households currently subscribed to Your low income program in California.

Response:

Not applicable - see response to data request 3, above.

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17. Using the attached updated Broadband Services spreadsheet, list the number of households currently subscribed to Your low income program in California by Census Block.

Response:

Not applicable - see response to data request 3, above.

18. Provide information describing Your yearly and total expenditures for Your low income program operations for years 2010, 2011, 2012, 2013.

Response:

Not applicable - see response to data request 3, above.

19. Provide any cost/benefit analyses made when creating or revising Your low income program eligibility criteria, including any analyses made which project costs of expanding eligibility to include low-income seniors, the disabled, or other groups predominately represented in unserved and underserved areas.

Response:

Not applicable - see response to data request 3, above.

20. Please provide Your definition of "line extension" and explain Your line extension policies.

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

21. Using Your definition of line extension as provided in question 20, please identify the total number of line extensions requested in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

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22. Using Your definition of line extension as provided in question 20, please identify the total number of line extensions completed or built-out in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

23. Using Your definition of line extension as provided in question 20, using the attached updated Broadband Services spreadsheet, list the number of line extensions that You have deployed in California by Census Block for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

24. Using Your definition of line extension as provided in question 20, please identify the number of households that were not able to get a line extension in California because they could not afford it for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

What is the number of entities You serve using California Teleconnect Fund (CTF) funding?

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

25. Please provide the percent of Your Network Availability in California, by county, for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's historical network availability have no relevance to any of the topics that are identified by the

Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

26. Please explain how You define quality of service for broadband and voice services.

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds as follows:

Although Charter's voice services are not subject to Commission regulation, Charter relies on the provisions of the Commission's General Order 133-C to guide its measurement and monitoring of voice quality of service.

Charter objects to this data request on the ground that the requested information has no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

27. Please identify the types of quality of service metrics that You track and measure for broadband and voice services.

Response:

Charter objects to providing the information sought by this data request on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Without waiving this objection, Charter responds as follows:

Charter tracks the following types of voice quality of service metrics:

a) Customer Trouble Report
b) Out of Service Report
c) Answer Time

28. Please provide all procedures and protocols in place on how You track and measure the quality of service metrics identified in question 27.

Response:

Charter objects to providing the information sought by this data request on the ground that such information has no relevance to the topics that are identified in the Scoping

Ruling as being within the scope of this proceeding. Without waiving this objection, Charter responds as follows:

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

29. For all quality of service metrics You identified in response to questions 27 and 28, please provide the results separately for broadband and voice services in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to providing the information sought by this data request on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Charter further objects to this data request on the ground that data for periods prior to 2013 is stale and has no relevance to this proceeding. Without waiving these objections, Charter responds as follows:

Charter is unable to retrieve data for periods prior to 2012. Charter is providing data relating to voice quality of service in the Excel file named "CONFIDENTIAL CA Comcast Merger Data1.xls"

30. Provide the number of Outages for Your voice services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:
a. The number of service Outages by type of customer (residential, small or medium sized business)
b. Cause of service Outage
c. Response time (time it took to respond to an outage)
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e., resolve an Outage)
e. Total number of Outages by county.

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter further objects to this data request on the ground that data for periods prior to 2013 is stale and has no relevance to this proceeding. Without waiving these objections, Charter responds as follows:

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Charter is providing outage report data in the Excel file named "CONFIDENTIAL CA ORA DR #2_Question 30 FCC Outage Report Spreadsheet 2010-2014.xlsx"
[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

31. Provide the number of Outages for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:
a. The number of Outages by type of customer (residential, small or medium sized business)
b. Cause of Outage
c. Response time (time it took to respond to an outage)
d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)
e. Total number of Outages by county

Response:

Charter objects to this data request on the ground that data regarding Charter's historical broadband outages have no relevance to the topics that are identified by the Scoping Ruling as being within the scope of this proceeding. Without waiving this objection, Charter submits the following information. Residential outage information is provided in the following confidential Excel file: CONFIDENTIAL California Historical HSI Outages TRB send.xls

32. How do You define service degradation for broadband service?

Response:

Charter objects to this data request on the ground that data regarding Charter's service degradation (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

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33. Using Your definition of service degradation, provide the number of service degradations for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

a. The number of service degradation by type of customer (residential, small or medium sized business)

b. Cause of service degradation

c. Response time (time it took to respond to a service degradation)

d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve a service degradation)

e. Total number of service degradations by county

Response:

Charter objects to this data request on the ground that data regarding Charter's service degradation (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

34. Please provide all outage reports You have submitted to the Federal Communications Commission as required by 47 C.F.R. Part 4 pertaining specifically to outages in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter further objects to this data request on the ground that data for periods prior to 2013 is stale and has no relevance to this proceeding. Without waiving these objections, Charter responds as follows:

Charter is providing outage report data in the .pdf files in the confidential folder named CONFIDENTIAL CA ORA DR #2_Question 34 FCC Outage Reports_pdfs.zip

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35. Please provide the Service Installation Intervals for Charter orders for new voice service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. The Service Installation Interval excludes all orders having customer requested appointments later than the provider's commitment dates.

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds as follows:

Charter is unable to retrieve data for periods prior to 2012. Charter is providing data relating to service orders in the Excel file named "CONFIDENTIAL CA Comcast Merger Data1.xls"

36. Please provide the Service Installation Intervals for Charter orders for new broadband service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. This amount excludes all orders having customer requested appointments later than the provider's commitment dates).

Response:

Charter objects to this data request on the ground that data regarding Charter's service installation intervals have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

37. Please provide the total number of California service orders received for new voice services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):

a. Total number of service orders received

b. Total number of service orders completed (i.e. commitment met)

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have

regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter further objects to this data request on the ground that data for periods prior to 2013 is stale and has no relevance to this proceeding. Without waiving these objections, Charter responds as follows:

Charter is unable to retrieve data for periods prior to 2012. Charter is providing data relating to service orders in the Excel file named "CONFIDENTIAL CA Comcast Merger Data1.xls"

38. Please provide the total number of California service orders received for new broadband services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):

a. Total number of service orders received

b. Total number of service orders completed (i.e. commitment met)

Response:

Charter objects to this data request on the ground that data regarding Charter's receipt of new service orders have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

[39. no request made]

40. Please provide all customer-initiated complaints concerning unauthorized charges in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

a. Type of customer: residential, small or medium sized business

b. Type of service: voice or broadband

c. Date of complaint

d. Frequency of complaint by the same customer

e. Response time to customer for assistance

f. Location of customer by County

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter further objects to this data request on the ground that data for periods prior to 2013 is stale and has no relevance to this proceeding. Without waiving these objections, Charter responds as follows:

Charter is providing data relating to complaints for unauthorized charges for voice service in the Excel file named "CONFIDENTIAL CA ORA DR#2_Question 40_44_45 Agency Customer Complaints 2010-2014.xlsx"
[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

Charter objects to providing the information sought by this data request with respect to broadband service on the ground.s that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Charter further objects to this data request on the ground.s that Charter does not track such complaints relating to broadband service and compiling such data from its records would be unduly burdensome, in that it would require the expenditure of significant human resources over an extended period of time.

[41. no request made]

42. Please provide Your current processes and/or procedures for handling customers complaints and/or dissatisfaction for:
a. Voice services
b. Broadband services

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter will respond in a supplemental submission.

43. Please provide any changes to Your current processes and/or procedures for handling customer complaints and/or dissatisfaction post-merger in California for:
a. Voice services
b. Broadband services

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds as follows:

If this request is referring to the "merger" that is the subject of Application 14-04-013, Charter responds that it has no post-merger plans for changes to its current processes or procedures in California for handling customer complaints or dissatisfaction. If this request is referring to the asset sale that is the subject of Application 14-06-012, Charter responds that it has no plans for changes to its current processes or procedures for handling customer complaints or dissatisfaction in California following the asset sale.

44. Please provide Data for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) on the number of Your California customers with billing complaints for:

a. Voice services

b. Broadband services

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter also objects to this request insofar as it seeks data regarding customer-initiated complaints for periods prior to May, 2013, on the ground that such data is not readily available and obtaining it would be overly burdensome. Further, no data for periods prior to May, 2013, would be relevant to this proceeding. Without waiving these objections, Charter responds to this data request as follows:

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

In addition, please see the Excel file named "CONFIDENTIAL CA ORA DR#2_Question 40_44_45 Agency Customer Complaints 2010-2014.xlsx"

Charter objects to providing the information sought by this data request with respect to broadband service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Charter further objects to this data request on the ground that Charter does not track such complaints relating to broadband service and compiling such data from its records would be unduly burdensome, in that it would require the expenditure of significant human resources over an extended period of time.

45. Please provide all remaining customer-initiated complaints concerning Your voice services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

a. Type of customer: residential, small or medium sized business
b. Type and/or nature of complaint or dissatisfaction
c. Date of complaint
d. Frequency of complaint by the same customer
e. Response time to customer for assistance
f. Location of customer by County

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Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter also objects to this request insofar as it seeks data regarding customer-initiated complaints for periods prior to May, 2013, on the ground that such data is not readily available and obtaining it would be overly burdensome. Further, no data for periods prior to May, 2013, would be relevant to this proceeding. Without waiving these objections, Charter responds to this data request as follows:

See the Excel file named "CONFIDENTIAL CA ORA DR#2_Question 40_44_45 Agency Customer Complaints 2010-2014.xlsx"
[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

46. Please provide all remaining customer-initiated complaints concerning Your broadband services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

[a-f. No request made]
g. Type of customer: residential, small or medium sized business
h. Type and/or nature of complaint or dissatisfaction (such as provision of new Installation/service, fault repair/restoration, cramming, quality of service/product/software/hardware, billing)
i. Date of complaint
j. Frequency of complaint by the same customer
k. Response time to customer for assistance
l. Location of customer by County

Response:

Charter objects to providing the information sought by this data request with respect to broadband service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Charter further objects to this data request on the ground that Charter does not track such

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complaints relating to broadband service and compiling such data from its records would be unduly burdensome, in that it would require the expenditure of significant human resources over an extended period of time.

47. Please provide Your current plans to improve the quality of service to California customers?

Response:

Charter has completed an all digital upgrade throughout most of its California service area. This has enabled Charter to launch its Charter Spectrum product, which offers over 200 new HD channels, and to increase Charter's minimum Internet speed from 30 mbps to 60 mbps in most areas where Internet is available, and Charter will complete the increase by mid-October in other areas where Internet is available. (For additional information regarding this project see: http://www.bizjournals.com/prnewswire/press_releases/2014/08/25/CG96184)

Charter plans to continue to fully optimize the investment in its facilities so long as Charter continues to operate the facilities.

48. Please provide any plans to improve Your quality of service to California customers post-merger.

Response:

If this request is referring to the proposed merger that is the subject of A.14-04-013, Charter responds that it does not expect that the plans described in its response to data request 47, will change. If this request is referring to the proposed asset sale that is the subject of A.14-06-012, Charter responds that the plans described in its response to data request 47 will apply only to the facilities located within the California service area that Charter will retain following consummation of the sale.

49. Please provide Your level of customer satisfaction compared to the five largest competing service providers (in California, where available) for the years 2009, 2010, 2011, 2012, and 2013 for:

a. Voice services

b. Broadband services

Response:

Charter objects to this data request insofar as seeks information for periods prior to 2013, on the grounds that such information is irrelevant. Further, Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping

Ruling as being within the scope of this proceeding. Without waiving these objections, Charter responds to this data request as follows:

Charter has not compiled customer satisfaction comparisons with other California providers.

The following chart was compiled by Bruce Leichtman, President and Chief Analyst at Leichtman Research Group. This firm conducts Charter's ongoing *Customer Satisfaction research*. The following question is asked in Charter's Customer Satisfaction Survey Action Team (CSAT) survey and in the LRG nationwide survey: *How satisfied are you with Charter as your current Internet Service Provider?* The survey utilizes a 1 to 10 scale with 10 being extremely satisfied and 1 being not at all satisfied, with the top 3 box scores combined, indicating a high level of satisfaction.

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

50. Please separately identify the source(s) of the Data (for example, J.D. Power & Associates, internal surveys, independent third-party surveys) for Your responses to Question 48 [sic].

Response:

Charter understands this data request as referring to data request 49, above. See response to data request 49.

51. Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Telephone Service Providers Customer Satisfaction Study?

Response:

Charter objects to this data request on the ground that the requested information has no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

PUBLIC VERSION

52. Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Telephone Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.

Response:

Charter objects to this data request on the ground that the requested information has no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

53. Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study?

Response:

Charter objects to this data request on the ground that the requested information has no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

54. Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.

Response:

Charter objects to this data request on the ground that the requested information has no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

55. Please provide the battery backup brand(s) provided by Your company. For each brand please provide the following:

a. Average standby life of the backup battery

b. Average use life

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

PUBLIC VERSION

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

The average use life of each backup battery provides 6 to 10 years of service life.

56. Please provide any educational materials provided to Your customers informing them that they will not have phone services in the instances of power outages.

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

In addition to obtaining an affirmative acknowledgment from each customer prior to service initiation regarding 911 service availability during power outages, Charter provides customer educational material discussing the availability of phone service during a power outage on Charter's website at https://www.charter.com/browse/content/voice-agreement and in customer Welcome kit materials as shown on the following Charter website http://connect.charter.com/welcome/motorola/eng/index.html at pages 59, 71.

57. Do You provide backup batteries at no charge to Your customers?

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

[begin CONFIDENTIAL information:

PUBLIC VERSION

:end CONFIDENTIAL information]

58. Can Your customers get extra backup batteries from You?

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

[begin CONFIDENTIAL information: :end CONFIDENTIAL information]

59. Please provide processes and procedures on how You provision 911 services in California?

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds to this data request as follows:

Charter establishes connections to the ILEC Selective Router for each area where Charter provides service. Charter establishes facilities that are diverse and redundant. Charter follows the California TD-280A processes.

60. Please provide Data on any and all of Your 911 service outages in California by county for years 2010, 2011, 2012, 2013, and through August 31, 2014.

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Charter further objects to this data

request insofar as it seeks information for periods prior to 2013, on the ground that such information is irrelevant. Without waiving these objections, Charter responds to this data request as follows:

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

61. Please identify with specificity each and every source of economies of scale that You claim will be engendered by the merger. For each, indicate the anticipated annual savings, staff reductions, other workforce-related cost savings, and any other source of claimed cost reductions. For each source of scale economies identified, indicate why You believe that a similar savings could not be achieved in the absence of the proposed merger.

Response:

If this data request is referring to the merger that is the subject of A.14-04-013, Charter has made no such claim. Charter's assertions regarding the transaction that is the subject of A.14-06-012 are described in the application on file with the Commission in that docket and the companion public application and supporting documents on file with the FCC.

62. Please indicate the number of California employees that will be eliminated by You.

Response:

Charter does not anticipate any job elimination.

63. Provide ORA with a copy of any materials provided to the FCC in support of the proposed merger transaction, including the FCC Application, any supporting attachments, and any confidential information or information provided under seal.

Response:

Charter objects to this data request on the ground that seeks information regarding matters outside California and outside the scope of this proceeding, as identified in the Scoping Ruling. Charter objects, further, to this data request to the extent that it seeks documents and information that are on public file and easily accessible to ORA. Charter also object to this data request to the extent it duplicates earlier data requests, specifically, ORA's second set of data requests. Charter is providing data and documents in its response to ORA's second set of data requests that are also responsive to this data request.

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64. Using the updated attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households subscribed by speed tier (upload and download speeds). Please clearly identify each speed tier and add any additional columns as necessary.

Response:

Charter will respond to this data request in a supplemental submission.

65. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest ISPs/transit providers/other networks with whom You interconnect.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

66. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest ISPs/transit providers/other networks with whom You interconnect.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

67. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest directly interconnected customers (if any).

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

68. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest directly interconnected customers (if any).

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

69. For Your network in California, please state the bandwidth capacity of Your backbone IP/mesh network.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

70. For Your network in California, please state the bandwidth capacity of Your three highest traffic volume metro area (or Your network equivalent large geography) routers.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

71. For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume metro area (or Your network equivalent large geography) routers.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

72. For Your network in California, please state the bandwidth capacity of Your three highest traffic border routers.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

73. For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume border routers.

Response:

Charter objects to this request on the ground that it seeks highly confidential information that is neither relevant to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding nor reasonably calculated to lead to the discovery of admissible evidence in this proceeding.

74. How do You define "usage based pricing"? Please provide all of the areas nationwide where You are currently using or offering usage based pricing.

Response:

Charter does not offer or have any plans in the near future to offer usage based broadband pricing.

75. Please provide all of the areas nationwide where You are currently using or offering usage based pricing.

Response:

Charter does not offer or have any plans in the near future to offer usage based broadband pricing.

76. Please identify the specific terms, conditions, and policies of Your usage based pricing offerings and plans, including but not limited to, speed tiers, data caps, and pricing.

Response:

Charter does not offer or have any plans in the near future to offer usage based broadband pricing.

77. Please provide any and all of Your Plans to use, roll out and or implement usage based pricing nationwide.

Response:

Charter does not offer or have any plans in the near future to offer usage based broadband pricing.

78. Please provide, by Census Block, all of the areas in California where You are currently using or offering usage based pricing.

Response:

Charter does not offer or have any plans in the near future to offer usage based broadband pricing.

79. Please provide any and all of Your plans to use, roll out and or implement usage based pricing in California.

Response:

Charter does not offer or have any plans in the near future to offer usage based broadband pricing.

Dated: September 19, 2014

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3146/005/X166236.v1

PUBLIC VERSION

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.□	Application 14-06-012 (Filed June 17, 2014)

SUPPLEMENTAL RESPONSE BY CHARTER FIBERLINK CA-CCO, LLC (U6878C) TO THE THIRD SET OF DATA REQUESTS BY THE OFFICE OF RATEPAYER ADVOCATES

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September 26, 2014

PUBLIC VERSION

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U6874C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U6955C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	Application 14-04-013 (Filed April 11, 2014)
Joint Application of Comcast Corporation, Time Warner Cable Information Services (California), LLC (U6874C) and Charter Fiberlink CA-CCO, LLC (U6878C) for Expedited Approval to Transfer Certain Assets and Customers of Charter Fiberlink CA-CCO, LLC to Time Warner Cable Information Services (California), LLC, Pursuant to Public Utilities Code Section 851.□	Application 14-06-012 (Filed June 17, 2014)

SUPPLEMENTAL RESPONSE BY CHARTER FIBERLINK CA-CCO, LLC (U6878C) TO THE THIRD SET OF DATA REQUESTS BY THE OFFICE OF RATEPAYER ADVOCATES

Pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure, Charter Fiberlink CA-CCO, LLC ("Charter") submits these supplemental responses to the third set of data requests (Data Request No. ORA-A.14-04-013.A-14-06-012 PHH-302) by the Office of Ratepayer Advocates ("ORA"), as subsequently restated or clarified by ORA. Charter's supplemental responses to these data requests are subject to the General Objections and Reservations set forth below, which are hereby incorporated by reference into each response below. In these responses, the term "Charter" includes such of its affiliates as is consistent with the context of specific requests.

GENERAL OBJECTIONS

1. Charter objects to these data requests to the extent they seek information that is neither relevant nor material to any claims or defenses in this action, nor reasonably calculated to lead to the discovery of admissible evidence in this action.

PUBLIC VERSION

2. Charter objects to these data requests to the extent they purport to apply to: (a) any person or entity that is not subject to the jurisdiction of the Commission or that does not conduct regulated operations in the State of California; or (b) services that are not subject to the jurisdiction of the Commission, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence.

3. Charter objects to these data requests to the extent they seek information protected from discovery by any applicable privilege, protection, immunity or other exemption from discovery under the California or United States Constitutions, statutes or case law, including, without limitation, the attorney-client privilege, attorney work-product doctrine, right of privacy, trade secret protection, confidential information protection, or other exemption from discovery.

4. Charter objects to these data requests to the extent they are overbroad, unreasonably duplicative of other data requests, or beyond the scope of permissible discovery.

5. Charter objects to these data requests to the extent they call for information that is equally or reasonably available to ORA without undue burden.

6. Charter objects to the continuing nature of these data requests.

7. Charter objects to these requests to the extent they purport to impose requirements or burdens beyond the production of information and documents.

RESERVATIONS

1. The fact that any response is given to a particular data request should not be taken as an admission or other concession that the substance of the data request is properly within the scope of this proceeding or permissible discovery or inquiry.

2. Neither Charter's responding to a particular data request nor Charter's response should be taken as an admission or other concession as to any matter of law, including, without limitation, the extent of the Commission's jurisdiction or authority over any matter being investigated or considered in this proceeding.

3. Charter's investigation and discovery of the matters relating to this proceeding are continuing. The responses and objections herein are based upon information and documents presently known to, and in the possession of, Charter. Charter reserves the right to rely on any documents or other evidence that may develop or subsequently come to its attention, to assert additional objections or supplemental responses should Charter discover that there is information or grounds for objections, and to supplement or amend these responses at any time.

4. Nothing contained in these responses is intended to be or should be considered a waiver of the attorney-client privilege, attorney work-product doctrine, or other applicable privilege, immunity, the right of privacy or other exemption from discovery. Charter specifically reserves

the right to assert privileges for any privileged or otherwise protected information that is disclosed inadvertently in response to these data requests.

SUPPLEMENTAL RESPONSES

20. Please provide Your definition of "line extension" and explain Your line extension policies.

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding. Without waiving this objections, Charter provides the following responsive information:

Charter has, on occasion, defined "line extension" in the following terms: "Aerial or underground construction of coaxial and/or fiber optic cable to residential dwellings and/or commercial businesses for the purpose of providing video, and/or high speed data, and/or telephone services."

21. Using Your definition of line extension as provided in question 20, please identify the total number of line extensions requested in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome. Without waiving this objections, Charter provides the following responsive information:

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

22. Using Your definition of line extension as provided in question 20, please identify the total number of line extensions completed or built-out in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome. Without waiving these objections, Charter provides the following responsive information:

See response to data request 22, above.

23. Using Your definition of line extension as provided in question 20, using the attached updated Broadband Services spreadsheet, list the number of line extensions that You have deployed in California by Census Block for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome, as Charter does not track line extension by census block.

24. Using Your definition of line extension as provided in question 20, please identify the number of households that were not able to get a line extension in California because they could not afford it for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

What is the number of entities You serve using California Teleconnect Fund (CTF) funding?

Response:

Charter objects to this data request on the ground that data regarding Charter's line extensions (by any definition) have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome. Without waiving these objections, Charter provides the following responsive information:

Charter does not track the requested line extension information.

Charter serves 221 entities using CTF funding.

26. Please explain how You define quality of service for broadband and voice services.

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds as follows:

Although Charter's voice services are not subject to Commission regulation, Charter relies on the provisions of the Commission's General Order 133-C to guide its measurement and monitoring of voice quality of service.

Charter objects to this data request with respect to broadband service on the ground that the requested information has no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding.

Without waiving this objection, Charter responds that it measures broadband service quality in terms of as delivered speed, latency, and uptime.

27. Please identify the types of quality of service metrics that You track and measure for broadband and voice services.

Response:

Charter objects to providing the information sought by this data request on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Without waiving this objection, Charter responds as follows:

Charter tracks the following types of voice quality of service metrics:

a) Customer Trouble Report
b) Out of Service Report
c) Answer Time

Charter tracks the following types of broadband quality of service metrics:

a) delivered speed
b) latency
c) uptime

28. Please provide all procedures and protocols in place on how You track and measure the quality of service metrics identified in question 27.

Response:

Charter objects to providing the information sought by this data request on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Without waiving this objection, Charter responds as follows:

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

29. For all quality of service metrics You identified in response to questions 27 and 28, please provide the results separately for broadband and voice services in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

Charter objects to providing the information sought by this data request on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Charter further objects to this data request on the ground that data for periods prior to 2013 is stale and has no relevance to this proceeding. Without waiving these objections, Charter responds as follows:

Charter is unable to retrieve data for periods prior to 2012. Charter is providing data relating to voice quality of service in the Excel file named "CONFIDENTIAL CA Comcast Merger Data1.xls." Charter is providing data relating to broadband quality of service in the Excel file named "CONFIDENTIAL SamKnows CA Data.xlsx"

31. Provide the number of Outages for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

a. The number of Outages by type of customer (residential, small or medium sized business)

b. Cause of Outage

c. Response time (time it took to respond to an outage)

d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)

e. Total number of Outages by county

Response:

Charter objects to this data request on the ground that data regarding Charter's historical broadband outages have no relevance to the topics that are identified by the Scoping Ruling as being within the scope of this proceeding. Without waiving this objection, Charter submits the following information: Residential outage information is provided in the following confidential Excel file: "CONFIDENTIAL California Historical HSI Outages TRB send.xls"; and business outage information is provided in the following confidential Excel file: "CONFIDENTIAL California Historical HSI Outages CIT send.xls."

36. Please provide the Service Installation Intervals for Charter orders for new broadband service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. This amount excludes all orders having customer requested appointments later than the provider's commitment dates).

Response:

Charter objects to this data request on the ground that data regarding Charter's service installation intervals have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome.

Without waiving this objection, Charter states:
[begin CONFIDENTIAL information:

:end CONFIDENTIAL information]

38. Please provide the total number of California service orders received for new broadband services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):
a. Total number of service orders received
b. Total number of service orders completed (i.e. commitment met)

Response:

Charter objects to this data request on the ground that data regarding Charter's receipt of new service orders have no relevance to any of the topics that are identified by the Scoping Ruling as being within the scope of this proceeding, and on the ground that providing the information sought by this request would be unduly burdensome. Without waiving this objection, Charter provides responsive information in the Confidential Excel files named "CONFIDENTIAL CB Internet Orders- CA.xlsx" and "CONFIDENTIAL Residential Internet Orders - CA.xlsx."

42. Please provide Your current processes and/or procedures for handling customers complaints and/or dissatisfaction for:

a. Voice services

b. Broadband services

Response:

Charter objects to providing the information sought by this data request with respect to voice service on the ground that such information has no relevance to the topics that are identified in the Scoping Ruling as being within the scope of this proceeding. Specifically, the Scoping Ruling states that the Commission's inquiry will involve the "implications of the Merger for those voice and backhaul services over which we have regulatory jurisdiction . . . ." (Scoping Ruling at p. 6.) Without waiving this objection, Charter responds as follows:

When a customer escalation is received, the Corporate Customer Escalation Desk (CCED) reviews for details and initiates a call to the customer within 4 hours of receipt. Assignment of escalation should occur within 4 hours of receipt. Local management initiates a second customer contact within 24 hours of assignment to work towards a resolution. Escalation closure should occur within 7 days; unless extension is requested. Once the ticket is resolved, it is then reviewed and closed by the appropriate VP/GM.

64. Using the updated attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households subscribed by speed tier (upload and download speeds). Please clearly identify each speed tier and add any additional columns as necessary.

Response:

Charter provides responsive information in the Confidential Excel file named CONFIDENTIAL Subscriber & Speed_as of 06302014.xlsx." A redacted version named "PUBLIC Subscriber & Speed_as of 06302014.xlsx" is also provided.

Dated: September 26, 2014

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3146/005/X166328.v2

PUBLIC VERSION

EXHIBIT 14

Bright House's Response ORA Data Request, Set 1

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)

BRIGHT HOUSE NETWORKS INFORMATION SERVICES (CALIFORNIA), LLC RESPONSES TO FIRST SET OF DISCOVERY REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A. 14-04-013 (Filed April 11, 2014)

BRIGHT HOUSE NETWORKS INFORMATION SERVICES (CALIFORNIA), LLC RESPONSES TO FIRST SET OF DISCOVERY REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

Pursuant to Rule 10.1 of the California Public Utilities Commission ("CPUC"), Bright House Networks Information Services (California), LLC, and its affiliates and subsidiaries ("BHN") provides responses to the first set of data requests ("DRs") served on it by the Office of Ratepayer Advocates, California Public Utilities Commission ("ORA").

These responses are subject to the general objections stated below and the specific objections posed in each response. BHN's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this response.

GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, BHN may restate one or more of these general objections. However, these general objections apply to each individual request and BHN's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive BHN's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of

such questions, requests, responses or documents, as to their competency, relevancy, materiality, privilege and admissibility as evidence for any purpose, or to other requests for production. BHN reserves the right to object on appropriate grounds to the use of such information and documents. BHN hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. BHN objects to each DR due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

2. BHN objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

3. BHN objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to BHN together with any copies.

4. BHN objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to BHN.

5. BHN objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to BHN.

6. BHN objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

7. BHN objects to each DR to the extent that it exceeds the requirements of applicable law, purports to impose upon BHN any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

8. BHN objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

9. BHN objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

10. BHN objects to each DR to the extent that it seeks the production of information and/or documents that that is publicly available or readily accessible to the requesting party(ies).

11. BHN objects to each DR to the extent that it requests documents or materials not in BHN's possession, custody or control.

12. BHN objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

Each of the foregoing general objections is incorporated by reference into the following responses.

I. RESPONSES

1. Please identify the total number of households passed where Bright House Networks broadband service is available in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

As of August 2014, BHN's facilities passed approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] households in California.

Sponsor: Dane Knudsen

2. Please identify the total number of households subscribed to Bright House Networks broadband services in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

As of August 2014, BHN provided broadband service to approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] households in California.

Sponsor: Dane Knudsen

3. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the number of households passed.

Response:

BHN does not track the number of households passed by Census block. Accordingly, BHN does not collect or retain the information necessary to respond to this question. As of August 2014, the number of households passed was approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] in California.

Sponsor: Dane Knudsen

4. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the number of households subscribing to Bright House Networks broadband service.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

Please see column E in the attached **Confidential Exhibit to Question #4**, which is the California-specific portion of BHN's most recent FCC Form 477 filed with the FCC. This report contains the requested information by Census tract.

Sponsor: Chris Feathers

5. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the maximum advertised download speeds (Mbps) for residential Bright House Networks broadband services.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

As of August 2014, the maximum advertised download speed for all areas where BHN's broadband residential service was available in California was 90 Mbps.

Sponsor: Jeff Allinder

6. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the maximum advertised upload speeds (Mbps) for residential Bright House Networks broadband services.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

As of August 2014, the maximum advertised upload speed for all areas where BHN's broadband residential service was available in California was 10 Mbps.

Sponsor: Jeff Allinder

7. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the price associated with the maximum advertised speed tier for residential Bright House Networks broadband services including:

a. Average initial promotional price of service ($ per month and number of months during which the promotional price remains in effect) within the Census Block

b. Average price of service following the expiration of the initial promotional cost of service ($ per month) within the Census Block.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. In particular, it is unclear what is meant by "average" prices.

Subject to the foregoing objections, BHN responds as follows:

Response: The monthly rate for BHN's high-speed Internet access service (10 Mbps download x 1 Mbps upload) is $54.00.

Sponsor: Jeff Allinder

8. Please list all Your residential broadband products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

a. Product/service name: Internet.

b. Description: Please see **Exhibit to Question #8b**.

c. Speed Tier: BHN's High-Speed Internet services in California are available at the following speeds (download speed x upload speed in Mbps): 10x1, 30x2, 60x5 and 90x10.

d. Price: The monthly rate for BHN's 10x1, standard high-speed Internet access service is $54.00.

e. Terms and Conditions: Please see **Exhibit to Question #8e**.

f. Total number of subscribers for each product/service offered: As of August 2014, BHN had approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] subscribers for its residential Internet service.

Sponsor: Jeff Allinder, Dane Knudsen

9. Please provide the information requested in items (7) and (8) separately for each year over the period 2009 through and including 2014.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, in that the company does not retain the request information for prior years. The company also objects on the grounds that the request seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

Please see **Exhibit to Question #9**, BHN's Channel and Pricing guides for 2009-2014.

With respect to subpart (f), please see the following table:

Date	Number of Residential Internet Subscribers		
Dec. 2009	[**BEGIN CONFIDENTIAL**]	[redacted]	[**END CONFIDENTIAL**]
Dec. 2010	[**BEGIN CONFIDENTIAL**]	[redacted]	[**END CONFIDENTIAL**]
Dec. 2011	[**BEGIN CONFIDENTIAL**]	[redacted]	[**END CONFIDENTIAL**]
Dec. 2012	[**BEGIN CONFIDENTIAL**]	[redacted]	[**END CONFIDENTIAL**]
Dec. 2013	[**BEGIN CONFIDENTIAL**]	[redacted]	[**END CONFIDENTIAL**]

Sponsor: Jeff Allinder, Dane Knudsen

10. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not conduct speed tests to determine the actual average download speeds of households on a Census block level. The advertised download speed of BHN's standard Internet access service is 10 Mbps.

Sponsor: Jeff Allinder

11. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) six (6) Mbps during peak times in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not conduct speed tests to determine the actual average download speeds of households on a Census block level. The advertised download speed of BHN's standard Internet access service is 10 Mbps.

Sponsor: Counsel

12. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not conduct speed tests to determine the actual average download speeds of households on a Census block level. The advertised download speed of BHN's standard Internet access service is 10 Mbps.

Sponsor: Counsel

13. Using the attached Broadband Services spreadsheet template, please identify the percent (%) of households subscribed with actual average download speeds greater than or equal to (≥) ten (10) Mbps during peak times in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not conduct speed tests to determine the actual average download speeds of households on a Census block level. The advertised download speed of BHN's standard Internet access service is 10 Mbps.

Sponsor: Counsel

14. Is Bright House Networks broadband service offered as a stand-alone service in California?

Response:

Yes, BHN's broadband service is offered as a stand-alone service in California.

Sponsor: Jeff Alinder

15. If the answer to Question #14 is yes, please identify the following:

a. Product/service name

b. Description

c. Terms and Conditions

d. Price

e. Number of households subscribed to stand-alone broadband service in California

Response:

The requested information for subparts (a)-(d) of this data request is stated in BHN's response to Question #8 above. In response to subpart (e), as of August 2014 there were approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] households subscribed to BHN's stand-alone broadband service in California.

Sponsor: Jeff Allinder, Michael Mayer

16. Please identify how Bright House Networks defines small business.

Objection:

BHN objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not have an official definition of the term "small business." In very broad terms, BHN considers small business to be those with fewer than 50-100 employees, depending on context.

Sponsor: Paul Woelk, Doug Knight

17. Please identify the total number of small-sized businesses passed by Bright House Networks facilities.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track the number of businesses passed by its facilities based on the size of the business. Facilities capable of delivering BHN's business services pass approximately **[BEGIN CONFIDENTIAL]** [redacted] [**END CONFIDENTIAL**] business premises in BHN's service territory in California as of August 2014.

Sponsor: Dane Knudsen

18. Please identify the total number of small-sized business subscribed to Bright House Networks broadband services in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track subscriptions for its business services based on the size of a business. As of August 2014, approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California have subscribed to BHN's broadband services. BHN generally believes that [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] of its business customers for broadband services are small businesses.

Sponsor: Dane Knudsen, Paul Woelk

19. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the number of all small-sized businesses passed where Bright House Networks broadband service is available.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track the number of businesses passed by its facilities based on the size of the businesses. Accordingly, BHN does not collect or retain the information necessary to respond to this question. Further, BHN does not track the number of business premises passed by its facilities capable of delivering BHN's business services on a Census block level. As of August 2014, BHN's facilities capable of delivering business services passed approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California.

Sponsor: Dane Knudsen

20. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the number of all small-sized business subscribed to Bright House Networks broadband service.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track subscriptions for its business services based on the size of a business. Accordingly, BHN does not collect or retain the information necessary to respond to this question. Further, BHN does not track the number of businesses that have subscribed to its business broadband services on a Census block level. As of August 2014, BHN provided service to approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California. BHN generally believes that [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] of its business customers are small businesses.

Sponsor: Dane Knudsen, Paul Woelk

21. Please list all Your small business products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

a. BHN's broadband and voice services marketed to businesses in California consist of the following:

- Trunking (primary rate interface and session initiation protocol)
- High-speed data over coax
- Dedicated Internet access over fiber
- Metro Ethernet over fiber
- Hosted voice (cloud PBX)
- Managed network services (managed router, managed firewall, content filtering, managed LAN, managed Wi-Fi)
- Hosted Microsoft exchange
- Hosted Microsoft SharePoint
- PC helpdesk support
- Managed server support
- Data backup

b. Marketing materials for these services are provided in **Exhibit to Question #21b**.

c. BHN's High Speed data services are available in the following speeds (downstream x upstream in Mbps): 25x2, 50x5, 75x7 and 100x10. BHN's Dedicated IP and Metro Ethernet speeds are custom designed and can range from 5 Mbps to 10 Gbps.

d. Please see **Confidential Exhibit to Question #21d** for pricing information.

e. Please see **Exhibit #21e**.

f. BHN does not track subscriptions for its business services based on the size of a business. With respect to subpart (f), as of August 2014, BHN had approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] business customers for broadband services in California. BHN generally believes that [**BEGIN CONFIDENTIAL**]

[redacted] [**END CONFIDENTIAL**] of its business customers are small businesses.

