Exhibit No. ____ (WET-4T)
Docket No. UT-050814
Witness: Dr. William E. Taylor

BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Joint Petition of	)	
Verizon Communications Inc. and MCI, Inc.	)	**Docket No. UT-050814**
for Approval of Agreement and Plan of Merger.	)	

REBUTTAL TESTIMONY OF
DR. WILLIAM E. TAYLOR

ON BEHALF OF

VERIZON COMMUNICATIONS INC. AND

MCI, INC.

REDACTED VERSION

October 6, 2005

TABLE OF CONTENTS

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is William E. Taylor. I am a Senior Vice President of NERA Economic Consulting ("NERA"), head of its Communications Practice, and head of its Boston office located at 200 Clarendon Street, Boston, MA 02116.

Q. ARE YOU THE SAME WILLIAM TAYLOR WHO PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes, I submitted direct testimony in this proceeding on June 28, 2005, on behalf of Verizon Communications Inc. ("Verizon") and MCI, Inc. ("MCI") (collectively, the "Parties").

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to claims made in the testimonies submitted on September 9, 2005, by Thomas L. Wilson, on behalf of the Staff of the Washington Utilities and Transportation Commission (the "WUTC"), Don J. Wood, on behalf of XO Communications Inc. and Covad Communications Company ("XO"), Trevor R. Roycroft, on behalf of the Public Counsel Section of the Washington Attorney General (the "PC"), and Joseph Gillan, on behalf of Covad Communications Company ("Covad"). I address, among other things, Mr. Wilson's discussion of market concentration; Mr. Wood's claims about the competitive impact of the merger on what he considers the market for midsized businesses; Dr. Roycroft contentions about competitive

and policy issues associated with the merger; and, Mr. Gillan claims about the effect of the transaction on services provided over the Internet backbone.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE INTERVENORS' ANALYSES OF THE EFFECTS OF THE ACQUISITION, IF ANY, ON COMPETITION.

A. My review of the intervenors' testimony does not change my conclusions regarding the competitive effects of the merger—that is, it will not adversely affect mass market or enterprise competition in Washington. The Commission should assess the *incremental* effects of the transaction and should not allow the intervenors' unfounded claims regarding the amount of market power that Verizon allegedly has today to distract from the key competitive issue to be examined here—that is, whether the transaction will substantially increase the companies' power to control prices in Washington. The data show that the merger will not have that result.

- MCI's mass market business is and has been in a continuing and irreversible decline. As discussed in my Direct Testimony (at 55), MCI does not offer facilities-based mass market local services in Washington and the relatively low UNE-P rates on which MCI's mass market business has depended have been replaced with higher rates under commercial contracts. MCI has already begun to increase the rates it charges retail customers served using the UNE-P replacement product. Further, because MCI's commercial agreement with Verizon provides for additional increases in MCI's costs each year, it is likely that MCI would continue to increase its retail rates for mass market customers, rendering it less competitively attractive in the eyes of consumers. Thus, regardless of how the market is defined, the merger will not harm competition for residential or small business customers because MCI does not now and would not in the future constrain Verizon's prices for services provided to those customers.

- In addition to the fact MCI's mass market business is in a substantial and irreversible decline, it is clear that competition for these customers will not be harmed because: (1) there are numerous alternative services available; and (2) there are no longer substantial barriers to entry into the mass market as evidenced by that fact that cable and wireless companies have already deployed their own "last mile" facilities in many areas of the state and are already using them to provide residential customers service, including voice services, in competition with Verizon.

- Enterprise customers are sophisticated purchasers of communications services who typically use competitive procurement methods to obtain high quality, competitively priced services from a diverse array of providers, including interexchange carriers ("IXCs"), global systems network providers, competitive and data local exchange carriers ("CLECs/DLECs"), systems integrators, equipment manufacturers, wireless providers, cable companies and VoIP providers.

- Verizon and MCI are not major competitors for enterprise customers. In fact, an internal study of more than 800 instances where MCI bid on enterprise contracts between October 1, 2004, and April 20, 2005, showed that Verizon was not a bidder in more than 96 percent of them.

- MCI's facilities overlap with Verizon's in Washington is extremely small, and in areas where overlap exists, other competitors have deployed fiber.

- MCI is not uniquely situated as a purchaser or reseller of special access.

- Other CLECs currently serve many more buildings in Verizon's territory in Washington than MCI. Other CLECs also serve some of the buildings served by MCI and have fiber facilities close to the remaining buildings.

- Verizon and SBC already compete with each other out-of-region, and, consistent with the principal purpose of the transaction, Verizon will continue to compete with SBC out-of-region when

the transaction is completed. Claims that these two companies will collude to inflate prices for these services are nonsensical.

The data provided by the other parties substantiates these conclusions, despite the fact that their analyses are flawed in ways that understate the degree of competition faced by Verizon and overstate the effects of the merger on market power.

- As in my analysis, Mr. Wilson recognizes the significance of intermodal competition, stating:

  > Much more activity is occurring in the relevant market than appears under direct Commission oversight. For example, intermodal offerings of analog and digital services via wire and non-wireline transmission technologies are often presented as competitive alternatives, in whole or in part, to what Verizon currently offers in the relevant market.
  >
  > Applicants both compete with VOIP/Internet, cable TV companies, wireless (wi fi, wi max, microwave, low-earth-orbit satellite), public utility districts (PUDs), Noanet, municipal networks and private/public partnerships, and broadband over power line (BPL), to name a few unregulated alternatives. ***I do not dispute that intermodal competition should be an important element of the analysis….***

- Although Mr. Wilson incorrectly excludes these alternatives from his subsequent analyses, his results nevertheless show that the merger will not harm competition for any of the service types that he analyzes.

  - For "residential local exchange lines," Mr. Wilson states (at 14) that "MCI is Verizon's number one competitor, with 0.7 percent market share ***and virtually no market power.***" Of course, if MCI has "virtually no market power" or market share, the merger cannot possibly cause harm for residential customers. This is particularly so given that Mr. Wilson's analysis of residential local exchange lines excludes intermodal options and the current market share data that he used in his analysis ignores MCI's downward trend for residence services. Had Mr. Wilson included these alternatives and considered

MCI's declining market share in his analysis, it would show that MCI's insignificance as a competitor is even more pronounced.

- For "business local exchange service," Mr. Wilson finds (at 16) that "MCI is the seventh largest CLEC, selling business local exchange services to less than one percent of the lines" and that "after the merger Verizon's market power will increase in two wire centers from below 5,000 to above 5,000 and its market share will increase by less than one percent." Moreover, his pre- and post-merger average business access line HHI increases by only 59 points. Even accepting Mr. Wilson's analysis as accurate (and it is not), it only serves to prove that the transaction presents no concern for competitive harm to "business customers."

- Similarly, Dr. Roycroft's HHI calculations present no basis for concluding that the transaction will adversely affect mass market competition. Although Dr. Roycroft uses a static analysis that disregards intermodal competition and MCI's decision to manage the decline of its mass market business, it shows the merger would increase Verizon's market share by only about eight-tenths of 1 percent for residence and nine-tenths of 1 percent for business, and the HHIs would increase by only 163 for residence and 114 for business.

As I explain below, the intervenors' analyses are flawed because they define the relevant markets incorrectly, and they rely to an undue extent on HHI calculations that reflect their flawed market definitions; therefore, they distort the transaction's impact on competition. Yet, regardless of whether the Commission accepts my definition of the relevant market or one of the intervenors' proposed definitions, the transaction will not harm competition for mass market customers because:

- MCI has never focused on the mass markets as defined by the intervenors. Both Dr. Roycroft and Mr. Wilson claim that the relevant markets consist of "local exchange lines (residential and business local exchange service)." However, since it entered the area served by Verizon in Washington, MCI never focused on any of these "markets." Rather, as anyone familiar with MCI's "The Neighborhood" plan knows, MCI has focused its mass market efforts on providing *bundled* local and long distance services to

residential customers. Thus, the proposed transaction has little adverse impact, if any, on competition as MCI does not focus on any of the "markets" intervenors have defined or considered in their analyses.

- While Verizon's basic local exchange rates average about $22 per line for flat rate basic local residential exchange service, MCI's Neighborhood offering costs residential customers about $50 per line per month. Moreover, as shown below, MCI's rates are higher than those of other competitors' bundled service offerings. Thus, MCI's price does not constrain Verizon's basic exchange rates.

I discuss all of these shortcomings and conclusions in detail later.

Q. HOW IS THE REST OF YOUR TESTIMONY ORGANIZED?

A. In Section II, I discuss Mr. Wilson's and Dr. Roycroft's analyses of mass market competition (by which I mean competition for residential and small business customers) in Washington. I demonstrate the flaws in those analyses and the fallacies and inconsistencies in the witnesses' conclusions based on those flawed analyses. In Section III, I demonstrate that the proposed transaction will not adversely affect enterprise competition (by which I mean competition for medium- to large-sized business customers) in Washington. In particular, I respond to Mr. Wood's claim that midsized businesses constitute a separate market for which the transaction would cause harm. I explain that his market definition is overly narrow and discuss the fallacies in his market structure and analyses. I also address why the transaction will not harm competition for wholesale fiber facilities or for Internet backbone services, and why an expansion of the unbundling obligations, as suggested by Mr. Wood, is not justified.

II. THE TRANSACTION WILL NOT HARM COMPETITION FOR MASS MARKET CUSTOMERS IN WASHINGTON

Q. HOW DO YOU DEFINE THE MASS MARKET?

A. In my Direct Testimony (at 48), I defined the mass market to include residential and small business customers, who typically buy local, long distance, and other services (such as Caller ID, call waiting, and other vertical features) as a bundle of services.

Q. WHAT DID YOU CONCLUDE ABOUT THE TRANSACTION'S EFFECT ON COMPETITION FOR MASS MARKET CUSTOMERS IN WASHINGTON?

A. The merger will not harm competition for mass market customers in Washington for at least two reasons: MCI's mass market business is in a state of irreversible decline; and (2) numerous other competitors are already serving mass market customers in competition with Verizon in Washington.

Q. WHAT MAJOR SOURCES OF MASS MARKET COMPETITION WILL REMAIN IN PLACE EVEN WITH THE MERGER?

A. Competition will continue to come from CLECs, cable companies providing digital telephony, wireless providers, broadband and Internet services providers, and VoIP providers. The transaction will not harm intermodal competition, which is already making significant inroads into Verizon's wireline services and which is expected to grow substantially in the near term.

Q. HOW DO YOU RESPOND TO THE CRITICISMS BY THE INTERVENORS REGARDING YOUR ASSESSMENT OF THE MERGER?

A. The intervenors either incorrectly read my testimony or simply do not understand it. Further, as I said before, no reasonable analysis can show any market power impact when the transaction consolidates market shares of less than 1 percent from a provider whose mass market business is steadily declining anyway. Those facts alone are enough to conclude the inquiry, in full compliance with the *Merger Guidelines*, and no amount of verbiage or incorrect HHI calculations can show otherwise. In any event, the criticisms should be rejected for several reasons.

First, the *Merger Guidelines* do not prescribe the kind of rote application of market definition or HHI analyses that Mr. Wood and Dr. Roycroft claim I should have considered here. Rather, they merely provide a useful organizing device for considering issues related to market definition, market power, and competitive effects. In addition, the intervenors have misapplied the *Merger Guidelines* in this environment of rapid technological change.

Second, contrary to the intervenors' claims, my definition of the "mass market" is consistent with economic principles and the *Merger Guidelines'* approach to defining a relevant market. As I explained in my Direct Testimony (at 5) and explain in detail here, the services provided by cable companies, wireless companies, Internet and broadband services providers, and VoIP providers are all sufficiently close substitutes and should be included in the relevant market to be

analyzed. These services currently constrain the price of Verizon's wireline residential basic local exchange service and, in fact, would constrain a hypothetical wireline monopolist's effort to raise prices above competitive market levels. The intervenors' support for the narrow market definitions they adopt is based on flawed applications of the *Merger Guidelines* and ignores the reality of the marketplace in Washington and throughout the country.

Third, the fact that I did not explicitly perform a market definition test does not mean, as the intervenors incorrectly claim, that my market definition is inconsistent with such a test; nor does it mean that I failed to follow the *Merger Guidelines*. I presented data sufficient to show that intermodal alternatives belong in the mass market for Washington:

- Wireline access lines have been declining as wireless and broadband alternatives have been on the rise. For example, in Washington, FCC data show that mass market access lines (CLEC plus ILEC) have dropped by 8 percent from the end of 2001 to the end of 2004, whereas wireless subscribers have grown by 40 percent and mass market broadband lines have grown by 188 percent in that same period.[1]

- These disparate trends have brought Washington to the point where the number of wireless subscribers and residential and small business broadband lines exceed the number of residential and small business ILEC plus CLEC lines by almost 2 million lines (or 40 percent).[2]

[1] See FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, "Trends in Telephone Service," June 21, 2005, Table 10.2 ; see also FCC, "High-Speed Services for Internet Access: Status as of December 31, 2004," July 7, 2005, Table 11.

[2] *Id.*

- Wireline usage has been declining as wireless usage has been growing. Wireline interLATA access minutes declined over 8 percent per year, on average, from 2000 to 2003.[3] Wireless minutes-of-use increased 49 percent per year, on average, from 2000 to 2003.[4]

The fact that a formal market definition test is not required here is perhaps best demonstrated by the fact that not one of the intervenors performed such a test themselves. Mr. Wood (at 6) refers to "rigorous economic analyses" and (at 9) to "market-specific and fact-intensive analysis" when describing what he views as a proper merger review. Curiously, however, Mr. Wood is not "walking the talk," as he offers no empirical analysis whatsoever in his review of the competitive impact of the merger. Similarly, Dr. Roycroft provides hardly any evidence in his testimony on this issue, and the evidence he presents is flawed and inconsistent with economic principles.

Q. HOW DO YOU RESPOND TO THE CLAIMS THAT YOU FAILED TO CONDUCT A FORMAL IMPACT ANALYSIS USING THE HHI?

A. I followed the *Merger Guidelines* but did not perform an HHI calculation for four reasons. *First*, it is crucial to emphasize that the *Merger Guidelines* require a forward-looking analysis and that such an analysis shows that MCI is managing the decline of its mass market business, is not now, and would not in the future be a meaningful competitor that constrains Verizon's prices in the relevant mass

[3] *Id.*

[4] See CTIA, "CTIA-The Wireless Association's Semi-annual Wireless Industry Survey Results December 1985–December 2004," March 14, 2005, p. 8 <http://files.ctia.org/pdf/CTIAYearend2004Survey.pdf> (September 15, 2005).

market. Accordingly, MCI's forward-looking share—the incremental impact of the merger—is near zero and no HHI calculation is required to conclude the transaction will not harm competition for mass market customers.

Second, given the dynamics transforming the industry, HHI calculations based on past or even current market shares (such as the ones performed by Mr. Wilson and Dr. Roycroft) are not appropriate for this transaction. They are misleading because the question of whether a transaction will injure competition is necessarily predictive and *forward-looking*.[5] Indeed, Dr. Roycroft (at 70) quotes a passage from the *Merger Guidelines*, which begins: "'Market shares will be calculated using the best indicator of firm's future competitive significance.'" Yet he disregards this key aspect of the passage he quotes. Thus, reliance on historical or even current data understates the competitive significance of some providers and overstates the competitive significance of others. This consideration was deemed particularly important by the California state Attorney General, who has issued a formal opinion recommending approval of the Verizon/MCI transaction and who observed that "The HHI is relatively useful, for example, in assessing mergers in static, dominant-firm industries [but] is less useful in predicting effects in regulated or highly dynamic industries or in mergers

[5] Specifically, the *Merger Guidelines* (at 2) state: "Moreover, information is often incomplete and the picture of competitive conditions that develops from historical evidence may provide an incomplete answer to the *forward-looking* inquiry of the Guidelines. Therefore, the Agency will apply the standards of the Guidelines reasonably and flexibly to the particular facts and circumstances of each proposed merger." [Emphasis added.]

between firms supplying differentiated products."[6] More specifically, there is strong evidence that intermodal services have been acting, and will continue to act, as substitutes for wireline services. Thus, to the extent an HHI is appropriate, the correct forward-looking application of the *Merger Guidelines'* test would not yield results as high as those that Dr. Roycroft and Mr. Wilson present.

Third, although HHI calculations are sometimes used by the DOJ or the FTC in merger reviews, they carry nowhere near the weight that the intervenors suggest. HHIs can be useful as screens to determine whether a merger merits further investigation. However, they should not be seen as an end in themselves, and, at times, they can be highly misleading indicators of market power. Indeed, there are cases in which HHIs played no role in the evaluation of a merger.[7] Moreover, it is well known that a number of mergers with HHIs significantly above the thresholds in the *Merger Guidelines* have not been blocked by the antitrust authorities.[8] For instance, when Cingular and AT&T Wireless merged, the DOJ

[6] In the Matter of the Joint Application of Verizon Communications Inc. ("Verizon") and MCI, Inc. ("MCI") to Transfer Control of MCI's California Utility Subsidiaries to Verizon, Which Will Occur Indirectly as a Result of Verizon's Acquisition of MCI before the Public Utilities Commission of the State of California, Application No. 05-04-020, "Opinion of the Attorney General on Competitive Effects of Proposed Merger of Verizon Communications, Inc. and MCI, Inc.," issued September 16, 2005, p. 11.

[7] The FTC and the DOJ note that "in a relative handful of cases, the Agencies never determined both the market shares of the merging firms and the level of market concentration." FTC/DOJ, "Merger Challenges Data: Fiscal Years 1999-2003," December 18, 2003, p. 3.

