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to this new customer set is not very capital intensive relative to the revenue opportunity."[41]

Bright House has been especially successful in winning new voice customers. Less than two years after launching its voice service offering in Florida, it proclaimed in May 2006 that it had already won 225,000 voice customers, suggesting a penetration rate of over 10 percent of homes passed.[42] Then, in January of this year, it announced the number had more than doubled, to "nearly 500,000" customers, suggesting a penetration rate of nearly 25 percent.[43] Thus, Bright House is achieving a net gain of well over 100,000 voice customers per year in its Florida service territories, translating into an increase in market share of more than five percentage points every 12 months. Other cable companies are achieving similarly rapid gains.[44]

**Q. In this context, are you able to estimate the potential impact of Verizon's retention marketing program on Bright House's customer acquisition efforts?**

A. Yes. Ms. Smith testified that in the three and a half months between January 1, 2008 and April 15, 2008, there were **[BEGIN PROPRIETARY]** **[END PROPRIETARY]** in the Southeast region (Florida, North Carolina and South Carolina) who elected to stay with or switch back to Verizon in response to a retention marketing offer.[45] Extrapolating this figure to a full year indicates an annual rate of approximately **[BEGIN PROPRIETARY]** **[END PROPRIETARY]** accepting such offers each

[41] Simon Flannery, "Cable & Telecom VoIP Success Driving Telco On-Net and Off-Net Video," Morgan Stanley (July 23, 2007), at 5-6.

[42] Bright House Networks, "More Than 225,000 Florida Families Switch to Bright House Networks Digital Phone," Press Release (May 1, 2006) (available at www.mybrighthouse.com/about_us/press_releases/default.aspx). See also Taylor and Ware at 27.

[43] "Bay Area Assists Verizon FiOS Boom" *St. Petersburg Times* (January 29, 2008.).

[44] Taylor and Ware at 22-31.

[45] Smith Direct at 5-6.

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year. Of course, many of these customers are not in Bright House's service territory (or, for that matter, even in Florida). However, *even if* 100 percent of the customers in Verizon's Southeast region who accept Verizon's retention marketing offers would otherwise have switched to Bright House, the effect would be to slow the rate at which Bright House's is gaining net voice customers by **[BEGIN PROPRIETARY]** **[END PROPRIETARY]**.[46] In other words, Bright House will continue to experience six figure annual gains in voice customers, and its market share will continue to grow rapidly, with or without Verizon's retention marketing program. Moreover, to the extent that Verizon's retention marketing effort is taking a small bite out of Bright House's market share growth, it is only because, with more complete information, some customers are deciding that Verizon's offer gives them greater value than the Bright House offer they had initially accepted. That result is the essence of efficient competition.

With this in mind, it is clear that Dr. Bazelon's warnings that, as a result of Verizon's retention marketing program, Florida consumers "will all find themselves shopping in a less competitive marketplace in the future"[47] are worse than hyperbole. They are simply not true. Verizon's retention marketing program is having no material effect, and will not in the future have any material effect, on Bright House's viability as a wireline voice competitor. Casting all of the other arguments aside, this is reason enough for the Commission to find that the retention marketing program is not "anticompetitive."

**Q. Does Dr. Bazelon offer an opinion on whether Verizon's retention marketing program gives Verizon an "undue or unreasonable advantage"?**

[46] Based on Bright House's annual net voice customer growth of 100,000+ customers.
[47] Bazelon Direct at 5.

**EXHIBIT JAE-2**

**PUBLIC VERSION**

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

| | | |
|---|---|---|
| In the Matter of<br><br>Bright House Networks, LLC,<br>Comcast Corporation, and<br>Time Warner Cable Inc.,<br><br>Complainants,<br><br>v.<br><br>Verizon California Inc.,<br>Verizon Delaware LLC,<br>Verizon Florida, LLC,<br>Contel of the South, Inc.,<br>Verizon South Inc.,<br>Verizon New England Inc.,<br>Verizon Maryland Inc.,<br>Verizon New Jersey Inc.,<br>Verizon New York Inc.,<br>Verizon Northwest Inc.,<br>Verizon North Inc.,<br>Verizon Pennsylvania Inc.,<br>GTE Southwest Incorporated<br>d/b/a Verizon Southwest,<br>Verizon Virginia Inc.,<br>Verizon Washington, D.C. Inc.,<br><br>Defendants. | ) | File No. EB-08-MD-002 |

**DECLARATION OF JEFFREY A. EISENACH**

FEBRUARY 29, 2008

**[NON-PROPRIETARY VERSION]**

CRITERION ECONOMICS, L.L.C.

## CONTENTS

## I. INTRODUCTION

1. I have been asked by counsel for Verizon to analyze the economic welfare effects of the Verizon retention marketing program at issue in this proceeding. In this Declaration, I report the results of my analysis.

2. First, in Section II, I present my qualifications. In Section III, I explain the benefits to consumers and the economy of providing consumers with timely and accurate information about prices and product characteristics, and explain why the retention marketing program is uniquely effective in helping consumers make choices that best fulfill their needs. In Section IV, I estimate the increase in economic welfare that is directly attributable to the retention marketing program (or, conversely, the economic welfare loss that would be associated with banning the program). I estimate that the approximate discounted present value of the annual welfare gain from the retention marketing program is between \$16 million and \$17 million, and that the approximate discounted present value of the welfare gain over five years is between \$75 million and \$79 million.