Sponsor: Dane Knudsen, Paul Woelk

22. Please identify how Bright House Networks defines medium-sized businesses.

Objection:

BHN objects to this request on the grounds that the request is vague and ambiguous.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not have an official definition of the term "medium business." Generally speaking, however, BHN considers medium business to be those with more than 100 employees.

Sponsor: Paul Woelk, Doug Knight

23. Please identify the total number of medium-sized businesses passed by Bright House Networks facilities.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track the number of sized businesses passed by its facilities based on the employee count of the businesses. Facilities capable of delivering BHN's business services pass approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] business premises in BHN's service territory in California as of August 2014.

Sponsor: Dane Knudsen

24. Please identify the total number of medium-sized business subscribed to Bright House Networks broadband services in California.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track subscriptions for its business services based on the size of a business. As of August 2014, approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California have subscribed to BHN's broadband services.

Sponsor: Dane Knudsen

25. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the number of all medium sized business passed by Bright House Networks facilities.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track the number of businesses passed by its facilities based on the size of the businesses. Accordingly, BHN does not collect or retain the information necessary to respond to this question. Further, BHN does not track the number of business premises passed by its facilities capable of delivering BHN's business services on a Census block level. As of August 2014, BHN's facilities capable of delivering business services passed approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California.

Sponsor: Dane Knudsen

26. Using the attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Bright House Networks broadband service is available in California, the number of all medium sized business subscribed to Bright House Networks broadband service.

Objection:

BHN objects to this request on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company, including information of this type at the Census block level. Further, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track subscriptions for its business services based on the size of a business. Accordingly, BHN does not collect or retain the information necessary to respond to this question. Further, BHN does not track the number of businesses that have subscribed to its business broadband services on a Census block level. As of August 2014, BHN provided broadband service to approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] businesses in California.

Sponsor: Dane Knudsen

27. Please list all Your medium-sized business broadband products/services offered in California, including:

a. Product/service name

b. Description

c. Speed Tier

d. Price

e. Terms and Conditions

f. Total number of subscribers for each product/service offered

Response:

Please see the response Question #21 for BHN's response to subparts (a) through (e).

With respect to subpart (f), as of August 2014, BHN had approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] business customers in California. BHN believes that [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] of these business customers are medium-sized businesses.

Sponsor: Paul Woelk, Doug Knight, Dane Knudsen

28. Please identify all voice services offered by your company:

a. **Product/service name**
b. **Description (include if your voice service is VoIP)**
c. **Is the product/service offered as a stand-alone service?**
d. **Price**
e. **Terms and Conditions**
f. **Total number of subscribers for each product/service offered**

Response:

BHN offers a variety of residential and business voice services in California. With respect to subparts (a) through (e), please see **Exhibit for Question #28** for the requested information.

With respect to subpart (f), as of August 2014, BHN had approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] subscribers for its voice services in California, which were comprised of approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] are residential subscribers and approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] are business subscribers.

Sponsor: Jeff Allinder, Paul Woelk, Doug Knight, Dane Knudsen

29. Please identify the total number of households passed where Bright House Networks voice service is available in California.

Response:

As of August 2014, BHN's voice services were available to approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] households in California.

Sponsor: Dane Knudsen

30. Please identify the total number of households subscribed to Bright House Networks voice services in California.

Response:

As of August 2014, approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] households in California were subscribed to BHN's voice services.

Sponsor: Dane Knudsen

31. Please identify all Your existing current broadband and voice deployment projects currently underway in California that includes:

a. Name of project

b. Description

c. Speeds offered

d. County/city/community name

e. Status of project

f. Estimated time of completion

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Counsel

32. Please identify all Your planned broadband and voice deployment in California in the next three years. Please include the following:

a. Description

b. Speeds offered

c. County/city/community name

d. Estimated deployment schedule

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Counsel

33. Please identify and describe how Bright House Networks decides whether to invest and expand its network into a community and what criteria is considered in making this determination. Identify all locations falling generally within or proximate to Bright House Networks' BHN's California operating areas where Bright House Networks has specifically declined to furnish any service that had been requested by customers, developers, communities, or others at any time from and after 2009. For each such instance, provide the specific reason or reasons for Bright House Networks' BHN's decision not to provide the requested service.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. The request fails to define key terms and concepts, including "locations … proximate to" BHN's operating areas. As such, it is not clear what is intended by the term "otherwise," or what services the request is intended to cover. To the extent that this request seeks information about BHN's video/cable services the company also objects on the grounds that such a request is outside the scope of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence.

Subject to the foregoing objections, BHN responds as follows:

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Counsel

34. Does Bright House Networks believe that it has an obligation (legal or otherwise) to provide service to any area within California upon request for service?

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. The request fails to define key terms, including "service," "obligation," and "otherwise." As such, it is not clear what is intended by the term "otherwise," or what services the request is intended to cover. To the extent that this request seeks information about BHN's video/cable services the company also objects on the grounds that such a request is outside the scope of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. BHN further objects to the extent this request calls for a legal opinion.

Subject to the foregoing objections, BHN responds as follows:

Response:

With respect to local exchange services, the Commission has imposed certain legal build-out obligations upon competitive local carriers ("CLCs") that provide competitive local exchange services in California. Specifically, such providers are "required to serve customers requesting service within their designated service territory" and "serve all customers who request service and whose premises are within 300 feet of the CLC's transmission facilities used to provide service so long as the CLC can reasonably obtain access to the point of demarcation on the customer's premises, but the CLC shall not be required to build out facilities beyond such 300 feet." *See* D.95-07-054. Bright House Networks Information Services (California), LLC is certified as a CLC, but does not provide local exchange services to retail customers in California.

With respect to broadband services, BHN is not aware of a legal obligation to provide service to any area within California upon request for service.

Sponsor: Counsel

35. Please provide Your five-year forecasted capital investment in California by county.

Objection:

BHN object to this request on the grounds that the request is vague and ambiguous; further, the request seeks the production of documents not in existence.

Subject to the foregoing objections, BHN responds as follows:

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Counsel

36. Will Your existing build-out plans be affected by the planned merger? If yes, what considerations are involved? Please state specifically how Your build-out plans will be affected by the planned merger.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning build-out plans outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

No. Any existing build-out plans in California for current markets will not be affected by the planned merger because BHN's operations will not change as a result of the merger.

Sponsor: Counsel

37. Are there any build-out projects for which further action would be dependent on the merger happening? If yes, how will the timelines for these projects be set?

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning build-out plans outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

Subject to the foregoing objections, BHN responds as follows:

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Counsel

38. Please identify any and all backhaul services You offer in California, including:

a. Type of service

b. Description

c. Speeds

d. Price

e. Terms and Conditions

f. Capacity utilized

g. Capacity available

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. BHN further objects to this request on the grounds that the request seeks the production of confidential information concerning BHN's customers which is protected by numerous privacy laws and contractual obligations.

Response:

[**BEGIN CONFIDENTIAL**] [redacted]

[**END CONFIDENTIAL**].

Sponsor: Paul Woelk, Doug Knight

39. Please provide a map of the location of Your backhaul cable/fiber in California.

Response:

[**BEGIN CONFIDENTIAL**] [redacted]
[**END CONFIDENTIAL**]

Sponsor: Paul Woelk, Doug Knight

40. How many customers do You currently provide backhaul services to in California?

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Paul Woelk, Doug Knight

41. Please identify the entities/customer names that obtain backhaul services from Bright House Networks in California.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. BHN further objects to this request on the grounds that the request seeks the production of confidential information concerning BHN's customers which is protected by numerous privacy laws and contractual obligations, and which may not be disclosed without prior consent. In particular, BHN's backhaul service agreement contains a non-disclosure provision that prevents BHN from disclosing the agreement without the other party's consent.

Sponsor: Counsel

42. Please identify all of Your competitors for backhaul services in California and types of services they offer.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. BHN further objects on the grounds that the request seeks the production of information not in BHN's possession or control.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not maintain a comprehensive list of all of the company's competitors for backhaul services. However, the company is generally aware that the following non-exhaustive list of entities also provide backhaul services in California: ANPI, AT&T, CenturyLink, Cogent, Comcast, Earthlink, Global Capacity, iKano, Integra, Level 3, Mammoth Networks, MegaPath, Nitel, Pac West, Sprint, Surewest, TelePacific, tw telecom, Verizon, Windstream, XO Communications, and Zayo.

Sponsor: Paul Woelk, Doug Knight

43. Identify the number of cell sites in California that You provide cellular backhaul services to.

Response:

BHN provides cellular backhaul service to [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] cell sites in California.

Sponsor: Paul Woelk, Doug Knight

44. Does Bright House Networks obtain backhaul services from other providers in California?

Response:

No.

Sponsor: Paul Woelk, Doug Knight

45. Identify the entity name(s) from which Bright House Networks obtains backhaul services.

Response:

Not applicable.

Sponsor: Paul Woelk, Doug Knight

46. Please provide all Your contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to, Netflix, Amazon, and Hulu. Please include all appendices and attachments to the agreements.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

47. Please provide all Your contracts, agreements, and supporting documents for all peering, transit, and transport agreements with third parties, including but not limited to Level 3, AT&T, AT&T Wireless, Verizon, Verizon Wireless, and Cogent. Please include all appendices and attachments to the agreements.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the proceeding. Further, to the extent that this request seeks production of voice network interconnection agreements subject to Section 251 of the Communications Act, such documents are already filed with the Commission. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

48. Please identify any and all wholesale services You currently provide to third parties, including:

a. Name of product/service

b. Description

c. Speeds, where applicable

d. Price

e. Number of subscribers per product/service

Response:

[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Bright House Networks Information Services (California), LLC ("BHNIS") offers wholesale voice termination services and provides combined transport and termination for the purpose of delivering certain voice communications traffic received the Public Switched Telephone Network (PSTN) and/or to Voice-over-IP service providers including BHNIS' affiliated retail interconnected VoIP providers.

Sponsor: Paul Woelk, Doug Knight

49. Please identify all of Your competitors in the wholesale services in California.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad. BHN further objects on the grounds that the request seeks the production of information not in BHN's possession or control.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not maintain a comprehensive list of all of the company's competitors for wholesale services. BHN's response to this request is based on information obtained through reasonable inquiry of knowledgeable employees of the company and from publicly available sources. However, the company is generally aware that the following non-exhaustive list of entities that also provide wholesale services in California:

a. **Wholesale Voice Termination Services:** Level 3, Intelepeer/Peerless, Certain Communications, Airespring, O1 Communications, CenturyLink, Verizon, and AT&T.

b. **Wholesale Broadband Services:** ANPI, AT&T, CenturyLink, Cogent, Earthlink, Global Capacity, GTT, TeliaSonera, iKano, Integra, Level 3, Mammoth Networks, MegaPath, Nitel, NTT, Pac West, Sprint, Surewest, TelePacific, tw telecom, Verizon, Windstream, XO Communications, and Zayo.

Sponsor: Paul Woelk, Doug Knight

50. Provide full details on Your integration plans with Joint Applicants.

a. How will Joint Applicants facilities be integrated into Bright House Networks facilities?

b. How will Joint Applicants operations be integrated into Bright House Networks operations?

Objection:

Please refer to paragraph 1 of BHN's General Objections.

Subject to the foregoing objection, BHN responds as follows:

Response:

With respect to subpart (a), BHN has no plans to integrate its facilities with those of the Joint Applicants.

With respect to subpart (b), BHN has no plans to integrate its operations with those of the Joint Applicants.

Sponsor: Counsel

51. How will these integration plans affect Your business operationally?

Objection:

Please refer to paragraph 1 of BHN's General Objections.

Subject to the foregoing objection, BHN responds as follows:

Response:

Please see Response to Question #50. BHN has no plans to integrate its facilities or operations with those of the Joint Applicants.

Sponsor: Counsel

52. Please provide all specific benefits You claim will result from the proposed merger *for* California customers? Please provide justification for Your claims.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

Please see the Application on file with the CPUC in docket A.14-04-013, which describes the public interest benefits of the transaction for California customers. Further, the Public Interest Statement on file with the FCC describes other public interest benefits of the merger.

Sponsor: Counsel

53. Please provide Bright House Networks' revenue in California for the years 2011, 2012 and 2013, and projections for 2014. Also provide annual revenues for these same periods for the following categories:

a. Residential: video, high-speed internet, and Voice Services

b. Business: video, high-speed internet, and Voice Services

c. Enterprise Ethernet Services

d. Wholesale IP Services

e. Carrier Backhaul Services

f. Advertising

g. Other (Describe)

Objection:

BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. BHN further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

BHN objects to each DR due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

54. Please provide Bright House Networks' BHN's operating costs and expenses in California for the years 2011, 2012 and 2013, and projections for 2014. Also show revenues for the following categories:

a. Residential: video, high-speed Internet, and Voice Services

b. Business: video, high-speed Internet, and Voice Services

c. Enterprise Ethernet Services

d. Wholesale IP Services

e. Carrier Backhaul Services

f. Advertising

g. Other (Describe)

Objection:

BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. BHN further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

55. Please provide anticipated merger-related and restructuring impacts on Bright House Networks' BHN's financial structure in California, including details on residential and business cable communications services, i.e., video, high-speed Internet and Voice Services.

Objection:

BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, advertising services, or any other services outside of the scope of this proceeding. BHN further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

56. What is the current participation level of residential customers in Lifeline in California with respect to services offered by Bright House Networks?

Response:

BHN does not provide Lifeline-supported services in California at this time.

Sponsor: Counsel

57. Please provide a detailed list of all mergers and acquisitions of Bright House Networks of companies operating in California from 1990 to 2013.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request exceeds the established scope of the docket. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

Bright House acquired from Suddenlink systems in the Bakersfield area in 2007.

Sponsor: Counsel

58. Have You previously offered service to customers in the service territories of any of the Joint Applicants in this application?

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request is vague, ambiguous, and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

No.

Sponsor: Jeff Allinder, Paul Woelk, Doug Knight

59. If the answer to Question #58 is yes, and You do not currently offer service, state all the reasons why You ceased offering service there and provide the details of the transfer transaction.

Response:

Not applicable.

Sponsor: Counsel

60. If the answer to Question #58 is no, state all reasons why You have not offered service [in the] Joint Applicants territories.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request is vague, ambiguous, and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not offer service in the Joint Applicants' service territories because it is not authorized to do so.

Sponsor: Counsel

61. Provide the total number of commercial buildings "lit" by Bright House Networks – i.e., where Bright House Networks-owned fiber optic cable facilities are in place – in BHN's California operating areas. For purposes of this request, "owned" facilities also includes Indefeasible Rights of Use ("IRUs") issued to Bright House Networks.

Response:

BHN does not maintain data on the number of commercial buildings "lit" by BHN. As of August 2014, the total number of commercial buildings serviceable by BHN facilities was approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**].

Sponsor: Paul Woelk, Doug Knight

62. Provide the number of Bright House Networks-owned "lit" buildings in Bright House Networks' BHN's California operating areas that are also served by fiber optic facilities owned by Time Warner Cable, Comcast, and Charter. For purposes of this request, "owned" facilities also include facilities under the control of Comcast, Time Warner Cable, Bright House Networks, or Charter via IRUs.

Response:

BHN is not aware of any buildings in its service are that are also served by fiber-optic facilities owned by Time Warner Cable, Comcast or Charter.

Sponsor: Paul Woelk, Doug Knight

63. Provide the number of Bright House Networks-owned "lit" buildings in Bright House Networks' California operating areas at which fiber optic facilities owned by any other non-ILEC service provider other than Time Warner Cable, Bright House Networks, and Charter. For purposes of this request, "owned" facilities also includes IRUs.

Objection:

BHN objects to this request on the grounds that it is vague, ambiguous, unduly burdensome and overbroad. The request appears to be incomplete and the drafter's intent is unclear. Further the company also objects on the grounds that the request seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. Finally, the company also objects on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company.

Response:

BHN does not possess this information at this time.

Sponsor: Paul Woelk, Doug Knight

64. Indicate the total number of locations in Bright House Networks' California operating areas at which at least one service provider other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Response:

BHN does not possess this information at this time.

Sponsor: Paul Woelk, Doug Knight

65. Indicate the total number of locations in Bright House Networks' California operating areas at which at least two different service providers other than an ILEC or one of the merging parties currently owns fiber optic facilities to that location. For purposes of this request, "owned" facilities also includes IRUs.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Response:

BHN does not possess this information at this time.

Sponsor: Paul Woelk, Doug Knight

66. Please identify all operating areas in which Bright House Networks offers cable television service in California in which Bright House Networks provides broadcast television stations on an encrypted basis.

Objection:

BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. BHN further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

67. To the extent that any of the other merging entities currently does not encrypt broadcast television stations, is it Bright House Networks' BHN's intention to convert those systems to encryption of broadcast television stations following the merger?

Objection:

BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding. BHN further objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Sponsor: Counsel

68. Using the attached Broadband Services spreadsheet template, please identify each Census Block where Bright House Networks business Ethernet services are currently available in California. Provide information including the service or brand names for business services offered by Bright House Networks, including those that are substantially equivalent to the following Comcast services or brand names: Comcast Ethernet Virtual Private Line Service ("EVPL"), Comcast Ethernet Network Service, Comcast Business Ethernet for Branch Offices, and Comcast Ethernet Private Line Service.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN is unable to provide a response to this question because it does not track the availability of its business Ethernet services on a Census block basis.

Sponsor: Paul Woelk, Doug Knight

69. Indicate which of the business Ethernet services identified at No. 68 are also being offered in California, perhaps under different descriptions or brand names, by any of the merging parties. Provide the name and description of each such service, and identify to which Bright House Networks service the other parties' services is equivalent to.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN is not familiar with the business Ethernet service offerings of the Joint Applicants.

Sponsor: Paul Woelk, Doug Knight

70. With respect to each of the services identified at No. 68 and 69 and for each Census Block where the service is currently available in California, identify all of Your current competitors offering similar services at each such location, including the parties to the proposed merger and all other providers.

Objection:

BHN objects to this request on the grounds that it seeks information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. The company further objects on the grounds that the request seeks the production of information that is not in BHN's possession, and is not normally generated or retained by the company. Finally, the company also objects to this request on the grounds that the request is vague, ambiguous, unduly burdensome and overbroad.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not maintain a comprehensive list of all of the company's competitors for business Ethernet services. However, the company is generally aware that the following non-exhaustive list of entities that also provide business Ethernet services in Bakersfield: AT&T, tw telecom and Level 3 Communications.

Sponsor: Paul Woelk, Doug Knight

71. With respect to each of the services identified at No. 68 and 69, does Bright House Networks offer such services in situations where a customer's geographic coverage requirements extend beyond current Bright House Networks operating areas? If yes, please describe in detail the nature of the relationship between Bright House Networks and any connecting provider involved in the furnishing of the service to such customer, including the manner in which such multi-provider services are priced, the entity that acts as the prime contact for the customer, the process for coordination of installation and ongoing maintenance of the service, revenue-sharing or revenue-splitting arrangements between Bright House Networks and such other provider(s). If such multi-provider arrangements are documented in formal written agreements, provide copies of all such agreements, including all appendices and attachments.

Response:

No.

Sponsor: Paul Woelk, Doug Knight

72. With respect to the multi-provider arrangements referenced at No. 71 above, identify all providers with which such arrangements have been established. Indicate which of the merging parties Bright House Networks currently has entered into a multi-provider arrangement with to deliver Ethernet, backhaul, or other telecommunications services.

Response:

Not applicable.

Sponsor: Paul Woelk, Doug Knight

73. With respect to the multi-provider arrangements of the type referenced at No. 71 above, identify all providers with which such arrangements have been established by any of the other merging entities, and identify the providers with which such entities have entered into such multi-provider arrangements.

Response:

No response from BHN is required per ORA e-mail dated September 8, 2014.

Sponsor: Counsel

Sincerely,

/s/

Danielle Frappier
Counsel to Bright House Networks

Dated: September 12, 2014

EXHIBIT 15

Bright House's Response ORA Data Request, Set 2

(PUBLIC)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A.14-04-013 (Filed April 11, 2014)

BRIGHT HOUSE NETWORKS INFORMATION SERVICES (CALIFORNIA), LLC RESPONSES TO SECOND SET OF DISCOVERY REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

Public/Redacted

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of Comcast Corporation, Time Warner Cable Inc., Time Warner Cable Information Services (California), LLC, and Bright House Networks Information Services (California), LLC for Expedited Approval of the Transfer of Control of Time Warner Cable Information Services (California), LLC (U-6874-C); and the Pro Forma Transfer of Control of Bright House Networks Information Services (California), LLC (U-6955-C), to Comcast Corporation Pursuant to California Public Utilities Code Section 854(a).	A.14-04-013 (Filed April 11, 2014)

BRIGHT HOUSE NETWORKS INFORMATION SERVICES (CALIFORNIA), LLC RESPONSES TO SECOND SET OF DATA REQUESTS FROM OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

Pursuant to Rule 10.1 of the California Public Utilities Commission ("CPUC"), Bright House Networks Information Services (California), LLC, and its affiliates and subsidiaries ("BHN") provides responses to the second set of data requests ("DRs") served on it by the Office of Ratepayer Advocates, California Public Utilities Commission ("ORA").

These responses are subject to the general objections stated below and the specific objections posed in each response. BHN's responses are submitted without prejudice to, and without waiving, any general objections not expressly set forth herein or any claims of privilege. No incidental or implied admissions are intended by this response.

GENERAL OBJECTIONS

These responses are provided subject to the following general objections and interpretations. At times, in response to a specific request, BHN may restate one or more of these general objections. However, these general objections apply to each individual request and BHN's failure to restate the objection in response to an individual request may not be interpreted as a waiver of such general objections.

The objections and responses contained herein and any documents produced in response hereto are not intended and should not be construed to waive BHN's right to object to the questions, DRs, responses or documents produced in response hereto, or the subject matter of such questions, requests, responses or documents, as to their competency, relevancy, materiality,

privilege and admissibility as evidence for any purpose, or to other requests for production. BHN reserves the right to object on appropriate grounds to the use of such information and documents. BHN hereby fully preserves all of its objections to the questions and DRs for any purpose whatsoever.

1. BHN objects to each DR due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

2. BHN objects to each DR to the extent it purports to apply to: (a) any person or entity that is not subject to the jurisdiction of the CPUC or that does not conduct regulated operations in the State of California; and/or (b) services that are not subject to the jurisdiction of the CPUC, on the grounds that such request is improper, overly broad, or unduly burdensome, and is not reasonably calculated to lead to the discovery of admissible evidence. Among other things, the Commission has limited authority over broadband Internet access service, Voice over Internet Protocol ("VoIP") service and other IP-enabled services, as set forth in Public Utilities Code Section 710, and such authority does not extend to the matter at hand.

3. BHN objects to each DR as improper, overbroad, and unduly burdensome to the extent that it seeks the disclosure of information or documents containing privileged communications, attorney work product, and/or other protected information on the grounds that such discovery is not permissible under the California Code of Civil Procedure or applicable rules in the Commission's Rules of Practice and Procedure. Demand is hereby made that any such inadvertently produced documents or items be returned to BHN together with any copies.

4. BHN objects to each DR to the extent that it improperly requests or purports to require access to confidential, competitively sensitive and/or proprietary business information and trade secrets belonging to BHN.

5. BHN objects to each DR to the extent that it seeks the production of information and/or documents that are not readily available to BHN.

6. BHN objects to each DR insofar as it is vague, ambiguous, overly broad and unduly burdensome, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these DRs.

7. BHN objects to each DR to the extent that it exceeds the requirements of applicable law, purports to impose upon BHN any obligations broader than those set forth in the California Code of Civil Procedure, the California Public Utilities Code, the Commission Rules of Practice and Procedure, or applicable law.

8. BHN objects to each DR to the extent that it seeks the production of information and/or documents that are privileged information collected or prepared in anticipation of litigation. Materials, documents, and information protected from disclosure under the work product doctrine or the attorney-client privilege will not be produced.

9. BHN objects to each DR to the extent that it seeks the production of information and/or documents that are not relevant to this proceeding and not calculated to lead to the discovery of admissible evidence.

10. BHN objects to each DR to the extent that it seeks the production of information and/or documents that that is publicly available or readily accessible to the requesting party(ies).

11. BHN objects to each DR to the extent that it requests documents or materials not in BHN's possession, custody or control.

12. BHN objects to each DR to the extent that it requests documents or materials outside the established scope of this proceeding.

Each of the foregoing general objections is incorporated by reference into the following responses.

RESPONSES

1. Provide Your post-merger plans for network upgrades and enhancements, including but not limited to, any enhancement in broadband speeds to households, small and medium sized businesses. Please reference ORA Data Request No. ORA-A.14-04-013.PHH-001, question 16 and 22, for definitions of small and medium sized businesses.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

Any of BHN's network upgrade or enhancement plans in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

2. Specify, using maps where required in order to provide a complete and accurate response, whether Your planned upgrades or enhancements noted above are occurring in Your current network area, Comcast network areas, Time Warner Cable network areas and/or Charter networks network area.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

Any of BHN's network upgrades or enhancements in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

3. Provide the existing rules and requirements for Your low income program offered in California, including eligibility requirements.

Response:

In California, BHN is part of Connect2Compete, a program offering in partnership with EveryoneOn.org, which provides low cost Internet to students and families that qualify for the National School Lunch Program. Subscribers may be eligible to participate if their household has at least one child eligible for free or reduced lunch and attending a Connect2Compete partner school or school district, has not subscribed to BHN's Internet service within 90 days prior to enrollment in the program, and has no outstanding bills or unreturned equipment with BHN. Through this program, BHN offers Internet service to qualified low income subscribers for $9.95 per month with no equipment or set-up fees.

Sponsor: Marva Johnson

4. Provide a description of the enrollment process for Your low income program in California, including:

   a. All available methods of application submission,
   b. Application requirements,
   c. Application review procedures, and
   d. Anticipated and actual time frames, from first request for application to activation of service.

Response:

a. BHN works with the school districts in its service area to identify eligible students and then supplies the eligible student with an enrollment form. Eligible participants can subscribe to the low-cost Internet service by calling BHN's customer care center number.

b. Subscribers may be eligible to participate if their household has at least one child eligible for free or reduced lunch and attending a Connect2Compete partner school, has not subscribed to BHN's Internet service within the last 90 days, and has no outstanding fees or unreturned equipment with BHN.

c. BHN relies on the school districts to identify students who are part of eligible households. BHN verifies that applicants have not had BHN's Internet service within the 90-day period prior to enrolling in Connect2Compete and that there are no outstanding fees and/or equipment due to BHN.

d. Once the subscriber has completed the application process, BHN's standard installation intervals apply.

Sponsor: Marva Johnson

5. For each available sign-up method, list how many California Your low income program customers utilized each method to sign up, including unsuccessful sign up attempts.

Response:

BHN currently provides [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] low income California households with Internet service through the Connect2Compete program.

BHN does not have information regarding the methods utilized to apply for service under the program or the number of unsuccessful applications.

Sponsor: Marva Johnson

6. Describe the mechanism whereby eligibility for Your low income program expires, and describe any procedures You undertake to continue providing services to households in California.

Response:

In order to remain eligible for participation in the Connect2Compete program, a subscriber household must have at least one child eligible for free or reduced lunch and attending a Connect2Compete partner school or school district and have no outstanding bills or unreturned equipment with BHN. BHN's low income program in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Marva Johnson

7. Provide a list and description of services offered through Your low income program in California, including advertised and actual speeds of services offered.

Response:

BHN offers 1 Mbps x 786 kbps Internet service through its low income program.

Sponsor: Marva Johnson

8. Describe Your assessment of Your low income program's existing shortfalls in California, including enhancements needed.

Objection:

BHN objects to this request on the grounds that the request is vague. In particular, it is unclear what is meant by the term "shortfalls."

Response:

BHN is not aware of any existing shortfalls in its California low income program.

Sponsor: Marva Johnson

9. Provide Your plans to improve or enhance Your low income program in California, reflecting planned changes over the three years following the merger, including:

   a. Expansion of eligibility requirements,
   b. Equipment improvements,
   c. Expansion into wireless modem offerings, and
   d. Speed upgrades.

Response:

BHN has no immediate plans to modify its low income program in California. BHN's low income program in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Marva Johnson

10. Describe how Your low income program outreach plans in California will make new customers aware of the Your low income program, post-merger.

Response:

BHN's outreach efforts for its low income program in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Marva Johnson

11. Describe post-merger integration plans for customers who are already Comcast customers, Time Warner Cable customers or Charter customers who are also eligible for Your low income program.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN is not aware of the low income related post-merger integration plans of Comcast, Time Warner Cable or Charter. BHN has no immediate plans to modify its low income program in California. BHN's low income program in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Marva Johnson

12. Where Your Broadband Services is available in California, list the total number of households currently eligible for Your low income program.

Response:

In California BHN currently provides [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] low income households with Internet service through the Connect2Compete program.

Sponsor: Marva Johnson

13. Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households currently eligible for Your low income program.

Response:

BHN's low income program is available throughout its service area in California. BHN does not track this information at the Census block level.

Sponsor: Marva Johnson

14. List the anticipated number of households that will be eligible for Your low income program in California, post-merger.

Response:

BHN does not anticipate a material change in the number of households that will be eligible for its low income program in California after the transaction has closed. BHN's low income program in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Marva Johnson

15. Using the attached updated Broadband Services spreadsheet template, please identify, separately for each Census Block, the anticipated number of households that will be eligible for Your low income program in California by Census Block, post- merger.

Response:

BHN does not track the requested information at the Census block level. BHN does not anticipate a material change in the number of households that will be eligible for its low income program in California after the transaction has closed. BHN's low income program in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Marva Johnson

16. List the number of households currently subscribed to Your low income program in California.

Response:

In California BHN currently provides [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] low income households with Internet service through the Connect2Compete program.

Sponsor: Marva Johnson

17. Using the attached updated Broadband Services spreadsheet, list the number of households currently subscribed to Your low income program in California by Census Block.

Response:

BHN does not track the requested information at the Census block level.

Sponsor: Marva Johnson

18. Provide information describing Your yearly and total expenditures for Your low income program operations for years 2010, 2011, 2012, 2013.

Response:

BHN does not track its "yearly and total expenditures" for its California low income program operations.

Sponsor: Marva Johnson

19. Provide any cost/benefit analyses made when creating or revising Your low income program eligibility criteria, including any analyses made which project costs of expanding eligibility to include low-income seniors, the disabled, or other groups predominately represented in unserved and underserved areas.

Response:

BHN has no responsive documents.

Sponsor: Marva Johnson

20. Please provide Your definition of "line extension" and explain Your line extension policies.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

While BHN does not have an official company definition of the term "line extension," in this context, the company generally understands the term to mean the process of extending its network facilities to additional portions of its service territory in order to serve additional subscribers. BHN's line extension policies in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Dane Knudsen

21. Using Your definition of line extension as provided in question 20, please identify the total number of line extensions requested in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track or maintain the requested information.

Sponsor: Dane Knudsen

22. Using Your definition of line extension as provided in question 20, please identify the total number of line extensions completed or built-out in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations. Subject to the foregoing objections, BHN responds as follows:

Response:

Please see the following table:

Date	Approximate Number of Residential Passings	Approximate Number of Business Passings
Dec. 2009	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2010	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2011	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2012	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2013	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Aug. 2014	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Dane Knudsen

23. Using Your definition of line extension as provided in question 20, using the attached updated Broadband Services spreadsheet, list the number of line extensions that You have deployed in California by Census Block for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track its line extensions on a Census block basis. Therefore, BHN does not possess the requested information.

Sponsor: Dane Knudsen

24. Using Your definition of line extension as provided in question 20, please identify the number of households that were not able to get a line extension in California because they could not afford it for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. In particular, it is unclear what is meant by the phrase "could not afford it."

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track or maintain the requested information.

Sponsor: Dane Knudsen

25. What is the number of entities You serve using California Teleconnect Fund (CTF) funding?

Response:

BHN does not track or maintain the requested information.

Sponsor: Paul Woelk

26. Please provide the percent of Your Network Availability in California, by county, for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

BHN does not track or maintain the requested information.

Sponsor: Counsel

27. Please explain how You define quality of service for broadband and voice services.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not have an official definition of the term "quality of service" for broadband or voice services. The quality of BHN's broadband and voice services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

28. Please identify the types of quality of service metrics that You track and measure for broadband and voice services.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

The quality of BHN's broadband and voice services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

29. Please provide all procedures and protocols in place on how You track and measure the quality of service metrics identified in question 27.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks information concerning network-related outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

The quality of BHN's broadband and voice services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

30. For all quality of service metrics You identified in response to questions 27 and 28, please provide the results separately for broadband and voice services in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

The quality of BHN's broadband and voice services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

31. Provide the number of Outages for Your voice services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

    a. The number of service Outages by type of customer (residential, small or medium sized business)
    b. Cause of service Outage
    c. Response time (time it took to respond to an outage)
    d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e., resolve an Outage)
    e. Total number of Outages by county.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track or maintain the requested information.

Sponsor: Jason Marino

32. Provide the number of Outages for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

    a. The number of Outages by type of customer (residential, small or medium sized business)
    b. Cause of Outage
    c. Response time (time it took to respond to an outage)
    d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve an Outage)
    e. Total number of Outages by county.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not track or maintain the requested information.

Sponsor: Jason Marino

33. How do You define service degradation for broadband service?

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not have a definition of the term "service degradation" that pertains to broadband service.

Sponsor: Counsel

34. Using Your definition of service degradation, provide the number of service degradations for Your broadband services in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) indicating:

    a. The number of service degradation by type of customer (residential, small or medium sized business)
    b. Cause of service degradation
    c. Response time (time it took to respond to a service degradation)
    d. Minimum, maximum and average time to close a Trouble Report or ticket (i.e. resolve a service degradation)
    e. Total number of service degradations by county

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not possess the requested information at this time.

Sponsor: Counsel

35. Please provide all outage reports You have submitted to the Federal Communications Commission as required by 47 C.F.R. Part 4 pertaining specifically to outages in California for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014).

Response:

BHN submitted no outage reports to the FCC for outages in California for the period Jan. 1, 2010 through August 31, 2014.

Sponsor: Counsel

36. Please provide the Service Installation Intervals for Bright House Network orders for new voice service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. The Service Installation Interval excludes all orders having customer requested appointments later than the provider's commitment dates.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN's service installation interval for voice service in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction. BHN's standard service installation interval for voice service in California is seven (7) business days.

Sponsor: Counsel

37. Please provide the Service Installation Intervals for Bright House Network orders for new broadband service Installations in California. Service Installation Interval should be expressed in business days, between the date the service order was placed and the date the service becomes operational. This amount excludes all orders having customer requested appointments later than the provider's commitment dates).

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN's service installation interval for broadband service in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction. BHN's standard service installation interval for broadband service in California is seven (7) business days.

Sponsor: Counsel

38. Please provide the total number of California service orders received for new voice services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):

    a. Total number of service orders received
    b. Total number of service orders completed (i.e. commitment met).

Response:

BHN does not possess the "total number of California service orders received for new voice services," but the following table sets forth the number of voice services provided by BHN in California over the referenced time period.

Date	Approximate Number of Residential Voice Services	Approximate Number of Business Voice Services
Dec. 2009	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2010	[**BEGIN CONFIDENTIAL**] [redacted]0 [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2011	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2012	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2013	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Aug. 2014	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Dane Knudsen

39. Please provide the total number of California service orders received for new broadband services as listed below for years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014):

    a. Total number of service orders received
    b. Total number of service orders completed (i.e. commitment met)

Response:

BHN does not possess the "total number of California service orders received for new broadband services," but the following table sets forth the number of broadband services provided by BHN in California over the referenced time period:

Date	Approximate Number of Residential Broadband Services	Approximate Number of Business Broadband Services
Dec. 2009	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2010	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2011	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2012	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Dec. 2013	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]
Aug. 2014	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]	[**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Dane Knudsen

40. Please provide all customer-initiated complaints concerning unauthorized charges in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

    a. Type of customer: residential, small or medium sized business
    b. Type of service: voice or broadband
    c. Date of complaint
    d. Frequency of complaint by the same customer
    e. Response time to customer for assistance
    f. Location of customer by County

Objection:

BHN objects to this request on the grounds that it is grossly overbroad. BHN does not maintain a repository of "customer-initiated complaints concerning unauthorized charges in California" and the process of identifying all such complaints over the past four and a half years would be extraordinarily time consuming and burdensome.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

41. There is no Question #41 in the Data Requests. BHN inserts this placeholder to maintain consistency between the numbering of the Data Requests and its responses.