[8] See FTC/DOJ, "Merger Challenges Data: Fiscal Years 1999-2003," December 18, 2003. Referencing the *Merger Guidelines*, the report (at 2) notes that "market shares and concentration data provide only the starting point analyzing the competitive impact of a merger." *See also*, Malcolm B. Coate, "Economic Models in Merger Analysis: A Case Study of the Merger Guidelines," Potomac Working Paper in Law and Economics 05-04, May 2005, Table 3-b. According to Coate, in collusion cases, 9 (of 18) mergers with HHI's from 2400-2999 AND deltas from 200-499 were closed. For HHI's over 3000 and deltas over 500, 6 of 21 were closed (i.e., the FTC took no action to challenge the transaction).

sought remedies only with respect to a handful of the 450 Component Economic Areas and Cellular Market Areas in which strict application of the HHI thresholds identified suggested that the merger warranted further scrutiny.[9] And those few areas had post-merger HHIs that "range[d] from approximately 4400 to more than 8000, with increases in the HHI as a result of the merger ranging from approximately 1100 to more than 3500."[10] The HHI calculations done by the intervenors all fall within the range of HHIs that the DOJ has calculated in other mergers that it has approved.

Fourth, a more practical, but nonetheless serious concern is the fact that it is virtually impossible to obtain accurate market-share information concerning each of the many communications services providers serving mass market customers today (e.g., wireless providers, Internet and broadband providers, and VoIP providers). In fact, as I discuss in detail later, Mr. Wilson (at 4–5) fully admits that while "intermodal offerings of analog and digital services via wire and non-wireline transmission technologies are often presented as competitive alternatives in part or in whole to what Verizon currently offers in the relevant

[9] See *United States v. Cingular Wireless Corp.*, No. 04-CV-1850 (D.D.C. Nov. 3, 2004) Final Judgment, pp. 3–7; *see also* Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corp., For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, 19 FCC Rcd 21522 (2004) ¶¶ 104, 110 ("AT&T Wireless-Cingular Order"). The FCC similarly found that remedies should be imposed with respect to very few of the markets identified through HHI calculations as warranting further investigation. *See id*. ¶ 184 ("we have concluded that, as a general matter, even the markets identified for further review by our preliminary HHI and spectrum analysis are unlikely to suffer anticompetitive effects as a result of the merger."). In the few instances in which the FCC did impose remedies, it did so only after an extensive and detailed analysis. *See id*. ¶¶ 193–200 and Appendix D.

[10] Competitive Impact Statement, p. 11, *United States v. Cingular Wireless Corp.*, No. 04-CV-1850 (D.D.C. filed Oct. 29, 2004).

market," his analysis of the transaction's effect on competition did not account for any of these "intermodal offerings" simply because Mr. Wilson was unable to obtain market share data pertaining to these other competitors. Rather than abandoning his effort to calculate an HHI in light his inability to obtain all of the necessary data, he omitted all intermodal competition from his review and in so doing overstated the HHIs.

The difficulty of gathering complete and reliable market share data virtually forecloses the possibility of performing a reliable HHI calculation. Thus, there is little reason even to attempt to calculate HHIs, when any such calculation would have little if any chance of producing a meaningful assessment of this transaction.

Q. WHAT DO THE INTERVENORS CLAIM REGARDING THE TRANSACTION'S EFFECT ON COMPETITION FOR MASS MARKET CUSTOMERS?

A. Mr. Wilson's conclusion regarding the transaction's effect on competition for mass market customers is unclear. Although he (at 14) concludes that the market for residential local exchange service is already highly concentrated in the areas where Verizon operates, he does not perform any post-merger concentration analysis in this "market" and offers no conclusions about how, in his view, this merger will affect competition.

Dr. Roycroft (at 4) claims that the transaction will lead to a "significant decrease in competitive activity in Verizon's Washington service area following the

merger," which will "extend to mass market consumers in Qwest's service area." Dr. Roycroft (at 76) further claims: "the merger will result in an increase in Verizon's market power especially in the residential market." He (at 81) concludes that "[t]here is substantial evidence that the merger will result in competitive harm, and there is no evidence that any countervailing influences to the merger harms will be emerging in Washington."

Q. DO YOU AGREE WITH THE INTERVENORS' CONCLUSIONS?

A. No. The intervenors' competitive analyses are fundamentally flawed because: (1) they fail adequately to account for the fact that MCI does not now and would not in the future constrain Verizon's prices; (2) they begin with overly narrow definitions of the geographic and the service market; and, in particular, they ignore all forms of intermodal competition which as a matter of economics and business realities, should be included in the relevant market; and (3) they place undue reliance on flawed HHI calculations.

A. The Intervenors Overstate MCI's Competitive Significance

Q. PLEASE EXPLAIN HOW INTERVENORS FAILED TO ASSESS THE SIGNIFICANCE OF MCI AS A COMPETITOR FOR MASS MARKET CUSTOMERS.

A. Mr. Wilson, Mr. Wood, and Dr. Roycroft all fail to consider the fact that MCI does not now, and would not in the future be capable of constraining Verizon's prices. Currently, MCI provides local and integrated local/long distance service

in Verizon's service territory through a commercial agreement to resell Verizon's UNE-Ps.[11] But, MCI is now a less important competitive force because, as Mr. Beach explains, MCI made a business decision before it agreed to merge with Verizon to "manage the decline" of its mass market business and to focus instead on its enterprise business (where Verizon is not a formidable competitor). As part of its plan to manage the decline, MCI has been increasing its prices by adding new fees and charges. Since September 2004 (before any increase in wholesale costs), MCI has increased the total price paid by consumers for MCI's Neighborhood Unlimited by $4.02 per month, on average, in the Verizon region.[12] Price increases are likely to continue because the agreements MCI has negotiated with Verizon and other incumbents provide for periodic wholesale rate increases. MCI's commercial agreement with Verizon affects this increase through a monthly per-line surcharge to be added to former UNE-P rates.

MCI's prices are already above the prices charged by intermodal competitors. MCI's unlimited all-distance product in Washington excluding fees and surcharges is priced at $49.99 in the former GTE's zones 1–4 and $54.99 in former GTE's zone 5. (Its price is about $11 higher on average in Washington when fees and surcharges are included.) For the same unlimited all-distance

[11] The Verizon/MCI commercial agreement was negotiated after the elimination of UNE-P in the FCC's TRRO decision.

[12] In particular, in September 2004, MCI increased the Carrier Cost Recovery Charge for stand-alone long-distance service to $0.85. In 2005, with the FCC's TRRO Order, MCI increased rates by $1.90 per month nationally, including in Washington. Beach Direct Testimony, pp. 17–18.

product, Comcast charges $39.95. T-Mobile charges $39.99 for a wireless plan that includes 600 "whenever" minutes and unlimited nights and weekends. Vonage charges $24.99 for its unlimited all-distance VoIP service. Other VoIP services such as those offered by BroadVoice and Packet 8 are even less.[13] Even when the price of a broadband line is added to the price of VoIP, the price is still competitive with MCI's price, which, of course, does not include any broadband at all. The same divergence exists in markets across the nation.[14]

Q. HOW HAVE THESE DEVELOPMENTS AND INTERMODAL COMPETITION AFFECTED MCI?

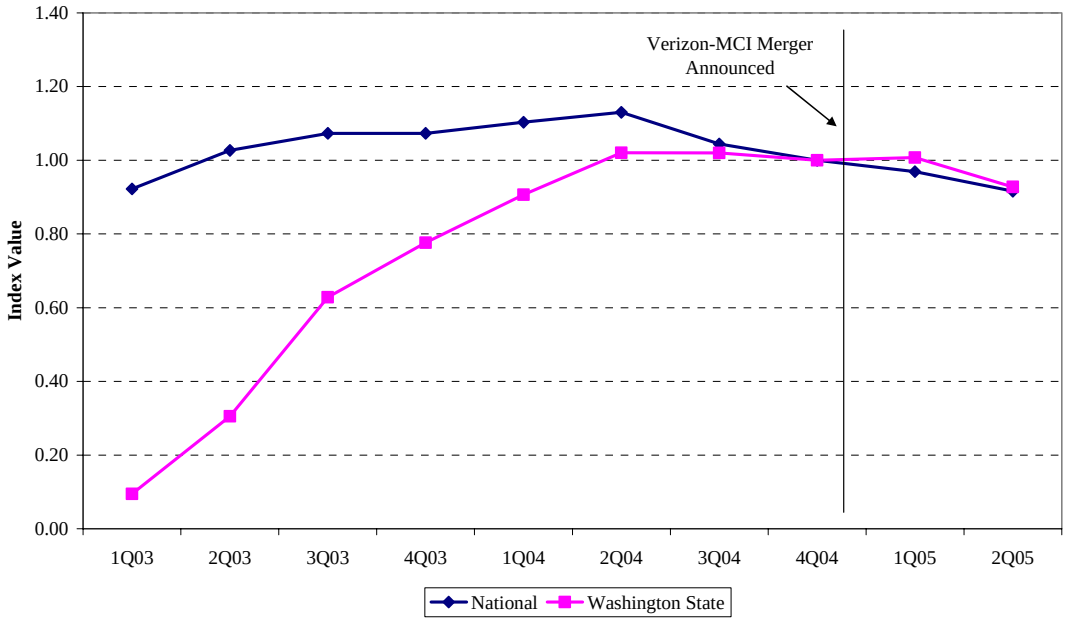
A. As a result of these developments and intermodal competition, MCI's revenues, lines, and mass market customer base have been shrinking. Figure 1 summarizes how MCI's residential lines have been declining in Washington and nationally since the merger was announced.

[13] See BroadVoice, Rate Plans <http://www.broadvoice.com/rateplans.html> (September 15, 2005).

[14] See Opening FCC Application, Hassett et al. Declaration, Exhibit 2, pp. 2–50.

Figure 1

Indices of MCI Residential Lines In Washington State and All Major ILEC Territories



Q. DR. ROYCROFT ASSUMES THAT MCI COULD HAVE ENTERED AND DIRECTLY COMPETED IN THE VOIP MARKET. IS THAT A VALID ASSUMPTION?

A. No. As Mr. Beach explains, MCI could not have revived its mass market business through a commercial VoIP offering, if MCI were ever to seek to expand beyond its current limited market trial. MCI's mass market business had been built in the past through reliance on telemarketing. If it were to compete for VoIP customers against Vonage, Yahoo, and AOL who already command the attention of hundreds of millions of potential customers, it would, at best, be a late entrant that brings no unique advantages that would enable it to become a significant market participant alongside these large, well-financed early entrants.

Q. WHAT IS THE ECONOMIC SIGNIFICANCE OF MCI'S DECLINE INSOFAR AS THIS TRANSACTION IS CONCERNED?

A. From an economic perspective, the most significant consideration in any analysis of whether this transaction will adversely affect prices is the fact that Verizon does not set its mass market pricing in response to MCI, and MCI could not be expected to constrain Verizon's pricing given the near certainty of future MCI price increases. While the intervenors rely on HHI calculations to gauge whether the transaction might adversely affect competition and thus affect prices for mass market customers, these facts about MCI's current effect on Verizon's prices are themselves sufficient to conclude that the transaction will not increase Verizon's ability to raise prices after the transaction. Moreover, while those HHI calculations are flawed in ways that I discuss later, when taken with the evidence of MCI's mass market decline, they do not lead to a conclusion that the transaction will harm competition for mass market customers.

B. The Intervenors' Definitions of the Relevant Market Are Incorrect

Q. HOW DO THE INTERVENORS DEFINE THE RELEVANT MARKET WHEN ANALYZING THE COMPETITIVE EFFECTS OF THIS TRANSACTION?

A. Mr. Wilson (at 2–3) defines the relevant (service) product market as "the market for local exchange lines" and the relevant geographic market as "the wire centers served by Verizon in Washington."

Dr. Roycroft (at 69) defines the product market as the "market for local exchange service, categorized by customer class." He does not explicitly define a geographic market but, by calculating HHIs using market shares of wireline providers within Verizon's service area in Washington, he implicitly defines the geographic market as Verizon's service area in Washington.

Q. SHOULD THE COMMISSION ADOPT ANY OF THESE DEFINITIONS FOR ITS OWN ANALYSIS OF THE TRANSACTION?

A. No. These definitions of the relevant geographic and product markets are overly narrow. Economists view a market as the set of offerings with which the service in question competes (i.e., the services that consumers would substitute if the price of the service in question were increased). The intervenors' definitions of relevant geographic and product markets do not account for how communications services are currently bought and sold; for example, they ignore the widespread availability of all-distance services from numerous providers that are now available and will remain available after the transaction.

1. The Intervenors' Definitions of the Relevant *Geographic* Market Are Overly Narrow

Q. WHY ARE MR. WILSON'S AND DR. ROYCROFT'S PROPOSED DEFINITIONS OF THE RELEVANT GEOGRAPHIC MARKET TOO NARROW?

A. In confining the market to Verizon's service area in Washington, or even more narrowly to individual Verizon wire centers within that area, these witnesses fail to account for the fact that communications services providers, particularly

intermodal competitors, are national in scope. As traditional regional companies like Verizon add VoIP services, they become national providers as well. Although wireless providers, including Cingular, Sprint/Nextel, and T-Mobile, have slightly different geographic coverage, they too compete nationally. Moreover, any customer with a broadband connection can purchase VoIP services from a number of competitors, including Vonage, Packet8, Lingo, and AT&T, and such services have no inherent geographic location. Although individual cable companies operate regionally, their cable networks span close to the entire country and already are being used to offer consumer bundled local and long distance voice services. Accordingly, whatever the precise contours of the geographic market, consumers are served by a number of national providers, many of whom can serve them in Verizon Washington's service area in response to an effort by Verizon to raise prices in that area. This suggests that the market is more properly defined as a national market. In the final analysis, however, the definition of the geographic market is of little, if any, significance because: (1) competitive forces are sufficiently widespread, and (2) MCI's and Verizon's relative positions are sufficiently similar throughout the nation and the state of Washington.

2. The Intervenors' Definitions of the Relevant *Product* Market Are Overly Narrow

Q. WHY IS MR. WILSON'S DEFINITION OF THE RELEVANT PRODUCT MARKET TOO NARROW?

A. Mr. Wilson (at 4) starts out with the right analysis, stating that "current theoretical discussion and case study of the communications sector, with attention to the role of regulation when competition exists, indicates that non-traditional, cross-industry, technology-neutral analysis based on functionality of the relevant market may be appropriate." Mr. Wilson (at 4–5) even acknowledges that "[m]uch more activity is occurring in the relevant market than appears under direct Commission oversight. For example, intermodal offerings of analog and digital services via wire and nonwireline transmission technologies are often presented as competitive alternatives in part or in whole to what Verizon currently offers in the relevant market." However, when he (at 5) finds that information on all these intermodal competitors is not readily available, he drops all such competition from his analysis and defines the relevant product market to include only "local exchange lines (residential and business local exchange service)." Mr. Wilson (at 5) admits that his analysis "represents only a sub-set of all the choices facing consumers in the relevant market, and it does not include facilities-based or intermodal competition."

Mr. Wilson's definition is in fact, too narrow. By defining the product market with reference to local exchange service only, Mr. Wilson makes at least two

errors. *First*, given that communications services are most frequently bought and sold as bundles of all-distance services today, there is no longer an economically meaningful distinction between local and long distance services such that it is improper to define the product market by reference to a single product such as local service. *Second*, as Mr. Wilson himself recognizes, communication services are no longer limited to those made on the local exchange company's "wireline" network, and consumers now communicate using services offered by a vast array of providers that use various technologies to enable those communications. These providers should be included with traditional wireline carriers in any analysis of the transaction's effect on competition.

Q. IS THERE MARKET EVIDENCE INDICATING THAT LOCAL EXCHANGE SERVICE IS NO LONGER A STAND-ALONE SERVICE?

A. Yes. I described this in detail in my Direct Testimony (at 45–47). To further understand why there is no longer a stand-alone local service market, consider wireless services, which are near-uniformly provided on an all-distance basis. This results in even stronger competition for wireline services when consumers make decisions on whether to add or drop lines, how many minutes to buy in different flat-rate plans, how many metered minutes to buy, and so on.

The movement to all-distance product offerings accelerated when wireless providers erased the distance distinction by offering consumers large quantities of minutes that they could use to call anywhere in the country for the same price.

The effect was to induce wireless subscribers to use wireless devices for long distance, which, in turn, reduced demand for wireline long distance services. As consumers became more accustomed to all-distance services, they became increasingly intolerant of extra charges for long distance calls from wireline providers. For this and other reasons, long distance minutes in particular shifted dramatically toward wireless.

In a similar vein, consider cable companies and VoIP providers. Much the same as wireless providers, these carriers typically do not distinguish between local calls and long distance calls. Instead, they offer consumers all-distance bundles. Cable companies and VoIP providers routinely offer telephone service as part of all-distance plans.

Because providers of every telephony technology offer services that no longer distinguish between local and long distance calls and because consumers increasingly purchase a wide range of all-distance services, formerly separate local and long distance communications markets have converged. There is no reason to believe that a hypothetical monopolist of only local or long distance service could profitably exercise market power without also controlling all-distance offerings. In addition, there is no economic or factual reason to limit the definition of the relevant product market to "local" service.

Q. ARE MR. WILSON'S ESTIMATES OF MARKET POWER CONSERVATIVE?

A. No. Mr. Wilson (at 9) states that his "estimates of Verizon market power in the relevant market are conservative, because [he does] not have the ability to include intermodal and facilities-based competition data in this case." In fact, however, his estimates based on current market shares likely ***overstate*** Verizon's market power for two reasons. *First*, given that telephone regulation historically gave ILECs exclusive franchises, and to this day distorts pricing by requiring below competitive market prices for basic services. One of the effects of such regulation is that market entry is less desirable. Wireline shares of the incumbent reflect this effect and do not provide any meaningful indication of market power. *Second*, more fundamentally and contrary to what Mr. Wilson says, his estimates of Verizon's market power are overstated because Mr. Wilson incorrectly excluded intermodal competition from his analysis.