## II. QUALIFICATIONS

3. My name is Jeffrey A. Eisenach. I am Chairman of Criterion Economics, an economic consulting firm based in Washington, D.C., and an Adjunct Professor at George Mason University Law School. I have more than 25 years experience performing economic analyses of competition, regulatory and public policy issues, and have served in senior policy positions at the U.S. Federal Trade Commission (FTC) and the White House Office of Management and Budget (OMB). I have also served on the faculties of Harvard University's Kennedy School of Government and Virginia Polytechnic Institute and State University. Prior to joining Criterion, I served as Chairman of CapAnalysis, the economic

consulting arm of Howrey LLC and, previously, as President of The Progress & Freedom Foundation.

4. I have authored or co-authored numerous expert reports in litigation matters as well as in regulatory proceedings before the Federal Communications Commission, the Federal Trade Commission, and other regulatory agencies, and testified before Congress on multiple occasions. I am the author or co-author of eight books, including *The Digital Economy Fact Book*, *The Telecom Revolution: An American Opportunity,* and *America's Fiscal Future: Controlling the Federal Deficit in the 1990s*. In addition, I have edited or co-edited five books, including *Communications Deregulation and FCC Reform: What Comes Next?* and *Competition, Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace*. My articles have appeared in scholarly journals as well as in such popular outlets as *Forbes, Investors Business Daily, The Wall Street Journal, The Washington Post*, and *The Washington Times*.

5. Among my previous affiliations, I have served as a scholar at the American Enterprise Institute, the Heritage Foundation, and the Hudson Institute. I remain a member of the board of directors of The Progress & Freedom Foundation, and I also serve on the Advisory Board of the Pew Project on the Internet and American Life.

6. I hold a Ph.D. in economics from the University of Virginia and a B.A. in economics from Claremont McKenna College. My complete *curriculum vita* is provided as Exhibit A to this report.

## III. VERIZON'S RETENTION MARKETING PROGRAM BENEFITS CONSUMERS AND COMPETITION

7. Imperfect information reduces economic efficiency, harms competition, and lowers consumer welfare. Retention marketing programs are an efficient mechanism for

providing consumers with timely information about product choices so that they can make utility-maximizing decisions. Verizon's retention marketing program provides consumers with timely and accurate information about Verizon's offerings. The proof of its value to consumers lies in the fact that, when fully informed about their choices, many consumers choose to accept Verizon's offer.

### A. Retention Marketing Is an Economically Efficient Means of Providing Consumers with Information

8. It is a fundamental tenet of modern economics that markets function more efficiently when consumers are fully informed about the choices available to them in the marketplace.[1] As Nobel Laureate George Stigler noted in his seminal 1961 article, however, consumers seldom have full information.[2] The reason is that information is costly – costly to produce, costly to acquire, and costly to assimilate. As Stigler explained, "the cost of keeping currently informed about all articles which an individual purchases would be prohibitive." Moreover, "[t]he seller's problem is even greater: he may sell two thousand items,... and to advertise each on the occasion of a price change, and frequently enough to remind buyers of his price, would be impossibly expensive."[3]

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[1] *See*, e.g., Dennis W. Carlton and Jeffrey M. Perloff, *Modern Industrial Organization* (2005) at 440-441. The importance of information to economic efficiency is also well-recognized in the law. See, e.g., *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council Inc.*, 425 US 748, 765 (1976) ("So long as we preserve a predominantly free enterprise economy, the allocation of our resources will be made through numerous private decisions. It is a matter of public interest that those decisions, in the aggregate, be intelligent and well informed. To this end, the free flow of commercial information is indispensable."); *Fair Packaging and Labeling Act*, 80 Stat. (1966) 15 U.S.C. §§1451-61. ("Informed consumers are essential to the fair and efficient functioning of a free market economy."); Federal Trade Commission, *Statement of Basis and Purpose, Labeling and Advertising of Home Insulation* 44 FR 50218, 50222 (1979) ("It is a basic tenet of our economic system that information in the hands of consumers facilitates rational purchase decisions; and, moreover, it is an absolute necessity for the efficient functioning of the economy.")

[2] George J. Stigler, "The Economics Of Information," *The Journal of Political Economy* 69;3 (June 1961) 213-225.

[3] *See* Stigler at 223.

9. At the most fundamental level, the effect of imperfect information is that consumers make "faulty" decisions: That is, they purchase products from sellers who charge more than the prices being charged for identical products by other sellers; or, if products are differentiated, they purchase products that do not fully meet their needs when a similar product, available for the same price, would provide them with greater satisfaction. Both consumers and competition are harmed as a result. Consumers' surplus is reduced by the difference between the price paid and the (lower) price that was available for the same product (or, by the difference in satisfaction the consumer receives from the "wrong" product and what she would have received had she purchased the "right" one). Competition is harmed because firms are not fully rewarded for charging the (lower) competitive price or making the more attractive product; and, as a result, all consumers end up paying more than they would in the presence of complete information.[4]

10. The costs to consumers (and the economy) of making faulty purchasing decisions also depend on the sunk (i.e., transaction-specific and non-recoverable) costs associated with such decisions. Sunk costs may be incurred by consumers, sellers or both. For example, if a consumer spends hours being fitted for a custom-made suit, when (given full information) an off-the-rack alternative would have better met his needs, he has incurred a cost that cannot be recovered; and, so has the seller, since the time spent by the tailor in fitting the suit is also unrecoverable. Both costs represent pure deadweight losses to the economy.