42. Please provide Your current processes and/or procedures for handling customers' complaints and/or dissatisfaction for:

    a. Voice services
    b. Broadband services

Objection:

BHN objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN subscribers can contact a BHN customer care specialist by telephone (on a 24x7 basis), by e-mail, by "chat" over BHN's website, or in person by visiting any of BHN's four customer care centers in California, which are located in Bakersfield, Delano, Taft and Tehachapi. Subscribers with concerns that are not resolved by a customer care specialist can contact the Office of the President of BHN's Bakersfield Division at: http://brighthouse.com/support/contact/contact-president.html.

Sponsor: Jeff Allinder

43. Please provide any changes to Your current processes and/or procedures for handling customer complaints and/or dissatisfaction post-merger in California for:

    a. Voice services
    b. Broadband services

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN's processes and/or procedures for handling customer complaints and/or dissatisfaction with voice or broadband services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

44. Please provide Data for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014) on the number of Your California customers with billing complaints for:

    a. Voice services
    b. Broadband services

Objection:

BHN objects to this request on the grounds that it is grossly overbroad. BHN does not maintain a repository of "billing complaints" in California and the process of identifying all such complaints over the past four and a half years would be extraordinarily time consuming and burdensome.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

45. Please provide all remaining customer-initiated complaints concerning Your voice services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

    a. Type of customer: residential, small or medium sized business
    b. Type and/or nature of complaint or dissatisfaction
    c. Date of complaint
    d. Frequency of complaint by the same customer
    e. Response time to customer for assistance
    f. Location of customer by County

Objection:

BHN objects to this request on the grounds that it is grossly overbroad. BHN does not maintain a repository of "customer-initiated complaints concerning [BHN's] voice services" and the process of identifying all such complaints over the past four and a half years would be extraordinarily time consuming and burdensome.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

46. Please provide all remaining customer-initiated complaints concerning Your broadband services not already addressed in questions in this Data Request in California for the years 2010, 2011, 2012, 2013, and 2014 (January 1, 2014 through August 31, 2014). For each complaint, please provide the following information:

    a. Type of customer: residential, small or medium sized business
    b. Type and/or nature of complaint or dissatisfaction (such as provision of new Installation/service, fault repair/restoration, cramming, quality of service/product/software/hardware, billing)
    c. Date of complaint
    d. Frequency of complaint by the same customer k. Response time to customer for assistance
    e. Location of customer by County

Objection:

BHN objects to this request on the grounds that it is grossly overbroad. BHN does not maintain a repository of "customer-initiated complaints concerning [BHN's] broadband services" and the process of identifying all such complaints over the past four and a half years would be extraordinarily time consuming and burdensome.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Sponsor: Counsel

47. Please provide Your current plans to improve the quality of service to California customers.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. Further, BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

The quality of BHN's services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

48. Please provide any plans to improve Your quality of service to California customers post-merger.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. Further, BHN objects to this request on the grounds that it exceeds the established scope of the docket to the extent it is seeking information regarding any video/cable services, or any other services outside of the scope of this proceeding.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

The quality of BHN's services in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction.

Sponsor: Counsel

49. Please provide Your level of customer satisfaction compared to the five largest competing service providers (in California, where available) for the years 2009, 2010, 2011, 2012, and 2013 for:

    a. Voice services
    b. Broadband services

Response:

BHN does not track or maintain the requested information.

Sponsor: Jeff Allinder

50. Please separately identify the source(s) of the Data (for example, J.D. Power & Associates, internal surveys, independent third-party surveys) for Your responses to Question 48.

Response:

Not applicable.

Sponsor: Jeff Allinder

51. Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Telephone Service Providers Customer Satisfaction Study?

Response:

BHN is investigating this issue and will supplement its response during the week of September 22, 2014.

Sponsor: Counsel

52. Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Telephone Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.

Response:

BHN is investigating this issue and will supplement its response during the week of September 22, 2014.

Sponsor: Counsel

53. Have You obtained, accessed, or purchased any Data related to any annual J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study?

Response:

BHN is investigating this issue and will supplement its response during the week of September 22, 2014.

Sponsor: Counsel

54. Please provide a full and complete copy of the J.D. Power & Associates U.S. Residential Internet Service Provider Customer Satisfaction Study for years 2009, 2010, 2011, 2012, 2013 along with all Data, attachments, appendices, spreadsheets and supporting documents that J.D. Powers & Associates used for the Study.

Response:

BHN is investigating this issue and will supplement its response during the week of September 22, 2014.

Sponsor: Counsel

55. Please provide the battery backup brand(s) provided by Your company. For each brand please provide the following:

    a. Average standby life of the backup battery
    b. Average use life

Response:

BHN does not currently provide battery backup in California. BHN's policies and procedures with respect to battery backup in California will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction. .

Sponsor: André Martineau

56. Please provide any educational materials provided to Your customers informing them that they will not have phone services in the instances of power outages.

Response:

BHN's phone battery policy (http://brighthouse.com/policies/policies/battery-policy.html) and § 5 of BHN's residential services agreement (http://brighthouse.com/policies/policies/residential-agreement.html) inform BHN's customers that they may not have phone service in the event of a power outage. BHN provides further customer support regarding backup batteries on its website at: http://support.brighthouse.com/Article/When-Battery-Home-Phone-Modem-Replace-2542.

Sponsor: André Martineau

57. Do You provide backup batteries at no charge to Your customers?

Response:

No.

Sponsor: André Martineau

58. Can Your customers get extra backup batteries from You?

Response:

Yes, backup batteries are available upon request for a charge. The average standby life of such batteries is approximately four to five hours.

Sponsor: André Martineau

59. Please provide processes and procedures on how You provision 911 services in California.

Response:

In California, BHN's phone service includes Enhanced 911, a function that enables an emergency dispatcher to identify the subscriber's name, phone number and address automatically when he or she dials 911. [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**]

Sponsor: Marva Johnson

60. Please provide Data on any and all of Your 911 service outages in California by county for years 2010, 2011, 2012, 2013, and through August 31, 2014.

Response:

BHN had no 911 service outages in California from Jan. 1, 2010 – August 31, 2014.

Sponsor: Marva Johnson

61. Please identify with specificity each and every source of economies of scale that You claim will be engendered by the merger. For each, indicate the anticipated annual savings, staff reductions, other workforce-related cost savings, and any other source of claimed cost reductions. For each source of scale economies identified, indicate why You believe that a similar savings could not be achieved in the absence of the proposed merger.

Response:

Not applicable. BHN does not assert that the transaction will create economies of scale with respect to BHN. The transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN or have any effect on BHN's operations.

Sponsor: Counsel

62. Please indicate the number of California employees that will be eliminated by You.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

Any decisions regarding the number of employees required by BHN in California will not be affected by the planned merger because BHN's operations will not change as a result of the merger.

Sponsor: Counsel

63. Provide ORA with a copy of any materials provided to the FCC in support of the proposed merger transaction, including the FCC Application, any supporting attachments, and any confidential information or information provided under seal.

Response:

BHN has not been asked by the FCC to provide materials in support of the proposed transaction. Time Warner Cable has been asked by the FCC to produce materials pertaining to its relationship with BHN. BHN understands that (1) ORA asked Time Warner Cable to provide it with a copy of materials provided to the FCC and (2) Time Warner Cable is in the process of preparing this material for the FCC.

Sponsor: Counsel

64. Using the updated attached Broadband Services spreadsheet template, please identify, separately for each Census Block where Your broadband service is available in California, the number of households subscribed by speed tier (upload and download speeds). Please clearly identify each speed tier and add any additional columns as necessary.

Response:

BHN does not track the number of households passed by Census block. Accordingly, BHN does not collect or retain the information necessary to respond to this question. As of August 2014, the number of households passed was approximately [**BEGIN CONFIDENTIAL**] [redacted] [**END CONFIDENTIAL**] in California.

Sponsor: Dane Knudsen

65. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest ISPs/transit providers/other networks with whom You interconnect.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

66. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest ISPs/transit providers/other networks with whom You interconnect.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

67. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three largest directly interconnected customers (if any).

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

68. For Your network in California, please state the bandwidth capacity of the interconnection (border) point(s) between You and the three smallest directly interconnected customers (if any).

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

69. For Your network in California, please state the bandwidth capacity of Your backbone IP/mesh network.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

70. For Your network in California, please state the bandwidth capacity of Your three highest traffic volume metro area (or Your network equivalent large geography) routers.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

71. For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume metro area (or Your network equivalent large geography) routers.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

72. For Your network in California, please state the bandwidth capacity of Your three highest traffic border routers.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

73. For Your network in California, please state the bandwidth capacity of Your three lowest traffic volume border routers.

Objection:

BHN objects to this request on the grounds that it seeks highly confidential information that is neither relevant to the issues in this proceeding, nor reasonably calculated to lead to the discovery of relevant or admissible evidence. BHN further objects on the grounds that the request exceeds the established scope of the proceeding. Finally, BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

Sponsor: Counsel

74. How do You define "usage based pricing"? Please provide all of the areas nationwide where You are currently using or offering usage based pricing.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

BHN does not have an official definition of the term "usage based pricing." BHN currently does not offer or use usage based pricing in any market.

Sponsor: Counsel

75. Please provide all of the areas nationwide where You are currently using or offering usage based pricing.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

None.

Sponsor: Counsel

76. Please identify the specific terms, conditions, and policies of Your usage based pricing offerings and plans, including but not limited to, speed tiers, data caps, and pricing.

Response:

Not applicable.

Sponsor: Counsel

77. Please provide any and all of Your Plans to use, roll out and/or implement usage based pricing nationwide.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad. To the extent this request seeks network-related information outside of California, BHN further objects on the grounds that the request seeks information about matters outside the scope of this proceeding and the Commission's jurisdiction.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

Any Internet pricing decisions by BHN will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction. BHN has no current plans to implement usage based pricing in any market.

Sponsor: Counsel

78. Please provide, by Census Block, all of the areas in California where You are currently using or offering usage based pricing.

Response:

Not applicable.

Sponsor: Counsel

79. Please provide any and all of Your plans to use, roll out and or implement usage based pricing in California.

Objection:

BHN objects to this request on the grounds that the request is vague, ambiguous and overbroad.

BHN also objects to this request due to the fact that (1) no Time Warner entity manages BHN or controls any aspect of its day-to-day operations, nor will any Comcast manage BHN or control any aspect of its day-to-day operations upon consummation of the transaction; (2) the transaction will only result in the *pro forma* transfer of the legal interest of Time Warner Entertainment-Advance/Newhouse Partnership in BHN, and will not result in any changes to the managerial responsibility for or *de facto* control over BHN; and (3) the transaction will have no effect on BHN's operations.

Subject to the foregoing objections, BHN responds as follows:

Response:

Any Internet pricing decisions in California by BHN will not be affected by the planned transaction because BHN's operations will not change as a result of the transaction. BHN has no current plans to implement usage based pricing in California.

Sponsor: Counsel

80. For ORA Data Request No. ORA-A.14-04-013.PHH-200 issued on August 28, 2014, unless otherwise identified, You shall use the most recent information available for Your responses to the Data Requests and shall clearly identify the point in time the Data reflects.

Response:

BHN acknowledges this instruction.

Sponsor: Counsel

81. For ORA Data Request No. ORA-A.14-04-013.PHH-200 issued on August 28, 2014, You shall use the following definition of "Census Block": Census Block number(s) must be based on the 2010 Census. A census block is the concatenation of Census 2010 state Federal Information Processing Standards (FIPS) code, Census 2010 county FIPS code, Census 2010 census tract code and Census 2010 tabulation block number. For questions requesting information or Data on a Census Block level and such information or Data is not available by Census Block level, provide the information or Data in the smallest geographic unit available.

Response:

BHN acknowledges this instruction.

Sponsor: Counsel

82. For ORA Data Request No. ORA-A.14-04-013.PHH-200 issued on August 28, 2014, You shall provide all Responses to ORA and CD in an electronic format. All electronic documents submitted in response to this Data request, with exception to Excel spreadsheets, should be in PDF, readable, downloadable, printable, and searchable formats, unless use of such formats is infeasible. You do not need to provide any hard copies to ORA or CD unless providing an electronic copy is infeasible. For Data available only in hard copy, please clearly state so in Your email response and state when the hard copy response was sent.

Response:

BHN acknowledges this instruction.

Sponsor: Counsel

83. For all Data Requests from ORA to You, including ORA Data Request No. ORA- A.14-04-013.PHH-200 issued on August 28, 2014, You shall inform ORA immediately upon determining that there is a term in a Data Request that is unclear or ambiguous, that You do not believe it is required to provide the information, or that You will require more time to provide a complete response to the Data Request.

Response:

BHN acknowledges this instruction.

Sponsor: Counsel

EXHIBIT 16

Grear v Comcast Federal District Court Class Action Lawsuit

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UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

TOYER GREAR and JOYCELYN HARRIS, individually and on behalf of all others situated; Plaintiff, vs. COMCAST CORPORATION, a Pennsylvania Corporation. Defendants.	Case No. CLASS ACTION COMPLAINT 1. VIOLATIONS OF THE COMPUTER FRAUD AND ABUSE ACT (18 U.S.C. 1030) 2. VIOLATION OF THE COMPREHENSIVE COMPUTER DATA ACCESS AND FRAUD ACT, CALIFORNIA PENAL CODE § 502 3. VIOLATION OF BUSINESS & PROFESSIONS CODE § 17200, et seq. (UNFAIR AND UNLAWFUL PRONGS)

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Santa Monica, California 90405

Plaintiffs Toyer Grear and Joycelyn Harris ("Plaintiffs"), individually and on behalf of all others similarly situated, bring this complaint against Comcast Corporation ("Defendant," the "Company," or "Comcast"). Plaintiffs seek certification of this matter as a class action. Plaintiffs, by and through their counsel, submit this Class Action Complaint (the "Complaint") against Defendant, and allege as follows:

I. SUMMARY OF COMPLAINT

1) Americans are increasingly turning to Wi-Fi wireless networks to connect their smartphones, tablets, and laptops to the Internet. In light of this fact, Comcast saw an opportunity to compete with cellular carriers such as AT&T and Verizon – while the Company does not have an infrastructure of cellular towers, it does have millions of residential customers dispersed across the United States who already pay Comcast to supply Internet access to their homes ("Xfinity Internet Service"). As part of that service, Comcast leases to its customers wireless routers that create home Wi-Fi networks. These households, Comcast realized, could be used as infrastructure for a national Wi-Fi network.

2) Within the past several years, Comcast began supplying its residential customers with new wireless routers, equipped to broadcast not only its customers' home Wi-Fi network signal, but also an *additional* Wi-Fi network signal that was available to the *public*.[1] Comcast then began selectively activating these routers to broadcast the secondary network – the public "Xfinity Wi-Fi Hotspot" – in various markets across the country, with the goal of enabling 8 million Xfinity Wi-Fi Hotspots by the end of 2014.

3) Comcast does not, however, obtain the customer's authorization prior to engaging in this use of the customer's equipment and Internet service for public, non-household use. Indeed, without obtaining its customers' authorization for this additional use of their equipment and resources, over which the customer has no control, Comcast has externalized the costs of its national Wi-Fi network onto its customers. The new wireless routers the Company issues consume vastly

[1] "Public," however, does not mean "free." It simply means that access is available to any party who pays to use the Wi-Fi hotspot. Comcast allows certain customers to log on to these hotspots as part of their subscription plan; for anyone else who wishes to log on, they must pay either an hourly or monthly rate. Beyond having to pay for access, there are no barriers or selection criteria.

more electricity in order to broadcast the second, public Xfinity Wi-Fi Hotspot, which cost is born by the residential customer.

4) Additionally, this unauthorized broadcasting of a secondary, public Wi-Fi network from the customer's wireless router degrades the performance of the customer's home Wi-Fi network.

5) Finally, the unauthorized broadcasting of a secondary, public Wi-Fi network from the customer's wireless router subjects the customer to potential security risks, in the form of enabling a stranger who wishes to access the Internet through the customer's household router, with the customer having no option to authorize or otherwise control such use.

6) Comcast's actions violate the Computer Fraud and Abuse Act, 18 U.S.C. § 1030; California's Unfair Competition Law, Cal. Bus. & Prof. Code § 17200; and the Comprehensive Computer Data Access and Fraud Act, California Penal Code § 502. Plaintiffs seek injunctive and declaratory relief, restitution, and monetary damages, individually and on behalf of (1) a national class of all households in the United States that have subscribed to Comcast's Xfinity Internet Service and that, as a result, have leased wireless routers that broadcast an Xfinity Wi-Fi Hotspot; and (2) a California subclass of all households in California that have subscribed to Comcast's Xfinity Internet Service and that, as a result, have leased wireless routers that broadcast an Xfinity Wi-Fi Hotspot.

II. JURISDICTION AND VENUE

7) This Court has federal question jurisdiction over this action pursuant to 28 U.S.C. § 1331. This Court also has original jurisdiction over the state law claims under 28 U.S.C. § 1332(d) because the action involves 100 or more class members; at least one member of the proposed class is a citizen of a State different from the State of citizenship of Defendant and the matter in controversy exceeds $5 million in sum or value.

8) This Court has personal jurisdiction over Defendant because Defendant has sufficient minimum contacts in California, or otherwise intentionally avails itself of the markets within California, through promotion, sale, marketing and distribution of its Xfinity Internet Service – and concurrent establishment of public Xfinity Wi-Fi Hotspots – in California, to render the exercise of

jurisdiction by this Court proper and necessary. Moreover, Defendant can be brought before this Court pursuant to California's "long-arm" jurisdictional statute.

9) Venue is proper in this District under 28 U.S.C. § 1391 because a substantial part of the events giving rise to Plaintiffs' claims occurred in this District, Plaintiffs reside in Alameda County, and Plaintiffs' Xfinity Internet Service is provided at their home address in Alameda County.

III. PARTIES

10) Plaintiff Joycelyn Harris ("Plaintiff Harris") and Plaintiff Toyer Grear ("Plaintiff Grear") are, and at all times relevant hereto were, individuals residing in the same household in Alameda County, California. Plaintiff Harris is the daughter of Plaintiff Grear. Both Plaintiffs access the Internet in their household via the wireless router leased from Comcast as part of its Xfinity Wi-Fi Service. Plaintiff Harris is a signatory to the contract for Xfinity Wi-Fi Service for the household; Plaintiff Grear is not a signatory to such contract. Plaintiff Grear pays the utility bills of the household, including the Comcast bill and the household's electricity bill.

11) Defendant Comcast Corporation is an American media corporation organized and existing under the laws of the State of Pennsylvania, with its principle place of business located at Comcast Center, 1701 John F Kennedy Blvd, Philadelphia, PA 19103-2838. Comcast, directly and through its agents, has substantial contacts with and receives substantial benefits and income from and through the State of California. Comcast is the distributor of the Xfinity Internet Service.

IV. FACTUAL ALLEGATIONS

A. Wi-Fi Internet Connectivity and Comcast's Network of Xfinity Public Wi-Fi Hotspots

12) Across the country, hundreds of millions of consumers connect to the Internet every day. Increasingly, they do so via mobile devices such as smartphones, tablets, and laptop computers, and because these devices are mobile, the manner in which they connect to the Internet must be wireless. Presently, there are two leading means of wireless Internet connection for mobile devices: cellular networks and Wi-Fi networks.

13) While cellular providers such as AT&T and Verizon have amassed a network of cellular towers allowing for coverage across the country, there is no corresponding national infrastructure of Wi-Fi networks. Instead, consumers wishing to connect to Wi-Fi must first find a Wi-Fi network to connect to (via a "Wi-Fi hotspot," a colloquial term for a wireless router that broadcasts a Wi-Fi signal) and are then bound to stay within the range of that hotspot or else lose their connection.

14) Comcast has decided to compete with cellular networks for consumers who wish to connect to the Internet on the go. However, the Company does not have the infrastructure for a cellular network (namely, cellular towers). What it does have are millions of residential customers who use Comcast as their Internet Service Provider ("ISP"), and who have already paid Comcast to set up wireless networks in their homes. Comcast realized that it could turn the equipment it leases to each of those customers into a *public* wireless hotspot, allowing *additional* consumers to piggyback off of those customers' Wi-Fi networks, emanating from their homes across the country. In this manner, Comcast would be able to create a network of Wi-Fi signals that could cover most, if not all, of the country and externalize much of the capital and operating costs.

15) Since sometime in 2013, in the course of providing its residential[2] Internet services, Comcast has been supplying new and existing customers with wireless routers that create both a Wi-Fi network in the customer's home and an *additional, public* Wi-Fi network, over which the customer has no control, that is accessible to anyone within the network's range. Upon information and belief, these secondary, public Wi-Fi networks ("Xfinity Wi-Fi Hotspots") being broadcast from consumers' homes are named "xfinityWi-Fi."[3]

16) However, Comcast never obtained authorization from its customers to use the customers' household routers to broadcast additional Wi-Fi hotspots that are available to the public.

17) As a result of this unauthorized use, Comcast is (1) externalizing its costs for this project onto its customers; (2) compromising the speed of the customers' Internet access; and (3)

[2] Comcast has been rolling out a mirror program of private/public Wi-Fi routers to business customers through separate contractual arrangements, as discussed below.

[3] Wi-Fi networks are typically named, so that parties can know which network they're connecting to. Upon information and belief, each of the Xfinity Wi-Fi Hotspots bear the same name of "xfinity Wi-Fi."

subjecting its customers to increased security risks.

B. Comcast's Practices Result in Higher Electricity Costs, A Slower Internet Connection, And Increased Security Vulnerabilities For Comcast Customers

18) Without authorization to do so, Comcast uses the wireless routers it supplies to its customers to generate additional, public Wi-Fi networks for its own benefit. One side effect of this practice is that these wireless routers use more electricity than would a regular router generating only a single Wi-Fi network for the customer's benefit. This additional electricity usage is a cost born by the unwitting customer.

19) When news broke that Comcast was turning consumers' homes into a national public Wi-Fi network, engineers at Speedify, a technology company offering services to increase customers' Internet connection speeds, began running tests on the routers Comcast was using to establish its Xfinity Wi-Fi Hotspots. The goal was to determine whether Comcast's equipment used more electricity than comparable equipment that was *not* emitting a second Wi-Fi network. "Based on our tests," the company stated on its website, "we expect that by the time they roll it out to all of their subscribers, Comcast will be pushing tens of millions of dollars per month of the electricity bills needed to run their nationwide public WiFi network onto consumers."[4]

20) Following the release of the experiment results, Comcast approached Speedify and asked them to replicate the study with newer hardware – specifically, the new router it was offering to its residential customers. The results were even worse. Just sitting idle – with no activity on the Xfinity Wi-Fi Hotspot – the wireless gateway used as much energy as the peak power that was observed in the prior study. When the engineer connected a wireless device to the Xfinity Wi-Fi Hotspot, that number climbed even higher.[5]

21) Thus, if a consumer uses a Comcast-supplied wireless router that enables an Xfinity Wi-Fi Hotspot, he or she can expect an additional $20-30 in electricity costs annually if *no one uses the hotspot*. If, however, someone *does* use the Xfinity Wi-Fi Hotspot, be it a guest of the customer

[4] Alex Gizis, "Is Your Comcast Public Hotspot Costing You Real Money?" Speedify (Jun. 26, 2014) (available at http://speedify.com/%20blog/comcast-public-hotspot-cost/)

[5] Raj Haldar, "Is There A Hidden Cost To Your Xfinity Router?" Speedify (Aug. 7, 2014) (available at http://speedify.com/blog/hidden-cost-xfinity-router-2/).

or a complete stranger sitting outside the customer's residence, then the electricity costs climb an additional 30-40 percent.[6]

22) Also, upon information and belief, the Xfinity Wi-Fi Hotspot slows down the speed of the customer's non-public, home Wi-Fi network. As one commentator notes, the spectrum upon which a Wi-Fi network operates is a limited resource, and increased network traffic – including traffic you cannot control – will affect your access to that resource: "There's limited bandwidth to your device and, on the larger scale, your neighborhood. With enough guests in a concentrated area, it will absolutely affect your connectivity… it may even destroy it."[7]

23) Another commentator further explains:

> This may be a legitimate concern, especially for areas that have lots of apartment buildings and multi-tenant dwellings within close proximity of one another. In my building, just about every apartment has a Wi-Fi router. Those routers are transmitting on the same channels for their 2.4GHz and 5GHz signals, leading to RF competition. Now, if you take that scenario and give everyone in that apartment another wireless network to broadcast, those networks are competing, too, and adding to interference. Comcast's FAQ about Xfinity's hotspots doesn't go into any details about channels and bands, but the company should be clear about how adding these hotspot networks affects the performance of existing WLANs—especially in business use.[8]

24) Additionally, upon information and belief, the Xfinity Wi-Fi Hotspot exposes Comcast's customers to increased privacy and security risks.

25) Since Comcast uses the Xfinity Wi-Fi Hotspot to allow strangers to connect to the Internet through the same wireless router used by Comcast customers in their homes, the data and information on a Comcast customer's network is at greater risk.

26) The customer is never asked for authorization by Comcast to let it use his or her router to create public Wi-Fi networks; but through Comcast's unauthorized use, *anyone* may connect to the customer's wireless router, without that customer's authorization and without that customer's control, for any purpose.

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[6] *Id.*

[7] Josh Carr, "Disable Comcast Xfinity WiFi Hotspot: A How-To-Guide." Fix Denver (Jun. 13, 2014) (available at https://fixdenver.com/blog/guides/disable-comcast-xfinity-wifi-hotspot/).

[8] Samara Lynn, "4 Concerns About Comcast's Xfinity Wi-Fi Hotspot Rollout." PC Magazine (Jun. 11, 2014) (available at http://www.pcmag.com/article2/0,2817,2459357,00.asp).

27) Upon information and belief, any activity on the Xfinity Wi-Fi Hotspot will appear as though it originated from the Comcast *customer's* IP address.

C. <u>Comcast's Failure to Obtain Class Members' Authorization for Its Use of Their Internet Service</u>

28) Comcast does not make its customers aware that, by contracting with Comcast for Internet access, the wireless routers they lease from the Company to establish their own Wi-Fi network will concurrently be used as part of Comcast's national network of publicly accessible Xfinity Wi-Fi Hotspots.

29) Accordingly, Comcast does not obtain authorization from its customers to use their routers to generate an Xfinity Wi-Fi Hotspot; rather, Comcast simply uses its customers' Internet access, equipment, and resources for its own benefit and to its customers' detriment, without any authorization.

30) Indeed, Comcast's contract with its customers is so vague that it is unclear as to whether Comcast even addresses this practice at all, much less adequately enough to be said to have obtained its customers' authorization of this practice.

31) Comcast's relevant agreement with its residential customers is comprised of three documents: "Comcast Agreement for Residential Services" (Exhibit A), "Comcast Customer Privacy Notice" (Exhibit B); and "Comcast Acceptable Use Policy for Xfinity Internet" (Exhibit C). None of these three documents obtains customers' authorization for Comcast's use of their routers to broadcast public Xfinity Wi-Fi Hotspots. Only one of those three documents – Exhibit A – makes *any* reference to the practices complained of herein, and it does so only three times and in passing, referencing the "XFINITY Internet WiFi Home Hotspot" (or its abbreviation, "HHS"). The document never defines the term "XFINITY Internet WiFi Home Hotspot," and never discloses to customers that Comcast will use their Comcast-provided routers to broadcast publicly accessible Wi-Fi networks.

32) Accordingly, Comcast never obtains its customers' authorization for its use of their routers to broadcast public Xfinity Wi-Fi Hotspots.

33) First, under the section "Maintenance and Ownership of Equipment and Software," in

a subsection disclaiming responsibility for the operation or support of customer equipment, Comcast references the "XFINITY Internet WiFi Home Hotspot" in the middle of a section otherwise devoted to remotely updating code for equipment:

> **6. MAINTENANCE AND OWNERSHIP OF EQUIPMENT AND SOFTWARE**
>
> **a. XFINITY Equipment.** "XFINITY Equipment" means any equipment provided by Comcast such as gateways, routers, cable modems, voice-capable modems, wireless gateway/routers, CableCARDs, converters, digital adapters, remote controls, and any other equipment provided or leased to you by us or our agents, excluding equipment purchased by you from Comcast and Customer Equipment. XFINITY Equipment also includes any software, firmware, or other programs contained within Customer Equipment or XFINITY Equipment. You agree that all XFINITY Equipment belongs to us or other third parties and will not be deemed fixtures or in any way part of the Premises. You agree to use XFINITY Equipment only for the Service(s) pursuant to this Agreement. We may remove or change the XFINITY Equipment at our discretion at any time the Service(s) are active or following the termination of your Service(s). You acknowledge and agree that our addition or removal of or change to the XFINITY Equipment may interrupt your Service(s). You may not sell, lease, abandon, or give away the XFINITY Equipment, or permit any other provider of video, broadband Internet (high speed data) or telephone services to use the XFINITY Equipment. The XFINITY Equipment may only be used in the Premises. At your request, we may relocate the XFINITY Equipment in the Premises for an additional charge, at a time agreeable to you and us. YOU UNDERSTAND AND ACKNOWLEDGE THAT IF YOU ATTEMPT TO INSTALL OR USE THE XFINITY EQUIPMENT OR SERVICE(S) AT A LOCATION OTHER THAN THE PREMISES, THE SERVICE(S) MAY FAIL TO FUNCTION OR MAY FUNCTION IMPROPERLY. You agree that you will not allow anyone other than Comcast or its agents to service the XFINITY Equipment. We suggest that the XFINITY Equipment in your possession be covered by your homeowners, renters, or other insurance. You will be directly responsible for loss, repair, replacement and other costs, damages, fees and charges if you do not return the XFINITY Equipment to us in an undamaged condition.
>
> **b. Customer Equipment.**
> **1. Responsibility:** Comcast has no responsibility for the operation or support, maintenance, or repair of any Customer Equipment including, but not limited to, Customer Equipment to which Comcast or a third party has sent software, firmware, or other programs.
> **• For XFINITY Video, XFINITY Internet, and XFINITY Voice Customers.** You agree by using the Service(s), you are enabling and authorizing (i) Comcast, its authorized agents and equipment manufacturers to send code updates to the XFINITY Equipment and Customer Equipment, including, but not limited to, cable modems, digital interactive televisions with CableCARDs, and voice-capable modems at any time it is determined necessary to do so as part of the

> Service(s): and (ii) Comcast and its authorized agents to use the XFINITY Equipment, Customer Equipment and Inside Wiring connected to our cable network to provide the Service(s) to you and others, including, but not limited to, the XFINITY Internet WiFi Home Hotspot ("HHS"). Such code updates may change, add or remove features or functionality of any such equipment or the Service(s).

(Ex. A at 5-6)

34) While Exhibit A defines "XFINITY Equipment" (p. 5), "Customer Equipment" (p. 5), "Inside Wiring" (p. 8), and "Service(s)" (p. 1), no definition is ever provided for the "XFINITY Internet WiFi Home Hotspot."

35) The remaining two references in Exhibit A employ only the "HHS" acronym and provide no information as to the purpose or use of HHS:

> **7. USE OF SERVICES**
> You agree that the Service(s) and the XFINITY Equipment will be used only for personal, residential, non-commercial purposes, unless otherwise specifically authorized by us in writing. You will not use the XFINITY Equipment at any time at an address other than the Premises without our prior written authorization. You agree and represent that you will not resell or permit another to resell the Service(s) in whole or in part. You will not use or permit another to use the XFINITY Equipment or the Service(s), directly or indirectly, for any unlawful purpose, including, but not limited to, in violation of any posted Comcast policy applicable to the Service(s). Use of the XFINITY Equipment or Service(s) for transmission, communications or storage of any information, data or material in violation of any U.S. federal, state or local regulation or law is prohibited. You acknowledge that you are accepting this Agreement on behalf of all persons who use the XFINITY Equipment and/or Service(s) at the Premises and that you shall have sole responsibility for ensuring that all other users understand and comply with the terms and conditions of this Agreement and any applicable Comcast policies including, but not limited to, acceptable use and privacy policies. You further acknowledge and agree that you shall be solely responsible for any transactions, including, without limitation, purchases made through or in connection with the Service(s). You agree to indemnify, defend and hold harmless Comcast and its affiliates, suppliers, and agents against all claims and expenses (including reasonable attorneys' fees) arising out of the use of the Service(s), the XFINITY Equipment and/or the Customer Equipment or the breach of this Agreement or any of the applicable Comcast policies by you or any other user of the Service(s) at the Premises. You shall not be required to indemnify Comcast and its affiliates, suppliers, and agents with respect to third parties use of HHS.

(Ex. A at 8-9)

> **3. WIRELESS INTERNET ACCESS THROUGH XFINITY WIFI**
> If you subscribe to the XFINITY Performance Internet service or above you may also access the Internet and use XFINITY Internet wirelessly ("XFINITY WiFi") through our access points, HHS and access points of affiliated companies providing wireless Internet access at no additional charge by using your XFINITY user ID and password to log in. If you use an XFINITY WiFi access point owned or operated by Comcast to access XFINITY Internet, including an HHS your use will be subject to the terms of this Agreement, the XFINITY WiFi terms of service and our acceptable use policies. If you use an access point owned or operated by one of our affiliated companies to access the Internet, you may be subject to the terms and conditions and acceptable use policies of our affiliate as well. If you subscribe to XFINITY Internet at a level below XFINITY Performance Internet service, XFINITY WiFi may be made available to you on a trial, sponsored or pay per use basis subject to different terms. Your use of XFINITY WiFi indicates your acceptance of the applicable terms. If you do not accept the applicable terms, you should not use XFINITY WiFi Service. XFINITY WiFi is not available in all locations and availability is subject to change without notice.

(Ex. A at 21)

36) None of the remaining documents comprising the agreement between Comcast and its customers reference Xfinity Home Hotspots, nor do they discuss Comcast's practice of using customers' residential wireless service for public Wi-Fi networks. *See* Ex.'s B and C.

37) Nothing in the above-excerpted language even *alerts* a consumer that, as a matter of course, Comcast will use a second, independent Wi-Fi network via the wireless router it supplies to the customer, and that this network is open not to the customer, but to any member of the public who is within range of the customer's signal. Therefore, nothing in the above-excerpted language could even remotely be construed as an affirmative authorization on the part of the consumer of the practices described herein.

38) In contrast, Comcast's agreement with small business customers demonstrates that when it is in Comcast's financial interests, it obtains the customer's explicit authorization to broadcast its second, public Wi-Fi Network. The business contract contains an entire subsection devoted exclusively to Wi-Fi network usage – Exhibit D, "Supplemental Wi-Fi Terms and Conditions" – that *begins* not only by defining (and thus distinguishing between) public and private Wi-Fi networks, but also by clearly defining who will be *using* those networks:

> 1. Definitions.
>
> a. "End User" - Customer patrons and other authorized end users.
>
> b. "Private Wi-Fi Services" – Wi-Fi Services for the internal business use by Customer's employees, contractors and agents. Private Wi-Fi Service may not be used by End Users. As part of the logon process, Customer employees, contractors and agents will be asked to provide their Comcast High Speed Internet username and password, and the Customer will be responsible for all activities occurring under his or her username and for keeping the password secure.
>
> c. "Public Wi-Fi Services" – Wi-Fi Services for the use of Customer patrons and other authorized End Users, through the creation and maintenance of one or more wireless "hot spots". Public Wi-Fi Services may not be used by Customer employees, contractors and agents for internal business use.
>
> d. "Wi-Fi Service" - Access to the Wi-Fi Services or wireless connectivity to the internet. Wi-Fi Services will use the IEEE 802.11 standard (unless otherwise noted). Private Wi-Fi Services and Public Wi-Fi Services are collectively referred to herein as "Wi-Fi Services."

(Ex. D at 1)

39) Comcast further outlines the manner in which End Users may access Public Wi-Fi (Ex. D at section 9, "Wi-Fi Service to End Users") and states that it may actively advertise the customer's location as offering Public Wi-Fi Services (Ex. D at section 10, "Use of Comcast Name").