Q. PLEASE EXPLAIN WHY DR. ROYCROFT'S DEFINITION OF THE RELEVANT PRODUCT MARKET IS TOO NARROW.

A. In determining the relevant product market, Dr. Roycroft fails to perform an appropriate analysis. Rather than assessing whether consumers will turn to competitive alternatives should the post-merged entity attempt to raise prices in an anticompetitive way, Dr. Roycroft discusses how intermodal services differ from wireline services such that, in his view, consumers would not use them as alternatives today. From an economics perspective, however, a service does not

have to be identical in all aspects for customers to treat them as substitutes. Regardless of the differences Dr. Roycroft lists between wireline and various intermodal services, the existence of such differences does not refute the findings I set forth in my Direct Testimony, that wireless, VoIP, cable, and other intermodal services are all economic substitutes for wireline services and, based on their behavior, consumers view them as such. Like the other two witnesses, Dr. Roycroft also does not offer any evidence countering these findings of strong intermodal competition in Washington.

Q. ARE THE METHODS THAT MR. WOOD AND DR. ROYCROFT USED TO DEFINE THE RELEVANT PRODUCT MARKET CONSISTENT WITH THE *MERGER GUIDELINES*?

A. No. Mr. Wood discusses the "hypothetical monopolist test" as his basis for defining the relevant product market. He (at 11) states:

> Pursuant to the Merger Guidelines, product or service markets are defined by the likely pricing behavior of a hypothetical entity that has a monopoly in that product market. The test is whether the hypothetical monopolist would be able to impose a relevant price increase (as defined below) for the products in the market. If the monopolist could profitably impose a price increase on a single product, then possible substitute products are by definition not sufficient to constrain prices and are not in the same relevant market.

However, Mr. Wood never conducted the test he advocates. In fact, the market evidence discussed in my Direct Testimony shows that—using this very test—voice-grade customers do not constitute a separate economic market. Dr. Roycroft (at 73) eliminates wireless from the relevant market in part because "the

limited data available indicates very little wireless substitution." Of course, if such factors eliminate wireless from the relevant market, the same is true of MCI's local and bundled services because, based on the intervenors' data, MCI has an even smaller share of local lines in Verizon Washington's than have likely substituted wireless for wireline service.[15] Thus, the analyses conducted by these witnesses are not only seriously flawed, but also inconsistent with the *Merger Guidelines*.

a. The intervenors improperly discount the significance of the vigorous cable competition in Washington.

Q. SHOULD CABLE COMPANIES BE INCLUDED IN THE RELEVANT MARKET?

A. Yes. In my Direct Testimony (at 65), I presented evidence showing that 95 percent of the 2.2 million homes passed by cable systems in Washington have broadband service (i.e., cable modems) available, and 50 percent of homes passed will have telephony available by the end of the year. All of the approximately 500,000 customers in Washington that have broadband over cable already can substitute ILEC services with VoIP.[16] The voice telephony offerings of cable providers already have led to price competition, and such price competition is expected to continue and accelerate. As one analyst observed, "the Bells appear to be responding to the VoIP threat with price cuts" on their calling plans as cable

[15] Similarly, he dismisses VoIP because he believes consumers are not "using stand-alone VoIP services, to any meaningful extent as substitutes for local exchange service…."

[16] See FCC High Speed Services for Internet Access: Status as of December 31, 2004, Table 7.

companies have begun to achieve significant market share in part due to their "aggressive pricing."[17] Accordingly, cable companies should be considered part of the relevant market to be analyzed here.

Q. DOES MR. WILSON CONSIDER CABLE COMPETITORS IN HIS ANALYSES OF THE TRANSACTION'S EFFECT ON MASS MARKET COMPETITION?

A. No. Although he acknowledges the importance of intermodal competition, Mr. Wilson completely ignores it in his analysis.

Q. DOES DR. ROYCROFT PROPERLY INCLUDE CABLE COMPETITORS IN HIS ANALYSES OF THE TRANSACTION'S EFFECT ON MASS MARKET COMPETITION?

A. No. Dr. Roycroft (at 72) includes the cable companies' provision of VoIP service in his HHI calculations "[i]f a cable TV provider is using VoIP, and provides E911 service to their customers." However, his analysis of cable telephony like his HHI analysis in general does not adequately consider cable because he takes a backward looking approach that ignores the likely and imminent growth of cable telephony. For example he (at 38) claims, that "cable CLEC activity has been negligible in Verizon's Washington service area" and suggests that it is "less than clear" whether these firms will be offering telephony service to all customers. He also claims that the services offered by cable CLECs "are not always comparable

[17] See J. Halpern, et al., Bernstein Research Call, Quarterly VoIP Monitor: The "Real" Price Gap for VoIP Driving Rapid Subscriber Growth, July 15, 2005, p. 5.

to basic telephone service," citing the possibility of power outages resulting in a disruption of cable provided digital telephony.

Q. DO YOU AGREE WITH DR. ROYCROFT'S ASSESSMENT OF CABLE COMPETITION?

A. No. In focusing solely on the number of customers that are actually receiving voice service from cable companies today, Dr. Roycroft fails to consider that Verizon's customers are able to switch to cable telephony at any time in the event Verizon tries to raise its prices above competitive levels.

As for the differences in service characteristics that Dr. Roycroft cites, these differences have evidently not been a deterrent to the growing number of customers who are switching to cable-provided voice service. More important, even if these differences would prevent some customers from switching to a cable company's voice service, it matters only that a significant number of customers would switch if Verizon increased prices above a competitive market level. The evidence shows that a significant number of customers would likely switch, therefore cable companies should be regarded as imposing pricing constraints on Verizon.

b. The intervenors take no account of broadband and Internet competition.

Q. SHOULD BROADBAND AND INTERNET SERVICES BE INCLUDED IN THE RELEVANT MARKET?

A. Yes. As I explained in my Direct Testimony (at 25–29), broadband services compete with wireline local exchange services in important ways. DSL and cable modem services are used as substitutes for dial-up Internet access (which is typically obtained through the use of a second phone line) or other data services. Moreover, they can be used with VoIP, making them platforms that can compete for voice calls. Furthermore, Internet communications also compete with wireline local exchange services. Email and instant messaging ("IM") are undoubtedly substituting for a substantial amount of voice traffic that would have otherwise gone over the traditional phone network.

Q. DO THE INTERVENORS CONSIDER THE PRICE-CONSTRAINING EFFECTS OF INTERNET AND BROADBAND SERVICES?

A. No. Mr. Wilson dismisses it for reasons I just discussed. Dr. Roycroft (at 63) speculates that, with the FCC's extension of the Supreme Court's *Brand X* decision (establishing that cable companies need not unbundle their networks for ISPs) to LEC broadband facilities, customer choices for Internet services might be limited and VoIP offerings associated with those ISPs would be constrained as well. However, where there is sufficient competition for broadband access services at the retail level, the degree of *wholesale* competition is irrelevant to consumer welfare. As the FCC observed, it is a mistake to "equate the ability of

ISPs to obtain wireline broadband transmission services on a Title II basis with the ability of *consumers* to obtain facilities-based competitive broadband Internet access services."[18] Where "consumers have a choice of multiple providers," a regulatory mandate to facilitate additional wholesale competition so as to aid particular competitors is not necessary. *Id.* In the case of broadband access, the evidence I presented shows that consumers do have such competitive choices in the form of intermodal alternatives to DSL. As I have explained at length in my Direct Testimony (at 72-74), Internet and broadband services are an important form of competition and excluding these services yields meaningless results.

c. Wireless services provide a viable competitive alternative to wireline services.

Q. SHOULD WIRELESS SERVICES BE INCLUDED IN THE RELEVANT PRODUCT MARKET?

A. Yes. As I showed in my Direct Testimony (at 20–25), wireless displacement occurs on at least three levels. First, wireless minutes often replace wireline minutes. Second, because of the prevalence of wireless phones, customers buy fewer second or third lines than they would absent competition from wireless. Third, an increasing number of customers use only wireless minutes by "cutting the cord."

[18] Report and Order, Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, CC Docket No. 02-33 et al. (rel. Sept. 23, 2005), ¶ 62.

Q. WHAT PROOF DO YOU HAVE THAT CUSTOMERS CONSIDER WIRELESS SERVICE AN ALTERNATIVE TO WIRELINE SERVICE?

A. The substantial evidence of growth in wireless subscriptions and usage presented in my Direct Testimony and in this testimony show that consumers already view wireless as a competitive alternative to wireline regardless of the differences. That evidence also implies that an economically significant number of customers would move to wireless service in the event of an increase in the price of wireline service.

In addition to this marketplace evidence, recent econometric research shows that wireless services are in fact substitutes rather than complementary services. For instance, some find that there is "conclusive evidence that wireless and wireline services are substitutes" and that "there appears to be statistically significant evidence that wireless competition prevents wireline prices from rising excessively."[19] Similarly, based on a survey conducted in the U.K., others have found that there is "strong evidence for call-level substitution between fixed and mobile telephony."[20] Moreover, some have found that "while earlier results suggest complementarity, subsequent research reports a "substitution effect" and finds, in particular, that there exists a "significant substitution effect" between

[19] See, e.g., Stephen B. Pociask, "Wireless Substitution and Competition, Different Technology but Similar Service—Redefining the Role of Telecommunications Regulation," Competitive Enterprise Institute, December 15, 2004, p. 1.

[20] Reka Horvath and Dan Maldoom, "Fixed-mobile substitution: a simultaneous equation model with quality and limited dependent variables," DotEcon Discussion Paper, August 2002, p. 21.

wireline and wireless services.[21] Although others still believe that "mobile service is a moderate substitute for fixed-line access, evolving usage patterns suggest that mobile and fixed service will become greater substitutes over time."[22] There are a number of additional studies using U.S. and international data, all suggesting similar results—wireless services are replacing wireline services. A study of the Canadian local phone services market finds that "the wireline local access market is entering a more vigorous phase of competition," and "traditional assumptions on local phone service market dynamics will no longer be relevant."[23]

The authors of this last report on Canadian phone services add:

> The incumbent telephone companies are threatened in a way that they have yet to experience in their more than 100-year history. Market forces, such as the arrival of voice over Internet Protocol (VoIP), as well as wireless and other technological substitutions to traditional voice services, will change the face of the Canadian wireline local access market in telecommunications. In addition, the entry of multiple players in the voice business will further accelerate this competitive shift.[24]

Finally, a study on cross-sectional and time-series data from published FCC and other governmental sources at the state level finds that:

---

[21] Gary Madden and Grant Coble-Neal, "Economic Determinants Of Global Mobile Telephony Growth," *Information Economics and Policy* 16, May 15, 2003, p. 531.

[22] Mark Rodini, Michael R. Ward, and Glenn A. Woroch, "Going mobile: substitutability between fixed and mobile access," *Telecommunications Policy* 27, 2003, p. 475.

[23] Michael Sone, "Canadian Local Telecom Services Market study," released November 18, 2004, cited in *Antitrust & Trade Regulation Report,* Vol. 87, No. 2182, p. 561.

[24] *Id*., p. 561.

> There is substantial competition between ILECs and CLECs and that wireless and high-speed services adversely affect ILEC lines. We conclude that the local market definition should be expanded for purpose of deregulation.[25]

Curiously, Dr. Roycroft cited the same study in his testimony (at 45) for the proposition that wireless and wireline phones are more complements than substitutes, and thus do not belong in the same relevant market. Dr. Roycroft is wrong, as the very same paper concludes:

> The finding that intermodal competition is significant in the communications market, and that local competition is enhanced by it, suggests that regulatory policies ought to account for these effects—perhaps without regard to CLEC line share. Otherwise, ILECs will be overly constrained in responding to market competition in the core wireline market.[26]

Note also that Dr. Roycroft points out (at 44) that the study was based on data from 1999 to 2002; thus, given the rapid progress of wireless with better quality, lower prices and greater consumer use since the end of 2002, I would expect that a similar model based on more recent data would show even stronger substitution. This can be seen graphically in the Figure 2 below.

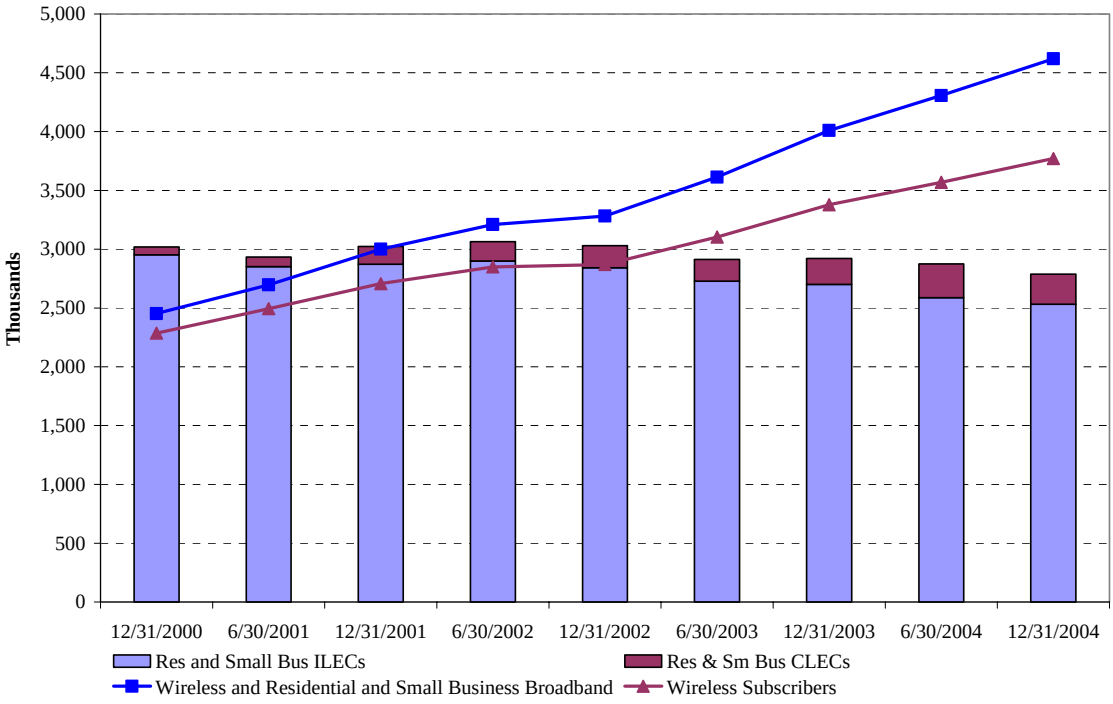
[25] David G. Loomis and Christopher M. Swann, "Intermodal Competition in Local Telecommunications Markets," *Information Economics and Policy* 17, 2005, p. 97.

[26] *Id.*, p. 111.

Q. DO YOU HAVE SPECIFIC EVIDENCE SHOWING THAT WIRELESS SERVICES ARE COMPETITIVE ALTERNATIVES TO WIRELINE SERVICES?

A. Yes. As seen in Figure 2, residence and small business wirelines have decreased, while wireless (and broadband) lines have been growing in Washington.

Figure 2
Residential and Small Business Wireless and Broadband Lines Have Increased and Residential and Small Business Wirelines Have Decreased in WA



Source: FCC Local Competition Reports and High Speed Services for Internet Access Reports

At a time when demographic factors would ordinarily increase the demand for telephone service in Washington, the pattern of declining wirelines access lines shows that intermodal substitution has been occurring. Specifically, in 2000, the Bureau of Census reported a housing unit growth rate of 1.5 percent for

Washington. For the same year, the FCC reported 3,054,277 ILEC and CLEC residential and small business lines in the state. Assuming that these mass market lines would have grown in proportion to the actual growth in the number of housing units, which averaged about 1.5 percent per year, I estimate that there would have been about 3,259,567 mass market lines by the end of 2004. The actual number of lines, however, was only 2,787,373. This implies that about 472,000 lines, or 14.5 percent of all lines, were lost to intermodal competition. Thus, as Table 1 and Figure 3 below illustrate, intermodal competition is strong in *today's* market; and if the trend continues, it would be expected to grow even stronger.

Table 1
Lines Lost to Intermodal Competition

	Housing Units Growth	Mass Market Wirelines	Mass Market Wirelines Forecast	ILEC Lines	CLEC Lines[27]	Lines Lost to Intermodal	Percent Lost to Intermodal
6/30/2000		3,054,277	3,054,277	2,993,440	60,836		
6/30/2001	1.48%	2,933,969	3,099,445	2,851,279	82,689	165,476	5.3%
6/30/2002	1.36%	3,063,395	3,141,749	2,843,195	165,109	78,354	2.5%
6/30/2003	1.48%	2,912,938	3,188,330	2,727,609	185,330	275,391	8.6%
6/30/2004	1.50%	2,874,778	3,236,017	2,588,040	286,738	361,239	11.2%
12/31/2004	0.73%	2,787,373	3,259,567	2,531,598	255,774	472,194	14.5%

Sources: 1) Housing units from U.S. Census
2) ILEC and CLEC lines from FCC local competition report

[27] CLEC residential and small business lines may include cable telephony.

Similarly, as seen in Figure 4, local calls and toll calls per Verizon wireline in Washington have declined since 2000.