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[4] *See* Howard Beales, Richard Craswell and Steven C. Salop, "The Efficient Regulation of Consumer Information," *Journal of Law and Economics* 24 (December 1981) 491-539, 503. ("Additional information induces sellers to compete for the patronage of informed consumers by offering better values – either lower prices or higher qualities. This induced competition also benefits those uninformed consumers who purchase randomly.") (Hereafter, Beales, Craswell and Salop.); *see also* Carlton and Perloff at 452 ("Firms can obtain market power from consumers' lack of knowledge about prices and quality. Limited information can lead to a monopolistic price in what would otherwise be a competitive market.")

11. Firms have incentives to inform consumers of the prices and characteristics of the products they produce. However, as Stigler suggested, the costs of keeping all potential consumers constantly informed of all prices and all product qualities is prohibitive. Moreover, the value of information to consumers varies depending on their circumstances. Consumers who are "in the market" for a product are likely to place a higher value on information about prices and qualities of that product than consumers who are not currently planning on making a purchase.

12. Thus, firms seek to *target* their marketing efforts to consumers most likely to have an interest in purchasing a particular product at the time they receive the information.[5] In so doing, firms reduce both the costs of distributing and the costs of using relevant information: the firm saves by advertising only to the consumers most likely to put the information to use; and, the consumer saves by virtue of not having to sort through advertising content for which she has no immediate use.[6]

13. Retention marketing is a form of targeted advertising in which firms identify consumers who are "in the market" on the basis of information suggesting they are considering switching to some other provider.[7] Knowing this, the firm seeks to ensure that the potential "switcher" is fully informed about the benefits of the firm's products, and also that the

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[5] Pizza delivery services, for example, often advertise on television during sporting events, and wedding services advertise in the Spring. The Internet has vastly increased the ability of firms to undertake such "targeted marketing." Amazon.com, for example, maintains a record of books I have previously purchased there, and each time I visit the site (evidencing that I am "in the market" for books), it provides me with information on products in which, based on my prior purchases, I am most likely to have an interest.

[6] Empirical studies have found that consumers incur high "nuisance costs" from untargeted advertising (*See*, e.g., Kenneth C. Wilbur, *A Two-Sided, Empirical Model of Television Advertising and Viewing Markets*, Working Paper, University of Southern California (June 2007), *available at* http://ssrn.com/abstract=885465.). Economic models show that nuisance costs can result in levels of advertising that diverge from the welfare maximizing level (*See*, e.g., Simon P. Anderson and Stephen Coate, "Market Provision of Broadcasting: A Welfare Analysis," *Review of Economic Studies* 72 (2005) 947-972.)

[7] See, e.g., Jill Griffin and Michael W. Lowenstein, *Customer Winback: How to Recapture Lost Customers and Keep Them Loyal* (2001) at 30 (describing segmentation of customers in retention management programs).

consumer has the opportunity to take advantage of the firm's best offers. From the perspective of the firm, retention marketing is a substitute for customer acquisition: If it can provide a consumer with information which leads that consumer to remain a customer, it has avoided the costs associated with acquiring a new customer from scratch. From the perspective of a customer, retention marketing provides useful information at the very time the consumer is "in the market" and examining other sellers' offers.

14. Retention marketing is also uniquely valuable when there are sunk costs of switching providers. If a consumer, as a result of becoming more fully informed through a retention marketing program, chooses to remain with the current provider, the sunk costs of switching (which would otherwise pure deadweight losses) are avoided altogether. In this sense, retention marketing programs are unique: They inform consumers *before* the costs of switching are incurred.

15. Just as the benefits of consumer information are widely understood, so too are the costs of government restrictions on firms' abilities to convey truthful information about their products. Such restrictions have been shown to harm both consumers and competition, raising prices[8] and preventing firms from earning returns on their efforts to reduce costs or introduce better products.[9] Conversely, the removal of such restrictions benefits consumers and competition.[10]

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[8] *See* e.g., Carlton and Perloff at 482.

[9] *See* Beales, Craswell and Salop at 514-15. ("It is clear that bans on advertising impair competition by preventing firms with an advantage from conveying that fact that thereby expanding. *It should be equally clear that restrictions which prevent choice of the most efficient medium for conveying that information have the same effect.*") (Emphasis added.)

[10] *Id.* at 514. ("Perhaps the information remedy most compatible with the interests of individual sellers (if not their collective interest) is the removal of private or governmental restraints on the free flow of information. Such restrictions often tend to inhibit competition, with consequent efficiency losses.")