40) And indeed, in this context it is imperative for Comcast to obtain its business customers' authorization in no uncertain terms. The above-excerpted portion of the agreement makes clear that Comcast's business model requires certain express obligations from the small business – namely that (a) its employees not use the public Wi-Fi network (an Xfinity Wi-Fi Hotspot) but instead limit use to the private Wi-Fi network; (b) that the business not compete with Comcast's Xfinity Wi-Fi Hotspot by offering free Wi-Fi access to its customers; and (c) that the business advertise and promote use of the Xfinity Wi-Fi Hotspot.

41) Thus, for its business customers, Comcast is capable of describing in detail the practices complained of herein, for purposes of creating a customer agreement that clearly and

unambiguously obtains customer authorization for such practices. However, with regard to its residential customers, where its financial incentives are different, Comcast has instead elected to use those unsuspecting customers' homes as public Wi-Fi hotspots without obtaining the customers' authorization.

H. Factual Allegations As To Plaintiffs

42) Plaintiffs contracted with Comcast for residential Internet services. As a part of such services, Plaintiffs paid Comcast to lease equipment to connect to the Internet, including a wireless router that was, unbeknownst to Plaintiffs, equipped to broadcast an Xfinity Wi-Fi Hotspot in addition to Plaintiffs' personal, home Wi-Fi hotspot.

43) Plaintiffs did not authorize Comcast to use their wireless router to create a separate, publicly accessible Xfinity Wi-Fi Hotspot.

44) As a result of Comcast's unauthorized use of Plaintiffs' router complained of herein, Plaintiffs' have been forced to incur additional expenses in the form of increased electricity bills.

45) As a result of Comcast's unauthorized use of Plaintiffs' router complained of herein, Plaintiffs have suffered injury in the form of decreased, inadequate speeds on their home Wi-Fi network.

46) As a result of Comcast's unauthorized use of Plaintiffs' router complained of herein, Plaintiffs have had their household's wireless router exposed to possible, additional use by unknown third parties, with neither Plaintiffs' knowledge nor Plaintiffs' authorization.

V. CLASS ACTION ALLEGATIONS

A. Class Definition

47) Plaintiffs bring this action, individually and on behalf all others similarly situated pursuant to Federal Rule of Civil Procedure 23, and seeks certification for the following National Class and California Subclass (collectively, "Class"):

> **National Xfinity Subscriber Class:** All households in the United States that have subscribed to Comcast's Xfinity Internet Service and that, as a result, have leased wireless routers that broadcast an Xfinity Wi-Fi Hotspot.

California Xfinity Subscriber Subclass: All households in California that have subscribed to Comcast's Xfinity Internet Service and that, as a result, have leased wireless routers that broadcast an Xfinity Wi-Fi Hotspot.

48) The Class does not include Comcast, or its officers, directors, agents, or employees.

49) Plaintiffs reserve the right to modify or amend the definition of the Class before the Court determines whether certification is appropriate.

50) This action readily satisfies the requirements set forth under Federal Rule of Civil Procedure 23.

FRCP 23(a) Factors

51) **Numerosity:** The Class comprises many thousands of persons throughout the State of California and millions of people throughout the United States. The class is so numerous, that joinder of all members is impracticable, and the disposition of their claims in a Class Action will benefit the parties and the Court.

52) **Commonality:** The questions of law and fact common to the Class have the capacity to generate common answers that will drive resolution of this action. Common questions of law and fact include, but are not limited to, the following:

a) Whether Defendant's Customer Agreement for Residential Services obtains authorization for Defendant to use customers' wireless routers to create separate, publicly accessible Xfinity Wi-Fi Hotspots;

b) Whether Defendant's conduct violates the Computer Fraud and Abuse Act (18 U.S.C. § 1030);

c) Whether Defendant's conduct is an unlawful business act or practice within the meaning of *Business & Professions Code* § 17200, *et seq.*;

d) Whether Defendant's conduct is an unfair business act or practice within the meaning of *Business & Professions Code* § 17200, *et seq.*; and

e) Whether Defendant's conduct violates the Comprehensive Computer Data Access and Fraud Act (California Penal Code § 502).

53) **Typicality:** Plaintiffs' claims and Defendant's defenses thereto, are typical of the claims of the proposed Class, as the direct violations of the Computer Fraud Abuse Act, California's Unfair Competition Law and the Comprehensive Computer Data Access and Fraud Act are consistent and uniform and affect every member of the Class in the same way. Additionally, all members of the proposed Class have the same or similar injury (loss of fees paid, increased electricity costs, slower Internet connections, and compromised network security) based upon Comcast's unlawful conduct.

54) **Adequacy:** Plaintiffs do not have any conflicts with any other members of the proposed Class, and will fairly and adequately represent and protect the interests of the proposed Class. Plaintiffs have retained competent and experienced counsel in class action and other complex litigation.

FRCP 23(b)(2)

55) Defendant has acted on grounds generally applicable to the entire Class, thereby making final injunctive relief and/or corresponding declaratory relief appropriate with respect to the Class as a whole. The prosecution of separate actions by individual Class members would create the risk of inconsistent or varying adjudications with respect to individual member of the Class that would establish incompatible standards of conduct for Defendant.

56) Injunctive relief is necessary to prevent further unlawful and unfair business practices by Defendant. Money damages alone will not afford adequate and complete relief, and injunctive relief is necessary to restrain Defendant from continuing to commit its illegal and unfair policies.

FRCP 23(b)(3)

57) **Common Issues Predominate:** As set forth in detail herein, common issues of fact and law predominate because all of Plaintiffs' claims are based on the same conduct. Whether Defendant's conduct violates the Computer Fraud and Abuse Act, the Unfair Competition Law, and the Comprehensive Computer Data Access and Fraud Act are a set of issues common to all members of the Class and are the predominate issues, and Plaintiffs can prove the elements of their claims on a class-wide basis using the same evidence as would be used to prove those elements in individual actions alleging the same claims.

58) **Superiority:** A class action is superior to other available methods for fair and efficient adjudication of this controversy. The expense and burden of individual litigation would make it impracticable or impossible for Class members to prosecute their claims individually. Absent a class action, Defendant will likely retain the benefits of its wrongdoing. Because of the small size of an individual Class member's claims, few, if any, Class members could afford to seek legal redress for the wrongs complained of herein. Absent a representative action, the Class members will continue to suffer losses and Defendant will be allowed to continue these violations of law and to retain the proceeds of its ill-gotten gains.

59) The trial and litigation of Plaintiffs' claims are manageable. Individual litigation of the legal and factual issues raised by Defendant's conduct would increase delay and expense to all parties and the court system. The class action device presents far fewer management difficulties and provides the benefits of a single, uniform adjudication, economies of scale, and comprehensive supervision by a single court.

60) **Notice to the Class:** Notice can be accomplished by direct notice to class members because Defendant has each customer's information from its contractual records.

VI. CAUSES OF ACTION

A. First Cause Of Action: Violations Of The Computer Fraud And Abuse Act (18 U.S.C. § 1030) (Brought On Behalf Of The Class)

61) Plaintiffs adopt and incorporate each and every allegation of this complaint as if stated fully herein.

62) Plaintiffs, individually and on behalf of Class members, assert violations of 18 U.S.C. § 1030 for Comcast's unlawful and unauthorized access of Plaintiffs' and Class members' wireless routers, for purposes of establishing Xfinity Wi-Fi Hotspots, thereby resulting in damage and loss.

63) Plaintiffs and Class members are "persons" pursuant to 18 U.S.C. § 1030(e)(12).

64) Plaintiffs' and Class members' wireless routers are "computers" pursuant to 18 U.S.C. § 1030(e)(1).

65) Plaintiffs' and Class members' wireless routers are "protected computers" pursuant to 18 U.S.C. § 1030(e)(2)(B).

66) Defendant's acts complained of herein "exceed authorized access" pursuant to 18 U.S.C. § 1030(e)(6).

67) Defendant's acts complained of herein have caused "damage" to Plaintiffs' and Class members' wireless routers pursuant to 18 U.S.C. § 1030(e)(6).

68) Plaintiffs and Class members have experienced "loss" pursuant to 18 U.S.C. § 1030(e)(11).

69) Throughout the entirety of the conduct upon which this suit is based, Comcast's actions have affected interstate commerce as evidenced by, *inter alia*, the national scope of Comcast's Xfinity Wi-Fi Hotspot network, the national scope of Comcast's subscriber base, and the national and international impact on commerce that Internet connectivity generally facilitates.

70) Comcast's actions are and have been knowing as evidenced by, *inter alia*, its dissemination of wireless routers capable of broadcasting Xfinity Wi-Fi Hotspots and its implementation of code that enables the activation of those Xfinity Wi-Fi Hotspots.

71) Pursuant to 18 U.S.C. § 1030(a)(5)(A), Comcast knowingly caused the transmission of a program, information, code, or command, and as a result of such conduct, intentionally caused damage without authorization to the protected computers of Plaintiffs and Class members. Specifically, Comcast made the wireless routers it provided to Plaintiffs and Class members capable of receiving a command to generate public Wi-Fi signals, in the form of Xfinity Wi-Fi Hotspots, that are additional to Plaintiffs' and Class members' home network Wi-Fi signals. Comcast never obtained authorization from Plaintiffs or Class members to execute such a command and to thereby cause Plaintiffs' and Class members' wireless routers – protected computers pursuant to 18 U.S.C. § 1030(e)(2)(B) – to broadcast Xfinity Wi-Fi Hotspots. Such practice – unauthorized by Plaintiffs and Class members – caused damage to the wireless routers at issue in the form of, *inter alia*, increased and unnecessary electricity usage. Such damage has resulted in an aggregated loss, as defined in 18 U.S.C. § 1030(e)(11), in of more than $5,000 within the year preceding the date of this filing.

72) Alternatively, pursuant to 18 U.S.C. § 1030(a)(5)(B), Comcast intentionally accessed the protected computers of Plaintiffs and Class members, and as a result of such conduct, recklessly caused damage. Specifically, Comcast made the wireless routers it provided to Plaintiffs and Class

members capable of receiving a command to generate public Wi-Fi signals, in the form of Xfinity Wi-Fi Hotspots that are additional to Plaintiffs' and Class members' home network Wi-Fi signals. Comcast never obtained authorization from Plaintiffs or Class members to execute such a command and to thereby cause Plaintiffs' and Class members' wireless routers – protected computers pursuant to 18 U.S.C. § 1030(e)(2)(B) – to broadcast Xfinity Wi-Fi Hotspots. Comcast intentionally executed such command in order to access, without authorization, the wireless routers of Plaintiffs and Class members, and as a result recklessly caused damage to the wireless routers at issue in the form of, *inter alia*, increased and unnecessary electricity usage. Such damage has resulted in an aggregated loss, as defined in 18 U.S.C. § 1030(e)(11), in of more than $5,000 within the year preceding the date of this filing.

73) Alternatively, pursuant to 18 U.S.C. § 1030(a)(5)(C), Comcast intentionally accessed the protected computers of Plaintiffs and Class members, and as a result of such conduct, caused damage and loss. Specifically, Comcast made the wireless routers it supplied to Plaintiffs and Class members capable of receiving a command to generate public Wi-Fi signals, in the form of Xfinity Wi-Fi Hotspots that are additional to Plaintiffs' and Class members' home network Wi-Fi signals. Comcast never obtained authorization from Plaintiffs or Class members to execute such a command and to thereby cause Plaintiffs' and Class members' wireless routers – protected computers pursuant to 18 U.S.C. § 1030(e)(2)(B) – to broadcast Xfinity Wi-Fi Hotspots. Comcast intentionally executed such command in order to access, without authorization, the wireless routers of Plaintiffs and Class Members, and as a result recklessly caused damage to the wireless routers at issue in the form of, *inter alia*, increased and unnecessary electricity usage. Such damage has resulted in an aggregated loss, as defined in 18 U.S.C. § 1030(e)(11), of more than $5,000 within the year preceding the date of this filing.

74) Plaintiffs and Class members are afforded a private cause of action against Comcast pursuant to 18 U.S.C. §§ 1030(g) and 1030(c)(4)(A)(i)(I).

75) Pursuant to 18 U.S.C. § 1030(g), Plaintiffs and Class Members are entitled to compensatory damages, injunctive relief, and all other equitable relief available.

B. <u>Second Cause Of Action: Violation of the Comprehensive Computer Data Access and Fraud Act, California Penal Code § 502 (Brought On Behalf Of The California Subclass)</u>

76) Plaintiffs adopt and incorporate each and every allegation of this complaint as if stated fully herein.

77) Comcast's acts, complained of herein, are "access" as defined in Cal. Pen. Code § 502(b)(1).

78) Plaintiffs' and Class members' respective wireless routers, along with the devices that Plaintiffs and Class members connected to those wireless routers in order to access the Internet, are "computer networks" as defined in Cal. Pen. Code § 502(b)(2) and "computer systems" as defined in Cal. Pen. Code § 502(b)(5).

79) The software installed on Plaintiffs' and Class member's wireless routers is a "computer program or software" under Cal. Pen. Code § 502(b)(3).

80) The functionality of Plaintiffs' and Class members' wireless routers, which enables Plaintiffs and Class members to wirelessly connect to the Internet, is a "computer service" pursuant to Cal. Pen. Code § 502(b)(4).

81) Comcast violated the Comprehensive Computer Data Access and Fraud Act ("CCDAFA") by knowingly and without permission accessing the computer, computer systems, and computer network of Plaintiffs and Class members. Specifically, Comcast acted without authorization from Plaintiffs and Class members, circumventing technical and code based barriers on Plaintiffs' and Class members' wireless routers which in turn enabled Comcast and unknown third parties to utilize Plaintiffs' and Class members' wireless routers to connect to the Internet.

82) Pursuant to Cal. Pen. Code § 502(e), Plaintiffs and Class members are entitled to compensatory damages, attorney's fees, injunctive relief, and all other equitable relief deemed appropriate by this Court.

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C. Third Cause Of Action: Violations Of California's Unfair Competition Law (Cal. Bus. & Prof. Code §§ 17200 *et seq.*) (Brought On Behalf Of The California Subclass)

83) Plaintiffs adopt and incorporate each and every allegation of this complaint as if stated fully herein.

84) Comcast's conduct as alleged herein constitutes unfair and unlawful business acts or practices as proscribed by Section 17200, *et seq.*, of the California Business & Professions Code ("UCL").

85) Comcast's conduct – the unauthorized access of Plaintiffs' and Class members' wireless routers resulting in damages and loss to Plaintiffs and Class members – constitutes "unlawful" business acts or practices by virtue of Comcast's violation of the Computer Fraud and Abuse Act, 18 U.S.C. § 1030.

86) Additionally, Comcast's conduct – knowingly and without permission accessing the computer, computer systems, and computer network of Plaintiffs and Class members – constitutes "unlawful" business acts or practices by virtue of Comcast's violation of the Comprehensive Computer Data Access and Fraud Act, California Penal Code § 502.

87) Plaintiffs and Class members have an interest in controlling the functionality of their wireless routers, limiting the amount of electricity for which they must pay in order to have access to the Internet in their homes, limiting the bandwidth occupied on their home Wi-Fi networks, and securing their wireless routers from unauthorized use. Contrary to Plaintiffs' and Class members' interests and without authorization, Comcast exercised control over Plaintiffs' and Class members' wireless routers, exploiting them for profit without Plaintiffs' or Class members' consent and to Plaintiffs' and Class members' detriment. As a result, Comcast's conduct constitutes "unfair" business acts or practices.

88) Plaintiffs and Class members have suffered injury in fact and lost money or property as a result of Comcast's business acts or practices.

89) Plaintiffs and Class members seek an order to enjoin Comcast from such unlawful and unfair business acts or practices, and to restore to Plaintiffs and Class members their interest in

money or property that may have been acquired by Comcast by means of unfair competition.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs seek judgment in favor of themselves and the Class for the following:

A. That the Court determine that this action may be maintained as a class action under Rule 23 of the Federal Rules of Civil Procedure; that Plaintiffs are proper class representatives; and that the best practicable notice of this action be given to members of the Class represented by Plaintiffs;

B. That judgment be entered against Defendant and in favor of Plaintiffs and the Class on the Causes of Action in this Complaint;

C. That judgment be entered against Defendant for restitution; compensatory damages in an amount to be determined at trial; and injunctive and equitable relief, including, but not limited to, enjoining Defendant from using residential customers' wireless routers to create Xfinity Wi-Fi Hotspots without first obtaining authorization;

D. That judgment be entered against Defendant imposing interest on damages;

E. That judgment be entered against Defendant imposing litigation costs and attorneys' fees; and

F. For all other and further relief as this Court may deem necessary and appropriate.

Plaintiffs demand a jury trial on all issues so triable.

DATED: December 3, 2014

Respectfully submitted,

MILSTEIN ADELMAN, LLP

By: /s/ Gillian L. Wade

Gillian L. Wade
Sara D. Avila

Hank Bates
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M. Ryan Casey
KU & MUSSMAN, PA

Attorneys for Plaintiffs,
Toyer Grear and Joycelyn Harris

EXHIBIT A

COMCAST AGREEMENT FOR RESIDENTIAL SERVICES

ABOUT THIS AGREEMENT, OUR SERVICES, AND YOUR RIGHTS

XFINITY® Service(s) will be provided to you ("you," "your," or "Customer") on the terms and conditions set forth in this Agreement for Residential Services (the "Agreement") and applicable law by the operating company subsidiary of Comcast Corporation that (i) owns and/or operates the cable television system in your area and/or (ii) the subsidiary that is the XFINITY Digital Voice service provider or Unlimited Select and Local Select service provider ("Comcast," "we," "us," or "our"). For purposes of this Agreement, "affiliate" means any entity that controls, is controlled by or is under common control with Comcast Corporation. Service(s) may include, but are not limited to, XFINITY TV cable television service ("XFINITY Video"), XFINITY Internet service including XFINITY WiFi ("XFINITY Internet"), and XFINITY Voice or Unlimited Select and Local Select service (herein collectively "XFINITY Voice" WITH LIMITED EXCEPTIONS FOR UNLIMITED SELECT AND LOCAL SELECT AS OTHERWISE INDICATED BELOW) (each a "Service" and collectively the "Services"). The Service(s) do not include Comcast owned or controlled websites such as Comcast.com, Comcast.net, Xfinity.com, or XfinityTV.com. Those websites have their own terms of service and policies that are accessible directly from those sites.

We may change our prices, fees, the Service(s) and/or the terms and conditions of this Agreement in the future. Unless this Agreement or applicable law specifies otherwise, we will give you thirty (30) days prior notice of any significant change to this Agreement. If you find the change unacceptable, you have the right to cancel your Service(s). However, if you continue to receive Service(s) after the end of the notice period (the "Effective Date") of the change, you will be considered to have accepted the changes. You may not modify this Agreement by making any typed, handwritten, or any other changes to it for any purpose.

Note: This Agreement contains a binding arbitration provision in Section 13 that affects your rights under this Agreement with respect to all Service(s). These terms and conditions are subject to applicable tariffs and service guides.

GENERAL TERMS AND CONDITIONS

1. **ACCEPTANCE OF THIS AGREEMENT**
   You will have accepted this Agreement and be bound by its terms if you use the Service(s) or otherwise indicate your affirmative acceptance of such terms.
2. **CHARGES AND BILLINGS**
   a. **Charges, Fees, and Taxes You Must Pay.** You agree to pay all charges associated with the Service(s), including, but not limited to, installation/service call charges, monthly service charges, XFINITY Equipment (as defined below) charges, measured and per-call charges, applicable federal, state, and local taxes and fees (however designated), regulatory recovery fees for municipal, state and federal government fees or assessments imposed on Comcast, permitted fees and cost recovery charges, or any programs in which Comcast participates, including, but not limited to, public, educational, and governmental access, universal service, telecom relay services for the visually/hearing impaired, rights-of-way access, and programs supporting the 911/E911 system and any fees or payment obligations imposed by governmental or quasi-governmental bodies for the sale, installation, use, or provision of the Service(s). **YOU WILL BE RESPONSIBLE FOR PAYING ANY GOVERNMENT IMPOSED FEES AND TAXES THAT BECOME APPLICABLE RETROACTIVELY.** We will provide you with notice and an effective date of any change in our prices or fees, unless the change in price is related to a change in governmental or quasi-governmental taxes, fees, or assessments, in which case we may elect not to provide notice except where required by applicable law. Not all fees apply to all Service(s).
      - **For XFINITY Video Customers.** XFINITY Video price information is supplied with our

Welcome Kit.

- **For XFINITY Internet Customers.** XFINITY Internet price information is available at www.comcast.com (or an alternative site if we notify you).
- **For XFINITY Voice Customers.** XFINITY Voice price information is available at www.comcast.com/voice/terms-of-service (or an alternative site if we notify you).
- **For Minimum Term Customers.** If you have agreed to a minimum term arrangement, your price for Service(s) is as specified in the minimum term arrangement.

b. How We Will Bill You. Unless you are subject to a minimum term arrangement, Service(s) are provided to you on a month-to-month basis. **If you are receiving Service(s) at a trial or introductory rate, you may cancel your Service(s) at the end of the trial or introductory period by calling your local Comcast customer service center.** You will generally be billed monthly, in advance, for recurring service charges, equipment charges, and fees. **YOU MUST PAY, ON OR BEFORE THE DAY WE INSTALL ANY OR ALL OF THE SERVICE(S), THE FIRST MONTH'S SERVICE CHARGES, XFINITY EQUIPMENT CHARGES, ANY DEPOSITS, AND ANY INSTALLATION CHARGES.** Your first bill may include pro-rated charges from the date you first begin receiving Service(s), as well as monthly recurring charges for the next month and charges for non-recurring services you have received. You may be billed for some Service(s) individually after they have been provided to you; these include measured and per-call charges (as explained below) and charges for pay-per-view movies or events, interactive television, and e-commerce. If you receive Service(s) under a promotion, after the promotional period ends, regular charges for the Service(s) will apply.

We do not waive our rights to collect the full balance owed to us by accepting partial payment. We will apply the partial payment to the outstanding charges in the amounts and proportions that we determine.

- **For XFINITY Voice Customers.** If you pay a flat monthly fee for your calling plan, that fee may not cover certain types of calls. You will be billed for these excluded call types on a per-call basis (e.g., operator services) or a measured basis (e.g., international calls).

  Generally, for billing purposes, a measured call begins when the call is answered by the called party or an automated answering device (such as an answering machine or fax machine); it ends when one of the parties disconnects the call. However, some providers (e.g., those involved in calls to foreign countries) charge for a completed call when the called party's line rings or after a certain number of rings. If such a provider charges Comcast, its affiliates, or suppliers as if your call were answered by the called party, Comcast will charge you for a completed call.

  Measured calls are recorded in whole minutes, with partial minutes rounded up to the next whole minute. If the charge for a measured call or for taxes or surcharges includes a fraction of a cent, the fraction is rounded up to the nearest whole cent. See www.comcast.com/voice/terms-of-service for information on per-call charges and the timing of measured-call charges.

  If your usage charges for XFINITY Voice exceed typical residential usage charges, we may: (i) require you to make advance payments for XFINITY Voice, which we may offset against any unpaid balance on your account; (ii) establish a credit limit for usage charges for XFINITY Voice and/or features; and/or (iii) restrict XFINITY Voice or features. If you exceed your credit limit, we reserve the right to suspend XFINITY Voice and require payment for usage charges assessed to your account.

  Our paper bills for XFINITY Voice contain only a summary of charges. Detailed information is available for a limited period at a password-protected portion of our website. You may call 1-800-XFINITY for a paper copy of outbound toll call records related to your most recent bill. There may be an additional charge for these paper copies except as otherwise required by applicable law.

c. Third-Party Charges That Are Your Responsibility. You acknowledge that you may incur charges with third-party service providers such as accessing on-line services, calling parties who charge for their telephone-based services, purchasing or subscribing to other

offerings via the Internet or interactive options on your XFINITY Video Service that are separate and apart from the amounts charged by us. You are solely responsible for all such charges payable to third parties, including all applicable taxes. In addition, you are solely responsible for protecting the security of credit card and other personal information provided to others in connection with such transactions.

d. **Alternative Billing Arrangements.** Comcast may agree to provide billing services on behalf of third parties, as the agent of the third party. Any such third-party charges shall be payable pursuant to any contract or other arrangement between you and the third party. We will not be responsible for any dispute regarding these charges between you and any third party. You must address all such disputes directly with the third party.

e. **Payment by Credit Card or Check.** If you use a credit card to pay for the Service(s), use of the card is governed by the card issuer agreement, and you must refer to that agreement for your rights and liabilities as a cardholder. If Comcast does not receive payment from your credit card issuer or its agents, you agree to pay all amounts due upon demand. If you make payment by check, you authorize Comcast to collect your check electronically. You agree that you may not amend or modify this Agreement with any restrictive endorsements (such as "paid in full"), or other statements or releases on or accompanying checks or other payments accepted by Comcast and any such notations shall have no legal effect.

f. **Our Remedies if You Pay Late or Fail to Pay.**

1. **Late or Non-Payments:** You may be billed fees, charges, and assessments related to late or non-payments if for any reason (a) Comcast does not receive payment for the Service(s) by the payment due date or (b) you pay less than the full amount due for the Service(s).
   - **For Maryland Customers. YOU WILL BE ASSESSED A LATE FEE OF 10% PER MONTH FOR ANY PAYMENT AMOUNT THAT HAS NOT BEEN PAID IN FULL AFTER 45 DAYS FROM THE DATE THE INVOICE WAS SENT, EXCEPT IN GARRETT AND ALLEGANY COUNTIES AND HANCOCK, MD. No more than three (3) monthly late fees will be imposed for any single payment amount that is past due, regardless of the period during which the payment remains past due.**
   - **For Garrett and Allegany County, Maryland Customers. YOU WILL BE ASSESSED A LATE FEE OF $4.95 PER MONTH FOR EACH ACCOUNT THAT HAS NOT BEEN PAID IN FULL AFTER 45 DAYS FROM THE DATE THE INVOICE WAS SENT.**
   - **For Hancock, Maryland Customers. YOU WILL BE ASSESSED A LATE FEE OF $2.00 PER MONTH FOR EACH ACCOUNT THAT HAS NOT BEEN PAID IN FULL AFTER 45 DAYS FROM THE DATE THE INVOICE WAS SENT.**
2. **Fees Not Considered Interest or Penalties:** Comcast does not anticipate that you will fail to pay for the Service(s) on a timely basis, and we do not extend credit to customers. Any fees, charges, and assessments due to late payment or nonpayment are liquidated damages intended to be a reasonable advance estimate of our costs resulting from late payments and non-payments. These costs will be difficult to calculate or to predict when we set such fees, charges, and assessments, because we cannot know in advance: (a) whether you will pay for the Service(s) on a timely basis, if ever; (b) if you do pay late, when you will actually pay; and (c) what costs we will incur because of your late payment or non-payment.
3. **Collection Costs:** If we use a collection agency or attorney to collect money owed by you, you agree to pay the reasonable costs of collection. These costs include, but are not limited to, any collection agency's fees, reasonable attorneys' fees, and arbitration or court costs.
4. **Suspension/Disconnect:** If you fail to pay the full amount due for any or all of the Service(s) then Comcast, at its sole discretion in accordance with and subject to applicable law, may suspend or disconnect any or all the Service(s) you receive.

g. **Reconnection Fees and Related Charges.** If you resume Service(s) after any suspension, we may require you to pay a reconnection fee. If you reinstate any or all

Service(s) after disconnection, we may require you to pay an installation fee and/or service activation fee. These fees are in addition to all past due charges and other fees. Reconnection of the Service(s) is subject to our credit policies, this Agreement and applicable law.

h. **Our Right to Make Credit Inquiries. YOU AUTHORIZE COMCAST TO MAKE INQUIRIES AND TO RECEIVE INFORMATION ABOUT YOUR CREDIT EXPERIENCE FROM OTHERS, TO ENTER THIS INFORMATION IN YOUR FILE, AND TO DISCLOSE THIS INFORMATION CONCERNING YOU TO APPROPRIATE THIRD PARTIES FOR REASONABLE BUSINESS PURPOSES.** Comcast will not discriminate in the application of its credit inquiries and deposit policy on the basis of race, color, sex, creed, religion, nationality, sexual orientation, or marital status. Any risk assessments conducted by either Comcast or its third party credit bureau will be done in conformance with the requirements of all applicable state or federal laws.

i. **Your Responsibilities Concerning Billing Questions.** Subject to applicable law, if you intend to dispute a charge or request a billing credit, you must contact Comcast within sixty (60) days of the date on the bill. You waive any disputes or credits that you do not report within sixty (60) days.

- **For Sacramento, California Customers.** If there are any billing errors or other requests for credit, you must bring those to our attention within sixty (60) days of the time you receive the bill for which you are seeking correction, unless applicable law provides for a longer period which cannot be waived or otherwise modified. We will investigate and respond to all complaints within five (5) business days of the receipt of the complaint. In some cases, an investigation might require a search of historical records that could take up to 14 business days. If you believe a payment was made which was not credited to your account, a copy of a cancelled check or money order may be required and the disputed amount will be set aside for up to fourteen (14) days while you gather that documentation.

3. REFUNDABLE DEPOSIT

We may require you to pay a refundable deposit when you activate the Service(s), if you add XFINITY Equipment and/or Service(s) or if you fail to pay any amounts when they are due. If we disconnect your Service(s) or are otherwise required under applicable law to refund the deposit, we shall within forty-five (45) days or as otherwise specified by applicable law return a sum equal to the deposit(s) you paid (without interest unless otherwise required by law) minus any amounts due on your account (including without limitation, any amounts owed for the Service(s) or for any XFINITY Equipment that is damaged, altered, or not returned).

- **For Prince Georges, Maryland Customers.** If we disconnect your Service(s) or are otherwise required under applicable law to refund the deposit, we shall within thirty (30) days or your next billing cycle, whichever is earlier, return a sum equal to the deposit(s) you paid (without interest unless otherwise required by law) minus any amounts due on your account (including without limitation, any amounts owed for the Service(s) or for any XFINITY Equipment that is damaged, altered, or not returned).

4. CHANGES TO SERVICES

Subject to applicable law, we have the right to change our Service(s), XFINITY Equipment and rates or charges, at any time with or without notice. We also may rearrange, delete, add to, or otherwise change programming or features or offerings contained in the Service(s), including, but not limited to, content, functionality, hours of availability, customer equipment requirements, speed, and upstream and downstream rate limitations. If we do give you notice, it may be provided on your monthly bill, as a bill insert, e-mail, in a newspaper or other communication permitted under applicable law. If you find a change in the Service(s) unacceptable, you have the right to cancel your Service(s). However, if you continue to receive Service(s) after the change, this will constitute your acceptance of the change.

5. ACCESS TO YOUR PREMISES AND CUSTOMER EQUIPMENT

a. **Premises.** You agree to allow us and our agents the right to enter your property at which the Service(s) and/or XFINITY Equipment will be provided (the “Premises”) at reasonable

times, for purposes of installing, configuring, maintaining, inspecting, upgrading, replacing and removing the Service(s) and/or XFINITY Equipment used to receive any of the Service(s). You warrant that you are either the owner of the Premises or that you have the authority to give us access to the Premises. If you are not the owner of the Premises, you are responsible for obtaining any necessary approval from the owner to allow us and our agents into the Premises to perform the activities specified above. In addition, you agree to supply us or our agent, if we ask, the owner's name, address, and phone number and/or evidence that the owner has authorized you to grant access to us and our agents to the Premises.

- **For California West Bay Area and San Francisco, California Customers.** If we fail to keep an appointment, we will credit your account with free installation or service call free of charge if the appointment was for an installation or service call for which a fee was to be charged or a minimum credit of $20.
- **For Sacramento, California Customers.** If we fail to keep an appointment, we will credit your account with one month of Limited Basic up to a maximum credit equal to one month of the Standard Cable price.

b. Customer Equipment. "Customer Equipment" means software, hardware or services that you elect to use in connection with the Service(s) or XFINITY Equipment. You agree to allow us and our agents the rights to insert cable cards and other hardware in the Customer Equipment, send software, firmware, and/or other programs to the Customer Equipment and install, configure, maintain, inspect and upgrade the Customer Equipment and XFINITY Equipment. You warrant you are either the owner of the Customer Equipment or that you have the authority to give us access to the Customer Equipment. If you are not the owner of the Customer Equipment, you are responsible for obtaining any necessary approval from the owner to allow us and our agents access to the Customer Equipment to perform the activities specified above. In addition, you agree to supply us or our agents, if we ask, the owner's name, address and phone number and/or evidence that the owner has authorized you to grant access to us and our agents to the Customer Equipment to perform the activities specified above.

6. MAINTENANCE AND OWNERSHIP OF EQUIPMENT AND SOFTWARE

a. XFINITY Equipment. "XFINITY Equipment" means any equipment provided by Comcast such as gateways, routers, cable modems, voice-capable modems, wireless gateway/routers, CableCARDs, converters, digital adapters, remote controls, and any other equipment provided or leased to you by us or our agents, excluding equipment purchased by you from Comcast and Customer Equipment. XFINITY Equipment also includes any software, firmware, or other programs contained within Customer Equipment or XFINITY Equipment. You agree that all XFINITY Equipment belongs to us or other third parties and will not be deemed fixtures or in any way part of the Premises. You agree to use XFINITY Equipment only for the Service(s) pursuant to this Agreement. We may remove or change the XFINITY Equipment at our discretion at any time the Service(s) are active or following the termination of your Service(s). You acknowledge and agree that our addition or removal of or change to the XFINITY Equipment may interrupt your Service(s). You may not sell, lease, abandon, or give away the XFINITY Equipment, or permit any other provider of video, broadband Internet (high speed data) or telephone services to use the XFINITY Equipment. The XFINITY Equipment may only be used in the Premises. At your request, we may relocate the XFINITY Equipment in the Premises for an additional charge, at a time agreeable to you and us. YOU UNDERSTAND AND ACKNOWLEDGE THAT IF YOU ATTEMPT TO INSTALL OR USE THE XFINITY EQUIPMENT OR SERVICE(S) AT A LOCATION OTHER THAN THE PREMISES, THE SERVICE(S) MAY FAIL TO FUNCTION OR MAY FUNCTION IMPROPERLY. You agree that you will not allow anyone other than Comcast or its agents to service the XFINITY Equipment. We suggest that the XFINITY Equipment in your possession be covered by your homeowners, renters, or other insurance. You will be directly responsible for loss, repair, replacement and other costs, damages, fees and charges if you do not return the XFINITY Equipment to us in an undamaged condition.

b. Customer Equipment:

1. **Responsibility:** Comcast has no responsibility for the operation or support, maintenance, or repair of any Customer Equipment including, but not limited to, Customer Equipment to which Comcast or a third party has sent software, firmware, or other programs.
   - **For XFINITY Video, XFINITY Internet, and XFINITY Voice Customers.** You agree by using the Service(s), you are enabling and authorizing (i) Comcast, its authorized agents and equipment manufacturers to send code updates to the XFINITY Equipment and Customer Equipment, including, but not limited to, cable modems, digital interactive televisions with CableCARDs, and voice-capable modems at any time it is determined necessary to do so as part of the Service(s): and (ii) Comcast and its authorized agents to use the XFINITY Equipment, Customer Equipment and Inside Wiring connected to our cable network to provide the Service(s) to you and others, including, but not limited to, the XFINITY Internet WiFi Home Hotspot ("HHS"). Such code updates may change, add or remove features or functionality of any such equipment or the Service(s).
   - **For XFINITY Internet and XFINITY Voice Customers.** You can find Comcast's current minimum technical and other requirements for XFINITY Internet customers at http://customer.comcast.com/help-and-support/internet and for XFINITY Voice customers at http://customer.comcast.com/help-and-support/phone. These requirements may be located at an alternative site if we so notify you. To use XFINITY Voice, you will need a voice-capable modem that meets our specifications. In some areas, we may permit you to use XFINITY Voice with a voice-capable modem that you have purchased. Depending on availability in your area, you may have an option to install the voice-capable modem yourself or to have Comcast install it for you. You agree to keep the voice-capable modem plugged into a working electrical power outlet at all times. Whether a cable modem, gateway/router, voice-capable modem or other device is owned by you or us, we have the unrestricted right, but not the obligation, to upgrade or change the firmware in these devices remotely or on the Premises at any time that we determine it necessary or desirable in order to provide Service(s) to you in accordance with our specifications and requirements.
   - **For XFINITY Voice Customers.** You acknowledge and understand XFINITY Voice may not support or be compatible with non-recommended configurations including, but not limited to, voice-capable modems not currently certified by Comcast as compatible with XFINITY Voice; Customer Equipment, including, but not limited to, non-voice communications equipment, including certain makes or models of alarm and security systems or devices, certain medical monitoring devices, personal emergency alert, and home detention devices, certain fax machines, and certain "dial-up" modems; rotary-dial phone handsets, pulse-dial phone handsets, and models of other voice-related communications equipment such as private branch exchange (PBX) equipment, answering machines, and traditional Caller ID units. In order to use XFINITY Voice, you are required to provide certain equipment such as a phone handset or equivalent, inside phone wiring and outlets, and an electrical power outlet. CERTAIN MAKES AND MODELS OF CORDLESS PHONES USE THE ELECTRICAL POWER IN YOUR HOME. IF THERE IS AN ELECTRICAL POWER OUTAGE, THE CORDLESS PHONE WILL CEASE TO OPERATE DURING THE OUTAGE, PREVENTING USE OF XFINITY VOICE VIA THE CORDLESS PHONE. DO NOT ATTEMPT TO CONNECT XFINITY VOICE TO INSIDE PHONE WIRING YOURSELF. In order to use online features of XFINITY Voice, where we make those features available, you are required to provide certain hardware, such as a personal computer, software, an Internet browser, and access to the Internet.
   - **For Unlimited Select and Local Select Customers.** You acknowledge and understand Unlimited Select and Local Select will not support or be compatible with: non-recommended configurations including, but not limited to, voice-capable modems not currently certified by Comcast as compatible with Unlimited Select

and Local Select, Customer Equipment, including, but not limited to, non-voice communications equipment, including certain alarm and security systems or devices, medical monitoring devices, personal emergency alert, and home detention devices, certain fax machines, and certain "dial-up" modems; rotary-dial phone handsets, pulse-dial phone handsets, and models of other voice-related communications equipment such as private branch exchange (PBX) equipment, answering machines, and traditional Caller ID units. In order to use Unlimited Select and Local Select, you are required to provide certain equipment such as a phone handset or equivalent, inside phone wiring and outlets, and an electrical power outlet. IF THERE IS AN ELECTRICAL POWER OUTAGE TO THE COMCAST NETWORK IN YOUR AREA, YOUR UNLIMITED SELECT AND LOCAL SELECT WILL CEASE TO OPERATE DURING THE OUTAGE, PREVENTING INBOUND OR OUTBOUND COMMUNICATIONS TO OR FROM SYSTEMS OR DEVICES CONNECTED TO UNLIMITED SELECT AND LOCAL SELECT, INCLUDING, BUT NOT LIMITED TO, HOME ALARM OR HOME SECURITY SYSTEMS, MEDICAL MONITORING DEVICES, PERSONAL EMERGENCY ALERT DEVICES OR HOME DETENTION DEVICES. DO NOT ATTEMPT TO CONNECT UNLIMITED SELECT AND LOCAL SELECT TO INSIDE PHONE WIRING YOURSELF. In order to use online features of Unlimited Select and Local Select, where we make those features available, you are required to provide certain hardware, such as a personal computer, software, an Internet browser, and access to the Internet.