Figure 3

Estimated Mass Market Lines Lost to Intermodal Competition

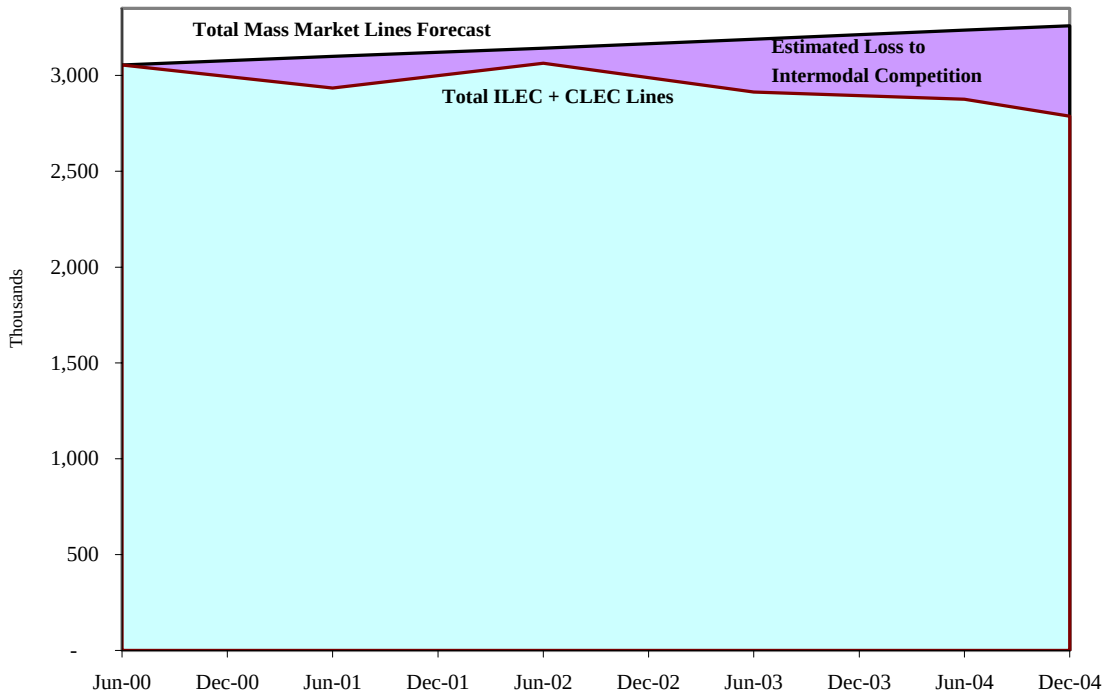
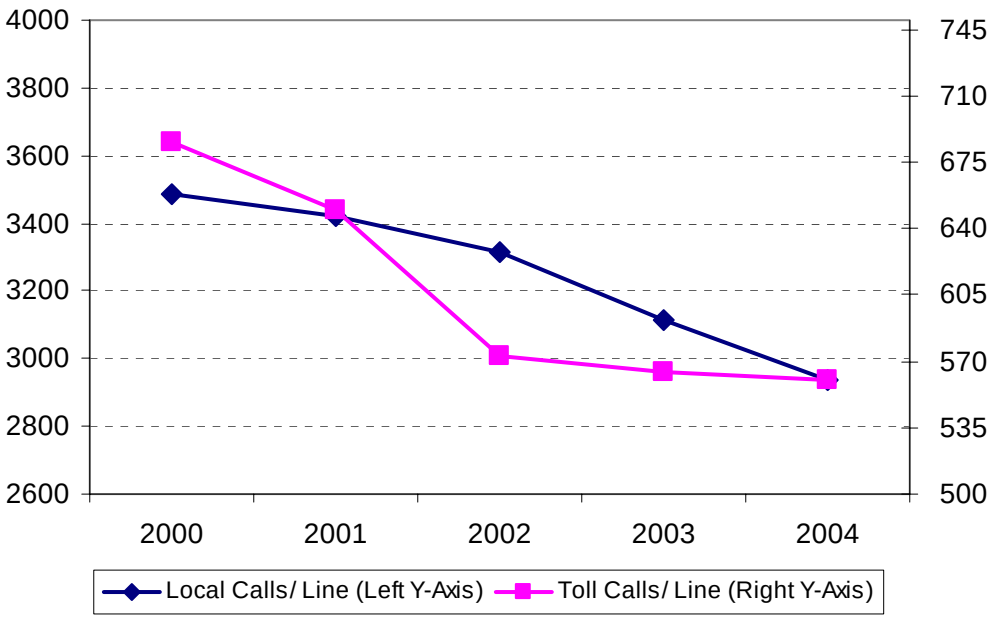
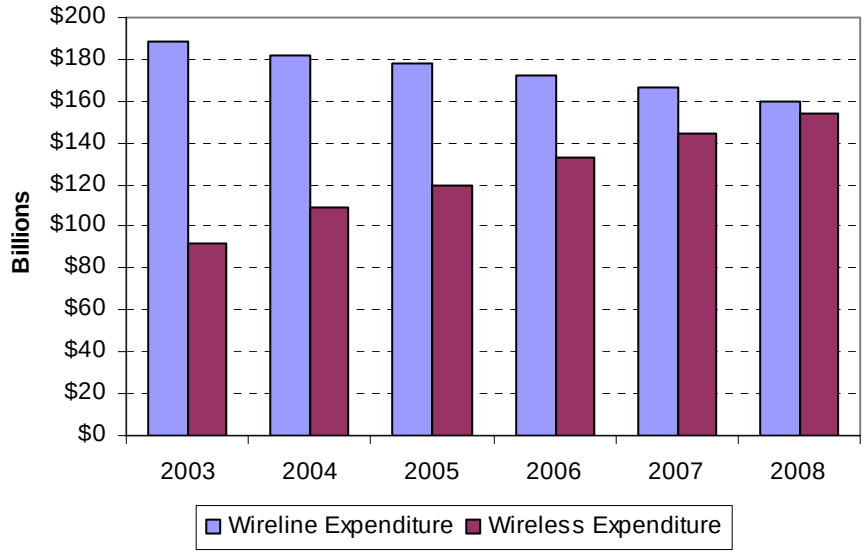


Figure 4
Calls Per Verizon Wireline Per Year in Washington



Finally, as shown in Figure 5, wireless expenditures by consumers have grown as their expenditures on wireline services have declined and that trend is expected to continue.

Figure 5
Wireline Expenditures Will Continue to Decline
While Wireless Expenditures Will Continue to Increase



Source: In-Stat/MDR. Wireline in Decline: US Wireline Services 2004. December 2004, Table 16.

Q. DO YOU AGREE WITH DR. ROYCROFTS STATEMENT (AT 46) THAT MARKET EVIDENCE HAS NOT SHOWN THAT VOIP AS A COMPETITIVE FORCE?

A. No. Dr. Roycroft cites (at 45-46) a Forrester Research report, which, according to him demonstrates that VoIP is "becoming more muted as consumers gain more experience with the prospects of wireless substitution." While indicating that cord-cutting is not proceeding as quickly as Forrester Research had initially estimated, the report still found that intermodal competition will increased significantly. Specifically, the report found that cord-cutting "increased 20% in

2004, and for every current cord-cutter, there are two more mobile users who plan to join their ranks in the future."[28]

Dr. Roycroft also cited (at 47) a *Wall Street Journal* article in his overall conclusion that wireless should not be considered part of the relevant product market. While pointing out some issues that consumers have encountered (such as the apparent inability to order pizza), Dr. Roycroft entirely misses the point of the article and its significance to this merger. First, as I have pointed out above, a service does not need to be identical to serve as a disciplining force for consumer prices. So, the claimed inability of ordering pizza (assuming this is even accurate) is irrelevant in this context as consumers still will substitute their wireline service for wireless service should the wireless carrier decide to raise its prices. Second, Dr. Roycroft conveniently ignores one of the main findings of this article, that is, that landlines are decreasing at a rapid rate. Specifically, the article states:

> Indeed, landlines are disappearing at an increasing rate. The number of traditional landlines in the U.S. fell to 182.8 million in June, 2003, the latest period available from the Federal Communications Commission…
>
> [A]nalysts say that many of the dumped landlines were second lines used for dial-up access or fax machines. But the long-term trend is troubling for landline carriers. Forrester Research analyst Charles Golvin projects that the proportion of wireless users

[28] Charles S. Groven, "Cord Cutting Reaches One in Twenty Mobile Households," Forrester Research, May 5, 2005, http://www.forrester.com/Research/Document/Excerpt/0,7211,36495,00.html, accessed September 16, 2005.

without a landline will nearly triple to13% by the end of 2006."Other analysts agree, especially as younger cell phone users set out on their own. 'There's a whole new generation of 18- to 22-year olds who have had wireless phones for the last four years, who when they get out of college have no incentive to put landlines into their homes,' ….[29]

Q. WHEN CONSIDERING THE PRICE CONSTRAINING EFFECTS OF WIRELESS SERVICES ON WIRELINE SERVICES, DOES IT MATTER HOW MANY CUSTOMERS HAVE "CUT THE CORD"?

A. No. The question of how many customers have cut the cord in the past does not matter here if: (1) the merger does not affect competition for reasons having nothing to do with wireless substitution (such as the fact that MCI is no longer constraining Verizon's prices); or (2) a post-merger, anticompetitive attempt by Verizon to increase its wireline prices would cause a substantial number of wireline customers to increase their wireless usage. On both counts the answer is that historical cord cutting does not matter because: (1) whatever the percent of "cord cutters," the merger will not affect mass market prices or market outcomes; and (2) the evidence shows that a substantial number of wireline customers likely would respond to such a price increase by switching to wireless service.

It should also be noted that a significant share of cutters is not required for wireless displacement to discipline wireline pricing and for wireless to be considered part of the same market as wireline. That is because competition in markets takes place at the margin, not the average. In setting prices for wireline

[29] "Choosing Cell Over Landline Can Bring Unexpected Pain," *The Wall Street Journal Online*, July 9, 2005, http://online.wsj.com/article_print/0,,SB108921367434057319,00.html, accessed October 5, 2005.

services, companies take into account that changes in wireline prices will encourage at least some consumers to consume more or fewer wireless services, and a wireline price increase will cause the demand for wireless services to shift upward. This fact constrains wireline prices, even though only a relatively small proportion of wireless customers are actually at the margin. Thus, even if a relatively small percent of households have currently given up their wireline in favor of a wireless phone, the fact is that the threat of additional cord cutting constrains ILECs from raising wireline prices above a competitive market level. Competition at the margin is particularly effective against wireline telephone companies like Verizon because its cost structure is disproportionately dominated by fixed or sunk costs.[30] For such firms, small losses of volume to competitors result in a large reduction in profits, mainly because costs do not fall when customers leave. Dr. Roycroft ignores these important economic considerations when he excludes wireless competitors from his analysis.

Finally, the effect of cutting the cord is not measured exclusively by looking at consumer demand, that is, the number or proportion of households that give up wireline telephone service, as Dr. Roycroft does. On the supply side of the market, some integrated wireline and wireless firms are spinning off their wireline businesses with the expectation that an exclusively wireless product offering would be more profitable. An explicit component of the recently consummated

[30] See Jerry A. Hausman, "Regulated Costs and Prices in Telecommunications," in Gary Madden (ed.), International Handbook of Telecommunications Economics, Volume 2: Emerging Telecommunications

Sprint/Nextel merger is the sale of Sprint's local exchange service and Alltel recently announced its decision to spin-off its wireline division.[31]

Q. DOES SERVICE QUALITY OR OTHER LIMITATIONS PREVENT WIRELESS FROM BEING A SUBSTITUTE FOR WIRELINE?

A. No. In suggesting otherwise, Dr. Roycroft (at 50) claims that wireless service quality is substantially inferior to wireline service quality and argues, in particular, that it has "dead zones." To begin with, I do not agree with Dr. Roycroft that wireless should be dismissed as a competitive alternative to wireline service because wireless coverage is not uniform (i.e., that it has dead zones). Indeed, a recent study by In-Stat/MDR concluded that "[b]arriers to wireline replacement, *particularly network coverage and quality-of-service*, are relatively low and that wireless carriers are working aggressively to neutralize these shortcomings."[32] Nationwide, wireless carriers have invested a cumulative $174 billion in their networks from 1985 through year-end 2004, which alone is more than the first ten years of wireless investment.[33] As shown in Figure 6, the result of these investments is substantially more cell sites, which now number

---

Networks, 2003.

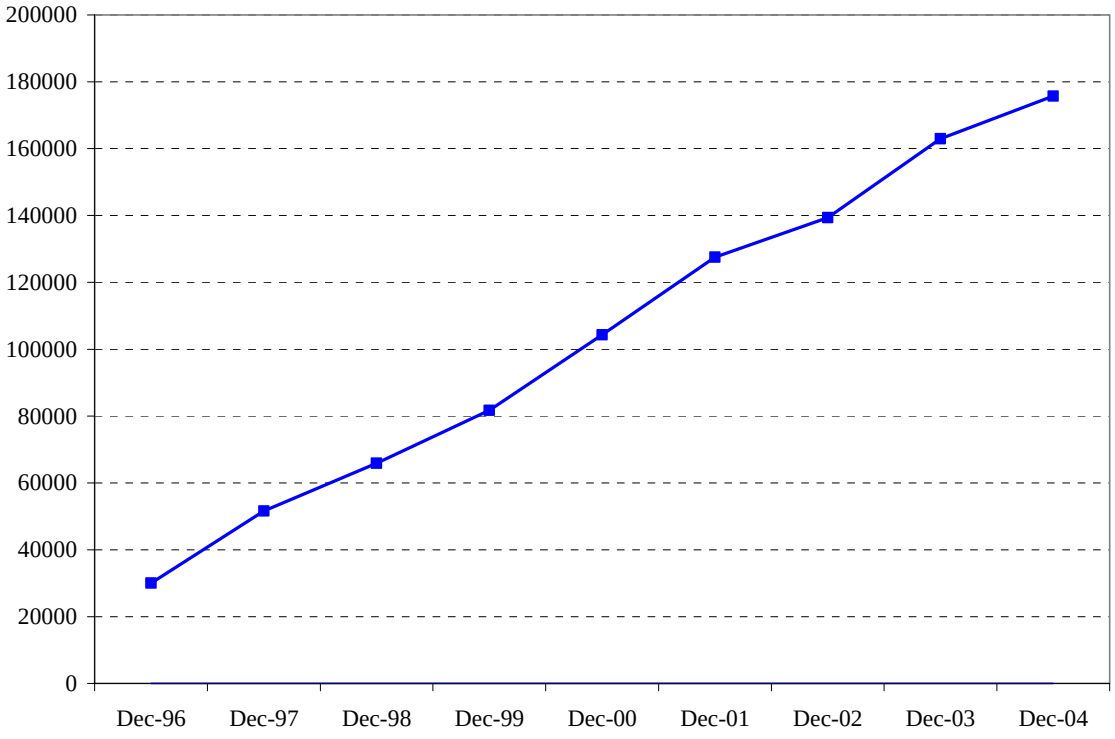
[31] See Merger Announcement, "Sprint and Nextel To Combine In Merger Of Equals," December 15, 2004 <http://sprintnextel.mergerannouncement.com/press/12_15_04.html> (15 September 2005). See also "Alltel's Ford: Company Will Likely Spinoff Wireline Business," Arkansasbusiness.com Daily Report, September 23, 2005 <http://arkansasbusiness.com/news/headline_article.asp?aid=41876> (September, 28 2005).

[32] C. Wheelock, In-Stat/MDR, "Cutting the Cord: Consumer Profiles and Carrier Strategies for Wireless Substitution," February 2004, p. 60 (emphasis added).

[33] CTIA SemiAnnual Survey, 2005.

nearly 176,000 locations in the U.S., up an average of 25 percent per year from 1996 to 2004. This network expansion allows wireless providers to offer better coverage in a given area and/or expand the areas that they cover, as well as to increase capacity.

Figure 6
Growth in Operational Cell Sites since December 1996
Has Averaged About 25 Percent Per Year



Source: CTIA, 2005

Evidence that the investments have been made to increase quality includes Cingular's substantial investments in denser cell sites and better quality

networks.[34] Furthermore, the FCC noted in its Ninth CMRS Report that wireless carriers now compete with wireline carriers on quality and have invested tens of billions to ensure that consumers get more reliable wireless service.[35]

Both in Washington generally and in Verizon's service area specifically, one or more wireless carriers cover virtually all households. In fact, two or more wireless carriers cover over 97 percent of all households in Washington as well as in Verizon's service area.[36]

Call completion is a key measure of network quality. A GAO study found that the "industry standard" in the wireless industry is a "98 percent call-completion rate" and that the vast majority of consumers experience few or no problems with dropped calls.[37] Another study by CTIA and Telephia similarly found that "on average wireless customers, in core and suburban areas, can expect to place, hold and complete a conversation of acceptable audio quality 96-99 percent of the

[34] See *In the Matter of Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Ninth Report ("Ninth CMRS Report"), FCC 04-216, released September 28, 2004, ¶ 149 <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-216A1.pdf>(July 28, 2005).

[35] See Ninth CMRS Report, ¶ 148.

[36] U.S. Census Bureau and individual carriers' websites.

[37] See General Accounting Office, *FCC Should Include Call Quality in Its Annual Report on Competition in Mobile Phone Services*, p. 22, Report No. GAO-03-501, April 2003. "While carriers did not provide us with detailed information on blocked and dropped calls, network officials at two carriers said that their goal was to have a 98 percent call-completion rate. . . . These officials and those at other carriers said that 98 percent is generally the industry standard."; id., p. 29 (finding that 78 percent of consumers either did not experience problems with dropped calls or only experienced problems on fewer than 10 percent of their calls).

time."[38] In any event, to the extent that consumers do experience problems with dropped calls, it is chiefly due to the subscriber being on the move during the call, a feature that wireline networks do not offer in the first place.[39]

Q. EVEN IF THERE WERE DIFFERENCES IN SERVICE QUALITY BETWEEN WIRELINE AND WIRELESS, DOES THIS AUTOMATICALLY MEAN THAT THEY ARE NOT ECONOMIC SUBSTITUTES?

A. No. Customers constantly choose products based on characteristics that are important to them. For many customers, the convenience of a mobile phone, the generous buckets of any time, any distance wireless minutes, and/or the unique features of cell phones (including the ability to take and wirelessly transmit pictures from any location at any time) outweigh any inconvenience that might be caused by a dropped call or a bad connection (which is not limited to wireless phones in any event).