## B. Verizon's Retention Marketing Program Unambiguously Benefits Consumers and Increases Economic Welfare

16. Verizon's retention marketing program offers consumers accurate information about their choices in the marketplace at a time when they are demonstrably "in the market" for voice, data and video services. It does so, typically, in two phases. First, customers who have indicated an intention to switch their voice service from Verizon to a competitor receive a letter and/or an automated telephone message from Verizon indicating Verizon's desire to retain their business and asking that they call a toll-free number to learn more about Verizon's product offerings. Second, upon calling, customers are offered discounts, either in the form of one-time "gift cards," or reduced monthly rates from Verizon's "rack" retail prices, or both.[11]

17. I obtained detailed information from Verizon on the discounts offered under the retention marketing program since its inception in mid-August 2007. As shown in Exhibit B, the discounts range from a minimum of [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] (for a [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] monthly discount with a six-month duration) to a maximum of [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] (for a two-year FiOS renewal package with monthly savings of [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY]).[12] The average savings per customer, relative to Verizon's standard rates is [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY].[13]

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[11] See *Joint Declaration of Chris Creager, Bette Smith, Patrick Stevens, and Gary Sacra* at ¶¶43-58.

[12] The value reported here reflects the fact that (as I indicate below), I discount future savings at a rate of five percent after one year. In the absence of such discounting, the value of the savings would be simply [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY].

[13] As shown in Exhibit B, I calculated this average based on data provided by Verizon on the discounts received by customers who accepted retention marketing program offers between August 15, 2007 and December 31, 2007. *See* VZ-TWC_RM-09-00000023. For one-time savings offers (e.g., an American Express Gift Card), I recorded the actual amount of the discount. For recurring monthly discounts, I obtained from Verizon the duration of the discount (in months) and calculated the total savings accordingly. For customers who received recurring

18. The retention marketing program's high response rates indicate that consumers find the information provided by Verizon to be valuable, because a large proportion of them act on that information. Whereas a response rate of two percent is considered highly successful for direct mail marketing campaigns,[14] approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] of customers who receive Verizon's direct mail piece call the toll-free number, and approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] of those customers choose to purchase Verizon's discounted offerings.[15]

19. Consumers who choose to accept Verizon's offer are unambiguously better off than they would have been in the absence of the retention marketing program. That is, they choose to remain with Verizon because, based on the information provided through the retention marketing program, they find Verizon's services to be superior in price, quality, or some combination of price and quality, to the services offered by the competitor.

20. The welfare gains from the retention marketing program do not, however, end with the savings consumers gain in terms of lower prices or superior services. Two other forms of welfare gains must also be taken into account.

21. First, consumers benefit by virtue of savings in "sunk" costs they would otherwise have incurred had they chosen to switch to a Verizon competitor when in fact the Verizon offer (had it been known to them) was superior. In particular, most if not all switches between wireline telephone and wireline cable service require a cable service representative to

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discounts extending for more than 12 months, I discounted savings beyond the 12th month using a discount rate of five percent, in order to get the present discounted value of their savings. I then computed the aggregate savings for all consumers, and divided the total number by the number of consumers who accepted retention marketing program offers during this period. Note that there are more discounts [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] than customers receiving them [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY], reflecting the fact that some customers received multiple discounts.

[14] *See*, e.g., Direct Marketing Association, "DMA Releases 5th Annual 'Response Rate Trends Report'" (October 13, 2007) (available at http://www.the-dma.org/cgi/disppressrelease?article=1008).

[15] *See* VZ-TWC_RM-11-00003429.

visit the consumers' home – and require the consumer to be present when the visit occurs. In choosing to remain with Verizon, consumers avoid the time cost associated with staying home from work or refraining from other activities. The consumer welfare savings from the retention marketing program include these avoided, sunk costs.

22. Second, cable companies also incur a one-time, sunk cost associated with initiating service for a new customer, which includes consumer premises equipment, labor and other customer-specific provisioning costs. When such costs are incurred to achieve a *misallocation* of economic resources, they constitute pure deadweight losses, which must be taken into account in measuring the economic benefits of the retention marketing program or, conversely, the economic harm that would result from banning it.[16]

23. As noted above, retention marketing – that is, providing information to consumers after they are known to be "in the market" but *before* they have actually switched – is unique in its ability to the avoid sunk costs of switching. No alternative (e.g., "win-back" marketing aimed at consumers *after* they switch) can achieve this objective.

24. In Section IV below, I estimate the economic benefits to consumers and the economy associated with the retention marketing program, and find them to be substantial.

25. The retention marketing program also benefits competition. In differentiated product markets such as this one, firms compete by seeking to offer individually-tailored combinations of prices and services that are most-preferred by as many consumers as possible.

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[16] Of course, there is nothing generically "inefficient" or economically wasteful about the existence of sunk costs incurred in switching from one provider to another, regardless of whether those costs are borne by consumers or by sellers. Assuming full information, these costs are incurred to move *from a less efficient choice to a more efficient one*, and are only incurred if the overall welfare gains exceed the costs. In the instance described here, the switching costs are incurred in the process of moving *from a more efficient choice to a less efficient one*. Thus, for example, when a cable company rolls a truck to switch a consumer from a more-preferred choice (given full information) to a less-preferred one, the cost of that truck roll is a deadweight loss. If, on the other hand, Verizon has to roll a truck to provide new services to a customer who – having been fully informed – prefers Verizon's services, that cost is part and parcel of an efficiency-enhancing transaction.

Their reward, when they are successful, is that they win the customer's business. Depriving firms of the ability to *inform* consumers of their best offers would remove their incentives to make those offers in the first instance. In short, to forbid firms from informing customers of their best offers is to deprive them of the incentive to compete.