2. **Non-Recommended Configurations:** Customer Equipment that does not meet Comcast's minimum technical or other specifications constitutes a "Non-Recommended Configuration." NEITHER COMCAST NOR ANY OF ITS AFFILIATES, SUPPLIERS OR AGENTS WARRANT THAT A NON-RECOMMENDED CONFIGURATION WILL ENABLE YOU TO SUCCESSFULLY INSTALL, ACCESS, OPERATE, OR USE THE SERVICE(S). YOU ACKNOWLEDGE THAT ANY SUCH INSTALLATION, ACCESS, OPERATION, OR USE COULD CAUSE CUSTOMER EQUIPMENT TO FAIL TO OPERATE OR CAUSE DAMAGE TO CUSTOMER EQUIPMENT, YOU, YOUR PREMISES OR XFINITY EQUIPMENT. NEITHER COMCAST NOR ANY OF ITS AFFILIATES, SUPPLIERS OR AGENTS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY SUCH FAILURE OR DAMAGE. Comcast reserves the right to deny you customer support for the Service(s) and/or terminate Service(s) if you use a Non-Recommended Configuration.
3. **No Unauthorized Devices or Tampering:** You agree not to attach or assist any person to attach, any unauthorized device to our cable network, XFINITY Equipment or the Service(s). If you make or assist any person to make any unauthorized connection or modification to XFINITY Equipment or the Service(s) or any other part of our cable network, we may terminate your Service(s) and recover such damages as may result from your actions.

   You also agree that you will not attach anything to the Inside Wiring, XFINITY Equipment, or Customer Equipment, whether installed by you or us, which singly or together impairs the integrity of our cable network or degrades our cable network's signal quality or strength or creates signal leakage.

   You also agree that we may recover damages from you for tampering with any XFINITY Equipment or any other part of our cable network or for receiving unauthorized Service(s). You agree that it would be difficult, if not impossible, to calculate precisely the lost revenue resulting from your receipt of unauthorized Service(s) or the tampering with XFINITY Equipment or our cable network. You therefore agree to pay us as liquidated damages, the sum of $500.00 per device used to receive the unauthorized Service(s) in addition to our cost to replace any altered, damaged, or unreturned XFINITY Equipment or other equipment owned by Comcast, including any incidental costs. The unauthorized reception of the Service(s) may also result in criminal fines and/or imprisonment.

   - **For XFINITY Voice Customers.** You will be liable for all authorized and unauthorized XFINITY Voice use at the Premises. You agree to notify us immediately in writing or by calling 1-800-XFINITY during normal business hours if your voice-

capable modem has been stolen or your Service(s) are being stolen or used without your authorization. When you call or write, you must provide your account number and a detailed description of the circumstances of the theft of your voice-capable modem or unauthorized XFINITY Voice use. If you fail to notify us in a timely manner, your Service(s) may be terminated without notice and you may incur additional charges.

c. **Inside Wiring.** You may install wiring inside your Premises ("Inside Wiring"), such as additional cable wiring and outlets, provided it does not interfere with the normal operations of our cable network. If you have us install Inside Wiring, we will charge you for that service. Regardless of who installed it, we consider the Inside Wiring your property or the property of whomever owns the Premises. Accordingly, you are responsible for the repair and maintenance of the Inside Wiring, unless you and Comcast have agreed otherwise in writing. (If you do not own the Premises, contact your landlord or building manager about the installation, repair or maintenance of Inside Wiring.) If you have us repair or maintain the Inside Wiring, we will charge you for that service.

- **For Sacramento, California Customers.** Comcast will be responsible to repair any defects of the Inside Wiring installed by Comcast for thirty (30) days after new residential video installations.
- **For XFINITY Voice Customers.** Except as described below, you may use XFINITY Voice with your telephone Inside Wiring, as long as we have reasonable access to it and you have the right to give us access to it. If you wish to have your voice-capable modem connected to your telephone Inside Wiring, you are advised to have a Comcast technician perform the installation. To make that connection, we must first disconnect your telephone Inside Wiring from the network of your existing telephone provider, which may disable any services you receive from them. If you install XFINITY Voice yourself (where self-installation is an option), you should connect the voice-capable modem to a cordless phone, not directly to your telephone Inside Wiring. If the voice-capable modem is connected to your telephone Inside Wiring without first disconnecting the wiring from any existing telephone provider's network, the voice-capable modem may be damaged and/or XFINITY Voice may not operate properly.

d. **End User Software Licenses.** Your use of the software, firmware, and other programs contained within the XFINITY Equipment, and of any other software or plug-ins to such software distributed or used in connection with the Services shall comply with the terms of the Comcast Software License Agreement (www.comcast.net/terms/license), and any other end user license agreements accompanying such software, as such agreements may be amended from time to time. All such agreements are incorporated in this Agreement by reference. When this Agreement terminates, all end user licenses also terminate; you agree to destroy at that time all versions and copies of all software received by you in connection with the Services.

7. USE OF SERVICES

You agree that the Service(s) and the XFINITY Equipment will be used only for personal, residential, non-commercial purposes, unless otherwise specifically authorized by us in writing. You will not use the XFINITY Equipment at any time at an address other than the Premises without our prior written authorization. You agree and represent that you will not resell or permit another to resell the Service(s) in whole or in part. You will not use or permit another to use the XFINITY Equipment or the Service(s), directly or indirectly, for any unlawful purpose, including, but not limited to, in violation of any posted Comcast policy applicable to the Service(s). Use of the XFINITY Equipment or Service(s) for transmission, communications or storage of any information, data or material in violation of any U.S. federal, state or local regulation or law is prohibited. You acknowledge that you are accepting this Agreement on behalf of all persons who use the XFINITY Equipment and/or Service(s) at the Premises and that you shall have sole responsibility for ensuring that all other users understand and comply with the terms and conditions of this Agreement and any applicable Comcast policies including, but not limited to, acceptable use and privacy policies. You further acknowledge and agree that you shall be

solely responsible for any transactions, including, without limitation, purchases made through or in connection with the Service(s). You agree to indemnify, defend and hold harmless Comcast and its affiliates, suppliers, and agents against all claims and expenses (including reasonable attorneys' fees) arising out of the use of the Service(s), the XFINITY Equipment and/or the Customer Equipment or the breach of this Agreement or any of the applicable Comcast policies by you or any other user of the Service(s) at the Premises. You shall not be required to indemnify Comcast and its affiliates, suppliers, and agents with respect to third parties use of HHS.

- **For XFINITY Internet Customers.** The Comcast Acceptable Use Policy ("AUP") and other policies concerning XFINITY Internet are posted at http://www.comcast.com/Corporate/Customers/Policies/Policies.html (or an alternative website if we so notify you). You further agree that Comcast may modify the AUP or other policies from time to time. Notwithstanding anything to the contrary in this Agreement, YOU ACKNOWLEDGE AND AGREE THAT THE TERMS OF THE AUP AND ANY OTHER APPLICABLE COMCAST POLICIES MAY BE PUT INTO EFFECT OR REVISED FROM TIME TO TIME WITH OR WITHOUT NOTICE BY POSTING A NEW VERSION OF THE AUP OR POLICY AS SET FORTH ABOVE. YOU AND OTHER USERS OF THE SERVICE(S) SHOULD CONSULT THE AUP AND ALL POSTED POLICIES REGULARLY TO CONFORM TO THE MOST RECENT VERSION.
- **For XFINITY Voice Customers.** The Comcast Acceptable Use Policy for Residential Voice Services ("Voice AUP") is posted at http://www.comcast.com/Corporate/Customers/Policies/Policies.html (or an alternative website if we so notify you). COMCAST RESERVES THE RIGHT TO LIMIT OR BLOCK ANY XFINITY VOICE USAGE AS COMCAST DEEMS NECESSARY TO PREVENT HARM TO ITS NETWORK, FRAUD, OR OTHER ABUSE OF XFINITY VOICE SERVICES. You agree the voice-capable modem and XFINITY Voice will only be used at the Premises, except that certain online features may be accessible from locations other than the Premises. You understand and acknowledge that if you improperly install the XFINITY Equipment or XFINITY Voice at another location in the Premises, then XFINITY Voice, including, but not limited to, 911/E911, may fail to function or may function improperly. If you move the voice-capable modem or XFINITY Voice to another location without notifying us, you do so in violation of this Agreement and at your own risk. You agree not to use XFINITY Voice for auto-dialing, continuous or extensive call forwarding, telemarketing, fax broadcasting or fax blasting, or for any other use that results in usage inconsistent with normal residential calling patterns. If we determine, in our sole discretion, that your use of XFINITY Voice is in violation of this Agreement, we reserve the right (1) to terminate or modify immediately and without notice or (2) to assess additional charges for each month in which such violation occurred.

8. ASSIGNABILITY

This Agreement and the Service(s) furnished hereunder may not be assigned by you. You agree to notify us immediately of any changes of ownership or occupancy of the Premises. We may freely assign our rights and obligations under this Agreement with or without notice to you.

9. TERMINATION OF THIS AGREEMENT

a. Term. This Agreement will be in effect from the time that the Service(s) are activated until (1) it is terminated as provided for by this Agreement or by any addendum to this Agreement or (2) it is replaced by a revised Agreement. If you self-install XFINITY Equipment, Service(s) charges begin the earliest of (1) the day on which you picked up XFINITY Equipment at our service center, (2) the day you install the Service(s), or (3) five (5) days after the date we ship the XFINITY Equipment to you. If you self-install a voice-capable modem, cable modem, or converter you obtained from a source other than Comcast, charges begin the day your order for the Service(s) is entered into our billing system. The option to self-install a voice-capable modem, cable modem, or converter and/or to use a non-Comcast-supplied voice-capable modem, cable modem or converter is subject to availability.

b. Termination by You. Unless you have signed a minimum term addendum, you may terminate this Agreement for any reason at any time by notifying Comcast in one of three

ways: (1) send a written notice to the postal address of your local Comcast business office; (2) send an electronic notice to the e-mail address specified on www.comcast.com; or (3) call our customer service line during normal business hours. Subject to applicable law or the terms of any agreements with governmental authorities, all applicable fees and charges for the Service(s) will accrue until this Agreement has terminated, the Service(s) have been disconnected, and all XFINITY Equipment has been returned. We will refund all prepaid monthly service fees charged for Service(s) after the date of termination (less any outstanding amounts due Comcast for the Service(s), affiliate services, XFINITY Equipment, or other applicable fees and charges).

- **For Prince Georges County, Maryland Customers.** All applicable fees and charges will accrue until the termination of this Agreement or the date you request the Service(s) to be disconnected, whichever is earlier.

c. Suspension and Termination by Comcast. Under the conditions listed below, Comcast reserves the right, subject to applicable law, to act immediately and without notice to terminate or suspend the Service(s) and/or to remove from the Service(s) any information transmitted by or to any authorized users (e.g., email or voicemail). Comcast may take these actions if it: (1) determines that your use of the Service(s) does not conform with the requirements set forth in this Agreement, (2) determines that your use of the Service(s) interferes with Comcast's ability to provide the Service(s) to you or others, (3) reasonably believes that your use of the Service(s) may violate any laws, regulations, or written and electronic instructions for use, or (4) reasonably believes that your use of the Service(s) interferes with or endangers the health and/or safety of our personnel or third parties. Comcast's action or inaction under this Section shall not constitute review or approval of your or any other users' use of the Service(s) or information transmitted by or to you or users.

d. Your Obligations Upon Termination. You agree that upon termination of this Agreement you will do the following:

1. You will immediately cease all use of the Service(s) and all XFINITY Equipment;
2. Except as provided in Section 9(b) for Prince Georges County Customers, you will pay in full for your use of the Service(s) up to the date that this Agreement has been terminated and the Service(s) are disconnected; and
3. Within ten (10) days of the date on which Service(s) are disconnected, you will return all XFINITY Equipment to us at our local business office or to our designee in working order, normal wear and tear excepted. Otherwise, you will be charged the amount set forth in the current pricing lists for such XFINITY Equipment, or the revised amount for which you receive notice; if no amount has been specified for the particular model of XFINITY Equipment, you will be charged the retail price for a new replacement. You may also be charged incidental costs that we incur in replacing the XFINITY Equipment. Upon our request during regular business hours at a time agreed upon by you and us, you will permit us and our employees, agents, contractors, and representatives to access the Premises during regular business hours to remove all XFINITY Equipment and other material provided by Comcast.
   - **For Prince Georges County, Maryland Customers.** Within five (5) business days of the date on which Service(s) are disconnected, you will return all XFINITY Equipment to us at our local business office or to our designee in working order, normal wear and tear excepted or make arrangements for Comcast to recover the XFINITY Equipment. Otherwise, you will be charged the amount set forth in the current pricing lists for such XFINITY Equipment, or the revised amount for which you receive notice; if no amount has been specified for the particular model of XFINITY Equipment, you will be charged the retail price for a new replacement. You may also be charged incidental costs that we incur in replacing the XFINITY Equipment. Upon our request, you will permit us and our employees, agents, contractors, and representatives to access the Premises during regular business hours to remove the XFINITY Equipment and other material provided by Comcast. We will conduct this removal at a time agreed on by you and us, and you will ensure that all XFINITY

Equipment is returned to Comcast.

- **For Montgomery County, Maryland XFINITY Internet Customers.** If you are mobility impaired, upon your request, we will arrange for the pickup or exchange of your cable modem at the Premises.

10. LIMITED WARRANTY

THE XFINITY EQUIPMENT AND THE SERVICE(S) ARE PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS WARRANT THAT THE XFINITY EQUIPMENT OR THE SERVICE(S) WILL MEET YOUR REQUIREMENTS, PROVIDE UNINTERRUPTED USE, OR OPERATE AS REQUIRED, WITHOUT DELAY, OR WITHOUT ERROR. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS WARRANT THAT ANY COMMUNICATIONS WILL BE TRANSMITTED IN UNCORRUPTED FORM. ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF PERFORMANCE, NONINFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, ARE HEREBY DISCLAIMED AND EXCLUDED UNLESS OTHERWISE PROHIBITED OR RESTRICTED BY APPLICABLE LAW.

11. LIMITATION OF COMCAST'S LIABILITY

a. **Application.** The limitations of liability set forth in this Section apply to any acts, omissions, and negligence of Comcast and its underlying third-party service providers, agents, suppliers, distributors, licensors and business partners (and their respective officers, employees, agents, contractors or representatives) which, but for that provision, would give rise to a cause of action in contract, tort or under any other legal doctrine.

b. **Customer Equipment.** CUSTOMER EQUIPMENT MAY BE DAMAGED OR SUFFER SERVICE OUTAGES AS A RESULT OF THE INSTALLATION, SELF-INSTALLATION, USE, INSPECTION, MAINTENANCE, UPDATING, REPAIR, AND REMOVAL OF XFINITY EQUIPMENT, CUSTOMER EQUIPMENT AND/OR THE SERVICE(S). EXCEPT FOR GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, NEITHER COMCAST NOR ANY OF ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY DAMAGE, LOSS, OR DESTRUCTION TO THE CUSTOMER EQUIPMENT. IN THE EVENT OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT BY COMCAST, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS WE SHALL PAY AT OUR SOLE DISCRETION FOR THE REPAIR OR REPLACEMENT OF THE DAMAGED CUSTOMER EQUIPMENT UP TO A MAXIMUM OF $500. THIS SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY RELATING TO SUCH ACTIVITY.

- **For XFINITY Internet and XFINITY Video Customers.** YOU UNDERSTAND THAT YOUR COMPUTER OR OTHER DEVICES MAY NEED TO BE OPENED, UPDATED, ACCESSED OR USED EITHER BY YOU OR BY US OR OUR AGENTS, IN CONNECTION WITH THE INSTALLATION, UPDATING OR REPAIR OF XFINITY INTERNET OR VIDEO SERVICE(S). THE OPENING, ACCESSING OR USE OF YOUR COMPUTER, OTHER DEVICES USED IN CONNECTION WITH XFINITY INTERNET OR VIDEO SERVICE(S) MAY VOID WARRANTIES PROVIDED BY THE COMPUTER OR OTHER DEVICE MANUFACTURER OR OTHER PARTIES RELATING TO THE COMPUTER'S OR DEVICE'S HARDWARE OR SOFTWARE. NEITHER COMCAST NOR ANY OF ITS AFFILIATES, SUPPLIERS, OR AGENTS, SHALL HAVE ANY LIABILITY WHATSOEVER AS THE RESULT OF THE VOIDING OF ANY SUCH WARRANTIES.

c. **Other Services or Equipment.** BY ACCEPTING THIS AGREEMENT, YOU WAIVE ALL CLAIMS AGAINST COMCAST FOR INTERFERENCE, DISRUPTION, OR INCOMPATIBILITY BETWEEN THE XFINITY EQUIPMENT OR THE SERVICE(S) AND ANY OTHER SERVICE, SYSTEMS, OR EQUIPMENT. IN THE EVENT OF SUCH INTERFERENCE, DISRUPTION, OR INCOMPATIBILITY, YOUR SOLE REMEDY SHALL BE TO TERMINATE THE SERVICE(S) IN

ACCORDANCE WITH SECTION 9.

d. Software. When you use certain features of the Service(s), such as online features (where available), you may require special software, applications, and/or access to the Internet. Comcast makes no representation or warranty that any software or application installed on Customer Equipment, downloaded to Customer Equipment, or available through the Internet does not contain a virus or other harmful feature. It is your sole responsibility to take appropriate precautions to protect any Customer Equipment from damage to its software, files, and data as a result of any such virus or other harmful feature. We may, but are not required to, terminate all or any portion of the installation or operation of the Service(s) if a virus or other harmful feature or software is found to be present on your Customer Equipment. We are not required to provide you with any assistance in removal of viruses. If we decide, in our sole discretion, to install or run virus check software on your Customer Equipment, we make no representation or warranty that the virus check software will detect or correct any or all viruses. You acknowledge that you may incur additional charges for any service call made or required on account of any problem related to a virus or other harmful feature detected on your Customer Equipment. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY DAMAGE TO OR LOSS OF ANY HARDWARE, SOFTWARE, FILES, OR DATA RESULTING FROM A VIRUS, ANY OTHER HARMFUL FEATURE, OR FROM ANY ATTEMPT TO REMOVE IT.
In addition, as part of the installation process for the software and other components of the Service(s), system files on your Customer Equipment may be modified. Comcast does not represent, warrant or covenant that these modifications will not disrupt the normal operations of any Customer Equipment including without limitation your computer(s), or cause the loss of files. Comcast does not represent, warrant, or covenant that the installation of the special software or applications or access to our Web portal(s) will not cause the loss of files or disrupt the normal operations of any Customer Equipment, including, but not limited to, your computer(s). FOR THESE AND OTHER REASONS, YOU ACKNOWLEDGE AND UNDERSTAND THE IMPORTANCE OF BACKING UP ALL FILES TO ANOTHER STORAGE MECHANISM PRIOR TO SUCH ACTIVITIES. YOU UNDERSTAND AND ACCEPT THE RISKS IF YOU DECIDE NOT TO BACK UP FILES. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY DAMAGE TO OR LOSS OF ANY SOFTWARE, FILES, OR DATA.

e. Disruption of Services. The Service(s) are not fail-safe and are not designed or intended for use in situations requiring fail-safe performance or in which an error or interruption in the Service(s) could lead to severe injury to business, persons, property, or environment ("High Risk Activities"). These High Risk Activities may include, without limitation, vital business, or personal communications, or activities where absolutely accurate data or information is required. You expressly assume the risks of any damages resulting from High Risk Activities. We shall not be liable for any inconvenience, loss, liability, or damage resulting from any interruption of the Service(s), directly or indirectly caused by, or proximately resulting from, any circumstances beyond our control, including, but not limited to, causes attributable to you or your property; inability to obtain access to the Premises; failure of any signal at the transmitter; failure of a communications satellite; loss of use of poles, or other utility facilities; strike; labor dispute; riot or insurrection; war; explosion; malicious mischief; fire, flood, lightning, earthquake, wind, ice, extreme weather conditions, or other acts of God; failure or reduction of power; or any court order, law, act or order of government restricting or prohibiting the operation or delivery of the Service(s). In all other cases of an interruption of the Service(s), you shall be entitled upon a request made within sixty (60) days of such interruption, to a pro rata credit for any Service(s) interruption exceeding twenty-four consecutive hours after such interruption is reported to us, or such other period of time as may be specifically provided by law. Unless specifically provided by law, such credit shall not exceed the fixed monthly charges for the month of such Service(s) interruption and excludes all nonrecurring charges, one-time charges, per call or measured

charges, regulatory fees and surcharges, taxes and other governmental and quasi-governmental fees. **EXCEPT AND UNLESS SPECIFICALLY PROHIBITED BY LAW, SUCH CREDIT SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR AN INTERRUPTION OF SERVICE(S).** Any credits provided by Comcast are at our sole discretion and in no event shall constitute or be construed as a course of conduct by Comcast.

- **For Connecticut XFINITY Video Customers.** In the event of an interruption of XFINITY Video of more than twenty four (24) consecutive hours and of which Comcast has received actual notice, a credit will be issued to your XFINITY Video monthly service charges for the length of time XFINITY Video was interrupted.
- **For Maine XFINITY Video Customers.** In the event your XFINITY Video services are interrupted for more than six (6) consecutive hours in a thirty (30) day period, you may request a pro-rate credit or refund by calling 1-800-XFINITY.
- **For New York XFINITY Video Customers.** In the event of an interruption of XFINITY Video for at least four (4) hours between 6:00 p.m. and 12:00 a.m., except for emergency notice events, a credit equal to one day will be issued to your XFINITY Video monthly service charges. If your XFINITY Video is interrupted for less than four (4) hours or outside of the hours of 6:00 p.m. and 12:00 a.m., please call 1-800-XFINITY to request a credit.
- **For Vermont XFINITY Video Customers.** In the event of an interruption of XFINITY Video for more than twenty-four (24) consecutive hours and of which Comcast has received actual notice, Comcast will issue a credit to your XFINITY Video monthly service charges for the total period of the interruption in an amount proportionate to your regular monthly service charge. If Comcast has not been made aware of the interruption, you must call 1-800-XFINITY to request a credit.
- **For Montgomery County, Maryland.**
  - **XFINITY Video Customers.** Under its franchise with Montgomery County, Maryland, Comcast has the following rebate policy: In the event of a XFINITY Video Service interruption (loss of picture or sound of one or more channels to any customer) Comcast shall repair the XFINITY Video Service interruption as soon as possible. This obligation is satisfied if Comcast offers you the next available repair appointment within the 24-hour period following the XFINITY Video Service interruption, or at your request, to a mutually convenient later time for the repair call, and successfully repairs the XFINITY Video Service interruption during the agreed upon appointment. If the Service interruption is not repaired at the time of the scheduled appointment, you will receive a credit of 10% of your normal monthly bill for XFINITY Video for each 24-hour period, or segment thereof, that the Service interruption continues beyond the scheduled repair call. You may contact Comcast at (301) 424-4400.
  - **XFINITY Internet Customers.** Under its franchise with Montgomery County, Maryland, Comcast has the following rebate policy: In the event of a Service interruption of XFINITY Internet (loss of cable modem service) Comcast shall repair the XFINITY Internet Service interruption as soon as possible. This obligation is satisfied if Comcast offers you the next available repair appointment within the 24-hour period following the XFINITY Internet Service interruption, or at your request, to a mutually convenient later time for the repair call, and successfully repairs the XFINITY Internet Service interruption during the agreed upon appointment. If the XFINITY Internet Service interruption is not repaired at the time of the scheduled appointment, you will receive a prorated credit for each 24-hour period, or segment thereof, that the XFINITY Internet Service interruption continues beyond the scheduled repair call. You may contact Comcast at (301) 424-4400.
- **For Prince Georges County, Maryland Customers.** In the event of a XFINITY Video Service interruption (loss of picture or sound of one or more channel to any customer) lasting between two (2) and six (6) hours, you shall be entitled upon request, to a pro-rata credit for such XFINITY Video Service interruption. In the event of a XFINITY Video Service interruption lasting between six (6) and twenty-four (24) consecutive hours,

you shall be entitled to a pro-rata credit equal to one day of your monthly XFINITY Video Service charge.

- **For New Jersey Customers.** Comcast will issue credit for XFINITY Video Service outages or service interruptions in accordance with N.J.A.C. 14:18-3.5.
- **For XFINITY Voice Customers.** You understand and acknowledge that you will not be able to use XFINITY Voice under certain circumstances, including, but not limited to, the following: (1) if our network or facilities are not operating or (2) if normal electrical power to the voice-capable modem is interrupted and the voice-capable modem does not have a functioning battery backup. You also understand and acknowledge that the performance of a battery backup is not guaranteed. If the battery backup does not provide power, XFINITY Voice will not function until normal power is restored. You also understand and acknowledge that Comcast does not support priority restoration of XFINITY Voice. You also understand and acknowledge that you will not be able to use online features of XFINITY Voice (where available), under certain circumstances including, but not limited to, the interruption of your Internet connection.

f. Directory Listings. IF WE MAKE AVAILABLE AN OPTION TO LIST YOUR NAME, ADDRESS, AND/OR TELEPHONE NUMBER IN A PUBLISHED DIRECTORY (WHETHER IN PRINT OR ONLINE) OR DIRECTORY ASSISTANCE DATABASE, AND ONE OR MORE OF THE FOLLOWING CONDITIONS OCCURS: (1) YOU REQUEST THAT YOUR NAME, ADDRESS AND/OR PHONE NUMBER BE OMITTED FROM A DIRECTORY OR DIRECTORY ASSISTANCE DATABASE, BUT THAT INFORMATION IS INCLUDED IN EITHER OR BOTH; (2) YOU REQUEST THAT YOUR NAME, ADDRESS AND/OR PHONE NUMBER BE INCLUDED IN A DIRECTORY OR DIRECTORY ASSISTANCE DATABASE, BUT THAT INFORMATION IS OMITTED FROM EITHER OR BOTH; OR (3) THE PUBLISHED OR LISTED INFORMATION FOR YOUR ACCOUNT CONTAINS MATERIAL ERRORS OR OMISSIONS, THEN THE AGGREGATE LIABILITY OF COMCAST AND ITS AFFILIATES, SUPPLIERS OR AGENTS SHALL NOT EXCEED THE MONTHLY CHARGES, IF ANY, WHICH YOU HAVE ACTUALLY PAID TO COMCAST TO LIST, PUBLISH, NOT LIST, OR NOT PUBLISH THE INFORMATION FOR THE AFFECTED PERIOD. YOU SHALL HOLD HARMLESS COMCAST AND ITS AFFILIATES, SUPPLIERS OR AGENTS AGAINST ANY AND ALL CLAIMS FOR DAMAGES CAUSED OR CLAIMED TO HAVE BEEN CAUSED, DIRECTLY OR INDIRECTLY, BY THE ERRORS AND OMISSIONS REFERENCED ABOVE.

g. Third Parties. Notwithstanding anything to the contrary in this Agreement, you acknowledge and understand that we may use third parties to provide components of the Service(s), including without limitation, their services, equipment, infrastructure, or content. Comcast is not responsible for the performance (or non-performance) of third-party services, equipment, infrastructure, or content, whether or not they constitute components of the Service(s). Comcast shall not be bound by any undertaking, representation or warranty made by an agent, or employee of Comcast or of our underlying third-party providers and suppliers in connection with the installation, maintenance, or provision of the Service(s), if that undertaking, representation, or warranty is inconsistent with the terms of this Agreement. In addition, you understand that you will have access to the services and content of third parties through the Service(s), including without limitation that of content providers [whether or not accessible directly from the Service(s)]. Comcast is not responsible for any services, equipment, infrastructure, and content that are not provided by us [even if they are components of the Service(s)], and we shall have no liability with respect to such services, equipment, infrastructure, and content. You should address questions or concerns relating to such services, equipment, infrastructure, and content to the providers of such services, equipment, infrastructure, and content. We do not endorse or warrant any third-party products, services, or content that are distributed or advertised over the Service(s).

h. Damages. EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS SHALL UNDER ANY CIRCUMSTANCES OR UNDER ANY LEGAL THEORY (INCLUDING, BUT NOT LIMITED TO,

TRESPASS, CONVERSION, TORT OR CONTRACT) HAVE ANY LIABILITY TO YOU OR TO ANY OTHER PERSON OR ENTITY FOR THE FOLLOWING LOSSES, DAMAGES, OR COSTS:

(1) ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, TREBLE, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL LOSSES OR DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF EARNINGS, LOSS OF BUSINESS OPPORTUNITIES, PERSONAL INJURIES, OR DEATH) THAT RESULT DIRECTLY OR INDIRECTLY FROM OR IN CONNECTION WITH (a) YOUR RELIANCE ON OR USE OF THE XFINITY EQUIPMENT OR THE SERVICE(S); (b) THE INSTALLATION, SELF-INSTALLATION, MAINTENANCE, FAILURE, OR REMOVAL OF THE SERVICE(S) (INCLUDING, BUT NOT LIMITED TO, ANY MISTAKES, OMISSIONS, INTERRUPTIONS, COMPUTER OR OTHER HARDWARE OR SOFTWARE BREACH, FAILURES OR MALFUNCTIONS, DELETION OR CORRUPTION OF FILES, WORK STOPPAGE, ERRORS, DEFECTS, DELAYS IN OPERATION, DELAYS IN TRANSMISSION, OR FAILURE OF PERFORMANCE OF THE SERVICE(S), THE XFINITY EQUIPMENT, OR THE CUSTOMER EQUIPMENT, OR ANY OTHER MISTAKES, OMISSIONS, LOSS OF CALL DETAIL, E-MAIL, VOICEMAIL, OR OTHER INFORMATION OR DATA); (c) THE USE OF XFINITY EQUIPMENT OR CUSTOMER EQUIPMENT TO PROVIDE THE SERVICES, INCLUDING, BUT NOT LIMITED TO, DAMAGES RESULTING FROM OTHERS ACCESSING CUSTOMER EQUIPMENT,COMCAST'S NETWORK, OR THE CONTENTS OF YOUR TRANSMISSIONS MADE THROUGH THE SERVICE(S), OR YOUR USE OF FILE SHARING, PRINT SHARING, OR OTHER CAPABILITIES THAT ALLOW OTHERS TO GAIN ACCESS TO YOUR COMPUTER NETWORK. OR

(2) ANY LOSSES, CLAIMS, DAMAGES, EXPENSES, LIABILITIES, LEGAL FEES, OR OTHER COSTS THAT RESULT DIRECTLY OR INDIRECTLY FROM OR IN CONNECTION WITH ANY ALLEGATION, CLAIM, SUIT, OR OTHER PROCEEDING BASED UPON A CONTENTION THAT THE USE OF THE XFINITY EQUIPMENT OR THE SERVICE(S) BY YOU OR ANY OTHER PERSON OR ENTITY INFRINGES UPON THE CONTRACTUAL RIGHTS, PRIVACY, CONFIDENTIALITY, COPYRIGHT, PATENT, TRADEMARK, TRADE SECRET, OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY.

i. **Customer's Sole Remedies.** Your sole and exclusive remedies under this Agreement are as expressly set forth in this Agreement. Certain of the above limitations may not apply if your state does not allow the exclusion or limitation of implied warranties or does not allow the limitation or exclusion of incidental or consequential damages. In those states, the liability of Comcast and its employees, affiliates, suppliers, agents, contractors, distributors, licensors and business partners is limited to the maximum extent permitted by law.

j. **Survival of Limitations.** All representations, warranties, indemnifications, and limitations of liability contained in this Agreement shall survive the termination of this Agreement; any other obligations of the parties hereunder shall also survive, if they relate to the period before termination or if, by their terms, they would be expected to survive such termination.

12. INDEMNIFICATION AND LIABILITY OF CUSTOMER

YOU AGREE THAT YOU SHALL BE RESPONSIBLE FOR AND SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS COMCAST AND ITS EMPLOYEES, AFFILIATES, SUPPLIERS, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS AND BUSINESS PARTNERS AND SHALL REIMBURSE US FOR ANY DAMAGES, LOSSES OR EXPENSES (INCLUDING WITHOUT LIMITATION, REASONABLE ATTORNEYS' FEES AND COSTS) INCURRED BY US IN CONNECTION WITH ANY CLAIMS, SUITS, JUDGMENTS, AND CAUSES OF ACTION ARISING OUT OF (a) YOUR USE OF THE SERVICE(S) OR XFINITY EQUIPMENT; (b) VIOLATION OR INFRINGEMENT OF CONTRACTUAL RIGHTS, PRIVACY, CONFIDENTIALITY, COPYRIGHT, PATENT, TRADEMARK, TRADE SECRET, OR OTHER INTELLECTUAL PROPERTY AND PROPRIETARY RIGHTS ARISING FROM YOUR USE OF THE SERVICE(S) OR ANY UNAUTHORIZED APPARATUS OR SYSTEM; (c) ANY CLAIMS OR DAMAGES ARISING OUT OF THE LACK OF 911/E911 OR DIALING ASSOCIATED WITH A HOME SECURITY, HOME DETENTION, OR MEDICAL MONITORING SYSTEM; AND (d) YOUR BREACH OF ANY PROVISION OF THIS AGREEMENT.