Moreover, the test of whether a product should be included in a relevant market turns not merely on whether the service is actually being provided (or, in the case of wireless service, whether coverage currently exists) in a particular geographic area but also on whether a potential competitor could readily provide an alternative in that area if the incumbent provider raises the price of the service at

[38] CTIA Press Release, "Market Research Finds Outstanding Wireless Network Performance," July 18, 2001.

[39] See FCC, *Understanding Cell Phone Coverage Areas* <http://www.fcc.gov/cgb/consumerfacts/cellcoverage.html > (17 August 2005). "When a carrier fails to

issue above competitive levels. As I explained, wireless carriers have already deployed extensive networks in Washington and they could readily expand those networks to provide wireless services in areas where the price of wireline service has increased in a way that makes expansion to those areas more attractive. Thus, the lack of wireless service coverage in some areas of the state today does not mean that wireless service is not a viable competitive alternative to wireline service.

Q. IS DR. ROYCROFT'S SURVEY INFORMATION OF ANY VALUE?

A. No. Dr. Roycroft (at 50–51) cites surveys that allegedly show that consumers are dissatisfied with the quality of wireless service, stating that they support his view that wireless cannot be considered a competitive alternative to wireline. However, Dr. Roycroft is rather selective in the choice of surveys he has considered for his argument. There are a number of other surveys that Dr. Roycroft elected not to review. For instance, a recent report by Harris Interactive, a consumer research company, reports that roughly the same number of respondents was satisfied with their wireless service (90 percent) as with their local service (92 percent) and long distance service (90 percent). And the percent who found these services to be a "good value" was also about the same—77 percent for local, 78 percent for long distance, and 75 percent for wireless. Furthermore, the survey finds that "three in four (73%) use a wireless phone

---

hand off a call in progress as a consumer travels from one part of the carrier's network to another, it is called a 'dropped call.'"

instead of a landline to make a long distance call at least occasionally, while 65% do so to make local calls."[40] This is clear evidence that a substantial share of the population views wireless as a substitute for wireline service. Finally, the report states that "nearly half (46%) of all respondents, and 57% of those with incomes of more than $100K, are likely to use VoIP in place of a landline."[41]

Q. DR. ROYCROFT (AT 47) CLAIMS THAT THE COST OF WIRELESS SERVICE IS A REASON TO CONCLUDE THAT CONSUMERS DO NOT REGARD WIRELESS AS A COMPETITIVE ALTERNATIVE TO WIRELINE. DO YOU AGREE?

A. Certainly not. In making this claim, Dr. Roycroft (id.) also acknowledges that "[w]ireless calling plans offer 'buckets' of minutes that can be used at any time." As I explained in my Direct Testimony (at 69–72), it is precisely these wireless plans that have generated intense competition between wireless carriers and wireline carriers. Wireline carriers have been forced to offer calling plans that also include "buckets of minutes for a fee." In addition, as the FCC has observed, "a number of analysts have argued that wireless service is cheaper than wireline, particularly if one is making a long distance call or when traveling."[42]

Available evidence indicates that wireless and wireline now closely compete with one another because wireless companies have cut prices and increased the

[40] *Id.*, p. 10.

[41] *Id.*, p. 11.

[42] Ninth CMRS Report, ¶ 213.

reliability of their service. Wireless prices have declined nearly 80 percent over the last decade.[43] Wireless and wireline prices for similar service offerings are now comparable.[44] According to one analyst, "[w]ireless pricing dropped below wireline pricing in 2003 for the first time."[45]

Dr. Roycroft (at 47) chooses to gloss over the wireless buckets of minutes by focusing on the relatively high per-minute fees that wireless customers pay when they exceed their allotted minutes-of-use. However, he ignores the fact that these same fee arrangements exist with respect to wireline packages as well. Moreover, Dr. Roycroft provides no evidence that these fees are deterring the displacement of wireline service or that they would do so in the event of a significant, nontransitory increase in the price of wireline service. He also does not show that the "substantial penalties for early termination," have had any detrimental impact on wireless growth or substitution for wireline.

More important, with respect to the central question of whether the merger will adversely affect mass market competition, Dr. Roycroft ignores the fact that MCI's local service product focuses almost exclusively on its combined local/toll offering, "the Neighborhood" which costs about $50 or far more than the basic service rates he ascribes to wireline service.

[43] CTIA SemiAnnual Wireless Survey, 2005.

[44] See Opening FCC Application, Hassett et al. Declaration, Exhibit 2, p. 15.

Q. DOES THE FACT THAT VERIZON PROVIDES WIRELESS SERVICE THROUGH VERIZON WIRELESS MEAN THAT WIRELESS SERVICE CANNOT BE COUNTED ON TO CONSTRAIN WIRELINE PRICES, AS DR. ROYCROFT SUGGESTS (AT 51)?

A. No. Dr. Roycroft's theory is that Verizon need not worry about its wireline prices because if its wireline customers switch to its wireless service, Verizon still makes money. However, this theory makes no economic or business sense. If a wireline customer migrates to Verizon's wireless service, Verizon obtains only 55 percent of the new wireless revenues (reflecting its ownership interest in its wireless venture), but Verizon also faces the risk that the customer may choose a different wireless provider altogether. Moreover, although some wireless companies (Verizon Wireless and Cingular) are partly owned by one or more RBOCs, this ownership does not imply that these companies would forego profitable opportunities to sell services to wireline customers, and the facts do not support such an implication.

First, competition is intense among wireless providers and has driven wireless prices down. Verizon Wireless (which Verizon owns with Vodafone) must compete with the other wireless companies, and all of them, including Verizon Wireless, have aggressively improved their service quality, introduced major service innovations, and reduced their prices in a way that has made all of the wireless companies' services better competitive alternatives to wireline services.

[45] Neeham V. Grover, *New Year's Resolution—Avoid the Bells*, December 29, 2003, p. 1.

Whether it likes it or not, to remain competitive in wireless services, Verizon Wireless is compelled to compete with its wireline siblings.

Second, wireless companies affiliated with wireline companies have to compete with wireless companies that are not affiliated with wireline companies, such as T-Mobile and Virgin Mobile, or with companies that have a more significant wireless presence than wireline presence, such as Sprint/Nextel. In order to remain competitive with these companies, affiliated wireless companies need to pursue profitable opportunities to sell services to wireline customers or they will be punished by the market.

Third, some wireline firms do not own the entire wireless operation but have partners that have no financial interest in the wireline business. In such cases (and Verizon and its partner Vodafone is one), the wireless operation is even more likely to operate in its own self-interest without taking into account its effects on wireline providers in its territory. Consistent with that expectation, counsel informs me that the fiduciary duty of Verizon Wireless's Board of Directors would be to maximize the profits of Verizon Wireless regardless of the consequences for Verizon Communications. In addition, Verizon Wireless provides service nationally and competes against wireless companies that provide service nationally. Thus, Verizon Wireless must be competitive with other communications companies whether its offering is in Verizon's wireline territory (and thus competes against Verizon's wireline business) and/or outside of

Verizon's wireline territory, where taking business from the ILEC has no adverse financial consequences for the holding company.

d. The intervenors improperly dismiss VoIP competition.

Q. SHOULD VOIP SERVICE BE INCLUDED IN THE RELEVANT MARKET?

A. Yes. Cable companies are currently offering VoIP in Washington. One analyst recently observed that "the Bells appear to be responding to the VoIP threat with price cuts" on their calling plans as cable companies have begun to achieve significant market share in part due to their "aggressive pricing."[46] I showed in my Direct Testimony (at 75-76) that these patterns hold true in Washington as well.

More recently, Bernstein Research discussed growing evidence that VoIP service provided by cable companies has a "halo effect," stimulating faster growth for cable modem service, and lower churn for cable basic video.[47] The report indicates that:

> Cable gains appear…to be coming directly from the Bells, in the form of subscriber losses. Despite a significant pull-back in wholesale-based consumer voice services by AT&T and MCI, the Bells' rate of UNE winback remained anemic, causing the Bells'

[46] See J. Halpern, et al., Bernstein Research Call, "Quarterly VoIP Monitor: The "Real" Price Gap for VoIP Driving Rapid Subscriber Growth," July 15, 2005, p. 5.

[47] Craig Moffett, Bernstein Research Call, "Quarterly VoIP Monitor: The 'Halo Effect' of VoIP Driving Faster Cable Broadband and Basic Subscriber Growth," August 24, 2005.

> total losses (*i.e.*, retail plus wholesale) to closely parallel the gains seen in VoIP penetration.[48]

The Bernstein Research study concludes that "[r]isks to the RBOCs' wireline businesses stem from competition with the cable MSOs and other providers of broadband and/or VoIP service, including those using alternative technologies such as Wi-Max or [Broadband Over Powerline]."[49]

Independent VoIP providers, such as Vonage, Lingo, and AT&T CallVantage, are also serving customers in Washington. A September 17, 2005, article in *The Economist*, entitled "How the Internet Killed the Phone Business," discussed eBay's purchase of VoIP provider Skype, stating that it has highlighted the significance of VoIP, and the enormous threat it poses to incumbent telecom operators.

> For the rise of Skype and other VoIP services means nothing less than the death of the traditional telephone business, established over a century ago. Skype is merely the most visible manifestation of a dramatic shift in the telecoms industry, as voice calling becomes just another data service delivered via high-speed internet connections. Skype, which has over 54m users, has received the most attention, but other firms routing calls partially or entirely over the internet have also signed up millions of customers.
>
> The ability to make free or almost-free calls over a fast internet connection fatally undermines the existing pricing model for telephony. "We believe that you should not have to pay for making phone calls in future, just as you don't pay to send e-mail," says Skype's co-founder, Niklas Zennstrom. That means not just

[48] *Id.*

[49] *Id.*, p. 13.

> the end of distance and time-based pricing – it also means the slow death of the trillon-dollar voice telephony market, as the marginal price of making phone calls heads inexorably downwards.[50]

Recognizing the importance of this technology, Verizon is offering VoiceWing, its VoIP service, in the state as well. Qwest has also responded and now provides its OneFlex VoIP service for residential and small business customers; it recently announced a joint venture with Microsoft to provide a business-oriented VoIP service for small and midsized business customers.

Q. DO THE INTERVENORS INCLUDE VOIP PROVIDERS IN THE RELEVANT MARKET?

A. Mr. Wilson does not consider VoIP providers at all. Dr. Roycroft does but only to the extent that the VoIP service is provided by a cable company that has included its VoIP numbers in the E911 database; this count omits all of the stand-alone providers of VoIP service over broadband connections. Dr. Roycroft (at 57–65) dismisses VoIP as a competitive alternative, citing everything from limited availability, bundled purchase options, unreliability, special skill requirements, the absence of 911 services, to the recent Supreme Court decision in the *Brand X* case. Dr. Roycroft does not provide any analysis to support his reasons for dismissing VoIP and, in fact, he was wrong to do so.

[50] "How the Internet Killed the Phone Business," *The Economist,* September 17, 2005.

Q. DO YOU AGREE THAT DIFFERENCES IN SERVICE CHARACTERISTICS PRECLUDE VOIP FROM BEING CONSIDERED A SUBSTITUTE FOR WIRELINE SERVICE?

A. Absolutely not. Like the wireless services that I just discussed, VoIP service characteristics do not have to be identical to wireline service characteristics for customers to regard them as substitutes. The steady, rapid growth of VoIP services that I discussed in my Direct Testimony (at 31–36) demonstrates that any differences that might exist are not deterring consumers from purchasing VoIP services as substitutes for wireline services and would not serve as a deterrent to substitution in the event Verizon were to increase its wireline prices above competitive levels after the transaction.

Indeed, despite differences in some service characteristics, customers are already treating VoIP service as a replacement for their telephone line, not simply as a source of cheap long distance service. This is demonstrated by the fact that only approximately 50 percent of Vonage customers maintain their old phone number when they switch to Vonage.[51] This fact also disproves Dr. Roycroft's claim (at 58) that "Vonage or a similar service … [are disadvantaged by the] lack of number portability…." Certainly, the communications industry does not believe that VoIP's service characteristics prevent customers from substituting it for wireline service. The fact that Verizon and Qwest have developed and marketed

[51] See J. Hodulik, et al., UBS Investment Research, *The Vonage Story: The Who, What, Where, and How,* November 24, 2003, p. 5; A. Quinton, et al., Merrill Lynch, *US VoIP Update: Competitive, Regulatory, and Other Issues,* November 25, 2003, p. 9.

their own VoIP service is strong evidence of the industry-wide recognition of the crucial importance of VoIP as a means of lowering costs of production and prices for consumers as well as a means of providing innovative new services.

Q. IS IT CORRECT TO COMPARE MCI'S PROSPECTS IN THE MASS MARKET WITH WHAT IS OCCURRING WITH OTHER COMPETITORS, SUCH AS VOIP PROVIDERS, IN THE GENERAL MASS MARKET?

A. No. Dr. Roycroft (at 55) claims that "the issue of VoIP [sic] raise[s] a contradiction in Joint Petitioners' overall case that the transaction will have no competitive harm." He asks, "if it is so easy to grow a business using VoIP, then why does MCI view the mass market in 'irreversible decline'?" There is no contradiction between the evidence that VoIP providers are a source of price-constraining competition and MCI's assertion that ***its*** mass market business is in a continuing and irreversible decline. As I have explained, VoIP service is a competitive substitute for wireline service. However, as MCI witness Mr. Beach explains (at 10) in his Rebuttal Testimony, offering VoIP service cannot revive ***MCI's*** deteriorating mass market business. Today, MCI is providing residential VoIP on a limited trial basis and is well behind other service providers. However, MCI has no unique characteristics that would distinguish it from other providers and, as a late entrant to the provision of VoIP service, it would only be one of many such providers. Thus, there is no reason for Dr. Roycroft's assumption that MCI could have revived its mass market business through a commercial VoIP offering, if MCI were ever to offer one. For the same reason, there is no reason to

conclude that MCI's own decision to manage the decline of its mass market business (and to focus instead on the enterprise market) means that VoIP is not a viable means of competing with Verizon.

Q. DR. ROYCROFT (AT 58) CLAIMS THAT LOCAL EXCHANGE CARRIERS ARE BUNDLING THEIR VOICE SERVICE WITH DSL SERVICE AND THAT DSL CANNOT BE USED TO OBTAIN VOIP UNLESS VOICE SERVICE IS ALSO PROVIDED. HE MAINTAINS THAT THIS IS A BARRIER TO THE DISPLACEMENT OF WIRELINE SERVICE BY VOIP. IS HE CORRECT?

A. No. This claim relates to Verizon's offering known as "stand-alone DSL" service (i.e., a DSL line without voice). If it were true that the lack of a stand-alone DSL product from the ILECs were a deterrent to VoIP subscribership, then VoIP subscribership would not be growing by leaps and bounds as it has been for the last year. In fact, there are two reasons why the alleged absence of stand-alone DSL is not an impediment to wireline customers switching to VoIP.

First, Dr. Roycroft ignores the fact that consumers can and are using existing forms of broadband connections to obtain VoIP, regardless of the availability of stand-alone DSL. Broadband services that enable VoIP are widely available in Washington. A recent FCC report indicates that as of December 31, 2004, broadband service is available in 98 percent of the zip codes in Washington, and three or more broadband providers are available in 71 percent of the zip codes in all the state.[52] Cable modem service is not only widely available throughout the

[52] See FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2004*, July 2005, Table 13.

state, but it is also the major source of broadband in Washington. As of December 31, 2004, coaxial cable accounted for approximately 56 percent of the nearly 900,000 high-speed lines serving Washington, while ADSL accounted for only 38 percent.[53]

Second, Dr. Roycroft is evidently unaware of the fact that, as Dr. Danner explains in his rebuttal testimony, that Verizon is already moving ahead with a stand-alone DSL offering. Verizon would not be taking these steps if it had any interest in "tying" local service to broadband, as Dr. Roycroft baldly asserts. Indeed, the fact that Verizon sees a business need to offer a stand-alone DSL product is solid evidence of the fact that Verizon cannot "tie" one product to another. For a tying arrangement to succeed, the firm must possess a monopoly on the product to which the other product is tied. This obviously is not the case here.

Q. DR. ROYCROFT (AT 57) CLAIMS THAT BROADBAND SERVICE IS NOT AVAILABLE TO ALL CONSUMERS IN WASHINGTON, SO THEY COULD NOT SWITCH TO VOIP SERVICE IF THEY WANTED TO DO SO. IS HE CORRECT?

A. No. As I just explained, broadband service is available in 98 percent of all zip codes in Washington and, in any event, a service does not need to have perfect coverage for it to be a competitive alternative. What matters is whether: (1) a substitute is available to enough potential consumers so that if a firm (e.g., Verizon) were to try to raise the price of its service above competitive levels so

[53] *Id*. Table 7. The remaining 6 percent are served by other types of technology.

that doing so would be unprofitable because those consumers could switch to the alternative (e.g., VoIP) or a set of different alternatives (e.g., VoIP, Cable telephony, or wireless) they would switch to one of the alternatives; and (2) whether providers could expand their service to offer VoIP if Verizon were to increase prices above competitive levels. Cable companies already have extensive facilities in Washington that they could expand to areas where they are not already providing service if an increase in Verizon's prices attracted entry.

Q. DR. ROYCROFT (AT 60-62) ALLEGES THAT USING VOIP REQUIRES SPECIAL SKILLS. IS THIS CORRECT?

A. No. A VoIP telephone is not any more complex to use than a regular telephone and there are no special skills involved in using it. The apparent "special skills" Dr. Roycroft is referring all relate to the installation of VoIP phones. This, however, is not an important point because, as Dr. Roycroft acknowledges, consumers lacking the necessary computer skills can always opt to have the phone installed professionally. Furthermore, installation of VoIP telephones is becoming increasingly simple. For instance, Uniden, a wireless consumer electronics manufacturer, advertises its "whole house VoIP phone system," as a "snap" to use…"[54] While there is a possibility that some consumer might have to reconfigure the router of such system, this task is no more difficult than setting up an email account. Dr. Roycroft's claim that the need for "special skills" to install a VoIP telephone excludes VoIP as a competitive alternative to an ordinary

[54] Packet8, Uniden, < http://www.packet8.net/about/uniden.asp> (September 29, 2005).

telephone is akin to saying that computers cannot serve as a substitute for typewriters as computers require "special skills" to install the necessary software.