26. Looked at from the other direction, the competitive price facing Verizon's competitors – the price they must meet or beat to win a customer away from Verizon – is Verizon's best offer. To prohibit Verizon from making that offer is, by definition, to *allow its competitors to charge prices above the competitive price*, while still winning customers. It may seem "unfair" to Verizon's competitors that they should actually have to make a better offer in order to win customers, but that requirement is precisely what is meant by "competition." And, from the perspective of consumers, it is the very essence of "fairness."

## IV. THE ECONOMIC HARM FROM BANNING THE RETENTION MARKETING PROGRAM WOULD BE SIGNIFICANT

27. I requested from Verizon information on the number of consumers who have participated in the retention marketing program since its inception in mid-August 2007, as well as the nature of the offers made to consumers who elected to remain with Verizon as a result of the program. I also gathered information on the "sunk" costs associated with switching from Verizon to a cable competitor, including both the time costs incurred by consumers and the one-time "setup" costs incurred by cable companies. Based on this information, I estimated the gains to consumers and to overall economic welfare of the retention marketing program. Specifically, I estimated (a) increase in consumer surplus associated with consumers' choice of a preferred package of services and the avoided sunk costs of switching carriers, and (b) the increase in overall economic welfare associated with avoided sunk costs incurred by cable operators. My calculations are summarized in Exhibits B and C.

28. To summarize, I found that the five-year discounted present value of the welfare gains associated with Verizon's retention marketing program is between approximately $75 million and $79 million. Of this, approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] consists of direct gains to consumers, and the remainder consists of welfare gains to the economy overall.

**A. The Retention Marketing Program Directly Increases Consumer Welfare**

29. Consumers benefit directly from the retention marketing program in two ways. First, they benefit because, having become fully informed about their product choices, they choose a package they prefer to the one they would have chosen in the absence of complete information. Second, they benefit by avoiding the sunk costs associated with switching to the competitor's (less preferred) offering.

30. To estimate the consumer welfare benefits associated with the retention marketing program, it is necessary to calculate (a) the number of customers who, based on the information provided through the retention marketing program, choose Verizon's offer over the competitor's, (b) the value those consumers place on Verizon's offer relative to the competitor's, and (c) the avoided sunk costs of switching carriers. I estimated these values on both an annual basis and over a five-year period.

31. As shown in Exhibit C, approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] consumers accepted RMP discount offers from August 15, 2007 through January 31, 2008, an average of [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] per month. Throughout the analysis that follows, I estimate that

the RMP program will continue at this level,[17] i.e., that [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] consumers will accept RMP discount offers each month throughout the periods for which I provide estimates.[18]

32. The benefit to consumers who choose retention marketing program discount offers consists of (a) the difference between their valuations of the Verizon retention marketing program offer, on the one hand, and the less preferred competitor's offer, on the other hand, and (b) the avoided sunk costs of switching.

33. Based on Bureau of Labor Statistics data showing that average hourly earnings were $17.75 in January 2008[19] (representing the opportunity cost per hour of time), and on an average "wait time" for a cable visit of four hours,[20] I estimate consumers' avoided sunk costs of switching to be $71.00 per consumer. Assuming approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] consumers accept retention marketing program offers each month (approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] per year)], the resulting annual consumer benefit is approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] per year. Note that these savings represent a pure welfare gain, as they are the avoided costs of implementing *welfare-reducing* choices made by consumers based on incomplete information. Furthermore,

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[17] While there may be reasons for believing the rate of customers attempting to shift from Verizon to cable telephony will increase over the next few years, I assumed conservatively that it will remain unchanged. *See also* Bernstein Research, *U.S. Telecom: Wireline Limbo - How Low Can You Go?* (February 7, 2008) at 24 ("[T]he historical rate of decline is a reasonable basis for future attrition….").

[18] As shown at VZ-TWC_RM-11-00003429, the retention marketing program also results in "win backs," i.e., customers who return to Verizon even after the initial cancellation order has been executed. Though these consumers also benefit from the retention marketing program, for simplicity, I do not include these benefits in my analysis.

[19] See Bureau of Labor Statistics, *Average Hourly Earnings of Production and Nonsupervisory Workers* (Table B-4) (available at http://www.bls.gov/webapps/legacy/cesbtab4.htm).

[20] Cable franchise agreements typically specify four-hour "appointment windows" for service appointments. See e.g., http://www.nyc.gov/html/doitt/html/faq/faq.shtml#13, http://www.ci.austin.tx.us/telecom/acvexa.htm, and http://www.state.vt.us/psb/orders/2005/files/7044sqrp.pdf.

these savings are achievable *only* through the retention marketing program. Alternatives, such as after-the-fact win-back programs, may cause consumers to switch back, but the sunk costs of making the ill-informed switch in the first place have already been incurred.[21]

34. Estimating the difference between the valuations consumers place on Verizon's retention marketing program offer and competitors' offer is slightly more complex: Although we have extensive information about Verizon's retention marketing program offers, we cannot directly observe competitors' offers.[22] However, it is straightforward to establish upper and lower bounds on the difference in valuations and, based on these, to establish reasonable estimates.

35. The upper bound on the incremental value consumers place on Verizon's retention marketing program offer is established by the fact that a consumer who initially chose to switch to a competitor did so because she found the competitor's offer at least marginally superior to her *existing Verizon package*, again taking into account (a) the difference between her valuations of the *Verizon standard rate* and the competitor's offer, and (b) the avoided costs of switching carriers.