13. BINDING ARBITRATION

a. **Purpose.** If you have a Dispute (as defined below) with Comcast that cannot be resolved through an informal dispute resolution with Comcast, you or Comcast may elect to arbitrate that Dispute in accordance with the terms of this Arbitration Provision rather than litigate the Dispute in court. Arbitration means you will have a fair hearing before a neutral arbitrator instead of in a court by a judge or jury. Proceeding in arbitration may result in limited discovery and may be subject to limited review by courts.

b. **Definitions.** The term "Dispute" means any dispute, claim, or controversy between you and Comcast regarding any aspect of your relationship with Comcast, whether based in contract, statute, regulation, ordinance, tort (including, but not limited to, fraud, misrepresentation, fraudulent inducement, negligence, or any other intentional tort), or any other legal or equitable theory, and includes the validity, enforceability or scope of this Arbitration Provision. "Dispute" is to be given the broadest possible meaning that will be enforced. As used in this Arbitration Provision, "Comcast" means Comcast and its parents, subsidiaries and affiliated companies and each of their respective officers, directors, employees and agents.

c. **Right to Opt Out.** IF YOU DO NOT WISH TO BE BOUND BY THIS ARBITRATION PROVISION, YOU MUST NOTIFY COMCAST IN WRITING WITHIN 30 DAYS OF THE DATE THAT YOU FIRST RECEIVE THIS AGREEMENT BY VISITING WWW.COMCAST.COM/ARBITRATIONOPTOUT, OR BY MAIL TO COMCAST 1701 JOHN F. KENNEDY BLVD., PHILADELPHIA, PA 19103-2838, ATTN: LEGAL DEPARTMENT/ARBITRATION. YOUR WRITTEN NOTIFICATION TO COMCAST MUST INCLUDE YOUR NAME, ADDRESS AND COMCAST ACCOUNT NUMBER AS WELL AS A CLEAR STATEMENT THAT YOU DO NOT WISH TO RESOLVE DISPUTES WITH COMCAST THROUGH ARBITRATION. YOUR DECISION TO OPT OUT OF THIS ARBITRATION PROVISION WILL HAVE NO ADVERSE EFFECT ON YOUR RELATIONSHIP WITH COMCAST OR THE DELIVERY OF SERVICE(S) TO YOU BY COMCAST. IF YOU HAVE PREVIOUSLY NOTIFIED COMCAST OF YOUR DECISION TO OPT OUT OF ARBITRATION, YOU DO NOT NEED TO DO SO AGAIN.

d. **Initiation of Arbitration Proceeding/Selection of Arbitrator.** If you or Comcast elect to resolve your Dispute through arbitration pursuant to this Arbitration Provision, the party initiating the arbitration proceeding may open a case with the American Arbitration Association - Case Filing Services, 1101 Laurel Oak Road, Suite 100, Voorhees, NJ 08043, 877-493-4185, www.adr.org under the Commercial Arbitration Rules of the American Arbitration Association "AAA."

e. **Arbitration Procedures.** Because the Service(s) provided to you by Comcast concerns interstate commerce, the Federal Arbitration Act ("FAA"), not state arbitration law, shall govern the arbitrability of all Disputes. However, applicable federal law or the law of the state where you receive the service from Comcast may apply to and govern the substance of any Disputes. No state statute pertaining to arbitration shall be applicable under this Arbitration Provision.

   If there is a conflict between this Arbitration Provision and the rules of the arbitration organization, this Arbitration Provision shall govern. If the AAA will not enforce this Arbitration Provision as written, it cannot serve as the arbitration organization to resolve your dispute with Comcast. If this situation arises, the parties shall agree on a substitute arbitration organization. If the parties are unable to agree, the parties shall mutually petition a court of appropriate jurisdiction to appoint an arbitration organization that will enforce this Arbitration Provision as written. If there is a conflict between this Arbitration Provision and the rest of this Agreement, this Arbitration Provision shall govern.

   A single arbitrator will resolve the Dispute. The arbitrator will honor claims of privilege recognized by law and will take reasonable steps to protect customer account information and other confidential or proprietary information.

   The arbitrator will make any award in writing but need not provide a statement of reasons unless requested by a party. An award rendered by the arbitrator may be entered in any court having jurisdiction over the parties for purposes of enforcement.

   If an award granted by the arbitrator exceeds $75,000, either party can appeal that award to a three-arbitrator panel administered by the same arbitration organization by a written

notice of appeal filed within thirty (30) days from the date of entry of the written arbitration award. The members of the three-arbitrator panel will be selected according to the rules of the arbitration organization. The arbitration organization will then notify the other party that the award has been appealed. The three-arbitrator panel will issue its decision within one hundred and twenty (120) days of the date of the appealing party's notice of appeal. The decision of the three-arbitrator panel shall be final and binding, except for any appellate right which exists under the FAA.

f. Restrictions:

1. YOU MUST CONTACT US WITHIN ONE (1) YEAR OF THE DATE OF THE OCCURRENCE OF THE EVENT OR FACTS GIVING RISE TO A DISPUTE (EXCEPT FOR BILLING DISPUTES, ABOUT WHICH YOU MUST CONTACT COMCAST WITHIN SIXTY (60) DAYS AS PROVIDED IN SECTION 2 OF THIS AGREEMENT), OR YOU WAIVE THE RIGHT TO PURSUE ANY CLAIM BASED UPON SUCH EVENT, FACTS, OR DISPUTE.
2. ALL PARTIES TO THE ARBITRATION MUST BE INDIVIDUALLY NAMED. THERE SHALL BE NO RIGHT OR AUTHORITY FOR ANY CLAIMS TO BE ARBITRATED OR LITIGATED ON A CLASS ACTION OR CONSOLIDATED BASIS OR ON BASES INVOLVING CLAIMS BROUGHT IN A PURPORTED REPRESENTATIVE CAPACITY ON BEHALF OF THE GENERAL PUBLIC (SUCH AS A PRIVATE ATTORNEY GENERAL), OTHER SUBSCRIBERS, OR OTHER PERSONS.

g. Location of Arbitration. The arbitration will take place at a location convenient to you in the area where you receive the service from us.

h. Payment of Arbitration Fees and Costs. COMCAST WILL ADVANCE ALL ARBITRATION FILING FEES AND ARBITRATOR'S COSTS AND EXPENSES UPON YOUR WRITTEN REQUEST GIVEN PRIOR TO THE COMMENCEMENT OF THE ARBITRATION. YOU ARE RESPONSIBLE FOR ALL ADDITIONAL COSTS THAT YOU INCUR IN THE ARBITRATION, INCLUDING, BUT NOT LIMITED TO, FEES FOR ATTORNEYS OR EXPERT WITNESSES. IF THE ARBITRATION PROCEEDING IS DECIDED IN COMCAST'S FAVOR, YOU SHALL REIMBURSE COMCAST FOR THE FEES AND COSTS ADVANCED TO YOU ONLY UP TO THE EXTENT AWARDABLE IN A JUDICIAL PROCEEDING. IF THE ARBITRATION PROCEEDING IS DETERMINED IN YOUR FAVOR, YOU WILL NOT BE REQUIRED TO REIMBURSE COMCAST FOR ANY OF THE FEES AND COSTS ADVANCED BY COMCAST. IF A PARTY ELECTS TO APPEAL AN AWARD TO A THREE-ARBITRATOR PANEL, THE PREVAILING PARTY IN THE APPEAL SHALL BE ENTITLED TO RECOVER ALL REASONABLE ATTORNEYS' FEES AND COSTS INCURRED IN THAT APPEAL. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS ARBITRATION PROVISION, COMCAST WILL PAY ALL FEES AND COSTS THAT IT IS REQUIRED BY LAW TO PAY.

i. Severability. If any clause within this Arbitration Provision is found to be illegal or unenforceable, that clause will be severed from this Arbitration Provision, and the remainder of this Arbitration Provision will be given full force and effect. If the class action waiver clause is found to be illegal or unenforceable, the entire Arbitration Provision will be unenforceable, and the dispute will be decided by a court.

In the event this entire Arbitration Provision is determined to be illegal or unenforceable for any reason, or if a claim is brought in a Dispute that is found by a court to be excluded from the scope of this Arbitration Provision, you and Comcast have each agreed to waive, to the fullest extent allowed by law, any trial by jury.

j. Exclusions from Arbitration. YOU AND COMCAST AGREE THAT THE FOLLOWING WILL NOT BE SUBJECT TO ARBITRATION: (1) ANY CLAIM FILED BY YOU OR BY COMCAST THAT IS NOT AGGREGATED WITH THE CLAIM OF ANY OTHER SUBSCRIBER AND WHOSE AMOUNT IN CONTROVERSY IS PROPERLY WITHIN THE JURISDICTION OF A COURT THAT IS LIMITED TO ADJUDICATING SMALL CLAIMS; (2) ANY DISPUTE OVER THE VALIDITY OF ANY PARTY'S INTELLECTUAL PROPERTY RIGHTS; (3) ANY DISPUTE RELATED TO OR ARISING FROM ALLEGATIONS ASSOCIATED WITH UNAUTHORIZED USE OR RECEIPT OF SERVICE; (4) ANY DISPUTE THAT ARISES BETWEEN COMCAST AND ANY STATE OR LOCAL REGULATORY AUTHORITY OR AGENCY THAT IS EMPOWERED BY FEDERAL, STATE, OR LOCAL LAW TO GRANT A FRANCHISE UNDER 47 U.S.C. § 522(9);

AND (5) ANY DISPUTE THAT CAN ONLY BE BROUGHT BEFORE THE LOCAL FRANCHISE AUTHORITY UNDER THE TERMS OF THE FRANCHISE.

k. **Continuation.** This Arbitration Provision shall survive the termination of your Service(s) with Comcast.

- **For New York XFINITY Video Customers.** You may elect to resolve a Dispute through the New York Public Service Commission in accordance with NYCRR 16§890.709(a) and NYCRR 16§709(c).

14. CUSTOMER PRIVACY NOTICE AND SECURITY

a. Comcast will provide you with a copy of our customer privacy notice at the time we enter into an agreement to provide any Service(s) to you, and annually afterwards, or as otherwise permitted by law. You can view the most current version of our privacy notice by going to www.comcast.com/customerprivacy.

b. To the extent Comcast is expressly required to do so by applicable law, we will provide notice to you of a breach of the security of certain personally identifiable information about you. It is Comcast's information security policy to provide such notice to you in the manner set forth in Section 16.

15. GENERAL

a. **Entire Agreement.** This Agreement and any other documents incorporated by reference constitute the entire agreement and understanding between you and Comcast with respect to the subject matter of this Agreement, and replace any and all prior written or verbal agreements. If any portion of this Agreement is held to be unenforceable, the unenforceable portion shall be construed in accordance with applicable law as nearly as possible to reflect the original intentions of the parties, and the remainder of the provisions shall remain in full force and effect. Comcast does not waive any provision or right if it fails to insist upon or enforce strict performance of any provision of this Agreement. Neither the course of conduct between you and Comcast nor trade practice shall act to modify any provision of this Agreement.

b. **Additional Representations and Warranties.** In addition to representations and warranties you make elsewhere in this Agreement, you also represent and warrant that:

i. **Age:** You are at least 18 years of age.

ii. **Customer Information:** During the term of this Agreement, you have provided and will provide to Comcast information that is accurate, complete and current, including without limitation your legal name, address, telephone number(s), the number of devices on which or through the Service(s) is being used, and payment data (including without limitation information provided when authorizing recurring payments). You agree to notify us promptly, in accordance with the terms of this Agreement, if there is any change in the information that you have provided to us. Failure to provide and maintain accurate information is a breach of this Agreement.

c. **Information Provided to Third Parties.** Comcast is not responsible for any information provided by you to third parties, and this information is not subject to the privacy provisions of this Agreement or the privacy notice for the Service(s). In addition you are responsible for controlling access to any XFINITY Equipment and any other device you use to access the Services ("Connected Device"). You assume all privacy, security, and other risks associated with providing any individual with access to a Connected Device or providing any information, including CPNI or personally identifiable information, to third parties via the Service(s). For a description of the privacy protections associated with providing information to third parties, you should refer to the privacy policies, if any, provided by those third parties.

d. **Protection of Comcast's Information and Marks.** The Service(s), XFINITY Equipment and related documents are protected by trademark, copyright or other intellectual property laws, and international treaty provisions. All websites, corporate names, service marks, trademarks, trade names, logos, and domain names (collectively "marks") of Comcast and its affiliates are and shall remain the exclusive property of Comcast. Nothing in this Agreement shall grant you the right or license to use any of the marks.

e. **Export Laws.** You expressly agree to comply with all applicable export and re-export laws, including, but not limited to, the Export Administration Act, the Arms Export Control Act, and their implementing regulations. You further expressly agree not to use the Service(s) in any way that violates any provision of such laws or their implementing regulations.

f. **Retention of Rights.** Nothing contained in this Agreement shall be construed to limit Comcast's rights and remedies available at law or in equity. Upon termination of this Agreement for any reason, Comcast and its suppliers reserve the right to delete all your data, files, electronic messages or other Customer information that is stored on Comcast's or its suppliers' servers or systems. In addition, you may forfeit your account user name and all e-mail, IP and Web space addresses, and voice mail. In the event you cancel XFINITY Voice without porting your voice service and the telephone number to another service provider, you will forfeit the telephone number. We shall have no liability whatsoever as the result of the loss of any such data, names, addresses, or numbers.

16. NOTICE METHOD FOR CHANGES TO THIS AGREEMENT

We will provide you notice of changes to this Agreement consistent with applicable law. The notice may be provided on your monthly bill, as a bill insert, in a newspaper, by e-mail, or by other permitted communication. If you find the change unacceptable, you have the right to cancel your Service(s). However, if you continue to receive the Service(s) after the change, we will consider this your acceptance of the change.

- **For XFINITY Internet and XFINITY Voice Customers.** Comcast may deliver any required or desired notice to you in any of the following ways, as determined in our sole discretion: (1) by posting it on www.comcast.net, www.comcast.com or another website about which you have been notified, (2) by sending notice via first class U.S. postal mail or overnight mail to your Premises; (3) by sending notice to the e-mail address on Comcast's account records, or (4) by hand delivery. You agree that any one of the foregoing will constitute sufficient notice and you waive any claims that these forms of notice are insufficient or ineffective. Because we may from time to time notify you about important information regarding the Service(s) and this Agreement by these methods, you agree to regularly check your postal mail, e-mail and all postings at www.comcast.net, www.comcast.com or on another website about which you have been notified or you bear the risk of failing to do so.

17. IMPORTANT INFORMATION

If you are unable to get a problem resolved to your satisfaction at your local Comcast office, you may write to the Comcast Corporate Offices at 1701 John F. Kennedy Blvd., Philadelphia, PA 19103-2838 with concerns and complaints.

- **Massachusetts Customers:** In addition if you are unsatisfied with our handling of your complaint, you may contact your local franchise authority: the Consumer Division of the Department of Telecommunications and Cable (DTC) toll free at 1-800-392-6066 or you may write to them at Two South Station, Boston, MA 02110.
- **Connecticut Customers:** If you experience a problem with your Service(s), please contact us first and give us an opportunity to resolve your problem. If the matter is not resolved to your satisfaction please contact the Connecticut Department of Utility Control at 1-800-382-4586 (toll free within Connecticut) or 1-860-827-2622 (outside Connecticut) or TDD 1-860-827-2837.
- **New York Customers:** If you experience a problem with your Service(s), please contact us first and give us an opportunity to resolve your problem. If your concerns have not been resolved contact your local government, or call the **New York State Public Service Commission (PSC) at 1-800-342-3377,** or write to: **Customer Service Representative, New York State Public Service Commission, Office of Customer Services,** Three Empire State Plaza, Albany, New York 12223-1350.
- **New Hampshire and Maine Customers:** The Office of the Attorney General Consumer Protection and Antitrust Bureau has the authority to enforce Consumer Protection Laws and provide assistance in the mediation of consumer complaints. Customers should file written complaints concerning any alleged misrepresentations and unfair or deceptive practices of the cable company to:

Maine – Office of the Attorney General, Department of Consumer Fraud and Antitrust, State House Station #6, Augusta, ME 04333
New Hampshire – Office of the Attorney General, Department of Consumer Fraud and Antitrust, 25 Capital Street, Concord, NH 03301

- **Vermont Customers:** The Vermont Department of Public Service can provide assistance in the resolution of consumer complaints. Customers should file complaints with the Customer Hotline at 1-800-622-4496.

ADDITIONAL PROVISIONS APPLICABLE TO XFINITY INTERNET SERVICE

In addition to the provisions above that are applicable to XFINITY Video, XFINITY Internet and XFINITY Voice, the following are specifically applicable to XFINITY Internet Customers.

1. INTELLECTUAL PROPERTY RIGHTS

a. **Ownership of Addresses.** You acknowledge that use of XFINITY Internet does not give you any ownership or other rights in any Internet/on-line addresses provided to you, including, but not limited to, Internet Protocol ("IP") addresses, e-mail addresses, and Web addresses. We may modify or change these addresses at any time without notice and shall in no way be required to compensate you for these changes. Upon termination of an XFINITY Internet account, we reserve the right permanently to delete or remove any or all addresses associated with the account.

b. **Authorization.** Comcast does not claim any ownership of any material that you publish, transmit or distribute using XFINITY Internet. By using XFINITY Internet to publish, transmit, or distribute material or content, you (1) warrant that the material or content complies with the provisions of this Agreement, (2) consent to and authorize Comcast, its agents, suppliers, and affiliates to reproduce, publish, distribute, and display the content worldwide and (3) warrant that you have the right to provide this authorization. You acknowledge that material posted or transmitted using XFINITY Internet may be copied, republished or distributed by third parties, and you agree to indemnify, defend, and hold harmless Comcast, its agents, suppliers, and affiliates for any harm resulting from these actions.

c. **Copyright.** Title and intellectual property rights to XFINITY Internet are owned by Comcast, its agents, suppliers, or affiliates or their licensors or otherwise by the owners of such material and are protected by copyright laws and treaties. You may not copy, redistribute, resell, or publish any part of XFINITY Internet without any required express prior written consent from Comcast or other owner of such material.

d. **Material Downloaded Through XFINITY Internet.** In addition to any content that may be provided by us, you may access material through XFINITY Internet that is not owned by Comcast. Specific terms and conditions may apply to your use of any content or material made available through XFINITY Internet that is not owned by Comcast. You should read those terms and conditions to learn how they apply to you and your use of any non-Comcast content.

2. ADDITIONAL LIMITATIONS ON COMCAST'S LIABILITY FOR XFINITY INTERNET

a. **Responsibility for Content.** You acknowledge that there is some content and material on the Internet or otherwise available through XFINITY Internet that may be offensive to some individuals, may be unsuitable for children, may violate federal, state or local laws, rules or regulations, or may violate your protected rights or those of others. We assume no responsibility for this content or material. Anyone who accesses such content and material does so at his or her own risk. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, CONTRACTORS, DISTRIBUTORS, LICENSORS OR BUSINESS PARTNERS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY CLAIMS, LOSSES, ACTIONS, DAMAGES, SUITS, OR PROCEEDINGS ARISING OUT OF OR OTHERWISE RELATING TO ACCESS TO SUCH CONTENT OR MATERIAL BY YOU OR OTHERS. Questions or complaints regarding content or material should be addressed to the content or material provider. You acknowledge that software programs are commercially available that claim to be able to restrict access to sexually explicit or other objectionable material on the Internet.

We make no representation or warranty regarding the effectiveness of such programs.

b. **Eavesdropping.** The public Internet is used by numerous persons or entities including, without limitation, other subscribers to XFINITY Internet. As is the case with all shared networks like the public Internet, there is a risk that you could be subject to "eavesdropping." This means that other persons or entities may be able to access and/or monitor your use of XFINITY Internet. If you post, store, transmit, or disseminate any sensitive or confidential information, you do so at your sole risk. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, OR AGENTS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY CLAIMS, LOSSES, ACTIONS, DAMAGES, SUITS, OR PROCEEDINGS ARISING OUT OF OR OTHERWISE RELATING TO SUCH ACTIONS BY YOU. You acknowledge that software programs are commercially available that claim to be capable of encryption or anonymization. We make no representation or warranty regarding the effectiveness of these programs.

c. **FTP/HTTP Service Setup.** You acknowledge that when using XFINITY Internet there are certain applications such as FTP (File Transfer Protocol) or HTTP (Hyper Text Transfer Protocol) that may be used by other persons or entities to gain access to your Customer Equipment. You are solely responsible for the security of your Customer Equipment or any other equipment you choose to use in connection with the Service(s), including without limitation any data stored on such equipment. NEITHER COMCAST NOR ITS AFFILIATES, SUPPLIERS, EMPLOYEES, AGENTS, OR CONTRACTORS SHALL HAVE ANY LIABILITY WHATSOEVER FOR ANY CLAIMS, LOSSES, ACTIONS, DAMAGES, SUITS OR PROCEEDINGS RESULTING FROM, ARISING OUT OF, OR OTHERWISE RELATING TO THE USE OF SUCH APPLICATIONS BY YOU, OR THE ACCESS BY OTHERS TO YOUR CUSTOMER EQUIPMENT OR OTHER EQUIPMENT OF YOURS.

d. **Facilities Allocation.** Comcast reserves the right to determine, in its discretion, and on an ongoing basis, the nature and extent of its facilities allocated to support XFINITY Internet, including, but not limited to, the amount of bandwidth to be utilized and delivered in conjunction with XFINITY Internet.

   i. The Terms and Conditions of Sale for Products for XFINITY Internet Customers is available at www.comcast.com/termsofservice/termHSI.html.

3. WIRELESS INTERNET ACCESS THROUGH XFINITY WIFI

If you subscribe to the XFINITY Performance Internet service or above you may also access the Internet and use XFINITY Internet wirelessly ("XFINITY WiFi") through our access points, HHS and access points of affiliated companies providing wireless Internet access at no additional charge by using your XFINITY user ID and password to log in. If you use an XFINITY WiFi access point owned or operated by Comcast to access XFINITY Internet, including an HHS your use will be subject to the terms of this Agreement, the XFINITY WiFi terms of service and our acceptable use policies. If you use an access point owned or operated by one of our affiliated companies to access the Internet, you may be subject to the terms and conditions and acceptable use policies of our affiliate as well. If you subscribe to XFINITY Internet at a level below XFINITY Performance Internet service, XFINITY WiFi may be made available to you on a trial, sponsored or pay per use basis subject to different terms. Your use of XFINITY WiFi indicates your acceptance of the applicable terms. If you do not accept the applicable terms, you should not use XFINITY WiFi Service. XFINITY WiFi is not available in all locations and availability is subject to change without notice.

ADDITIONAL PROVISIONS APPLICABLE TO XFINITY VOICE SERVICE

In addition to the General Terms and Conditions above, the following terms and conditions are specifically applicable to XFINITY Voice Customers.

1. SPECIAL NOTICE FOR COMCAST DIGITAL VOICE SUBSCRIBERS: LIMITATIONS OF XFINITY VOICE SERVICE

a. **Limitations.** XFINITY Voice includes 911/Enhanced 911 functionality ("911/E911") that may differ from the 911/E911 functionality furnished by other providers. As such, it may have certain limitations. CAREFULLY READ THE INFORMATION BELOW. YOU

ACKNOWLEDGE AND ACCEPT ANY LIMITATIONS OF 911/E911. YOU AGREE TO CONVEY THESE LIMITATIONS TO ALL PERSONS WHO MAY HAVE OCCASION TO PLACE CALLS OVER THE SERVICES. IF YOU HAVE ANY QUESTIONS ABOUT 911/E911, CALL 1-800-XFINITY.

i. **Correct Address:** In order for your 911/E911 calls to be properly directed to emergency services, Comcast must have your correct Premises address. If you move XFINITY Voice to a different address without Comcast's approval, 911/E911 calls may be directed to the wrong emergency authority, may transmit the wrong address, and/or XFINITY Voice (including 911/E911) may fail altogether. Therefore, you must call 1-800-XFINITY before you move XFINITY Voice to a new address. Comcast will need several business days to update your Premises address in the E911 system so that your 911/E911 calls can be properly directed. All changes in service address require Comcast's prior approval.

ii. **Service Interruptions:** XFINITY Voice uses the electrical power in your home. If there is an electrical power outage, 911 calling may be interrupted if a battery backup in the associated voice-capable modem is not installed, fails, or is exhausted after several hours. Furthermore, calls, including calls to 911/E911, may not be completed if there is a problem with network facilities, including network congestion, network/equipment/power failure, or another technical problem.

iii. **Suspension and Termination by Comcast:** You understand and acknowledge that all XFINITY Voice, including 911/E911, as well as all online features of XFINITY Voice, where we make these features available, will be disabled if your account is suspended or terminated.

iv. **Telephone Number Assignments:** The telephone numbers utilized for XFINITY Voice are assigned in accordance with applicable federal and state numbering rules. Therefore, XFINITY Voice cannot accommodate the assignment of a telephone number outside of the telephone rate center to which that number is appropriately assigned.

b. **Limitation of Liability and Indemnification.** YOU ACKNOWLEDGE AND AGREE THAT COMCAST WILL NOT BE LIABLE FOR ANY SERVICE OUTAGE, INABILITY TO DIAL 911 USING THE SERVICE(S), AND/OR INABILITY TO ACCESS EMERGENCY SERVICE PERSONNEL. YOU AGREE TO DEFEND, INDEMNIFY, AND HOLD HARMLESS COMCAST AND ITS AFFILIATES, SUPPLIERS OR AGENTS FROM ANY AND ALL CLAIMS, LOSSES, DAMAGES, FINES, PENALTIES, COSTS, AND EXPENSES (INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES) BY, OR ON BEHALF OF, YOU OR ANY THIRD PARTY OR USER OF THE SERVICE(S) RELATING TO THE FAILURE OR OUTAGE OF THE SERVICE(S), INCLUDING THOSE RELATED TO 911/E911.

2. **ADDITIONAL XFINITY VOICE-SPECIFIC PROVISIONS REGARDING CUSTOMER EQUIPMENT**

a. **Incompatible Equipment and Services.** You acknowledge and understand that XFINITY Voice may not support or be compatible with:

i. Non-Recommended Configurations as defined in Section 6(b) [including, but not limited to, voice-capable modems not currently certified by Comcast as compatible with the Service(s)];

ii. Certain non-voice communications equipment, including certain makes or models of alarm and home security systems, certain medical monitoring devices, personal emergency alert, and home detention devices, certain fax machines, and certain "dial-up" modems;

iii. Rotary-dial phone handsets, and certain makes and models of other voice-related communications equipment including key systems, private branch exchange (PBX) equipment, answering machines, and traditional Caller ID units;

iv. Casual/dial around (10-10) calling; 976, 900, 700, or 500 number calling;

v. 311, 511, or other N11 calling (other than 411, 611, 711, and 911); and

vi. Other call types not expressly set forth in our product literature (e.g., outbound shore-to-ship calling); and

vii. Certain service codes such as automatic callback and automatic recall (e.g., *66, *69) due to compatibility limitations with other carrier signal functions.

3. VOICE-CAPABLE MODEM BACKUP BATTERY

If the voice-capable modem is equipped with a backup battery, such battery is used to provide service during a power outage to your home where power to Comcast's network remains available. The length of time that XFINITY Voice will be available during a power outage will depend on the following: (i) the backup battery remains properly installed in the voice-capable modem; (ii) the condition and age of the backup battery; and (iii) the amount of XFINITY Voice usage when the voice-capable modem is utilizing power from the backup battery. You understand and acknowledge that: (i) the performance of the backup battery is not guaranteed; and (ii) you will not be able to use XFINITY Voice if electrical power to the voice-capable modem is interrupted and the voice-capable modem does not have a functioning backup battery. A voice-capable modem backup battery does not power cordless phones or other equipment connected to the telephone line that require electricity from your Premises, such as telecommunications devices used to assist customers with disabilities.

4. TRANSFER OF YOUR PHONE NUMBER(S)

For information about switching to another provider from XFINITY Voice and the assignment of telephone numbers related to XFINITY Voice Service please call 1-800-XFINITY.

5. CUSTOMER INFORMATION

Comcast and its suppliers reserve the right both during the term of this Agreement and upon its termination to delete your voicemail, call detail, data, files, or other information that is stored on Comcast's or its suppliers' servers or systems, in accordance with our storage policies. You understand and acknowledge that we shall have no liability whatsoever as a result of the loss or removal of any such voicemail, call detail, data, files, or other information.

6. INTEGRATED SERVICES

Use of XFINITY Voice's integrated services provided through online portals such as applicable communications center or voice center are governed by the GENERAL TERMS AND CONDITIONS of this Agreement.

7. ADDITIONAL TERMS OF SERVICE

To view additional terms of service applicable to XFINITY Voice in Maine, please go to http://www.comcast.com/tariffs.

EXHIBIT B

COMCAST CUSTOMER PRIVACY NOTICE

FOR CABLE VIDEO, HIGH-SPEED INTERNET, PHONE AND HOME SECURITY SERVICES

Why is Comcast providing this notice to me?

As a subscriber to cable service or other services provided by Comcast, you are entitled under Section 631 of the federal Cable Communications Policy Act of 1984, as amended, (the "Cable Act") to know the following:

- the limitations imposed by the Cable Act upon cable operators in the collection and disclosure of personally identifiable information about subscribers;
- the nature of personally identifiable information we collect;
- the nature of the use of personally identifiable information;
- under what conditions and circumstances we may disclose personally identifiable information and to whom;
- the period during which we maintain personally identifiable information;
- the times and places at which you may have access to your personally identifiable information; and
- your rights under the Cable Act concerning personally identifiable information and its collection and disclosure.

Personally identifiable information is information that identifies a particular person; it does not include de-identified, anonymous, or aggregate data that does not identify a particular person or persons. This notice is also provided to you in accordance with applicable California law, which only applies to our customers located in California who are served by a cable television corporation.

In addition, Section 222 of the Communications Act of 1934, as amended, (the "Communications Act") and the FCC's rules (47 C.F.R. § 64.2001 – 64.2011) provide additional privacy protections for certain information related to our phone services:

- information about the quantity, technical configuration, type, destination, location, and amount of your use of the phone services; and
- information contained on your telephone bill concerning the type of phone services and features you receive.

That phone information is known as customer proprietary network information or CPNI for short. This notice, which includes our CPNI Policy, describes what CPNI information we obtain, how we protect it, and how it may be used. If you are a customer of our phone services, you have the right, and Comcast has a duty, under the Communications Act and applicable state law, to protect the confidentiality of CPNI. We explain below under **"HOW DO I GIVE OR WITHHOLD MY APPROVAL FOR COMCAST TO USE CPNI TO MARKET ADDITIONAL PRODUCTS AND SERVICES TO ME?"** how you can approve our use of CPNI or withdraw your approval?

Special Note: Our CPNI Policy applies to the voice communications-related services provided by the applicable Comcast operating company that delivers voice services to our customers.

In this notice, the terms "Comcast," "we," "us," or "our" refer to the operating company subsidiary or subsidiaries of Comcast Corporation that (i) owns and/or operates the cable television system in your area pursuant to a cable television franchise with the local franchising authority, or (ii) is the operating company that delivers voice services in your area. The term "you" refers to you as a subscriber to one or more of our cable service and other services.

I. Collection

What kind of information does this notice apply to?

The Cable Act applies to personally identifiable information that you have furnished to Comcast, or that Comcast has collected using the cable system, in connection with the provision of cable service or other services. The Communications Act applies to CPNI related to our regulated phone services, and certain orders of the Federal Communications Commission apply the CPNI rules to our interconnected voice over Internet protocol communications services.

Special Note: This notice only applies to our cable video service, our high-speed Internet service, our phone and communications services, and our home security service. It applies to you as a subscriber to one or more of these services as provided for by applicable law and except as otherwise noted. It does not cover information that may be collected through any other products,

services, or websites, even if you access them through our cable services and even if they are co-branded with Comcast brands or the brands or logos of our affiliated companies. You should read the privacy policies for these other products, services, and websites to learn how they handle your personal information. You can read the privacy policy for Comcast's web services at http://xfinity.comcast.net/privacy/.

For what purposes may Comcast collect personally identifiable information and CPNI?

The Cable Act authorizes Comcast as a cable operator to use the cable system to collect personally identifiable information concerning any subscriber for the following purposes:

- to obtain information necessary to render our cable service or other services to our subscribers; and
- to detect unauthorized reception of cable communications.

The Cable Act prohibits us from using the cable system to collect personally identifiable information concerning any subscriber for any purposes other than those listed above without the subscriber's prior written or electronic consent.

The Communications Act authorizes us to use, disclose, or permit access to individually identifiable CPNI in our provision of:

- the telecommunications services from which this information is derived; or
- services necessary to, or used in, the provision of these services, including the publishing of directories.

The Communications Act prohibits us from using CPNI for any purposes other than those listed above except as permitted or required by law or with your approval.

What kind of personally identifiable information and CPNI does Comcast collect?

Comcast collects information from you at several different points when you request, turn on, and use our services under an account we create for you. Some of this information is personally identifiable information, but much of it is not. We collect certain personally identifiable information that our subscribers furnish to us in connection with the provision of cable service or other services. In order to provide reliable, high quality service to you, we keep regular business records containing information about you that may constitute personally identifiable information. These account records include some, but typically not all, of the following information:

- your name;
- service address;
- billing address;
- e-mail address;
- telephone number;
- driver's license number;
- social security number;
- bank account number; and
- credit card number.

With respect to phone services, examples of CPNI include information typically available from telephone-related details on your monthly bill:

- location of service;
- technical configuration of service;
- type of service;
- quantity of service;
- amount of use of service; and
- calling patterns.

CPNI does not include your name, address, and telephone number because the Communications Act classifies that information as "subscriber list information" which is not subject to the CPNI protections. However, that information is also subject to certain protections as described below under "To whom may Comcast disclose personally identifiable information?"

We also collect and maintain certain other information about your account. For example, this information may include:

- your account number;
- billing, payment, and deposit history;
- additional service information;

- customer correspondence and communications records;
- maintenance and complaint information;
- the device identifiers and network addresses of equipment used with your account;
- records indicating the number of television sets, set-top boxes, modems, telephones, home security and automation devices, or other devices connected to our cable system; and
- additional information about the service options you have chosen.

Some of our services permit you to establish secondary accounts, and if you do so we collect similar information in order to establish and service the secondary accounts. During the initial provisioning of our services, and during any subsequent changes or updates to our services, Comcast may collect technical information about your televisions, any set-top boxes, computer hardware and software, cable modems, telephones, other cable or other service-related devices, home security and automation devices, and customization settings and preferences. Additionally, if you rent your residence, we may have a record of whether landlord permission was required prior to installing our cable services as well as your landlord's name and address.

What kind of information does Comcast collect if I use cable video services?

When you use cable video services, our cable system automatically generates information about your use of the services and their features, and we collect much of this information as part of providing services to you. For example, we receive information about the use of set-top boxes, remote controls, electronic program guides, video players, applications, and other devices and software connected to our cable system. This information includes which channels, programs, and advertisements are viewed and for how long, for example. It may also include information about navigation through program guides and applications, and use of devices like remote controls and tablets. Except as described below, we collect this activity data without names and addresses or other personally identifiable information and we consider it de-identified data.

Our system may collect activity data with personally identifiable information for particular requests or transactions like when you order a pay-per-view program or purchase a product. This information typically consists of account and billing-related information such as the programs or other products, services, or features ordered so that you may be properly billed for them. Follow your program guide commands or any special instructions on your screen when you make these transactional requests. These commands and instructions will explain your choices so that you can complete or cancel your requests as you wish.

What kind of information does Comcast collect and use to improve your cable services and deliver relevant advertising?

Comcast's cable system, set-top boxes, and other equipment generate activity data that we collect and store. We use this information for a number of purposes including to determine which programs are most popular, how many people watch a program to its conclusion, and whether people are watching commercials. As described below under "How does Comcast use personally identifiable information and CPNI?," we may also provide information like subscriber lists or certain de-identified, anonymous, and/or aggregate information (such as activity data) to third parties working on our behalf – such as audience measurement or market research firms. We, or these firms, working as our service providers, may combine this information with aggregated or non-aggregated demographic information (such as census records) and other audience attributes, such as purchasing data, demonstrated interests (for example, in sports programs or movies), loyalty programs, organizational affiliations, advertiser customer lists, and the like to provide us with audience analysis data. We require third parties working on our behalf to treat all information we provide as confidential and to use it only for Comcast's business purposes. We may also work with academic or research interest groups to analyze de-identified, anonymous, and/or aggregate information we provide to them for specific purposes or projects.