Q. IS THE COST OF A BROADBAND CONNECTION A DETERRENT TO CUSTOMERS WHO MIGHT WANT TO SWITCH TO VOIP, AS DR. ROYCROFT (AT 57) IMPLIES?

A. No. VoIP services are marketed to and purchased by consumers who already have made the decision to subscribe to broadband to obtain high-speed Internet access based largely on the *marginal* costs to those customers. The rapid growth of VoIP subscriptions means that traditional wireless voice providers like Verizon cannot afford to assume that the cost of broadband service generally deprives consumers of the VoIP option. As I showed in my Direct Testimony (at 30), Vonage is adding some 15,000 new VoIP subscriptions per week and this is just one of several VoIP providers serving Washington customers. Obviously, the incremental cost of adding VoIP service is not preventing customers from switching to the digital voice services offered by cable companies and VoIP providers.

Also, VoIP packages are priced much lower than comparable ones from MCI and Verizon in Washington. Compared to MCI Neighborhood's $49.99 per month and Verizon Freedom's $64.95 per month, Vonage's and Package 8's unlimited nationwide calling plans charge $24.99 and $19.95 respectively per month. Comcast's cable telephony charges $39.95 per month. In general, service

offerings from VoIP competitors are comparable and priced lower than those from MCI and Verizon.[55]

But even if the price of broadband and VoIP packages were more than some customers want to pay, it matters only that a sufficient number of customers would switch if the price of Verizon's wireline service were to increase above competitive levels or the quality of its service were to decline as a result of this transaction. Said differently, the availability of VoIP services motivates Verizon to maintain competitive prices; otherwise, those customers can and would switch to VoIP (and/or other alternative) services and, in effect, punish Verizon for increasing prices above the competitive level.

Q. DR. ROYCROFT (AT 59) SAYS THAT "THE INTERNET IS AN INHERENTLY UNRELIABLE NETWORK." DO YOU AGREE?

A. I strongly disagree with Dr. Roycroft for several reasons. As a threshold matter, whatever the differences between wireline service quality and VoIP service quality may be, they do not provide valid reasons not to consider VoIP service a substitute for wireline service. As with wireless service (or any other alternative to wireline service), service quality is but one consideration in a consumer's decision concerning whether to switch to VoIP service. While some wireline customers may regard the quality of VoIP service as a reason not to switch from wireline, what matters is whether enough wireline customers would be willing to

[55] See Opening FCC Application, Hassett et al. Declaration, Exhibit 2, p. 15.

switch to VoIP (or other substitutes) in the event of a significant, nontransitory price increase in wireline service.

Also, as with wireless service, the evidence of steadily increasing VoIP subscriptions strongly suggests that the quality of VoIP service is not preventing wireline customers from switching to that service. Further, while VoIP service quality may have been an issue for some customers when VoIP was first introduced, VoIP providers are working assiduously (and it appears, successfully) to eliminate service quality issues. A recent NEW YORK TIMES article gave this account of the progress already achieved in improving VoIP service quality:

> "For the first year or so, we had problems with people not hearing us, or voices would sound scratchy," said Sowmya Parthasarathy, who has been a Vonage subscriber for nearly two years and "used to spend hours on the phone" with the company's operators. "But they really seem to have fixed the problems."[56]

More recently, a broadcast on National Public Radio described how VoIP service quality is actually *better* than wireline service quality:

> When you go digital and when you're over the Internet and you have enough reliable bandwidth, you can get very high quality. And what you're going to see over time is that the concept of voice is going to get better. You're used to stereo quality or digital quality, where the normal phone system was designed actually to truncate about two-thirds of people's voice. So it's not—you're not hearing over the phone everybody's true voice.[57]

[56] Ken Benson, "INSIDE THE NEWS: Cable's New Pitch: Reach Out and Touch Someone," *New York Times*, Sunday Business, May 8, 2005, Late Edition—Final, Section 3, Page 5, Column 1.

[57] National Public Radio: All Things Considered. Interview: Scott Cleland Discusses Firms Vying to Dominate Messaging Convergence, August 24, 2005.

Finally, my office in Boston has used VoIP exclusively for the past two years and neither our clients nor I have noticed any difference in quality.

Q. DOES THE FACT THAT VOIP SERVICE CAN BE DISRUPTED DURING A POWER OUTAGE PREVENT VOIP FROM BEING CONSIDERED A SUBSTITUTE FOR WIRELINE SERVICE AS DR. ROYCROFT CLAIMS (AT 60)?

A. No, for the same reasons that differences in service quality do not have that effect. And the facts, in particular, the unbelievable surge of customers, show that it is not having that effect.

Q. DR. ROYCROFT (AT 62) CONTENDS THAT THE LACK OF TRADITIONAL 911 AND E911 SERVICE WILL PREVENT WIRELINE SUBSCRIBERS FROM SWITCHING TO VOIP SERVICE. DO YOU AGREE?

A. No. Although E911 service had been an issue in the provisioning of applications-based VoIP services, the industry is working hard to address the issue and has made substantial progress in that direction. Large cable companies, fast-growing, well-funded firms like Vonage, and carriers such as AT&T and Verizon are all collaborating to develop E911 capability for VoIP. Given these efforts, any technological hurdles that remain are likely to be overcome in the near term. In addition, as discussed above, even if VoIP could never provide E911 that would not imply that VoIP service would not be a substitute for wireline service as evidenced by the customers who have already switched from wireline voice service to VoIP service. The inability of wireless to provide 911 or

E911 when it was first introduced certainly did not deter customers from purchasing wireless service.

e. The intervenors inappropriately minimize the importance of emerging technologies like Wi-Fi, WiMAX, BPL, and satellite broadband.

Q. SHOULD EMERGING TECHNOLOGIES BE INCLUDED IN THE RELEVANT MARKET?

A. Yes. Some intervenors downplay emerging technologies as too speculative because of possible startup difficulties and lack of current market share. For instance, Mr. Wood (at 33) claims that "none of the intermodal alternatives or nascent technologies listed by Dr. Taylor represents a viable substitute for these services in the foreseeable future." Obviously, I disagree.

WiMAX and other emerging technologies pose a serious and imminent competitive threat in the next few years. According to one view:

> The first implementations of WiMax—expected later this year and in early 2006—won't be aimed at mobile users. Instead, WiMax will initially be used at fixed locations, as an alternative (or backup) to traditional T1, cable-modem, and DSL broadband. [WiMax] will also provide broadband access to remote areas where cable and DSL providers have yet to tread. [However,] a mobile version of WiMax is in the works, and analysts expect to see the technology incorporated into laptops by 2007.[58]

[58] Alan Cohen, "All the World's a Hotspot," *Corporate Counsel, Volume 12, Issue 8,* August 1, 2005.

Other industry analysts concur that WiMAX will have a big impact in the next two to three years.[59] In-Stat projects that nearly 4.5 million customers worldwide will subscribe to Voice over WiMAX by 2009.[60] In fact, Speakeasy, a national broadband services company, has announced deployment of the largest of its kind WiMAX service in Seattle, the first among several major cities, and has started taking business customer orders since May.[61]

Similarly, Broadband over Powerlines ("BPL") continues to make progress toward having a significant competitive impact in the near term. In fact, a recent article described BPL:

> The technology that allows the internal power wiring in a home to deliver broadband service is getting some heavy-hitting endorsements from large technology companies including Intel, Motorola and Cisco Systems.…For several years, many have hoped that BPL would allow electric companies to become a viable third alternative to the cable and telephone companies providing high-speed access to the Internet.…The involvement of big tech names in helping develop broadband over power line technology could be a signal that it is finally coming of age. In addition to companies like Intel and Motorola, others such as Google and IBM also have taken notice of the technology. Last month, Google invested in Current Communications Group, a BPL service

[59] "Executives Bullish on Fixed, Mobile Deployment of WiMax Technology," *TR Daily*, June 29, 2005; see also "Who will rule the wireless world?" *Computer Weekly*, March 22, 2005.

[60] "WiMax Has Potential to Transform Telecom Markets," In-Stat Press Release, February 16, 2005 <http://www.instat.com/press.asp?Sku=IN0501958CT&ID=1248> (August 17, 2005).

[61] "Seattle Space Needle Anchors Speakeasy Wireless Broadband Service, Defining WiMAX Future," *SpeakEasy Press*, May 4, 2005 <http://www.speakeasy.net/press/pr/pr050405.php> (September 29, 2005).

provider. IBM announced it would partner with Houston-based power utility CenterPoint Energy to build a BPL network.[62]

C. By Ignoring Intermodal Competition, the Intervenors Have Offered Flawed Competitive Analyses and Equally Flawed Conclusions Based on Those Analyses

Q. PLEASE EXPLAIN HOW THE FAILURE TO ACCOUNT FOR INTERMODAL COMPETITION AFFECTS THE INTERVENORS' ANALYSES OF THE TRANSACTION'S EFFECT ON COMPETITION FOR MASS MARKET CUSTOMERS?

A. Such failures render each of their intervenors' analyses useless. By dismissing intermodal competition as insignificant based on their belief that intermodal technologies are "nascent," these witnesses fail to recognize that even small losses in volume affects profitability. Even assuming for a moment that the intervenors are correct about intermodal competition not being a major competitive threat (and they are not), they fail to recognize that, because of an ILEC's cost structure, what may appear to be modest losses of volume can quickly erode profitability.

In the current communications industry, Verizon is competing with CLECs, cable companies, wireless providers, Internet and broadband providers, and VoIP providers. Each of these communications services providers has the capacity to compete head-to-head with Verizon for the very customers on whom the intervenors focus their testimonies. Verizon's losses to these competitors, which Mr. Wilson, Mr. Wood, and Dr. Roycroft dismiss as insignificant, are terribly

[62] Marguerite Reardon, "Power line broadband gets popular with tech firms," *CNET News.com*, August 24, 2005 <http://news.com.com/Power+line+broadband+gets+popular+with+tech+firms/2100-1034_3-5842825.html> (September 15, 2005).

significant when considering whether the transaction will enable Verizon to exercise market power and raise prices profitably to supra-competitive levels.

Q. ARE THERE ANY ACADEMIC DISCUSSIONS THAT SUPPORT YOUR POINT ABOUT THE SIGNIFICANCE OF EVEN "SMALL" LOSSES TO COMPETITORS?

A. Yes. MIT Professor Jerry Hausman provides an insightful exposition of how the incipient loss of volume to competitors strongly limits the ability of firms with high fixed or sunk costs to sustain supracompetitive price increases.[63] The basic idea is straightforward: firms with high fixed or sunk costs must charge prices that are well in excess of their marginal costs in order to earn normal profits (i.e., attract and maintain investors). Therefore, when such a firm loses customers to competition, its revenues erode much more than the costs that it can avoid. If the firm attempts to increase prices, the lost profits (revenue minus avoided cost) from even a small decrease in customers could easily exceed the extra revenue obtained from the price increases on the remaining customers.

[63] Appendix A to my Rebuttal Testimony sets forth a more detailed discussion of Professor Hausman's exposition.

D. The Intervenors' Concentration Analyses Are Flawed and Their Reliance on HHIs Is Misplaced

Q. DO MR. WILSON'S HHI CALCULATIONS PROVIDE A PROPER BASIS FOR THE REVIEW OF THIS MERGER?

A. No. Mr. Wilson's HHI calculations are flawed in ways that cause them to overstate the competitive impacts of the merger. *First*, while Mr. Wilson acknowledges that intermodal competition is relevant, he excludes all forms of intermodal competition from his analysis merely because it was more expedient to do an analysis using available data regarding wireline CLECs. *Second*, Mr. Wilson's analysis is not forward-looking; it is based exclusively on information from 2003 and 2004 and takes no account of significant trends in the communications industry, including, most notably in this instance, MCI's recent decline in the mass market, as well as more general trends such as fixed-to-mobile convergence and the strong initial success of VoIP providers, such as Vonage. *Finally*, as I have mentioned, HHIs, if they are used at all in a merger evaluation, should be used only as a screen and only as a starting point in a more careful, probative analysis of competition, including the presence of entry barriers. Mr. Wilson seems to rest his entire case on his calculation of market shares and HHIs, along with some anecdotal evidence regarding the size of the market. Thus, his application of a single part of the *Merger Guidelines* does not show that the merger raises any competitive issues.

Significantly, however, if the Commission were to consider Mr. Wilson's HHI calculations despite its flaws, it should recognize that even these calculations show that the incremental impact of the merger on Verizon's market share and the resulting HHI change is extremely small and well within the types of changes that have been approved by antitrust authorities.

Q. PUTTING ASIDE THE QUALITATIVE FLAWS IN HIS HHI CALCULATIONS, ARE MR. WILSON'S HHI CALCULATIONS AT LEAST MATHEMATICALLY CORRECT?

A. No. Mr. Wilson calculates Verizon's market share for each wire center. However, rather than taking the square sum of each carrier's market share, he simply takes the square sum of Verizon's share and the *combined* share of all competitors. This error leads to overstated HHI values.

Q. DO DR. ROYCROFT'S HHI CALCULATIONS ADD ANYTHING MEANINGFUL TO THE REVIEW OF THIS MERGER?

A. No. Dr. Roycroft improperly limits his analysis to competition from traditional wireline providers and some cable-based VoIP providers.[64] For example, his HHI calculations exclude market shares of wireless providers, broadband (email, instant messaging) providers and stand-alone VoIP providers like Vonage; therefore, he fails to account for almost all intermodal competition. Further, Dr. Roycroft statement (at 79) that: "the elimination of UNE-P at TELRIC-based

[64] Dr. Roycroft (97) includes cable-based VoIP if it includes E911 (which it usually does), but excludes VoIP over broadband.

prices has caused a major contraction in the CLEC industry" suggests that even the small historical MCI "market share" for mass market implied by Dr. Roycroft's data overstate MCI's competitive significance in the market.. And, like Mr. Wilson, Dr. Roycroft did not attempt to calculate an HHI using predicted market shares, as an appropriate, forward-looking analysis requires.

Q. SHOULD THE COMMISSION USE MR. WILSON'S AND DR. ROYCROFT'S HHI CALCULATIONS IN ITS CONSIDERATION OF THE TRANSACTION'S EFFECT ON COMPETITION?

A. No. The Commission should not rely on those calculations because they overstate concentration for the customer segments for which they were computed and because they are not computed for the communications markets—i.e., the mass market and the enterprise markets—in which Verizon is competing today and will compete once the transaction is completed. These two intervenors' reliance on HHIs in these circumstances is misplaced. As I mentioned earlier, their HHIs use stale market share data of only one type of communications provider currently serving customers in Washington, that is, wireline local exchange carriers. In this way, their HHIs reflect the *past* when, in fact, the relevant inquiry concerning whether the Verizon/MCI transaction will injure competition is necessarily predictive and *forward-looking*.

To be relevant to any antitrust issues raised by a transaction, HHI calculations and other measures of concentration must enable a comparison of the future market

structure after the merger with that which would exist absent the merger.[65] Indeed, for this reason the *Merger Guidelines* state that the shares used to calculate HHIs should themselves "be calculated using the best indicator of firms' *future* competitive significance."[66] For many mergers, an analysis of the structure and performance of the market in the recent past provides a sound basis for predicting the structure and performance of the market in the future. For such mergers, HHIs and other data from the recent past serve, in effect, as proxies for a more direct examination of likely future attributes of the market.

In other situations, however, past is not prologue. Where markets are characterized by rapid technological or other changes, or individual firms are either declining or rising rapidly, sound merger analysis requires either that past data not be used for calculations of market structure or that calculations based on such data be used for only limited and tentative purposes.

The Verizon/MCI transaction presents just such a situation. Given the profound technological changes that have transformed the industry and that continue to change it, it is illogical to rely on HHI calculations based entirely on past data and to ignore recent changes in the market. However, that is exactly what Mr. Wilson and Dr. Roycroft did in calculating the HHIs offered for the Commission's

[65] See *Merger Guidelines* § 0. "[T]he picture of competitive conditions that develops from historical evidence may provide an incomplete answer to the forward-looking inquiry of the Guidelines."

[66] *Id.* § 1.41 (emphasis added).

consideration. The *Merger Guidelines* on which the intervenors purportedly rely make it abundantly clear that HHI calculations must be based on "forward-looking" shares, that is, the shares that would prevail in the absence of the proposed transaction.[67] There is simply no sound basis in law, economics, or public policy for calculating HHIs and basing competitive analyses on *past* data that is so patently obsolete. Mr. Wilson's and Dr. Roycroft's competitive analyses are fundamentally flawed because they are backward-looking when the market is in the throes of rapid and profound changes.

Q. IS THE USE OF MARKET SHARE DATA FOR A HISTORICALLY REGULATED FIRM AN ACCURATE TOOL TO ANALYZE THE PROPOSED TRANSACTION?

A. No. Because Verizon has been the regulated provider of telecommunications services to most customers in its Washington service area, its legacy of a relatively large market share is of little help in understanding the competitive prospects in the market from today forward. As the economic literature explains, regulation may increase a firm's market share and thus create the appearance of monopoly power. For example, the price of a regulated service may be above marginal cost in some markets and below marginal cost in others. In markets where the regulated price falls below marginal cost, the regulated firm is apt to have 100 percent market share. The reason for this "monopoly market share," however, is not due to market power. Rather, this share is due to the fact that the

[67] See *Merger Guidelines* § 1.521.

market is so unattractive to other providers that the only firm that will serve it is one that is required to serve it or the one that is induced to remain in it by the opportunity to recoup its losses in its other markets. In such cases, a high market share is a symptom of a lack, rather than the possession, of market power.