36. For clarity in exposition, I label the consumer's valuation of her existing Verizon package $V_l$, and her valuation of the competitor's offer $C_l$. In order to even consider switching from Verizon, it must be the case that the consumer's valuation of the competitor's offer exceeded the consumer's valuation of the existing Verizon package by the cost of the "wait

[21] Indeed, in cases where consumers, having made an ill-informed decision to switch, decide after the fact to switch back, they may incur further sunk costs associated with returning to their original provider. Given that the initial decision was based on incomplete information, *both* sets of switching costs constitute economic waste. While it would be appropriate to count "switchback" costs as an additional benefit of the retention marketing program, I did not attempt to estimate the magnitude of these costs.

[22] Even if competitors' offers were observable, the fact that communications services are highly differentiated (e.g., cable modem service is not identical to either FiOS or DSL service) would mean that we could not directly compare offerings and would still need to infer consumers' valuations.

time" for cable telephony installation. That is, a consumer who initially accepted the competitor's offer found that offer, standing alone, to be worth at least $71 more than her existing Verizon package. Mathematically, this condition can be expressed as follows:

$$C_I - V_I \geq \$71$$

37. For the marginal consumer who is indifferent between the cable offer and the existing Verizon package, the expression above will hold with equality. That is, $C_I - V_I = \$71$. The maximum possible benefit to consumers of accepting the retention marketing program offer is therefore the *full value of the retention marketing program discount relative to Verizon's standard rate*, less the $71 time cost of switching. Thus, the *upper bound on the consumer's incremental welfare improvement from accepting Verizon's average retention marketing program discount of approximately* [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY].

38. Of course, for many consumers, the valuation of the cable offer will exceed the valuation of their existing Verizon package by more than $71. (That is, $C_I - V_I > \$71$.) These consumers will accept the retention marketing program offer only if by doing so they increase their utility. This will occur whenever the full value of the retention marketing program discount, less the difference between the cable valuation and the valuation of the existing Verizon package, is greater than zero. In other words, consumers will accept a retention marketing program discount whenever:

[BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY]
$- (C_I - V_I) \geq \$0$

For the marginal consumer who is indifferent between accepting the cable offer and accepting the retention marketing program discount, the expression above will hold with equality. That is,

$$\text{[BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY]} - (C_I - V_I) = \$0$$

Therefore, the lower bound to the consumer's incremental welfare improvement as a result of a retention marketing program discount of [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] is $0.01.

39. To summarize, no consumer who accepts Verizon's average retention marketing program discount benefits by more than [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY], no consumer benefits by less than $0.01, and most consumers presumably benefit by an amount somewhere in between. The average value received depends on how consumers who accept Verizon's retention marketing program offer are distributed between the two extremes.

40. A conservative approach is to assume that the distribution of consumers is symmetric, and that the typical consumer falls at the mean of this distribution. i.e., to take the simple arithmetic average of [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] and $0.01. Using this approach, I estimate that the incremental welfare gain to the typical consumer who accepts Verizon's retention marketing program offer is [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY].

41. This estimate is conservative because it fails to take into account selection bias in the distribution of consumers who accept retention marketing program offers. That is, consumers who believe, *ex ante*, that Verizon's retention marketing program offer will be superior to the competitor's offer by a significant amount are likely over-represented in the

group of consumers who, *ex post*, accept the retention marketing program offer, while consumers who believe, *ex ante* that Verizon's retention marketing program offer would be inferior or only marginally superior are likely to be under-represented. Simply put, the fact that a consumer bothers to call the toll free number in the first place tells us that this consumer is unlikely to place an incremental valuation on Verizon's offer close to $0.01 (the lower bound), and is disproportionately likely to belong to the population of consumers whose incremental valuation is relatively close to [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] (the upper bound). In statistical terms, the distribution of consumers is likely to exhibit *negative skewness*, meaning that the mean is likely to lie above the simple average of its upper and lower bounds, as shown in Figure One below.

42. To account for this selection bias, I also calculated the incremental valuation of the retention marketing program on the assumption that, rather than falling midway between the upper and lower bounds of the incremental value distribution, the typical consumer who accepted the retention marketing program offer fell in the 75$^{th}$ percentile of the distribution. That is, the incremental value they placed on the retention marketing program offer was [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] * 0.75, or [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY]. Thus, I estimate that the typical consumer's incremental valuation of the Verizon retention marketing program offer relative to the competitor's offer, standing alone, is at least [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] and at most [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY].[23]