We use this information and analysis to improve our cable video service and other services and make programming and advertising more relevant to our subscribers. We may also use this information to distribute and deliver relevant programming and advertising to you without disclosing personally identifiable information about you to programmers or advertisers. In addition to this privacy notice, we may provide additional notices to you regarding specific advertising or other initiatives. These notices will describe the initiatives in greater detail and may, as appropriate, contain information you can use to choose to participate, or not participate, in these initiatives.

II. Use

How does Comcast use personally identifiable information and CPNI?

We collect, maintain, and use personally identifiable information and CPNI as permitted by the Cable Act and the Communications Act and other applicable laws. We use this information primarily to conduct business activities related to providing you with our cable service and other services, and to help us detect theft of service. Generally speaking, we use personally identifiable information in connection with:

- billing and invoicing;
- administration;
- surveys;
- collection of fees and charges;
- marketing;
- service delivery and customization;
- maintenance and operations;
- technical support;
- hardware and software upgrades; and
- fraud prevention.

More specifically, we also use personally identifiable information to:

- install, configure, operate, provide, support, and maintain our cable service and other services;
- confirm you are receiving the level(s) of service requested and are properly billed;
- identify you when changes are made to your account or services;
- make you aware of new content, products, or services that may be of interest to you;
- understand the use of, and identify improvements to, our services;
- detect unauthorized reception, use, or abuse of our services;
- determine whether there are violations of any applicable policies and terms of service;
- manage the network supporting our services;
- configure and update cable service and other service-related devices and software; and
- comply with law.

The Communications Act further permits Comcast to use, disclose, and permit access to CPNI obtained from our customers, either directly or indirectly, to:

- initiate, render, bill, and collect for telecommunications services;
- protect our rights and property, and protect our users of these services and other carriers from fraudulent, abusive, or unlawful use of, or subscription to, these services;
- provide any inbound telemarketing, referral, or administrative services to you for the duration of the call, if you initiated the call and you approve of the use of this information to provide these services; and
- to provide call location information concerning the user of a commercial mobile phone service.

Comcast may not use CPNI to market products and services to you other than enhancements to services you already have without your approval in accordance with our policies described below.

Comcast transmits, and may collect and store for a period of time, personally identifiable and non-personally identifiable information about you when you use our high-speed Internet and phone services to:

- send and receive e-mail, video mail, and instant messages;
- transfer and share files;
- make files accessible;
- visit websites;
- place or receive calls;
- leave and receive voice mail messages;
- use the applicable communications center or voice center;
- establish custom settings or preferences;
- communicate with us for support; or
- otherwise use the services and their features.

Comcast transmits, collects, and stores comparable information when you use our home security service. Our transmission, collection, and storage of this information are necessary to render the

services. In certain situations, third-party service providers may transmit, collect, and store this information on our behalf to provide features of our services. These third parties are not permitted to use your personally identifiable information except for the purpose of providing these features.

How does Comcast use activity data and other data in connection with cable video service?

We associate activity data with particular devices such as set-top boxes, portable devices, and other supported devices so that we know where to deliver the services and how to troubleshoot them. In general, Comcast uses de-identified and aggregate activity information to understand better how our customers use our products and services so that we can improve them, including by delivering more relevant content and advertising. We may try to determine how well our products and services deliver value to our customers, for example, by determining which programs are most popular, how many people watch a program to its conclusion, and whether and how often people are watching commercials. As discussed below, we may also combine activity data with other non-personally identifying demographic and similar information from our business records.

When we collect activity data, we may also use it to determine how many people view commercials (impressions) and to provide de-identified or aggregate reports to third-party advertisers. When we do this reporting on advertising impressions we do not provide any personally identifiable information about our subscribers to third-party advertisers.

We may also use activity data to help us learn how popular certain programs are and how our customers as a whole generally prefer to view certain kinds of programming using cable video service (such as whether they like to watch certain programs live, or they prefer to view them when we offer them on demand, on mobile devices, or online). As described below, this may require us to compare or combine activity data on our cable system with online activity data. We may also use activity data to determine whether promoting content and services in certain ways helps attract a larger audience and more customers. While we may provide aggregate reports on these observations to programmers or others, we do not provide any personally identifiable information about our subscribers, or the activities of individual subscribers, to those programmers and others.

We may also use, or combine information about, your use of our cable services with other information we obtain from our business records (such as your Comcast account number or device identifiers), or from third parties, to deliver better and more relevant products, services and advertising. However, we do not store or use your activity data in association with your name or address, except as necessary to render or bill for our services. We may try to determine, using aggregated data, which groups of our customers use which of our products and services and how they use them. To do this we, or third parties working on our behalf, may combine demographic and other generally available information, or advertiser information, including purchasing data and membership in loyalty programs, with our subscriber lists. From this information, we or our third party providers prepare de-identified and aggregated reports about how groups of customers with common characteristics – such as age and gender, or a demonstrated interest in a particular third party product – use our services and respond to the programming and advertising that we distribute. We may use this information to improve and communicate with you about our own products and services, and also to help us deliver relevant information and advertising on behalf of other companies and advertisers to certain subscriber groups – known as ad groups – who may be most interested in this information and advertising. When we do this, we do not share your personally identifiable information with these advertisers, unless you provide your express consent.

We may also combine personally identifiable information, which we collect as described in this notice as part of our regular business records, with personally identifiable information obtained from third parties for the purpose of creating an enhanced database or business records. We may use this database and these business records in marketing and other activities related to our cable service and other services. We also maintain records of research concerning subscriber satisfaction and viewing habits, which are obtained from subscriber interviews, questionnaires, and surveys or panels.

How does Comcast use information about use of cable video services on other platforms like websites or mobile applications?

We may compare or combine information such as activity data we receive when you use cable video services to view content or advertising with information about your use of content and advertising

that we deliver on other platforms, such as on our Xfinity websites and mobile applications. We may also compare or combine this information or data with that generated by your viewing of advertising placed or sold by Comcast on other websites and mobile applications. We do this to better understand, among other things, how our customers access and use our products and services in all of the places that we offer them.

III. Disclosure

Under what circumstances may Comcast disclose personally identifiable information to others?

Comcast considers the personally identifiable information contained in our business records to be confidential. The Cable Act authorizes Comcast as a cable operator to disclose personally identifiable information concerning any subscriber if the disclosure is:

- necessary to render, or conduct a legitimate business activity related to, the cable service or other services provided to the subscriber;
- required by law or legal process (described below under "When is Comcast required by law to disclose personally identifiable information and CPNI by law?"); or
- of the names and addresses of subscribers for "mailing list" or other purposes (subject to each subscriber's right to prohibit or limit this disclosure and the CPNI Policy described below under "How do I place myself on Comcast's 'do not call' and 'do not mail' lists?").

The Cable Act prohibits us as a cable operator from disclosing personally identifiable information concerning any subscriber for any purposes other than those listed above without the subscriber's prior written or electronic consent.

To whom may Comcast disclose personally identifiable information?

We may disclose personally identifiable information as provided for in the Cable Act when it is necessary to render, or conduct a legitimate business activity related to, the cable service or other services we provide to you. These kinds of disclosures typically involve billing and collections, administration, surveys, marketing, service delivery and customization, maintenance and operations, incident verification and response, service notifications, and fraud prevention, for example. We may also collect, use, and disclose information about you in de-identified, anonymous, or aggregate formats, such as ratings surveys and service usage and other statistical reports, which do not personally identify you, your particular viewing habits, or the nature of any transaction you have made over the cable system. The frequency of any disclosure of personally identifiable information varies in accordance with our business needs and activities.

The Cable Act authorizes Comcast as a cable operator to disclose limited personally identifiable information to others, such as charities, marketing organizations, or other businesses, for cable or non-cable "mailing list" or other purposes. From time to time we may disclose your name and address for these purposes. However, you have the right to prohibit or limit this kind of disclosure by contacting us by telephone at 1-800-XFINITY or by sending us a written request as described below under "How do I contact Comcast?" Any "mailing list" and related disclosures that we may make are limited by the Cable Act to disclosures of subscriber names and addresses where the disclosures do not reveal, directly or indirectly, (i) the extent of any viewing or other use by the subscriber of a cable service or other service provided by us; or (ii) the nature of any transaction made by the subscriber over our cable system.

We may sometimes disclose personally identifiable information about you to our affiliates or to others who work for us. We may also disclose personally identifiable information about you to outside auditors, professional advisors, service providers and vendors, potential business merger, acquisition, or sale partners, and regulators. We make these disclosures as provided for in the Cable Act. Typically, we make these disclosures when the disclosure is necessary to render, or conduct a legitimate business activity related to, the cable service or other services we provide to you. We may be required by law or legal process to disclose certain personally identifiable information about you to lawyers and parties in connection with litigation and to law enforcement personnel.

If we (or our parent company) enter into a merger, acquisition, or sale of all or a portion of our assets, subscribers' personally identifiable information will, in most instances, be one of the items transferred as part of the transaction. If this notice will be changed as a result of a transaction like

that, you should refer below under "Will Comcast notify me if it changes this notice?"
We may also use or disclose personally identifiable information about you without your consent to protect our customers, employees, or property, in emergency situations, to enforce our rights under our terms of service and policies, in court or elsewhere, and as otherwise permitted by law.

When may Comcast disclose personal information to others in connection with phone service?

Comcast may disclose to others personally identifiable information in connection with features and services such as Caller ID, 911/E911, and directory services as follows:

- We may transmit your name and/or telephone number to be displayed on a Caller ID device unless you have elected to block such information. Please note that Caller ID blocking may not prevent the display of your name and/or telephone number when you dial certain business or emergency numbers, 911, 900 numbers, or toll-free 800, 888, 877, 866, or 855 numbers.
- We may provide your name, address, and telephone number to public safety authorities and their vendors for inclusion in E911 databases and records, inclusion in "reverse 911" systems, or to troubleshoot 911/E911 record errors.
- We may publish and distribute, or cause to be published and distributed, telephone directories in print, on the Internet, and on disks. Those telephone directories may include subscriber names, addresses, and telephone numbers, without restriction to their use.
- We may also make subscriber names, addresses, and telephone numbers available, or cause such subscriber information to be made available, through directory assistance operators.
- We may provide subscribers' names, addresses, and telephone numbers to unaffiliated directory publishers and directory assistance providers for their use in creating directories and offering directory assistance services.
- Once our subscribers' names, addresses, and telephone numbers appear in telephone directories or directory assistance, they may be sorted, packaged, repackaged and made available again in different formats by anyone.

We take reasonable precautions to ensure that non-published and unlisted numbers are not included in our telephone directories or directory assistance services, but we cannot guarantee that errors will never occur.

When is Comcast required to disclose personally identifiable information and CPNI by law?

We make every reasonable effort to protect subscriber privacy as described in this notice. Nevertheless, we may be required by law to disclose personally identifiable information or individually identifiable CPNI about a subscriber. These disclosures may be made with or without the subscriber's consent, and with or without notice, in compliance with the terms of valid legal process such as a subpoena, court order, or search warrant.

For subscribers to our cable video service, Comcast may be required as a cable operator to disclose personally identifiable information to a third-party or governmental entity in response to a court order. If the court order is sought by a non-governmental entity, we are required under the Cable Act to notify the subscriber of the court order. If the court order is sought by a governmental entity, the Cable Act requires that the cable subscriber be afforded the opportunity to appear and contest in a court proceeding relevant to the court order any claims made in support of the court order. At the proceeding, the Cable Act requires the governmental entity to offer clear and convincing evidence that the subject of the information is reasonably suspected of engaging in criminal activity and that the information sought would be material evidence in the case.

For subscribers to our high-speed Internet, phone, and home security services, Comcast may be required to disclose personally identifiable information and individually identifiable CPNI to a private third party in response to a court order, and, if so, we are required to notify the subscriber of the court order. Comcast may also be required to disclose personally identifiable information and individually identifiable CPNI about subscribers to high-speed Internet, phone, and home security services to a government entity in response to a subpoena, court order, or search warrant, for example. We are usually prohibited from notifying the subscriber of any disclosure of personally identifiable information to a government entity by the terms of the subpoena, court order, or search warrant.

How does Comcast protect personally identifiable information?

We follow industry-standard practices to take such actions as are necessary to prevent unauthorized access to personally identifiable information by a person other than the subscriber or us. However, we cannot guarantee that these practices will prevent every unauthorized attempt to access, use, or disclose personally identifiable information.

How long does Comcast maintain personally identifiable information?

Comcast maintains personally identifiable information about you in our regular business records while you are a subscriber to our cable service or other services. We also maintain this information for a period of time after you are no longer a subscriber if the information is necessary for the purposes for which it was collected or to satisfy legal requirements. These purposes typically include business, legal, or tax purposes. If these purposes no longer apply, we will destroy, de-identify, or anonymize the information according to our internal policies and procedures.

IV. Customer Access and Choice

How can I see my personally identifiable information or CPNI and correct it, if necessary?

You may examine and correct, if necessary, the personally identifiable information regarding you that is collected and maintained by Comcast in our regular business records. In most cases, the personally identifiable information contained in these records consists solely of billing and account information. We will correct our records if you make a reasonable showing that any of the personally identifiable information we have collected about you is inaccurate.

If you have Internet access, you can view and change certain information yourself by going to www.comcast.com/myaccount and signing in with your Comcast username and password to access the My Account feature. If you are a home security customer, you can go to the subscriber portal at www.xfinity.com/xhportal.

You may also examine the records containing your personally identifiable information at your local Comcast office upon reasonable prior notice to us and during our regular business hours. If you wish to examine these records, please contact us by mail or telephone at 1-800-XFINITY, giving us a reasonable period of time to locate and, if necessary, prepare the information for review, and to arrange an appointment. You will only be permitted to examine records that contain personally identifiable information about your account and no other account.

If you make an affirmative, written request for a copy of your CPNI, we will disclose the relevant information we have to you at your account address of record, or to any person authorized by you, if we reasonably believe the request is valid. However, subscribers to our phone services should be aware that we generally do not provide them with records of any inbound or outbound calls or other records that we don't furnish in the ordinary course of business (for example, as part of a bill) or which are available only from our archives, without valid legal process such as a court order.

In addition, we cannot correct any errors in customer names, addresses, or telephone numbers appearing in, or omitted from, our or our vendors' directory lists until the next available publication of those directory lists. Further, we may have no control over information appearing in the directory lists or directory assistance services of directory publishers or directory assistance providers that are not owned by our subsidiaries or us.

Comcast reserves the right to charge you for the reasonable cost of retrieving and photocopying any documents that you request.

How do I manage or opt out of uses of information about my Comcast account?

You may opt out of receiving more relevant advanced advertising delivered with programs made available through our cable video service by going to http://www.comcast.com/adservices. Even if you opt out, you will still receive advertising and we will continue to send you Comcast marketing messages based on the way you use our products and services and the information we have collected about you.

How do I give or withhold my approval for Comcast to use CPNI to market additional products and services to me?

In addition to phone and voice services, various direct and indirect subsidiaries of Comcast Corporation offer many other communications-related services, such as high-speed Internet and home security services. From time to time we may like to use the CPNI information we have on file to provide you with information about our communications-related products and services or

special promotions. Our use of CPNI may also enhance our ability to offer products and services tailored to your specific needs. In addition, Comcast also offers various other services that are not related to the services to which you subscribe. Under the CPNI rules, some of those services, such as Comcast cable video services, are considered to be non-communications related products and services. Therefore, you may be asked during a telephone call with one of our representatives for your oral consent to Comcast's use of your CPNI for the purpose of providing you with an offer for communications related or non-communications related products and services. If you provide your oral consent for Comcast to do so, Comcast may use your CPNI only for the duration of that telephone call in order to offer you additional services.

If you deny or restrict your approval for us to use your CPNI, you will suffer no effect, now or in the future, on how we provide any services to which you subscribe. Any denial or restriction of your approval remains valid until your services are discontinued or you affirmatively revoke or limit such approval or denial.

How do I place myself on Comcast's "do not call" and "do not mail" lists?

You may contact Comcast at 1-800-XFINITY to ask us to put your name on our internal company "do not call" and "do not mail" lists so that you do not receive marketing or promotional telephone calls or postal mail from us or made at our request. You also have the right to prohibit or limit disclosure of your personally identifiable information for "mailing list" or other purposes as described above in this notice by contacting us at 1-800-XFINITY.

If you prefer to contact Comcast in writing instead of by telephone, you may send a written request to the address listed below under "How do I contact Comcast?" Be sure to include your name and address, your Comcast account number, and a daytime telephone number where you can be reached in the event we have any questions about your request. The person who is identified in our billing records as the subscriber should sign the written request. If you have a joint account, a request by one party will apply to the entire account. If you have multiple accounts, your notice must separately identify each account covered by the request.

What e-mail communications will Comcast send to me and how do I manage them?

We may send a welcome e-mail and sometimes other information to new subscribers to our cable service and other services (including each new secondary account holder, where applicable). We may also send service-related announcements to our subscribers from time to time. For example, we may send you an e-mail announcement about a pricing change, a change in operating policies, a service appointment, or new features of one or more of the cable service or other services you receive from us. You may not opt-out of these service-related communications. If you fail to check your primary e-mail address for service-related announcements, you may miss important information about our services, including legal notices, for example.

We reserve the right to send you promotional or commercial e-mail as permitted by applicable law. You can manage the promotional or commercial e-mails Comcast may send to you by following the instructions contained in the e-mails or by going to the Web page located at www.comcast.com/preferences and following the directions there. We may ask for additional information on this preferences page such as your zip code, for example. By providing this additional information to us we will be able to better inform you of the availability of special offers and promotions in your area. If you no longer wish to receive these e-mails you may opt-out of receiving them by going to the same page and changing your contact preferences.

What can I do if I think my privacy rights have been violated?

If you believe that you have been aggrieved by any act of ours in violation of the Cable Act or other applicable laws, we encourage you to contact us directly as described below in "How do I contact Comcast?" in order to resolve your question or concern. You may also enforce the limitations imposed on us by the Cable Act as applicable with respect to your personally identifiable information through a civil lawsuit seeking damages, attorneys' fees, and litigation costs. Other rights and remedies may be available to you under federal or other applicable laws as well. This customer privacy notice neither supersedes nor modifies any arbitration agreement to which you may be bound relating to the provision of our cable video service, our high-speed Internet service, our phone and communications services, or our home security service to you as a subscriber to one or more of these services.

Will Comcast notify me if it changes this notice?

As required by the Cable Act, we will provide you with a copy of this customer privacy notice at the time we enter into an agreement to provide any cable service or other service to you, and annually afterwards, or as otherwise permitted by law. You can view the most current version of this notice by going to http://www.comcast.com/Corporate/Customers/Policies/CustomerPrivacy.html.

We may modify this notice at any time. We will notify you of any material changes through written, electronic, or other means and as otherwise permitted by law. If you find the changes to this notice unacceptable, you have the right to cancel your service. If you continue to use the service following notice of the changes, we will deem that to be your acceptance of and consent to the changes in the revised privacy notice. This includes your consent for any personally identifiable information that we may collect and use starting on the effective date of the revised notice, as well as for any personally identifiable information that we have collected prior to the effective date of the revised notice. However, we will only deem your continued use of the service to be your acceptance of and consent to changes in the revised privacy notice for changes made after December 31, 2006.

How do I contact Comcast?

If you have any questions or suggestions regarding this privacy notice, or wish to contact us about your personal information, please reach us as follows:

Phone: 1-800-XFINITY
Website: http://customer.comcast.com/contact-us
Mail: Comcast Cable Communications, LLC
Attn: Law Department - Customer Privacy Notice
One Comcast Center
Philadelphia, PA 19103-2838

Revised and effective: August 1, 2014

Stnd 1014

EXHIBIT C

Acceptable Use Policy for XFINITY® Internet

Why is Comcast providing this Policy to me?

Comcast's goal is to provide its customers with the best residential cable Internet service possible. In order to help accomplish this, Comcast has adopted this Acceptable Use Policy (the "Policy"). This Policy outlines acceptable use of the residential XFINITY Internet service, including Comcast-provided XFINITY WiFi Internet service (collectively, the "Service"). This Policy is in addition to any restrictions or conditions contained in the Comcast Agreement for Residential Services (the "Subscriber Agreement") available at http://www.comcast.com/policies. The Frequently Asked Questions ("FAQs") at http://customer.comcast.com/help-and-support/internet/comcast-acceptable-use-policy/ explain how Comcast implements and applies many of the provisions contained in this Policy. All capitalized terms used in this Policy that are not defined here have the meanings given to them in the Subscriber Agreement.

All residential XFINITY Internet customers (the "customer," "user," "you," or "your") and all others who use the Service must comply with this Policy. Your failure, or others' failure, to comply with this Policy could result in the suspension or termination of your or their Service accounts. Therefore, you should take steps to ensure that others you permit to use your Service are aware of this Policy and agree to abide by it. If you are unwilling to comply with this Policy, you must immediately stop all use of the Service and notify Comcast so that it can close your account.

Does this Policy apply to my use of XFINITY WiFi-identified services inside and outside of my premises and in public places?

This Policy applies to your use of the Service if you are a residential XFINITY Internet customer who accesses Comcast-provided, XFINITY WiFi-identified services inside or outside of your premises or in public places using an XFINITY Internet login and password. You can learn more about Comcast-provided XFINITY WiFi services by going to the portal at www.comcast.com/wifi/default.htm. In the event certain provisions of this Policy may not apply to all uses of XFINITY WiFi-identified services, we explain those exceptions in the FAQs at www.comcast.com/wifi/faqs.htm.

How will I know when Comcast changes this Policy and how do I report violations of it?

Comcast may revise this Policy from time to time by posting a new version on the web site at http://xfinity.comcast.net/ or any successor URL(s) (the "XFINITY Web site"). Comcast will use reasonable efforts to make customers aware of any changes to this Policy, which may include sending email announcements or posting information on the XFINITY Web site. Revised versions of this Policy are effective immediately upon posting. Accordingly, customers of the

Service should read any Comcast announcements they receive and regularly visit the XFINITY Web site and review this Policy to ensure that their activities conform to the most recent version. You can send questions regarding this Policy to, and report violations of it, at http://customer.comcast.com/help-and-support/account/ways-to-get-help/. To report child exploitation or another child-related incident involving the Internet, go to http://constantguard.comcast.net/dedicated-support/submitting-reports.

I. Prohibited Uses and Activities

What uses and activities does Comcast prohibit?

In general, the Policy prohibits uses and activities involving the Service that are illegal, infringe the rights of others, or interfere with or diminish the use and enjoyment of the Service by others. For example, these prohibited uses and activities include, but are not limited to, using the Service, Customer Equipment, or the Comcast Equipment, either individually or in combination with one another, to:

Conduct and information restrictions

- undertake or accomplish any unlawful purpose. This includes, but is not limited to, posting, storing, transmitting or disseminating information, data or material which is libelous, obscene, unlawful, threatening or defamatory, or which infringes the intellectual property rights of any person or entity, or which in any way constitutes or encourages conduct that would constitute a criminal offense, or otherwise violate any local, state, federal, or non-U.S. law, order, or regulation;
- post, store, send, transmit, or disseminate any information or material which a reasonable person could deem to be unlawful;
- upload, post, publish, transmit, reproduce, create derivative works of, or distribute in any way information, software or other material obtained through the Service or otherwise that is protected by copyright or other proprietary right, without obtaining any required permission of the owner;
- transmit unsolicited bulk or commercial messages commonly known as “spam;”
- send very large numbers of copies of the same or substantially similar messages, empty messages, or messages which contain no substantive content, or send very large messages or files that disrupts a server, account, blog, newsgroup, chat, or similar service;
- initiate, perpetuate, or in any way participate in any pyramid or other illegal scheme;

- participate in the collection of very large numbers of email addresses, screen names, or other identifiers of others (without their prior consent), a practice sometimes known as spidering or harvesting, or participate in the use of software (including “spyware”) designed to facilitate this activity;
- collect responses from unsolicited bulk messages;
- falsify, alter, or remove message headers;
- falsify references to Comcast or its network, by name or other identifier, in messages;
- impersonate any person or entity, engage in sender address falsification, forge anyone else's digital or manual signature, or perform any other similar fraudulent activity (for example, “phishing”);
- violate the rules, regulations, terms of service, or policies applicable to any network, server, computer database, service, application, system, or web site that you access or use;

Technical restrictions

- access any other person's computer or computer system, network, software, or data without his or her knowledge and consent; breach the security of another user or system; or attempt to circumvent the user authentication or security of any host, network, or account. This includes, but is not limited to, accessing data not intended for you, logging into or making use of a server or account you are not expressly authorized to access, or probing the security of other hosts, networks, or accounts without express permission to do so;
- use or distribute tools or devices designed or used for compromising security or whose use is otherwise unauthorized, such as password guessing programs, decoders, password gatherers, keystroke loggers, analyzers, cracking tools, packet sniffers, encryption circumvention devices, or Trojan Horse programs. Unauthorized port scanning is strictly prohibited;
- copy, distribute, or sublicense any proprietary software provided in connection with the Service by Comcast or any third party, except that you may make one copy of each software program for back-up purposes only;
- distribute programs that make unauthorized changes to software (cracks);
- use or run dedicated, stand-alone equipment or servers from the Premises that provide network content or any other services to anyone outside of your Premises local area network

("Premises
LAN"), also commonly referred to as public services or servers. Examples of prohibited equipment and servers include, but are not limited to, email, web hosting, file sharing, and proxy
services and servers;

- use or run programs from the Premises that provide network content or any other services to
anyone outside of your Premises LAN, except for personal and non-commercial residential use;
- service, alter, modify, or tamper with the Comcast Equipment or Service or permit any other
person to do the same who is not authorized by Comcast;

Network and usage restrictions

- use the Service for any purpose other than personal and non-commercial residential use (except for your individual use for telecommuting);
- use the Service for operation as an Internet service provider or for any business, other legal entity, or organization purpose (whether or not for profit);
- restrict, inhibit, or otherwise interfere, regardless of intent, purpose or knowledge, with the ability of any other person to use or enjoy the Service (except for tools for safety and security functions such as parental controls, for example), including, without limitation, posting or transmitting any information or software which contains a worm, virus, or other harmful feature, or
- impede others' ability to use, send, or retrieve information;
- restrict, inhibit, interfere with, or otherwise disrupt or cause a performance degradation, regardless of intent, purpose or knowledge, to the Service or any Comcast (or Comcast supplier)
host, server, backbone network, node or service, or otherwise cause a performance degradation
to any Comcast (or Comcast supplier) facilities used to deliver the Service;
- resell the Service or otherwise make available to anyone outside the Premises the ability to use
the Service (for example, through WiFi or other methods of networking), in whole or in part,
directly or indirectly, with the sole exception of your use of Comcast-provided WiFi service in
accordance with its then-current terms and policies;
- connect the Comcast Equipment to any computer outside of your Premises;
- interfere with computer networking or telecommunications service to any user, host or network,
including, without limitation, denial of service attacks, flooding of a network, overloading a service,
improper seizing and abusing operator privileges, and attempts to "crash" a host; or
- access and use the Service with anything other than a dynamic Internet Protocol ("IP") address that adheres to the dynamic host configuration protocol ("DHCP"). You may not

configure
the Service or any related equipment to access or use a static IP address or use any protocol
other than DHCP unless you are subject to a Service plan that expressly permits you to do so.

II. Customer Conduct and Features of the Service

What obligations do I have under this Policy?

You are responsible for your own compliance with this Policy. You are also responsible for any use or misuse of the Service that violates this Policy by anyone else you permit to access the Service (such as a friend, family member, or guest) with one exception: In cases where you permit others to access your Comcast-provided, XFINITY WiFi-identified Internet Service with their own login information, those users are responsible for complying with all then-current terms and policies that apply to their access. You can learn more about Comcast-provided WiFi access at www.comcast.com/wifi/default.htm.

Comcast recommends against enabling file or printer sharing unless you do so in strict compliance with all security recommendations and features provided by Comcast and the manufacturer of the applicable file or printer sharing devices. Any files or devices you choose to make available for shared access on a home LAN, for example, should be protected with a strong password or as otherwise appropriate.

In all cases, you are solely responsible for the security of any device you connect to the Service, including any data stored or shared on that device. It is also your responsibility to secure the Customer Equipment and any other Premises equipment or programs not provided by Comcast that connect to the Service from external threats such as viruses, spam, bot nets, and other methods of intrusion.

How does Comcast address inappropriate content and transmissions?

Comcast reserves the right to refuse to transmit or post, and to remove or block, any information or materials, in whole or in part, that it, in its sole discretion, deems to be in violation of Sections I or II of this Policy, or otherwise harmful to Comcast's network or customers using the Service, regardless of whether this material or its dissemination is unlawful so long as it violates this Policy. Neither Comcast nor any of its affiliates, suppliers, or agents have any obligation to monitor transmissions or postings (including, but not limited to, email, file transfer, blog, newsgroup, and instant message transmissions as well as materials available on the Personal Web Features as defined below) made on the Service. However, Comcast and its affiliates, suppliers, and agents have the right to monitor these transmissions and postings from time to time for violations of this Policy and to disclose, block, or remove them in accordance with this Policy, the Subscriber Agreement, and applicable law.

What requirements apply to electronic mail?

The Service may not be used to communicate or distribute email or other forms of communications in violation of Section I of this Policy. As described below in Section III of this Policy, Comcast uses reasonable network management tools and techniques to protect customers from receiving spam and from sending spam (often without their knowledge over an infected computer). Comcast's anti-spam approach is explained in the FAQs under the topic "What is Comcast doing about spam?" located at http://customer.comcast.com/help-and-support/internet/reducing-spam-email/.

Comcast is not responsible for deleting or forwarding any email sent to the wrong email address by you or by someone else trying to send email to you. Comcast is also not responsible for forwarding email sent to any account that has been suspended or terminated. This email will be returned to the sender, ignored, deleted, or stored temporarily at Comcast's sole discretion. If you cancel or terminate your Service account for any reason, all email associated with that account (and any secondary accounts) will be permanently deleted as well.

If Comcast believes in its sole discretion that any subscriber name, account name, or email address (collectively, an "identifier") on the Service may be used for, or is being used for, any misleading, fraudulent, or other improper or illegal purpose, Comcast (i) reserves the right to block access to and prevent the use of any of these identifiers
and (ii) may at any time require any customer to change his or her identifier. In addition, Comcast may at any time reserve any identifiers on the Service for its own purposes.

What requirements apply to instant, video, and audio messages?

Each user is responsible for the contents of his or her instant, video, and audio messages and the consequences of any of these messages. Comcast assumes no responsibility for the timeliness, mis-delivery, deletion, or failure to store these messages. If you cancel or terminate your Service account for any reason, all instant, video, and audio messages associated with that account (and any secondary accounts) will be permanently deleted as well.

What requirements apply to personal web pages and file storage?

As part of the Service, Comcast may provide access to personal web pages and storage space through personal web pages and online storage features (collectively, the "Personal Web Features"). You are solely responsible for any information that you or others publish or store on the Personal Web Features. You are also responsible for ensuring that all content made available through the Personal Web Features is appropriate for those who may have access to it. For example, you must take appropriate precautions to prevent minors from receiving or accessing inappropriate content. Comcast reserves the right to remove, block, or refuse to post or store any information or materials, in whole or in part, that it, in its sole discretion, deems to be in violation of this Policy. For purposes of this Policy, "material" refers to all forms of communications including text, graphics (including photographs, illustrations, images, drawings, logos), executable programs and scripts, video recordings, and audio recordings. Comcast may remove or block content contained on your Personal Web Features and terminate

your Personal Web Features and/or your use of the Service if we determine that you have violated the terms of this Policy.

III. Network Management

Why does Comcast manage its network?

Comcast manages its network with one goal: to deliver the best possible broadband Internet experience to all of its customers. High-speed bandwidth and network resources are not unlimited. Managing the network is essential as Comcast works to promote the use and enjoyment of the Internet by all of its customers. The company uses reasonable network management practices that are consistent with industry standards. Comcast tries to use tools and technologies that are minimally intrusive and, in its independent judgment guided by industry experience, among the best in class. Of course, the company's network management practices will change and evolve along with the uses of the Internet and the challenges and threats on the Internet.

The need to engage in network management is not limited to Comcast. In fact, all large Internet service providers manage their networks. Many of them use the same or similar tools that Comcast does. If the company didn't manage its network, its customers would be subject to the negative effects of spam, viruses, security attacks, network congestion, and other risks and degradations of service. By engaging in responsible network management including enforcement of this Policy, Comcast can deliver the best possible broadband Internet experience to all of its customers. Visit Comcast's Network Management page at http://networkmanagement.comcast.net/ for more information.

How does Comcast manage its network?

Comcast uses various tools and techniques to manage its network, deliver the Service, and ensure compliance with this Policy and the Subscriber Agreement. These tools and techniques are dynamic, like the network and its usage, and can and do change frequently. For example, these network management activities may include (i) identifying spam and preventing its delivery to customer email accounts, (ii) detecting malicious Internet traffic and preventing the distribution of viruses or other harmful code or content, (iii) temporarily lowering the priority of traffic for users who are the top contributors to current network congestion, and (iv) using other tools and techniques that Comcast may be required to implement in order to meet its goal of delivering the best possible broadband Internet experience to all of its customers.

IV. Data Consumption

What data consumption requirements apply to the Service?

Comcast is not currently applying a monthly data consumption threshold to XFINITY Internet accounts. If the company changes that approach, it will post a new version of this Policy as described above and make other appropriate notifications to customers. However, in certain locations Comcast is providing versions of the Service with different speed and data consumption thresholds, among other characteristics, subject to applicable Service plans. You can learn about the Service plans that apply in your area by going to http://customer.comcast.com/help-and-support/internet/data-usage-what-are-the-different-plans-launching. You can check your current data usage at any time by logging into your My Account page and viewing the data usage meter at https://customer.comcast.com/Secure/UsageMeterDetail.aspx.

V. Violation of this Acceptable Use Policy

What happens if you violate this Policy?

Comcast reserves the right immediately to suspend or terminate your Service account and terminate the Subscriber Agreement if you violate the terms of this Policy or the Subscriber Agreement, or if anyone else you permit to access the Service violates this Policy.

How does Comcast enforce this Policy?

Comcast does not routinely monitor the activity of individual Service accounts for violations of this Policy, except for determining aggregate data consumption in connection with Section IV of this Policy. However, in the company's efforts to promote good citizenship within the Internet community, it will respond appropriately if it becomes aware of inappropriate use of the Service. Comcast has no obligation to monitor the Service and/or the network. Comcast and its suppliers reserve the right at any time to monitor bandwidth, usage, transmissions, and content in order to, among other things, operate the Service; identify violations of this Policy; and/or protect the network, the Service and Comcast users.

Comcast prefers to inform customers of inappropriate activities and give them a reasonable period of time in which to take corrective action. Comcast also prefers to have customers directly resolve any disputes or disagreements they may have with others, whether customers or not, without Comcast's intervention. However, if the Service is used in a way that Comcast or its suppliers, in their sole discretion, believe violates this Policy, Comcast or its suppliers may take any responsive actions they deem appropriate under the circumstances with or without notice. These actions include, but are not limited to, temporary or permanent removal of content, filtering of Internet transmissions, and the immediate suspension or termination of all or any portion of the Service. Neither Comcast nor its affiliates, suppliers, or agents will have any liability for any of these responsive actions. These actions are not Comcast's exclusive remedies and Comcast may take any other legal or technical actions it deems appropriate with or without notice.

Comcast reserves the right to investigate suspected violations of this Policy, including the gathering of information from the user or users involved and the complaining party, if any, and examination of material and data on Comcast's servers and network. During an investigation, Comcast may suspend the account or accounts involved and/or remove or block material that potentially violates this Policy. You expressly authorize and consent to Comcast and its suppliers cooperating with (i) law enforcement authorities in the investigation of suspected legal violations, and (ii) and system administrators at other Internet service providers or other network or computing facilities in order to enforce this Policy. Upon termination of your Service account, Comcast is authorized to delete any files, programs, data, email and other messages associated with your account (and any secondary accounts).

VI. Copyright

How does Comcast communicate with customers about copyright?

Comcast is committed to complying with U.S. copyright and related laws, and requires all customers and users of the Service to comply with these laws. Accordingly, you may not store any material or content on, or access, share or disseminate any material or content over, the Service (or any part of the Service) in any manner that constitutes an infringement of third party intellectual property rights, including rights granted by U.S. copyright law. Comcast provides two independent methods for copyright owners to communicate information about alleged infringements to us, and for us to inform our customers about them: as described below, Comcast participates in the Copyright Alerts System, and also complies with the Digital Millennium Copyright Act. You may receive alerts under either or both of these methods if your Service account is identified by a copyright owner as having been used in connection with acts of alleged copyright infringement.