In addition, the prices of regulated firms—particularly prices of basic exchange services—have been held below a competitive market level by regulation, in order to foster universal service. It would not be an exercise of market power if a firm were to raise its price profitably from prices that were set by regulation below the competitive market level.

Q. HOW DOES THE DOJ USE HHI CALCULATIONS IN ITS MERGER ANALYSES?

A. The *Merger Guidelines* describe a limited role for HHI calculations, as "an aid to the interpretation of market data," and this is how the DOJ uses them.[68] In fact, since the *Merger Guidelines* were issued, HHIs "have, become *progressively less significant*," as FTC Commissioner Thomas Leary explained in 2002.[69] In a similar vein, Lawrence Fullerton, then-Deputy Assistant Attorney General for Antitrust at DOJ, said in 1996 that the DOJ does "not approach merger analysis mechanistically" and that, after defining markets and assessing market

[68] *Id.*

[69] Thomas B. Leary, Commissioner FTC, "The Essential Stability of Merger Policy in the United States," January 17, 2002 (emphasis added) < http://www.ftc.gov/speeches/leary/learyuseu.htm> (September 15, 2005).

concentration, the DOJ then determines "whether anticompetitive effects are likely, given the[] concentration levels and other characteristics of the market."[70]

The deemphasizing of simple arithmetic calculations in merger analysis is not just a matter of words. It is plainly reflected in the enforcement decisions of the federal antitrust agencies, in both Democratic and Republican administrations. A study of DOJ and FTC merger challenges from 1999 to 2003 confirms that "a gap exists between the Merger Guidelines as written and actual enforcement practice."[71] When Cingular and AT&T Wireless merged, the DOJ sought remedies only with respect to a handful of 450 Component Economic Areas and Cellular Market Areas having post-merger HHIs ranging from approximately 4400 to more than 8000, with increases in the HHI as a result of the merger ranging from approximately 1100 to more than 3500.

Q. WHAT DO THE INTERVENORS' WITNESSES' HHI CALCULATIONS REVEAL ABOUT THE TRANSACTION'S EFFECT ON MASS MARKET COMPETITION?

A. Although the calculations are flawed for reasons that I have explained, flawed as they are, they still present no reason to conclude that the transaction will harm competition for mass market customers. Mr. Wilson calculated an HHI change of

[70] Lawrence R. Fullerton, Deputy Assistant Attorney General, "Recent Developments in Merger Enforcement," delivered February 9, 1996, text released March 13, 1996 <http://www.usdoj.gov/atr/public/speeches/fullerton.htm> (September 15, 2005).

[71] John Kwoka, Professor Economics Northeastern University, "Some Thoughts on Concentration Market Shares, and Merger Enforcement Policy," presented at FTC/DOJ Workshop on Merger Enforcement, February 17, 2004, p. 7, < http://www.ftc.gov/bc/mergerenforce/presentations/040217kwoka.pdf> (September 15, 2005).

69 in the residential "market" that he defined; Dr. Roycroft calculated HHI changes of 163 and 114 for residential and business customers, respectively. The changes are well below levels that the DOJ found acceptable. And when properly considered in relation to other important factors, such as MCI's decline and the surge in intermodal competition, the HHIs provide no basis adopting any of the conditions proposed by the intervenors based on their claims of harm to competition.

E. The Transaction Will Not Harm Competition for Long Distance Services

Q. DR. ROYCROFT (AT 65) DISAGREES WITH YOUR CONCLUSION THAT THIS MERGER WILL HAVE NO ADVERSE EFFECT ON COMPETITION FOR LONG DISTANCE CUSTOMERS. HOW DO YOU RESPOND?

A. First, there is ample evidence that there no longer is a stand-alone long distance market. But even if such a market were considered here, competition for long-distance services in Washington (and nationally) is intense as many firms offer "long distance" (generally as part of a package), average prices continue to decline, and long distance is offered by a host of providers.[72] Given this

[72] The Consumer Price Index ("CPI") for long-distance service has declined by close to 30 percent from 1998 to 2004 at a time when the overall CPI increased by about 15 percent. (Bureau of Labor Statistics). Moreover, there is a significant amount of fiber capacity in the long haul business as the telecommunications meltdown that hit the United States, and other countries, in the early 2000s was precipitated by a glut of fiber capacity that persists to this date. For example, according to research by TeleGeography in 2005 most intercity bandwidth is still unlit. They provide an example in the New York metropolitan area where 32 terrestrial carriers have a combined potential capacity of 818.2 Terabits per second but that only 22.6 Terabits per second, only 2.8 percent, of network bandwidth is actually lit. See TeleGeography, Company, Newsroom, "Most Intercity Bandwidth Still Unlit," April 20, 2005 <http://www.telegeography.com/press/release/2005-04-20.php> (September 15, 2005).

competition, there is no merit to Dr. Roycroft's bald claim that the merger will negatively impact the competition for long-distance customers.

III. THE TRANSACTION WILL NOT HARM COMPETITION FOR ENTERPRISE CUSTOMERS IN WASHINGTON

Q. WILL THE TRANSACTION HARM COMPETITION FOR ENTERPRISE CUSTOMERS IN WASHINGTON?

A. No. The merger of Verizon and MCI will not harm competition for enterprise customers (defined as midsized and large business customers) in Washington for several reasons. *First,* as I explained in my Direct Testimony (at 78–82), enterprise customers are sophisticated purchasers of communications services that typically employ competitive procurement practices (such as RFPs) and that can purchase individual components of the integrated bundles of products and services that they use from different service providers. This approach allows different types of firms to compete for enterprise customers and ensures that enterprise customers are able to purchase high-quality communications services at competitive prices.

Second, as I also explained in my Direct Testimony (at 82–94 and Exhibit WET-3), there are many competitors for enterprise customers including traditional IXCs, CLECs/DLECs, manufacturers (such as Lucent, Cisco, and Nortel), systems integrators, and managed service providers (such as IBM, EDS, and EMC), as well as major global telecom providers (such as BT, Deutsche

Telecom, and NTT). Cable, wireless, VoIP, and satellite providers also compete for enterprise customers.

Third, Verizon and MCI are not major competitors for these customers. In fact, an internal study of more than 800 instances where MCI bid on enterprise contracts between October 1, 2004 and April 20, 2005 showed that Verizon was not a bidder in more than 96 percent of them.[73]

Fourth, enterprise customers generally buy services in national or global markets, MCI's overlap with Verizon in Washington is extremely small, and its influence on the prices of enterprise services is not a significant factor in Verizon's service area in Washington. Specifically:

- As discussed in my Direct Testimony (at 55), the two companies have overlapping fiber in only four of the 104 wire centers in Verizon's Washington service area, and in those few wire centers at least 11 other carriers have fiber facilities.

- MCI's uses its own fiber to serve only 13 end-user buildings in Verizon's area (all in the Seattle-Tacoma-Bellevue MSA), while other CLECs have "lit" fiber in at least 247 buildings (the majority of which also fall in the Seattle MSA).

- MCI's influence on prices for special access is minimal; that is, it does not receive the largest discounts and it resells only a small share of the special access it purchases from Verizon.

[73] *See* Ex Parte Letter from Verizon and MCI to FCC, WC Docket No. 05-75, p. 3 n.5, filed July 1, 2005.

Q. WILL THE TRANSACTION BENEFIT ENTERPRISE CUSTOMERS?

A. Yes. The transaction will enable Verizon and MCI together to offer more complete service packages for enterprise customers. The two firms serve essentially as complements rather than substitutes for each other with regard to enterprise services. They compete to some extent for enterprise customers, but they focus on different aspects of the enterprise market. Their networks, services, and areas of expertise (engineering, sales, and customer support with respect to IP networks and applications) have very little overlap. For instance, Verizon offers wireless business services through its affiliate Verizon Wireless, while MCI has no wireless presence. While Verizon has limited interLATA transmission facilities, particularly in the western region of the U.S., MCI has a substantial interstate and international transmission network, is a leading IP backbone provider, and has considerable expertise at IP networking.[74]

Q. ABSENT THE MERGER, COULD VERIZON BECOME A VIABLE COMPETITOR IN THE ENTERPRISE MARKET OUTSIDE ITS LOCAL EXCHANGE OPERATING AREAS?

A. Yes, but not in the immediate future. However, the salient issue is not whether Verizon could eventually become a viable competitor in the enterprise market but whether the transaction will enhance its ability to serve enterprise customers without harming competition. My analysis of the transaction has shown that it will.

Q. WHAT DOES MR. WILSON CONCLUDE REGARDING THE TRANSACTION'S EFFECT ON COMPETITION FOR SERVICES PURCHASED BY ENTERPRISE CUSTOMERS?

A. Mr. Wilson analyzes competition for what he (at 5) describes as two separate business markets; that is, the "market" for business access lines, and the "market" for special access services. With respect to business access lines, he (at 16-17) concludes that "Verizon's market power will increase in two wire centers … and Verizon's market share will increase less than one percent." With respect to special access services, Mr. Wilson concludes that "Verizon will only gain market power over 0.3 percent of all intrastate and interstate private lines and special access lines as a result of the merger."

Q. WHAT DO MR. WILSON'S HHI CALCULATIONS IMPLY ABOUT SERVICES USED BY ENTERPRISE CUSTOMERS?

A. Although Mr. Wilson's conclusions are based on incomplete HHI calculations, accepting his HHI calculations and the underlying data on which they are based as correct, they do not indicate that the transaction will harm competition in any of the markets he defines. Specifically, the data used in Mr. Wilson's analysis show that Verizon has been losing substantial numbers of switched and end-user special access lines in Washington. From December 2003 to December 2004, Mr. Wilson's Exhibit TLW-3HC shows that Verizon lost about **[BEGIN VERIZON PROPRIETARY]** ****** **[END VERIZON PROPRIETARY]** voice-grade

[74] Verizon website, Domestic Telecom, at http://investor.verizon.com/business/wireline.aspx, accessed September 29, 2005 and Hoovers Fact Sheet, MCI, Inc.

equivalent business channels (which includes POTS, Centrex, DSO ISDN, and DS1 ISDN PRI channels) and about **[BEGIN VERIZON PROPRIETARY]** ******* **[END VERIZON PROPRIETARY]** end-user special access channels. These represent losses of about **[BEGIN VERIZON PROPRIETARY]** ******** **[END VERIZON PROPRIETARY]** percent, respectively.

Furthermore, the acquisition does not raise any concerns for customers who purchase business switched lines because, as Mr. Wilson (at 16) says: "MCI is the **[BEGIN MCI PROPRIETARY]** ********** **[END MCI PROPRIETARY]** CLEC, selling business local exchange services to **[BEGIN MCI PROPRIETARY]** **********[END MCI PROPRIETARY]** percent of the lines." Note also that, according to Mr. Wilson's data, MCI's "Multi-Line Business Self Provisioned Lines" are only about 4 percent as large as CLEC "Multi-Line Business Self Provisioned Lines."[75] Since Verizon provides about 193,000[76] multiline business lines over its own facilities, MCI's share of these lines comes to only 1 percent.

Q. DOES MR. WOOD PRESENT ANY EVIDENCE TO SUBSTANTIATE HIS CLAIM THAT THE MERGER HARM COMPETITION FOR ENTERPRISE CUSTOMERS?

A. No. Mr. Wood does not present any evidence regarding the enterprise market. Instead, Mr. Wood presents theoretical arguments of why he believes that

[75] *See* TLW-3HC, lines 49 and 50.

[76] FCC ARMIS Report 43-08, Table III, as of December 2004.

midsized businesses form a separate market and that the transaction will harm competition for that "market." Curiously, although Mr. Wood's testimony contains many sections in which he describes what he considers a proper merger analysis, he does not conduct any meaningful analysis himself (let alone any Washington-specific analysis) and bases his recommendations and conclusions exclusively on his theoretical discussion. Moreover, Mr. Wood does not attempt to evaluate the competitive significance of MCI alone, but lumps it together with AT&T in order to make conclusions about the state of competition generally (e.g., at 50-52). Significantly, Mr. Wood's correct observation (at 19) that MCI AT&T and MCI have "managed to capture only a small fraction of the market" contradicts his own claims (at 7) that MCI is "a major competitor of Verizon in the market for mid-sized business services" and that the merger will "adversely affect" customers.

Furthermore, Mr. Wood focuses his entire testimony on the competitive effects on midsized customers, ignoring the mass market and enterprise market. Not only does he define the markets differently than Verizon and MCI, he also defines them differently than even the other intervenors. This fact makes it virtually impossible to give any credence to Mr. Wood's testimony. It must be discounted as he does not provide this Commission with a full assessment of the merger, only his perception of the impact on so-called midsized businesses as he defines them.

Q. DOES DR. ROYCROFT PROPERLY ANALYZE THE EFFECT OF THE MERGER ON ENTERPRISE CUSTOMERS?

A. No. Dr. Roycroft (at 69) advocates that "customer class" should be treated as separate markets and performs some concentration analyses on this "market." With respect to business customers, Dr. Roycroft groups all business lines, whether provided to small, medium, or large businesses, into the same relevant market. He then calculates pre- and post-merger HHIs on this market. Given the incorrect market definition he employs and the incomplete and outdated data he relies on, Dr. Roycroft's HHI calculations do not reflect either transaction's effect on competition for either the mass market or the enterprise-market segments.

Specifically, his analysis shows the merger would increase the HHI from 4,083 to 4,197, or by a change of 114 points. However, a change of 114 is not an automatic dismissal of a proposed merger. As discussed above, antitrust authorities consider many other factors, besides HHIs, in their review of a merger and have not blocked a number of mergers with HHIs well above the threshold in the *Merger Guidelines*.

A. The Intervenors' Definitions of the Relevant *Geographic* Market Are Too Narrow

Q. YOU TESTIFIED EARLIER THAT THE INTERVENORS' DEFINITIONS OF THE RELEVANT GEOGRAPHIC MASS MARKET ARE TOO NARROW. HOW DOES THIS AFFECT THEIR ANALYSES OF THE ENTERPRISE MARKET?

A. Mr. Wilson's and Dr. Roycroft's definitions of the relevant geographic market for enterprise customers are incorrect because they limit the parameters of the market in a way that does not comport with the manner in which enterprise services are bought and sold on a national (if not international) basis today. Mr. Wood (at 13) defines the relevant geographic market for midsized businesses as "the individual buildings, campuses and individual end user locations where an effective substitute product would need to be present in order for a given customer to make use of it." Like Mr. Wilson's and Dr. Roycroft's definitions, this definition fails to account for the fact that competition for enterprise customers takes place in national and global markets. Granular market definitions, such as those proposed by the intervenors, have been rejected in other states. For instance, the California Attorney General (at 26) noted: "We reject the concept of a 'granular' market at the individual building or route level and analyze the competitive effects at the MSA level."[77]

[77] In the Matter of the Joint Application of SBC Communications Inc. and AT&T Corp. for Authorization to Transfer Control of AT&T Communications of California before the California Public Utilities Commission of the State of California, Application No. 05-02-027, "Opinion of the Attorney General on Competitive Effects of Proposed Merger of SBC Communications, Inc., and AT&T Corp.," February 28, 2005, released July 22, 2005, ("California Attorney General").

B. The Intervenors' Definitions of the Relevant *Product* Market Are Overly Narrow

Q. HOW DID THE INTERVENORS DEFINE THE RELEVANT PRODUCT MARKET FOR PURPOSES OF ANALYZING THE TRANSACTION'S EFFECT ON COMPETITION FOR ENTERPRISE CUSTOMERS?

A. Mr. Wilson finds that there is a separate market for business customers, while Mr. Wood (at 14) finds that "the mid-sized business market is a discrete, relevant market." Dr. Roycroft advocates separate markets by "customer class," but never really discusses what he believes that means; of greater concern, Dr. Roycroft analyzes competition for all "business lines" as if they were all part of the same market. Importantly, all three intervenors incorrectly exclude intermodal competitors from their analyses.

Q. DO YOU AGREE WITH THE INTERVENORS' DEFINITION OF THE RELEVANT PRODUCT MARKET?

A. No. As with their analyses of the transaction's effect on mass market customers, the intervenors' analyses of competition for enterprise customers relies on overly narrow definitions of the relevant product market. The *Merger Guidelines* focus on demand substitution factors (i.e., possible customer responses). As the FCC has noted, "demand substitutability identifies all of the products or services that consumers view as substitutes for each other, in response to changes in price." Contrary to the intervenors' view, there is no "*wireline voice*" market for enterprise customers. Enterprise customers do not merely purchase business lines; rather, they purchase a wide array of communications services, including

voice (domestic and international), data (Frame Relay, ATM, IP/VPN) that are often carried together over the same high-capacity business lines, CPE, ancillary services, and network integration services. Large enterprise and other commercial and institutional customers now spend more on data and wireless services than they spend on wireline voice services, and data and wireless are growing considerably, while wireline voice spending is declining.[78] Enterprise customers also obtain voice services through other technologies, such as VoIP, without obtaining switched lines. Any analysis of competition for this customer segment, therefore, must analyze the full array of services and facilities that large enterprise customers and midsized businesses purchase and cannot focus solely on switched wireline services.[79]

The intervenors' calculations of HHIs based entirely on wireline data are not probative of anything. By including but one product and only a small subset of all enterprise service providers in the relevant product market they analyzed, the intervenors ignored marketplace realities and fundamental economic principles which hold that all substitutes and all providers of substitutes must be measured in an analysis of a transaction's effect on competition.

[78] *See* Kneko Burney, InStat/MDR, Share of Wallet?: Telecom Trends and Expenditures in the US Business Market; Part One: US Enterprises (1,000+ Employees), August 2004, Table 7; Kneko Burney, InStat/MDR, Share of Wallet?: Telecom Trends and Expenditures in the US Business Market; Part Two: Mid-Sized Businesses (100-999 Employees), September 2004, Table 7.