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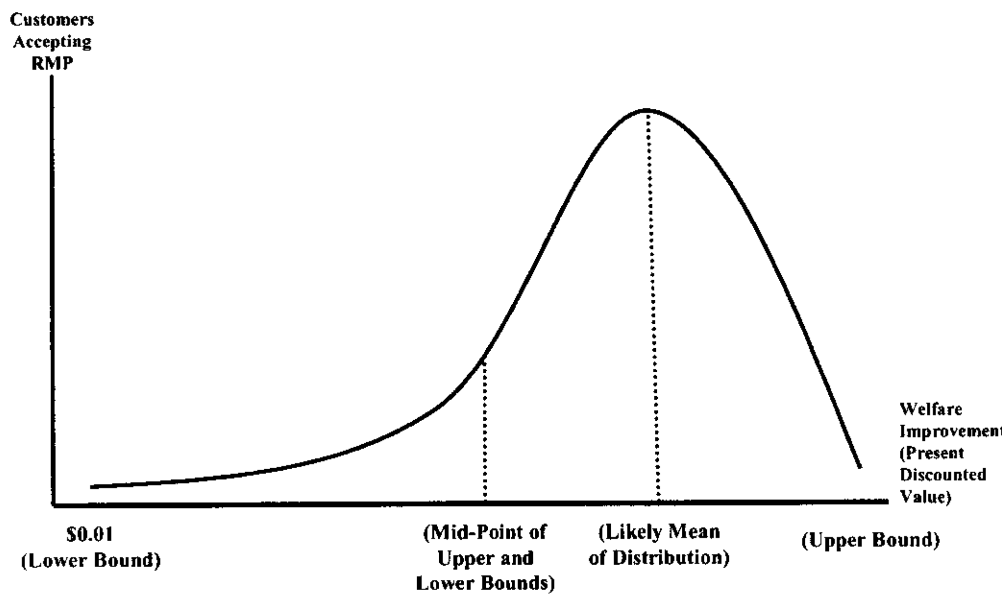
[23] Recall that, for offers that extent over more than 12 months, these values represent the present discounted value of the offer, discounted at a five percent discount rate.

**Figure One:**
**Distribution of Savings for Customers Accepting Retention Marketing Program Offers**




43. As noted above, based on historical data, I estimate that approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] consumers will accept retention marketing program offers during any given 12 month period. The approximate annual welfare gains to consumers resulting from the higher valuations they place on Verizon's retention marketing program offer relative to competitors' offers is thus between [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] and [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY].

44. The total annual welfare gains to consumers from Verizon's retention marketing program are the sum of the incremental valuation they place on the retention marketing program

offer plus the avoided time costs of switching carriers. Adding the annual avoided time costs of switching carriers (approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] to the figures above yields approximate total annual welfare gains from the program of between [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] This is the harm consumers would suffer directly in the 12 months immediately following a decision by the FCC to ban the retention marketing program.

**B. The Retention Marketing Program Avoids Additional Deadweight Losses Associated with Switching Carriers**

45. As discussed above, competitors also incur non-recoverable sunk costs in switching consumers from Verizon's services to their own, and these costs also represent pure deadweight loss, as they are incurred to facilitate a switch which, in and of itself, reduces overall economic welfare.

46. I consulted analyst reports on the incremental costs incurred by cable companies to establish VoIP telephone service for each new consumer, and found that cost to be estimated at $255 per incremental customer.[24]

47. Multiplying this figure by the total number of uneconomic switches avoided by the retention marketing program each year (approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] ) yields additional annual economic welfare gains from the retention marketing program of approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY]. This is the additional amount of economic harm that would result from an FCC decision to ban the retention marketing program during the 12 months

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[24] See InStat, *The Worldwide Market for Cable Telephony Services* (April 2007) at Table 5. Note that this figure is the most conservative I could have chosen, as it reflects the incremental cost of premise-powered (as opposed to network-powered) service using VoIP (as opposed to circuit-switched) technology. The incremental cost of network-powered VoIP service is $280 per subscriber; the incremental cost of circuit-switched cable telephony is $345. (See *id.* at Tables 4 and 6.)

immediately following the decision. Again, these costs cannot be avoided by alternatives such as win-back programs, which take effect only after the ill-informed, welfare-reducing switch has occurred.

### C. The Total Economic Welfare Cost of Banning the Retention Marketing Program Are Substantial

48. Adding the consumer welfare gains from the retention marketing program (approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] ) to the additional welfare gains calculated immediately above (approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] ) yields an estimated total annual welfare gain from the retention marketing program of between approximately $16 million and $17 million. However, these figures represent only the welfare loss that would occur during the first 12 months following an FCC ban of the program. The total impact on economic welfare of such a decision is the present discounted value of the economic welfare loss over the life of the program.

49. While I am aware of no plans on Verizon's part to terminate (or alter in any way) the program at any time in the future, I calculated the total welfare loss on the conservative assumption that the program would run for five years. To do so, I assumed that the program would continue to operate at the current rate, and that it would continue to offer the current range of discounts. Thus, over five years, I assumed that approximately [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] consumers would benefit from retention marketing program discounts, and that the other economic benefits of the program (in both time costs and avoided sunk costs incurred by cable companies) would continue at current rates. Based on these assumptions, and discounting benefits in the "out" years at a five percent discount rate, I estimate that the discounted present value of the economic welfare losses from

banning the retention marketing program would be between approximately $74 million and $79 million.

**Table One:**
**Welfare Costs of Banning the Retention Marketing Program**

| | **Annual Cost** | **Five-Year Cost**[25] |
|---|---|---|
| **Incremental Value of Retention Marketing Program Offers to Consumers** | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] |
| **Consumer Avoided Sunk Costs** | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] |
| ***Direct Consumer Benefits (Subtotal)*** | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] |
| **Carrier Avoided Sunk Costs** | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] | [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] |
| **TOTAL** | **$16 million - $17 million** | **$75 million - $79 million** |

## V. CONCLUSION

50. Verizon's retention marketing program is pro-consumer and pro-competitive. It provides consumers timely and accurate information, which they use to make welfare-increasing decisions. The value of the consumer information provided through the program is demonstrated by the high rates at which consumers participate. As a result of their participation, consumers are able to choose services which they find, *prima facie*, to be superior to the ones they would otherwise have purchased, and the difference is substantial – between [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] over five years.