What is the Copyright Alerts System?

The Copyright Alerts System is part of an Internet service provider and content industry initiative to help make people aware of appropriate ways to access and share content online, in particular over peer-to-peer file sharing programs. Copyright owners routinely participate in online peer-to-peer file sharing programs to see if their content is being improperly used or shared. If the copyright owner believes its content was uploaded or downloaded improperly, it can record the Internet Protocol or IP address that was used to access the content over these services. The IP address identifies the Internet service provider who uses the address for its customers; it does not identify an individual person. The copyright owner will then send a notice to the Internet service provider that contains the IP address along with other information such as the date and time of the event, the name of the file sharing program, and an identification of the content. The Internet service provider will then identify the account holder using that IP address in conjunction with the other information and send an alert to that customer. In Comcast’s case, we send the alert in two forms: an in-browser notice and an email to the primary account holder of the Service.

Comcast prefers to inform customers of inappropriate activities involving their Service and give them a reasonable period of time in which to take corrective action. Regardless of how many notices Comcast receives from copyright owners under the Copyright Alerts System, Service customers should not receive more than one alert in any seven day period. To learn more about how Comcast supports the Copyright Alerts System, including your options as a Service account owner and user, go to http://www.comcast.com/copyrightalerts.

What is Comcast's DMCA policy?

Owners of copyrighted works who believe that their rights under U.S. copyright law have been infringed may take advantage of certain provisions of the Digital Millennium Copyright Act of 1998 (the "DMCA") to report alleged infringements. It is Comcast's policy in accordance with the DMCA and other applicable laws to reserve the right to terminate the Service provided to any customer or user who is either found to infringe third party copyright or other intellectual property rights, including repeat infringers, or who Comcast, in its sole discretion, believes is infringing these rights. Comcast may terminate the Service at any time with or without notice for any affected customer or user.

How do copyright owners report alleged infringements to Comcast under the DMCA?

Copyright owners may report alleged infringements of their works that are stored on the Service or the Personal Web Features by sending Comcast's authorized agent a notification of claimed infringement that satisfies the requirements of the DMCA. Upon Comcast's receipt of a satisfactory notice of claimed infringement for these works, Comcast will respond expeditiously to either directly or indirectly (i) remove the allegedly infringing work(s) stored on the Service or the Personal Web Features or (ii) disable access to the work(s). Comcast will also notify the affected customer or user of the Service of the removal or disabling of access to the work(s).

Copyright owners may send Comcast a notification of claimed infringement to report alleged infringements of their works under the DMCA (but not the Copyright Alerts System) to:

M. Moleski/DMCA Notifications
Comcast Cable Communications, LLC
1800 Bishops Gate Drive
Mount Laurel, NJ 08054 U.S.A.
Phone: 888.565.4329
Fax: 856.324.2940
Email: dmca@comcast.net

Copyright owners may use their own notification of claimed infringement form that satisfies the requirements of Section 512(c)(3) of the U.S. Copyright Act. Under the DMCA, anyone who knowingly makes misrepresentations regarding alleged copyright infringement may be liable to Comcast, the alleged infringer, and the affected copyright owner for any damages incurred in connection with the removal, blocking, or replacement of allegedly infringing material.

What can customers do if they receive a DMCA notification of alleged infringement?

If you receive a DMCA notification of alleged infringement as described above, and you believe in good faith that the allegedly infringing works have been removed or blocked by mistake or misidentification, then you may send a counter notification to Comcast. Upon Comcast's receipt of a counter notification that satisfies the requirements of the DMCA, Comcast will provide a copy of the counter notification to the person who sent the original notification of claimed infringement and will follow the DMCA's procedures with respect to a received counter notification. In all events, you expressly agree that Comcast will not be a party to any disputes or lawsuits regarding alleged copyright infringement.

If a notification of claimed infringement has been filed against you, you can file a counter notification with Comcast's designated agent using the contact information shown above. All counter notifications must satisfy the requirements of Section 512(g)(3) of the U.S. Copyright Act.

Revised and effective: September 5, 2014

EXHIBIT D

SUPPLEMENTAL WI-FI TERMS AND CONDITIONS
("Wi-Fi Terms and Conditions")

The Customer named on the Wi-Fi Hot Spot Amendment and/or the Comcast Business Service Order Agreement and Comcast agree that the General Terms and Conditions and the below supplemental Wi-Fi terms and conditions, constitute the terms under which Comcast will provision the Wi-Fi Services selected by Customer. Capitalized terms not otherwise defined herein shall have the meaning ascribed to them in the Agreement or the Amendment.

1. Definitions.
   a. "End User" - Customer patrons and other authorized end users.
   b. "Private Wi-Fi Services" – Wi-Fi Services for the internal business use by Customer's employees, contractors and agents. Private Wi-Fi Service may not be used by End Users. As part of the logon process, Customer employees, contractors and agents will be asked to provide their Comcast High Speed Internet username and password, and the Customer will be responsible for all activities occurring under his or her username and for keeping the password secure.
   c. "Public Wi-Fi Services" – Wi-Fi Services for the use of Customer patrons and other authorized End Users, through the creation and maintenance of one or more wireless "hot spots". Public Wi-Fi Services may not be used by Customer employees, contractors and agents for internal business use.
   d. "Wi-Fi Service" - Access to the Wi-Fi Services or wireless connectivity to the internet. Wi-Fi Services will use the IEEE 802.11 standard (unless otherwise noted). Private Wi-Fi Services and Public Wi-Fi Services are collectively referred to herein as "Wi-Fi Services".

2. Changes to Wi-Fi Terms and Conditions. Comcast may at its sole option change or modify these Wi-Fi Terms and Conditions, and any related policies from time to time ("Revisions") by posting such Revisions to the Comcast website located at http://business.comcast.com/wifi/hotspot-terms. The Revisions are effective upon posting.

3. Term and Termination. Comcast Wi-Fi Services are offered on a month to month basis. Either party shall have the right to terminate Wi-Fi Service(s), at any time, for any reason, upon thirty (30) days prior written notice to the other party, subject to the payment of all outstanding amounts due for the Wi-Fi Service(s), if any, and the return of any and all Comcast Equipment used to provide the Wi-Fi Services. Termination of a Wi-Fi Services is not subject to Termination Charges. Wi-Fi Service(s) will terminate simultaneously with Customer's High-Speed Internet Services ("BCI").

4. Installation. Customer acknowledges that Comcast will be required to perform internal wiring at the Service Location in order to install the Comcast Equipment necessary to run the Wi-Fi Service. Customer further understands that certain Comcast Equipment may be mounted to walls and ceilings in order for the Wi-Fi Service to function properly. Comcast will use commercially reasonable efforts to keep damage to walls, ceilings and premises to a minimum, but will not be responsible for repairing or returning the Service Location to its original condition, except to the extent caused by Comcast's gross negligence or willful misconduct.
5. Service Charges. Wi-Fi Service(s) are provided to Customer by Comcast at no additional charge. Customer must remain subscribed to BCI at the current service tier in order to receive and continue receiving a Wi-Fi Service(s). Comcast reserves the right to impose a service charge for Wi-Fi Hot Spot(s) upon thirty (30) days advanced written notice to Customer.

6. Operational Responsibility for Wi-Fi Service. Comcast shall acquire, install and maintain all Comcast Equipment required to operate the Wi-Fi Services. The Comcast Equipment does not include any Wi-Fi End User equipment, including, but not limited network adapters, Internet access devices (computers, notebooks, PDAs, etc).

7. Wi-Fi Protocol Requirements. Comcast shall operate Wi-Fi Services using the applicable IEEE 802.11 protocols. Customer shall not use any other products or services at the Service Location that utilize the IEEE 802.11 protocols without Comcast's prior written consent.

8. No Modification of Comcast Equipment. Customer shall not attach additional equipment to or in any way modify the Comcast Equipment.

9. Wi-Fi Service to End Users.

   a. No Fee for Wi-Fi Service. Customer may not charge Wi-Fi End Users for Wi-Fi Service in any manner including hourly, daily, monthly or other subscription or usage charges without Comcast's prior written consent. Comcast shall have the right to charge a fee, to require the user to perform an action to gain access, and/or to limit the allowed parameters of usage, including but not limited to throughput, time of day, sessions per day or per month, for the Wi-Fi Service when the Wi-Fi Service is used by persons other than Comcast High-Speed Internet customers.

   b. Service Definition. Comcast shall have the right to define the performance parameters and other components of the Wi-Fi Service, such as data bit rate speed, service quality, number of Wi-Fi End Users supported, customer care and support levels, security features and other service features.

   c. Customer Support. Comcast shall provide customer support to Wi-Fi End Users for the Wi-Fi Service. Customer shall be responsible for notifying Comcast of any failure of the Wi-Fi Service.

   d. Customer Terms of Use. All Wi-Fi End Users shall be required to agree to an End User agreement that incorporates the use restrictions as Comcast's Acceptable Use Policy for Comcast High-Speed Internet service ("End User AUP"). Comcast shall have the right to deny access to the Wi-Fi Service to Wi-Fi End Users who violate the End User AUP or to any commercial end users (i.e., end users who use the Wi-Fi Service for commercial purposes).

   e. No Roaming. Customer shall not enter into "roaming" relationships with other Wi-Fi operators allowing another company's subscribers or users to access to the Wi-Fi Service(s), whether or not the Customer receives financial or other compensation for such relationship.

   f. Restriction on Other Derived Services. Customer shall not utilize the Wi-Fi Service for the purpose of deriving, creating or otherwise offering end user services or applications to others. The Wi-Fi Service shall only be offered as an amenity of the Service Location.

10. Use of Comcast Name. Customer may not use the Comcast's name or any Comcast trademarks, trade names or service marks or other branding in connection with sale, marketing or provision of the Wi-Fi Service or its operation of any Wi-Fi Service(s) without the advance written consent of Comcast, which shall not be unreasonably withheld, conditioned or delayed. Comcast may provide marketing material to Customer to advertise the Service Location as offering Public Wi-Fi Services. Customer will use reasonable commercial efforts to use such marketing material within the Service Location.

11. Warranties. THE COMCAST EQUIPMENT AND THE WI-FI SERVICES ARE PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. NEITHER COMCAST NOR ITS ASSOCIATED PARTIES WARRANT THAT THE COMCAST EQUIPMENT OR THE WI-FI SERVICES WILL (1) PROVIDE UNINTERRUPTED USE, OR OPERATE WITHOUT DELAY, OR WITHOUT ERROR; OR (2) BE TRANSMITTED IN UNCORRUPTED FORM. ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF PERFORMANCE, NONINFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, ARE HEREBY DISCLAIMED AND EXCLUDED UNLESS OTHERWISE PROHIBITED OR RESTRICTED BY APPLICABLE LAW.

12. Software. In addition to Article 6 of the General Terms and Conditions, Comcast makes no representation or warranty that any software or application installed on Wi-Fi End User equipment, downloaded from the Wi-Fi Service, or available through the Internet does not contain a virus or other harmful feature. Comcast makes no representation or warranty that virus check software will detect or correct any or all viruses, or that the installation of any software or applications to access the Wi-Fi Service will not cause the loss of files or disrupt the normal operations of any Wi-Fi End User equipment, including but not limited to computer(s).

13. Third Parties. Customer acknowledges and understands that Comcast may use third parties to provide the Wi-Fi Service(s) or any or all of the components of Wi-Fi Service, including without limitation installation, services, equipment, infrastructure or content. Comcast shall not be bound by any undertaking, representation or warranty made by third-party providers and suppliers in connection with the installation, maintenance or provision of the Wi-Fi Service, if that undertaking, representation or warranty is inconsistent with the terms of this Amendment.

14. Security and Authentication. Comcast shall deploy, manage, operate and upgrade (as appropriate) all security and authentication measures for use of the Wi-Fi Service. Customer acknowledges that anonymous Wi-Fi End Users will not be permitted to use the Wi-Fi Service and Comcast shall administer registration or other appropriate procedures sufficient to enable Comcast to identify its Wi-Fi End Users as necessary to address service or abuse issues and to comply with applicable law.

15. Limitation on Resale/Redistribution. Customer may not, without the prior written consent of Comcast, resell or otherwise make available the Wi-Fi Service to any other wireless service provider or make it otherwise available on any wide area network (WAN) or similar basis or on any other contiguous geographic basis.

16. Security and Abuse. Customer understands and agrees that any activity listed as Prohibited Uses and Activities in the End User AUP or AUP may result in the termination of the Wi-Fi Service to the Wi-Fi End User or in the event of recurring violations termination of the Wi-Fi Service to the Service Location.

17. Indemnification. The Customer understands and acknowledges that the Wi-Fi Services are offered as an amenity to Customer and/or Wi-Fi End Users at the Service Location. In addition to the indemnification obligations set forth in the General Terms and Conditions, Customer shall indemnify, defend and hold harmless Comcast and its directors, officers, employees, agents, subsidiaries, affiliates, successors and assigns from and against any and all claims (i) asserted by or on behalf of any Wi-Fi End User of the Wi-Fi Service; (ii) arising out of the use of the Wi-Fi Service, except for claims arising from fees charged to Wi-Fi End Users who are not Comcast High-Speed Internet subscribers.

18. Limitation of Liability. Reliance on and use of the Wi-Fi Service are subject to Article 6 of the General Terms and Conditions.

EXHIBIT 17

FCC Media Bureau Memorandum

Accepted / Filed

DEC 9 - 2014

Federal Communications Commission
Office of the Secretary

UNITED STATES GOVERNMENT

memorandum

DATE: December 9, 2014

TO: Marlene H. Dortch, Secretary, Federal Communications Commission

FROM: William T. Lake, Chief, Media Bureau

SUBJECT: Applications of Comcast Corporation, Time Warner Cable Inc., Charter Communications Inc., and SpinCo for Consent to Assign Licenses or Transfer Control of Licenses, MB Docket No. 14-57

The Media Bureau requests that the following exhibits based on Commission data be entered into the record of the above-captioned assignment and transfer of control proceeding (transaction proceeding).

The Applicants in this proceeding, as well as petitioners and commenters, have made various filings asserting that subscription to particular broadband speeds is relevant to our consideration of these transactions and relying on different sets of subscriber data.[1]

We make no determination at this time concerning contested matters in this proceeding. We seek to facilitate informed discussion. The Commission is in possession of the most up-to-date and comprehensive subscriber data – collected as of December 2013. We make the data available for the purpose of receiving informed comment in this proceeding, including to assist with economic analysis of

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[1] *See* DISH Comments at 27, MB Docket No. 14-57 (Aug. 25, 2014); Public Knowledge and Open Technology Institute Petition to Deny at 8, MB Docket No. 14-57 (Aug. 25, 2014) (asserting that an important consideration for examining potential effects of the proposed transactions on consumers is the number and overall percentage of subscribers to which the Applicants will provide a high-speed broadband service that has minimum speeds of 25 Mbps downstream); Netflix Comments at 16, MB Docket No. 14-57 (Aug. 25, 2014) (asserting that it is important to consider the number of subscribers to which the Applicants will provide minimum speeds of 25 Mbps downstream for multi-person households and minimum speeds of 10 Mbps downstream for individuals); Comcast and Time Warner Cable Opposition at 146, MB Docket No. 14-57 (Sept. 23, 2014) (noting that, based on the most recent data available to them – June 2013 data collected through the Commission's Form 477 – the post-transaction percentage of subscribers to which the merged firm would provide fixed broadband services would be 35.5 percent nationally).

Comcast's estimate is based on the Commission's speed benchmark in past Broadband Progress Reports – connections of at least 4 Mbps downstream and at least 1 Mbps upstream, using as a proxy the Commission's closest reporting tier for that time period of 3 Mbps downstream and 768 kbps upstream. That benchmark is under review. Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN Docket No. 14-126, *Notice of Inquiry*, 29 FCC Rcd 9747, 9755, para. 14 & n.34 (2014) (*Broadband Progress Notice of Inquiry*).

In addition, Comcast and Time Warner Cable state that the percentage of subscribers to which the merged firm would provide fixed broadband services of at least 10 Mbps downstream would be 40 percent, and the percentage of subscribers of connections with at least 25 Mbps downstream speeds would be 54.9 percent. Comcast and Time Warner Cable Opposition at 146-47 & n.454.

the proposed transactions. Such comment may play an integral role in the Commission's ultimate determination about whether the proposed transactions in this proceeding are in the public interest. In addition to Form 477 subscriber totals for the Applicants and other providers in the aggregate, both nationally (Exhibit 1) and in the Applicants' proposed footprints (Exhibit 2), we provide the number of wired, residential broadband providers offering a variety of broadband speeds in the Applicants' proposed footprints (Exhibit 3 – derived from State Broadband Initiative (SBI) broadband deployment data[2] and the Application filings in this docket), as well as subscriber totals by technology at various broadband speeds (Exhibit 4) and a comparison of cable broadband subscription with subscription to other technologies in homogeneous tracts (Exhibit 5). Exhibits 2-3 do not include Bright House Networks' broadband subscribers listed in Exhibit 1.[3]

Exhibit 1 provides the Applicants' residential broadband subscriber totals nationally (before and after the proposed transactions), based on Form 477 data collected for the period ending December 2013.[4] Exhibit 1 (and Exhibits 2, 4, and 5) present subscriber totals for fixed residential broadband services only.[5] This is consistent with the Commission's decision to date to exclude mobile service data from its finding pursuant to 47 U.S.C. § 1302(b). The Commission has noted that available data concerning mobile services appear to be unreliable and overstate deployment to a significant degree.[6]

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[2] http://www.fcc.gov/encyclopedia/changes-coming-form-477-data-collection.

[3] *See* Letter from Kathryn A. Zachem, Senior Vice President, Regulatory and State Legislative Affairs, Comcast Corp. et al. to Marlene H. Dortch, Secretary, Federal Communications Commission, MB Docket No. 14-57, at 9-13 (June 24, 2014) (discussing Bright House Networks subscribers and their relationship to the proposed transactions).

[4] The Applicants' broadband businesses have continued to grow since the transaction proceeding began earlier this year. In fact, Comcast, Time Warner Cable and Charter have made net additions of approximately 1.5 million broadband subscribers since filing their Form 477 reports as of December 31, 2013, the most recent period for which overall subscriber data has been reported. *See* Comcast Corp., Investor Relations, Third Quarter 2014 Trending Schedules, p. 4, http://files.shareholder.com/downloads/CMCSA/3661576083x0x788075/387ca4f4-31f0-4172-87a1-508cea675621/3Q14%20Trending%20Schedule.pdf; Time Warner Cable Inc., Investor Relations, Third Quarter 2014 Trending Schedules, p. 7, http://ir.timewarnercable.com/files/2014%20Earnings/3Q14/TWC-Trending-Schedules-Q3-2014-FINAL.pdf; Charter Communications Inc., 3Q2014 Trending Schedule, p. 1, http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-finlanding. Time Warner Cable and Charter report residential broadband subscriber net additions separately from business customers, for a total of 707,000 net residential adds in the first three quarters of 2014. Comcast added a total of 901,000 net residential and business broadband subscribers during the same time period. Assuming Comcast was adding residential and business broadband customers in the same ratio as the other two reporting companies, Comcast would have added a net of approximately 801,000 residential broadband subscribers, for a three-company total of 1,508,000 net new residential broadband customers so far this year. A total of approximately 1,694,000 net broadband additions (residential and business) have been reported by the Applicants so far this year.

[5] The four exhibits addressing subscriber counts from Form 477 reports – Exhibits 1, 2, 4 and 5 – are based on "fixed residential" broadband services, which include fixed wireless and satellite, as reported on Form 477. The count of providers in Exhibit 3 is not based on Form 477 subscriber data, but rather on SBI deployment data, and focuses on "wired residential" broadband providers, which excludes fixed wireless and satellite.

[6] *See Broadband Progress Notice of Inquiry*, 29 FCC Rcd at 9764, para. 34 & n.81. The Commission stated that the nature of the available data, among other things, limited its ability to make concrete findings about mobile deployment in its most recent review, and it expressed similar concerns regarding satellite services. *See id.* at para. 34 & nn.82, 85.

Exhibit 2 provides estimates of the Applicants' residential broadband subscriber totals at a variety of broadband speeds within their proposed footprints (before and after the proposed transactions). A provider's footprint is defined as all tracts where a given provider has at least one residential subscriber today. The post-transaction footprints are based on post-transaction tract lists submitted by the Applicants. The total number of broadband subscribers within any particular provider's footprint includes all broadband subscribers in any tract where the particular provider serves at least one subscriber. This means that the particular provider's percentage of subscribers within its footprint likely understates its percentage among households it serves because the denominator likely includes some households that could not be served by the particular provider (i.e., the provider's network likely does not cover the whole tract, but all subscribers in the tract are included).

Exhibit 3 presents the number of wired residential broadband providers for each of the Applicants' proposed footprint areas, by percentage of housing units with either 0, 1, 2, or 3+ providers at a variety of speeds. Additionally, the number of providers is provided at the national level. For this analysis, the category "wired, residential ISPs" includes providers using the following technologies: ADSL, DOCSIS and FTTP (SBI transmission technology codes 10, 40, 41 and 50); it excludes providers who are not facilities-based providers or who focus only on non-residential customers (includes only provider type of 1; excludes end-user-category of 2, 3 or 4).

Exhibit 4 presents residential broadband subscriber totals nationwide by technology (cable, FTTP, ADSL, other fixed broadband).

Exhibit 5 compares the percentage of residential subscribers to cable broadband technology with other wireline technologies – fiber, Upgraded DSL (DSL that is capable of providing speeds of at least 10 Mbps downstream/768 kilobits upstream), and Legacy DSL (DSL that is not capable of providing speeds of at least 10 Mbps downstream/768 kilobits upstream), in homogeneous census tracts nationally. A homogeneous tract is defined as one that is 90% covered by the technology of interest, with no more than 10% of the tract covered by multiple non-cable providers or better telco technology. (See note to table for additional explanation.)

For further information, or to obtain a copy of Highly Confidential information subject to the *Second Amended Modified Joint Protective Order* in this proceeding,[7] contact Ty Bream, Industry Analysis Division, Media Bureau, at Ty.Bream@fcc.gov or (202) 418-0644.

-FCC-

[7] *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Assign or Transfer Control of Licenses and Authorizations*, MB Docket No. 14-57, Second Amended Modified Joint Protective Order, DA 14-1639 (Nov. 12, 2014).

EXHIBIT 18

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
1	Comcast's Response to ORA Data Request, Set 1, No.3 & 4, Broadband Services Spreadsheet CONFIDENTIAL		X
2	Comcast's Response to ORA Data Request, Set 1, No.3 & 4, Broadband Services Spreadsheet SUPPLEMENTAL - CONFIDENTIAL		X
3	Comcast's Response to ORA Data Request, Set 3, No.35, *(ORA 3-35) CONFIDENTIAL Outage Report (DS3 - Intrastate).xlsx*		X
4	Comcast's Response to ORA Data Request, Set 3, No.35, *(ORA 3-35) CONFIDENTIAL Outage Report DS3 (Interstate).xlsx*		X
5	Comcast's Response to ORA Data Request, Set 3, No.35, *(ORA 3-35) CONFIDENTIAL Outage Report Voice.xlsx*		X
6	Comcast's Response to ORA Data Request, Set 3, No.40 *(ORA 3-40) CONFIDENTIAL Customer Initiated Complaints.xlsx*		X
7	Charter's Response to ORA Data Request, Set 1, No. 3 & 4, Broadband Services Spreadsheet, *CONFIDENTIAL CA PUC Data Request Broadband Services Spreadsheet.xls*		X
8	Charter's Response to ORA Data Request, Set 3, No.29, *CONFIDENTIAL CA Comcast Merger Data1.xls*		X
9	Charter's Response to ORA Data Request, Set 3, No.30, *CONFIDENTIAL CA ORA DR #2_Question 30 FCC Outage Report Spreadsheet 2010-2014.xlsx*		X
10	Charter's Response to ORA Data Request, Set 3, No.31, *CONFIDENTIAL California Historical HSI Outages CIT send.xls*		X
11	Charter's Response to ORA Data Request, Set 3, No.31, *CONFIDENTIAL California Historical HIS Outages TRB.xls*		X
12	Charter's Response to ORA Data Request, Set 3, No.34, *CONFIDENTIAL CA ORA DR #2_Question 34 FCC Outage Reports_pdfs.zip*		X
13	Charter's Response to ORA Data Request, Set 3, No.38, *CONFIDENTIAL CB*		X

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
	Internet Orders- CA.xlsx		
14	Charter's Response to ORA Data Request, Set 3, No.38, *CONFIDENTIAL Residential Internet Orders - CA.xlsx*		X
15	Charter's Response to ORA Data Request, Set 3, No.40, 45, 46, *CONFIDENTIAL CA ORA DR#2_Question 40_44_45 Agency Customer Complaints 2010-2014.xlsx*		X
16	Bright House's Response to ORA Data Request, Set 1, No. 4, Broadband Services Spreadsheet, *CONFIDENTIAL Question 4 Exhibit.xlsx*		X
17	Time Warner Cable's Response to ORA Data Request, Set 1, Exhibit 1-1, *Broadband Services Spreadsheet*		X
18	Time Warner Cable's Response to ORA Data Request, Set 1, *Exhibit 1-4, Time Warner Cable Residential Services Subscriber Agreements, Terms & Conditions, 2009-2014*	X	
19	Time Warner Cable's Response to ORA Data Request, Set 3, *Exhibit 3-5 , J.D. Power and Associates, Residential Telephone Customer Satisfaction Studies, 2009-2013*		X
20	Time Warner Cable's Response to ORA Data Request, Set 3, *Exhibit 3-6 , J.D. Power and Associates, Residential Internet Service Provider Satisfaction Studies, 2009-2013*		X
21	Time Warner Cable's Response to ORA Data Request, Set 3, *Exhibit 3-7, Time Warner Cable Customer Complaint Data*		X
22	FN003 – Comcast and Charter Reach Agreement on Divestitures	X	
23	FN003 – LA Times Comcast Charter	X	
24	FN006 – JtAppl_WLCB_10R	X	
25	FN006 – JtAppl_WLSS_10R	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
26	FN006 – Non_JtAppl_TFWCB_10R	X	
27	FN006 – Non_JtAppl_WLCB_10R	X	
28	FN006 – Non_JtAppl_WLSS_10R	X	
29	FN011 – California QuickFacts from the US Census Bureau	X	
30	FN012 – Comcast Form 10-K	X	
31	FN012 – ECAM Group MSO Information	X	
32	FN013 – Comcast TV market share	X	
33	FN020 – As Services Expand, Cable Bills Keep Rising – NY Times	X	
34	FN025-14 57 08-25-2014 Senator Al Franken 7521817502 – Page 14	X	
35	FN025-14 57 08-25-2014 Senator Al Franken 7521817502	X	
36	FN029 –Obama Asks F.C.C. to Adopt Tough Net Neutrality Rules – NY Times	X	
37	FN030 – Surprise! We agree with the Presidents Principles on Net Neutrality Reiterating Our Strong Support for the Open Internet	X	
38	FN036 – DoJ 2010 Horizontal Merger Guidelines	X	
39	FN041 – FiOS – Coverage Areas & Availability	X	
40	FN042 – USA Quick Facts from the US Census Bureau	X	
41	FN042 – Verizon 2013 10K Report	X	
42	FN043 – AT&T 2013 10K Report	X	
43	FN044 – Examining AT&T's 45 Mbps U-Verse Tier (And If You Can Get It) – DSL Reports, ISP Information	X	
44	FN045 – Verizon still can't justify expanding its FiOS service – Bussiness –	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
	The Buffalo News		
45	FN045 – Verizon's McAdam_New FiOS markets are not in the cards – FierceTelecom	X	
46	FN045 –Verizon's Shammo_We'll look at FiOS expansions once it returns the cost of capital – FierceTelecom	X	
47	FN046 – AT&T U-verse Expansion It's Over; AT&T's Rural Broadband Solution We Don't Have One – Stop the Cap!	X	
48	FN047 – AT&T Eyes 100 U.S	X	
49	FN047 – Why AT&T's Promise to Bring 1 Gbps to Austin is Mostly Empty – Company Tries Damage Control With Carefully-Worded Press Release -	X	
50	FN048 – Verizon Hopes to Nudge Some From Wired to Wireless - NYTimes	X	
51	FN049 – R11-12-001 Emergency Motion of TURN Exhibit A	X	
52	FN049 – R11-12-001_TURN_Supplement_to_Emergency_Motion_Public_PDFA	X	
53	FN050 – Google Fiber Is Fast, but Is It Fair – WXJ	X	
54	FN051 – Google Fiber City Checklist	X	
55	FN052 – Google Fiber Terms	X	
56	FN054 – National-Broadband-Plan	X	
57	FN057 – FCC Internet Access Status Report 6-2013	X	
58	FN058 – FCC-14-61A1 Open Internet NPRM Dkt 14-28	X	
59	FN065 – California Advanced Services Fund	X	
60	FN066-FCC-14-54A1 10-90 Intercarrier Comp	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
61	FN067 – FCC-14-113A1 14-126	X	
62	FN073 – 14-126 09-04-2014 Public Knowledge (1 of 2) 7521827814	X	
63	FN073 – 14-126 09-04-2014 The Internet Association 7522900872	X	
64	FN074 – 14-126 09-04-2014 Netflix, Inc. 7521827885	X	
65	FN075 – Wheeler Remarks_Daily_Releases_Daily_Business_2014	X	
66	FN078 – 14-126 09-04-2014 AT&T 7521827885	X	
67	FN078 – 14-126 09-04-2014 National Cable & Telecommunications Association 7521827767	X	
68	FN078 – 14-126 09-04-2014 Verizon 7522902820	X	
69	FN079 – 14-126 09-04-2014 City of Boston, Massachusetts 7521827767	X	
70	FN081 – 14-57 08-27-2014 Netflix, Inc. 7521825167	X	
71	FN086 – Comcast CEO agrees with Obama on net neutrality, sort of – SF Gate	X	
72	FN086 – NY Times 11-13-14 Pressure Mounts on FCC Over NN	X	
73	FN087 – Verizon to End Rollout of FiOS - WSJ	X	
74	FN092 – ATT Speed Tiers	X	
75	FN093 – ATT Internet Terms of Service	X	
76	FN095 – ORA-DR-Comcast-Set 2 CONFIDENTIAL		X
77	FN095 – ORA-DR-Comcast-Supp and Amended Responses to 1st, 3rd, and 4th ORA Data Requests - CONFIDENTIAL		X
78	FN099 – Amendment of the Commission's Rules for Rural Cellular Service, 85-388, 07-18-1986	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
79	FN099 – State Broadband Data and Development Grant Program Vol.74, 07-08-2009	X	
80	FN105 – An Inquiry into the Use of the Bands 825-845 MHz and 860-890 MHz for Cellular Communications Systems, 79-318, 03-03-1982	X	
81	FN106 – Omnibus Budget Reconciliation Act of 1993, P.L. 103-66	X	
82	FN107 – AT&T to Acquire T-Mobile USA From Deutsche Telekom AT&T	X	
83	FN109 – AT&T and Deutsche Telekom Continue to Pursue Sale of DT's U.S	X	
84	FN110 – Sprint Working on a Bid for T-Mobile US – WSJ	X	
85	FN111 – Wheeler on Competition in the Mobile Marketplace	X	
86	FN112 – CTIA survey_ye_2013_graphics-final	X	
87	FN115 – United States v. American Tel. & Tel. Co., 552 F. Supp. 131	X	
88	FN116 – Telephone Number Portability – Memorandum Opinion and Order, FCC 03-284, 10-10-2003	X	
89	FN117 – www.experian.com_assets_marketing-services_brochures_cross-device-video-analysis-2014	X	
90	FN119 – CBS joins the video-streaming bandwagon – Yahoo News	X	
91	FN121 – NBA Reaches Long-Term Rights Deals With Disney, Time Warner – WSJ	X	
92	FN123 – FCC Cable price report	X	
93	FN123 – Media Bureau cable prices DA-14-672A1	X	
94	FN124 – Cable TV Model Not Just Unpopular but Unsustainable – Forbes	X	
95	FN125 – HBO to Launch Stand-Alone Streaming Service - WSJ	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
96	FN128 – American Broadcasting Co. v Aereo, Supreme Court No. 13-461, 0625-2014	X	
97	FN129 – Aereo Files for Bankruptcy – NYTimes	X	
98	FN129 – Aereo to Suspend Operations Following Supreme Court Ruling – WSJ	X	
99	FN130 – FCC Propose Defining 'Linear' OVDs as MVPDs Multichannel	X	
100	FN131 – NetflixUS & Canada Blog – Internet Tolls and the Case for Strong Net Neutrality	X	
101	FN132 – Comcast Response to Netflix	X	
102	FN133 – Why is Netflix Buffering – Dispelling the Congestion Myth – Verizon Public Policy	X	
103	FN134 – Netflix Agrees to Pay Comcast to End Web Traffic Jam – WSJ	X	
104	FN135 – 10 Million_Roku Streaming Player	X	
105	FN136 – Apple CEO Tim Cook Interview_Apple TV, Celebrity Hack and Amazon - Digits - WSJ	X	
106	FN137 – Comcast Still Blocking HBO Go on Roku (And Now Playstation), Incapable of Explaining Why – Techdirt	X	
107	FN140 – 14-57 08-27-2014 Netflix, Inc. 7521825167	X	
108	FN142 – CFA-Comcast-TW-Merger-Analysis Mark Cooper Paper	X	
109	FN145 – FCC-10-201A1 Open Internet Order 2010	X	
110	FN146 – Verizon v. FCC DC Circuit decn.	X	
111	FN 151 – Netflix 2013 10-K	X	
112	FN155 – FCC 01-131 ISP-bound Traffic	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
113	FN155 – FCC 01-131 ISP-bound Traffic 2	X	
114	FN157 – FCC-14-54A1 10-90 Intercarrier Comp	X	
115	FN159 – comcast-twc-joint-written-statement-may-8	X	
116	FN159 – FCC 2011 ICC Order FCC 11-161	X	
117	FN161 – Patrick Leahy – United States Senator for Vermont – Release	X	
118	FN162 – DLCohen-Clarifying Data Caps & Prioritization	X	
119	FN163 – FCC-11-4 Comcast NBCU Order	X	
120	FN166 – FCC 01-146 CLEC Access Charge Order	X	
121	FN173 – 2001-May_LocComp	X	
122	FN176 – Cogent Offers to Pay Capital Costs Incurred by Major Telephone and Cable Companies Necessary to Ensure Adequate Capacity	X	
123	FN176 – Netflix CDN v. The Cable Guys or Comcast	X	
124	FN177 – 14-57 08-25-2014 Cogent Communications Group, Inc. (3 of 3) 7521817745	X	
125	FN182 – Netflix Reaches Interconnection Deal with Verizon – WSJ	X	
126	FN183 – 14-57 10-20-2014 Professors of antitrust law and economics 60000974628	X	
127	FN185 – Questions & Answers About Our New Data Usage Plan Trials	X	
128	FN185 – What are the new data usage plans	X	
129	FN185 – What is the new Flexible-Data Option	X	
130	FN186 – Economides_Hermalin_Congested_Platform	X	
131	FN188 – CBS Says Dish Poised to Black Out Network in Fee Dispute –	X	

List of Additional Documents Relied Upon and/or Referenced in ORA's Declarations

Document #	DOCUMENT	Public	Confidential
	Bloomberg		
132	FN190 – 14-57 09-23-2014 Comcast Corporation and Time Warner Cable Inc. 7522909787	X	
133	FN192 – Debra Aron Testimony TURN v. ATT REDACTED VERSION	X	
134	FN193 – Switch to a dish or pay more, Frontier tells FiOS TV customers – The Herald Business Journal	X	
135	FN195 – Amendment of Section 64.702 of the Commission's Rules and Regulations	X	
136	FN196 – Brand X v. National Cable and Telecom Association	X	
137	FN198 – 14-57 08-25-2014 Free Press 7521818670	X	
138	FN201 – Netflix 2014 10Q	X	
139	FN204 – Cable Modem Decl Rul & NPRM	X	
140	FN204 – ILEC Broadband Internet access_2005_lexis	X	
141	FN211 – Sandvine-2014-global-internet-phenomema-report	X	
142	FN218 – 05-25 02-11-2013 Ad Hoc Telecom Users Cmte 7022120787	X	
143	FN228 – RCN overbuild information	X	
144	FN228 – RCNI_News_2007_3_14_General	X	