[25] Figures do not add to totals due to rounding. See Exhibit C for un-rounded figures.

Taking into account the costs consumers would otherwise incur switching carriers, the direct consumer benefits total between [BEGIN HIGHLY PROPRIETARY] [END HIGHLY PROPRIETARY] All told, the retention marketing program increases economic welfare by between $75 million and $79 million over five years. Furthermore, the vast majority of these gains are unique to the retention marketing program, and cannot be achieved through increased "win-back" advertising or other means.

51. The welfare gains associated with the retention marketing program are a direct result of consumer sovereignty – fully informed consumers making utility maximizing choices among competing providers of comparable services. As such, they represent the essence of *gains from competition:* They are precisely the benefits Congress anticipated when it passed the 1996 Telecommunications Act, and which the Commission has struggled so hard to achieve through its implementation of the Act. To ban the retention marketing program on the grounds that it *harms* competition, as complainants suggest, would be Orwellian indeed.

Exhibit A

*February 2008*

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**Education**

Ph.D. in Economics, University of Virginia, 1985
B.A. in Economics, Claremont McKenna College, 1979

**Professional Experience**

Chairman, Criterion Economics, LLC, June 2006-present
Chairman, The CapAnalysis Group, LLC, July 2005-May 2006
Executive Vice Chairman, The CapAnalysis Group, LLC, February 2003-July 2005
President, The Progress & Freedom Foundation, June 1993-January 2003
Executive Director, GOPAC, July 1991-May 1993
President, Washington Policy Group, Inc., March 1988-June 1991
Director of Research, Pete du Pont for President, Inc., September 1986-February 1988
Executive Assistant to the Director, Office of Management and Budget, 1985-1986
Special Advisor for Economic Policy and Operations, Office of the Chairman, Federal Trade Commission, 1984-1985
Economist, Bureau of Economics, Federal Trade Commission, 1983-1984
Special Assistant to James C. Miller III, Office of Management and Budget/Presidential Task Force on Regulatory Relief, 1981
Research Associate, American Enterprise Institute, 1979-1981
Consultant, Economic Impact Analysts, Inc., 1980
Research Assistant, Potomac International Corporation, 1978

**Teaching Experience**

Adjunct Professor, George Mason University School of Law, 2000-present (Courses Taught: The Law and Economics of the Digital Revolution; Seminar on Government Regulation)
Adjunct Lecturer, Harvard University, John F. Kennedy School of Government, 1995-1999 (Course Taught: The Role of Government in the 21st Century)
Adjunct Professor, George Mason University, 1989 (Course Taught: Principles of Economics)
Adjunct Professor, Virginia Polytechnic Institute and State University, 1985, 1988 (Courses Taught: Graduate Industrial Organization, Principles of Economics)
Instructor, University of Virginia, 1983-1984 (Courses Taught: Value Theory, Antitrust Policy)
Teaching Assistant, University of Virginia, 1982-1983 (Courses Taught: Graduate Microeconomics, Undergraduate Macroeconomics)

**Awards, Activities and Concurrent Positions**

Member, Board of Advisors, Washington Mutual Investors Fund, 2008-present
Member, Board of Advisors, Pew Project on the Internet and American Life, 2002-present
Member, Board of Directors, The Progress & Freedom Foundation, 1993-present
Member, Attorney General's Identity Theft Task Force, Virginia, 2002
Member of the Board of Directors, Privacilla.com, 2002-2003
Member, Executive Board of Advisors, George Mason University Tech Center, 2001-2004
Contributing Editor, *American Spectator*, 2001-2002
Member, Bush-Cheney Transition Advisory Committee on the FCC, 2001
Member, Governor's Task Force on E-Communities, State of Virginia, 2000-2001
Member, 2000-2001 Networked Economy Summit Advisory Committee, 1999-2001
Member, Board of Directors, Internet Education Foundation, 1998-2003
Member, Internet Caucus Advisory Committee, 1998-2003

Member, American Assembly Leadership Advisory Committee, 1996 -2002
Member, Commission on America's National Interests, 1995-2000
Adjunct Scholar, Hudson Institute, 1988-1991
Visiting Fellow, Heritage Foundation, 1988-1991
President's Fellowship, University of Virginia, 1981-1984
Earhart Foundation Fellowship, University of Virginia, 1981-1983
Member, Reagan-Bush Transition Team on the Federal Trade Commission, 1981
Henry Salvatori Award, Claremont Men's College, 1979
Frank W. Taussig Award, American Economic Association, 1978

**Publications and Major Presentations**

"Irrational Expectations: Can a Regulator Credibly Commit to Removing an Unbundling Obligation?" (with Hal J. Singer), AEI-Brookings Joint Center Related Publication 07-28. December 2007

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*In the Matter of Verizon's 2007 Price Cap Plan for the Provision of Local Telecommunications Services in the District Of Columbia*, District of Columbia Public Service Commission, Formal Case No. 1057, Rebuttal Testimony (January 31, 2008)

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Exhibit B Redacted

Exhibit C Redacted