[79] For these same reasons, Staff's prediction of HHIs after this transaction provides no meaningful data on the consequences of this transaction. *See* White Paper, p. 32. In addition, as explained above, Staff's

Q. IS THERE A STAND-ALONE PRODUCT MARKET FOR MIDSIZED BUSINESSES AS ADVOCATED BY MR. WOOD?

A. No. Mr. Wood is simply wrong that midsized business customers using high-capacity services should be regarded as a stand-alone product market. Once a carrier has deployed network facilities to reach larger customers, the firm is likely—as demonstrated by the historical pattern of CLEC entry and expansion—to diversify from serving the large customers to serving smaller customers who demand similar services. Moreover, the high-capacity services to which Mr. Wood refers, whether they are special access services, high-capacity loops, or high-capacity local transmission, are essentially point-to-point services that are fundamentally the same for both large and midsized customers. Thus, high-capacity services, including special access services, local loop services, or local transmission services, are segments of an enterprise market and should be considered in any analysis of an enterprise market. Indeed, one of Mr. Wood's clients, XO Communications, states on its website:

> XO® Private Data Networking services deliver scalable transport solutions to solve even your most complex network connectivity problems. From XO VPN, an economical private network application *for businesses of all sizes, to sophisticated Ethernet solutions for our largest customers,* XO Private Data Networking solutions let you:
>
> - Use the latest technologies coupled with the strength of the XO OC-192 Network to provide reliable and scalable high bandwidth data connectivity

---

projection is based on a simple time series extrapolation that ignores technological trends and the expected growth of various alternatives.

- Select from the highest levels of security to ensure your data's integrity

- Enjoy all the benefits of working with XO, from proactive 24x7 network management to a single invoice for all your voice and data services.

Whatever your private data networking needs, XO has you covered.[80]

Whether your business has one location in a single market or many offices across the nation, XO makes it simple for you to buy local services. That's because XO offers standard product features across all of our markets, along with standard product names and functionality. Imagine that—local services available in over 70 markets nationwide from one supplier with one simple invoice.[81]

But putting aside the fact that there is no stand-alone market for mid-sized business customers, there is no reason to conclude that the transaction will harm these customers. MCI is not Verizon's most important competitor for midsized businesses since MCI's primary focus has been on large businesses.[82] One recent survey of midsized businesses (defined as those with between 100 and 1,000 employees) showed that just 3.5 percent of them named MCI as a primary communications provider.[83] By contrast, AT&T was named as a preferred

[80] XO, "XO® Private Data Networking." <http://www.xo.com/products/smallgrowing/data/index.html> (August 17, 2005) emphasis added.

[81] XO, "XO® Local Services." <http://www.xo.com/products/smallgrowing/voice/local/> (August 17, 2005).

[82] *See* Declaration of Ronald J. McMurtie, at ¶¶ 3-4, Attachment 12 filed at the FCC in WC Docket No. 05-75; and Declaration of Eric J. Bruno and Shelly Murphyat ¶ 58, Attachment 3 filed at the FCC in WC Docket No. 05-75.

[83] K. Burney, InStat/MDR, "Darwin Laughs: Exploring Broadband Preferences for Network and Managed Services in the US Business Market," Part Two: US Mid-sized Businesses (100 to 999 Employees), December 2004, Table 27.

provider by 16.4 percent of those businesses. Furthermore, many national and regional CLECs and DLECs specialize and compete actively for midsized business customers. The merger will have an insignificant impact on competitive options for midsized businesses and will not harm competition for customers in this segment of the enterprise market.

Q. WHEN DEFINING THE RELEVANT MARKET, DOES IT MATTER WHETHER AN ENTERPRISE CUSTOMER PURCHASES SERVICES ON A WHOLESALE OR RETAIL BASIS?

A. No. The fact that some enterprise customers are carriers that purchase services on a wholesale basis does not matter when determining whether these services should be considered part of the relevant product market for enterprise services. Whether the customer is a large retail establishment, a government institution, or a wholesale provider, the basic demand and supply characteristics are similar enough to warrant that they be grouped for analysis purposes.

On the demand side, customers who demand high-capacity services require DS1 level services and higher. These customers, whether retail establishments or wholesale customers, such as interexchange carriers, have the same characteristics as the enterprise customers; that is, they purchase through contracts, issue RFPs, and are marketed to through direct-sales contacts.

On the supply side, midsized businesses are not geographically isolated from larger or smaller businesses or residential customers. The networks, facilities, and

operations that existing competitors currently are using to serve larger customers also can be used to serve midsized business customers if profitable conditions arise (assuming they are not already being used to serve them). The networks serving residential and small businesses and the networks serving large business customers can be used to serve midsized businesses at low incremental cost in pursuit of profitable opportunities. In fact, competitors attempt to serve as many types of customers as they possibly can. For example, XO not only serves business customers as described above, but it recently announced a "Wholesale Local Voice services platform" that "now can help CLECs serving residential customers transition off of the RBOCs' UNE-P, and instead use central office and transport services from XO to deliver telephone services."[84] In addition, according to its website:

> XO understands that carriers and service providers need more than just bandwidth to satisfy their customers. So along with the generous bandwidth capabilities we offer, our products and services—coupled with dedicated customer service and technical support—make it possible for you to deliver what your customers need.
>
> XO is committed to serving the needs of emerging and established carriers and service providers such as:
>
> - Competitive Local Exchange Carrier (CLEC)
> - Internet Service Provider (ISP)
> - Interexchange Carrier (IXC)
> - Incumbent Local Exchange Carrier (ILEC)

[84] Bernier, Paula, "XO Targets Residential-Focused CLECs Wanting to Move Off RBOC Facilities," *XChange*, August 29, 2005.

- Non-Facility Based Reseller
- Building Local Exchange Carrier (BLEC)
- Cable TV Provider
- Wireless Service Provider
- VOIP Service Provider
- Utility Telecom Division

> This commitment, combined with our financial strength and vast network, means you can rely on XO to provide the communications solutions you need to stay competitive today... and further down the road.
>
> With assets that directly compete with those of the largest telecommunications service providers, XO serves carriers and service providers of various sizes. So no matter what your line of business, or product or service requirements, XO can handle a piece of your business…or all of it. We'll design a solution specifically for you, evaluating and delivering exactly what you need at a price you can afford. If it's speed to market you need, XO can help you expand into new markets with little to no additional effort or capital expense. That way, you can remain focused on running your business and servicing your customers instead of constructing networks.[85]

Q. MR. WOOD CLAIMS (AT 90) THAT "XO HAS SPENT CONSIDERABLE RESOURCES IN DEVELOPING FIXED WIRELESS TECHNICAL CAPABILITIES, BUT HAS NO EXISTING SERVICE OFFERINGS." HOW DO YOU RESPOND TO HIS CLAIM?

A. In making this claim, Mr. Wood relies on selective excerpts from XO's 2004 10-K and other statements. But a more thorough review of XO's SEC filings shows that Mr. Wood is improperly attempting to minimize the extent of wireless

[85] XO, "XO® Carrier Services." <http://www.xo.com/products/carrier/index.html> (August 17, 2005).

competition that his client provides. For example, according to XO's first quarter 2005 SEC Form 10-Q, at 12:

> We have begun offering fixed broadband wireless backhaul services to mobile wireless telecommunications carriers. In April 2005, we reached an agreement to provide fixed broadband wireless services on a limited basis to one of the national mobile wireless carriers. The Company will continue to pursue opportunities to market and sell its fixed wireless solution to mobile wireless carriers both for primary network connectivity and redundancy.

Mr. Wood's statement (at 44) that although "XO has invested approximately one billion dollars in the deployment of [fixed wireless]…, and while it has hopes of utilizing this technology for commercial application in the future, it cannot currently do so" is contradicted by XO's 2004 SEC Form 10-K. The 10-K states (at 10) that wireless can be cost-effectively deployed today in selected markets, including according to the accompanying map, parts of Washington state: The following diagrams depict the physical components of our nationwide network. There are additional maps located on our web site at www.xo.com. The map below depicts our intercity fiber network and the geographic zones in which we are licensed to deploy fixed wireless services, as well as ***the local markets in which we are currently able to cost-effectively deploy fixed wireless solutions***. (Emphasis added.)

Q. MR. WOOD CLAIMS (AT 15) THAT "THERE ARE NO INTERMODAL COMPETITIVE ALTERNATIVES TO THE[ ] WIRELINE CIRCUITS" USED BY MID-SIZED BUSINESS CUSTOMERS. DO YOU AGREE?

A. No, and the evidence proves he is incorrect. In a declaration filed by Verizon with the FCC, Verizon highlighted a December 2003 study indicating that 29 percent of midsized businesses (100–999 employees) and 23 percent of small businesses (5-99 employees) were currently using fixed wireless for some high-capacity services. Further, 44 percent of midsized businesses and 35 percent of small businesses planned to use fixed wireless within the next 12 months.[86] In fact, one of Mr. Wood's clients in this proceeding, XO Communications, is an example. XO Communications provides fixed-wireless retail and wholesale services.[87] On its website, XO discusses "Wireless Spectrum," stating:

> XO owns the largest footprint of U.S. fixed wireless spectrum, which covers 95% of the population in the top 30 U.S. cities. The frequency of the spectrum is 27 GHz-32 GHz and allows XO to offer broadband access services using Local-to-Multipoint Distribution System (LMDS) technology. This enables XO to bypass the Regional Bell Operating Companies (RBOCs) and provide direct access to our end customers.[88]

[86] *See In the Matter of: Special Access Rates for Price Cap Local Exchange Carriers*, Declaration of Quintin Lew, WC Docket No. 05-25, June 9, 2005, Verizon Attachment D ¶ 27 ("Declaration of Quention Lew").

[87] *Id*.

[88] XO, XO® Network, "Network Details" <http://www.xo.com/about/network/details.html> (September 16, 2005).

An accompanying map on the website shows that these wireless facilities cover parts of Washington, including Seattle, Portland, and much of Verizon's service territory.[89]

Contrary to Mr. Woods' and the other witnesses' claims, cable companies, wireless providers, Internet services providers, and VoIP providers are serving enterprise customers of all sizes, including midsized business customers.

1. Cable Companies Are Serving Enterprise Customers

Q. SHOULD CABLE COMPANIES BE INCLUDED IN THE RELEVANT PRODUCT MARKET?

A. Yes. I explained earlier that cable companies offer significant mass market competition with respect to services offered to residential and small businesses. However, it is critical to keep in mind that cable companies serve larger businesses as well. One study found that almost two years ago 41 percent of "enterprises" and 32 percent of "middle market" businesses were using cable modem service in their main offices, most often in the form of "full T1 service."[90] Furthermore, cable MSOs are devoting increasing levels of resources and products targeted specifically towards business customers. Time Warner and Cox offer two examples. According to one recent report, "Time Warner Cable sells 13

[89] *See* XO, XO® Network, "Network Details," <http://www.xo.com/about/network/maps/wireless_large.html> (September 16, 2005).

[90] Kneko Burney et al, In-Stat/MDR, Cash Cows Say "Bye-Bye": The Future of Private Line Services in US Businesses, December 2003, p. 19, Table 9.

different varieties of commercial service packages.…The company now has about 350 salespeople specifically devoted to commercial services and boasts average annual revenue growth of 50 percent over the last five years."[91] Jim Robbins, Cox CEO, reports a similar story. According to Mr. Robbins, Cox "now offers business service in 22 markets…[and its] Business Services' annual revenue jumped from $263.7 million in 2002 to $395.6 million by 2004. 'They're doing 25% a year, and they would be doing more than that if we would give them more money.'"[92] Also, Comcast, the largest cable provider in WA, provides broadband services to small businesses, businesses with telecommuters and businesses in the hospitality industry.[93]

Industry analysts support this view, but with a broader perspective. According to Chuck Kaplan, chief operating officer of the research firm Narad Networks Inc., "We see activity from every MSO in the commercial sectors…cable can steal 20% of the telcos' T-1 high-speed Internet market 'uncontested,' and 'after that, who knows?'"[94] Targeting businesses seems to be working for these carriers. "According to Kagan Research, cable's estimated commercial-services revenue

[91] Michael Grebb, "Making Business Big Business; Ops Want to Give Telcos a Run for their Commercial-Services Business," *Multichannel News*, June 27, 2005.

[92] *Id*.

[93] See Comcast Business Products <http://www.comcast.com/Benefits/CHSIDetails/Slot4PageOne.asp> (October 3, 2005).

[94] See Michael Grebb, "Making Business Big Business; Ops Want to Give Telcos a Run for their Commercial-Services Business," *Multichannel News*, June 27, 2005.

grew from $682.6 million in 2003 to $1.2 billion in 2004. Kagan estimates that 2005 revenue will reach about $2 billion."[95]

Q. MR. WOOD (AT 46) CLAIMS THAT THE CABLE COMPANIES CANNOT TARGET CUSTOMERS HAVING MULTIPLE FRANCHISE TERRITORIES AND THAT CABLE BANDWIDTH IS TOO SMALL TO REPLACE MULTIPLE DS1S. DO YOU AGREE WITH HIS ASSESSMENT?

A. No. Contrary to Mr. Wood's claims, it is clear that cable companies are targeting business of all sizes, including midsized business customers. *First*, executives from Comcast, Cox, Time Warner Cable, and Cablevision have announced plans to expand in the commercial sector, and each of these companies has a portion of its website devoted to services for business customers.[96] *Second*, the consolidation of cable serving areas – a process through which cable companies swap franchise areas in order to achieve the largest possible set of contiguous customers – reduces this concern for regional midsized business customers. *Third*, Mr. Wood's definition of a midsized market appears to be quite elastic, including multi-location businesses requiring multiple DS1s at particular locations. Even if cable companies were unable to provide geographic reach or sufficient bandwidth for some of these customers, there are sufficient other alternatives for these customers among suppliers of services to the enterprise market.

[95] *Id.*

2. Enterprise Customers Rely On Broadband And Internet Services

Q. ARE INTERNET SERVICES SUBSTITUTES FOR WIRELINE SERVICES?

A. Yes, the evidence that I have presented shows that enterprise customers regard Internet services as substitutes for wireline services. They use these services by installing IP PBXs in their networks and purchasing IP telephones or by subscribing to hosted IP telephony service, also called IP Centrex, in which the VoIP call control and management resides in the service provider's network.

Indeed, it can hardly be disputed that email has become a mainstream substitute for voice calls in the office. Some companies have taken this a step further and are now adopting instant messaging as a form of communication:

> Many instant messaging vendors have released enterprise versions of their products that add benefits alongside message logging. IBM's Lotus division sells the SameTime instant messaging server. Microsoft has the Live Communications Server, which enables employees to message each other while optionally messaging users on public instant messaging networks.[97]

[96] *See* In the Matter of Special Access Rates for Price Cap Local Exchange Carriers, Comments of Verizon, WC Docket 05-25, June 13, 2005, pp. 28-31.

[97] Danny Bradbury, "Boardrooms make room for chat rooms: A Calgary-based energy trading floor puts instant messaging technology to work," Canada's *National Post,* Financial Post: Tech Post, April 29, 2005.

3. Wireless Providers Compete With Wireline Providers to Serve Enterprise Customers

Q. DO YOU AGREE WITH MR. WOOD THAT WIRELESS SERVICE IS NOT A COMPETITIVE ALTERNATIVE TO WIRELINE SERVICE FOR ENTERPRISE CUSTOMERS?

A. No. In making such a statement, Mr. Wood suggests (at 41-42) that 250 individual wireless phones are not a substitute for a wireline telephone system serving 250 lines. But a recent agreement between Sprint and Ford Motor Company in Detroit shows how far off the mark Mr. Wood is in making that claim. In that transaction, Sprint entered into a contract with Ford to replace ***8,000*** of SBC's fixed lines with Sprint's wireless service.[98] This is a good example of an important trend occurring among business customers, where businesses seek the kind of flexibility that wireless service can offer in the form of mobility. While Ford is an enterprise customer, all types of business customers are increasingly viewing wireless service as an alternative to wireline service.

Mr. Wood is simply ignoring the many ways that wireless substitution takes place for midsized business customers. Wireless providers now offer a variety of plans designed to meet the needs of such customers, and, obviously, in businesses where mobility is important, wireless service is especially attractive when compared with wireline service. Some providers, such as Sprint/Nextel, offer

[98] See Computerworld Staff, "Ford, Sprint agree to wireless deal," *Computerworld*, January 2, 2005 <http://www.computerworld.com.au/index.php/id;93373959;relcomp;1> (September 15, 2005).

customized solutions by industry.[99] Sprint also offers its business customers the "PCS Integrated Office," which allows a user to retrieve contacts or messages from a wireless phone the same way as from a wireline phone.[100] Nextel introduced its Push-To-Talk feature and sold it aggressively to business customers. Cingular also offers services designed to appeal to business customers (e.g., it offers a multiline business discount that grows with the size of the business). Cingular and Sprint both offer businesses plans that allow employees of corporate subscribers to share minutes. Other major carriers offer similar incentives to business customers.

According to the Yankee Group: "As carriers attempt to deliver wireless data solutions to businesses, they will both compete and partner with traditional IT suppliers."[101] Sixty-three percent of enterprises have formal relationships with multiple wireless carriers and almost one-third (29 percent) have formal relationships with three or more carriers. On average, enterprises have relationships with 2.23 carriers.[102]

[99] See Sprint, "University Wireless Access" <http://www.sprint.com/business/products/products/universityWirelessAccess.jsp, (7 April 2005), *see also* Sprint, "Financial Services and Insurance" <http://www.nextel.com/about/enterprise/wbs/finance_insurance.shtml> (April 7,2005).

[100] See Sprint, "PCS Integrated Office" <http://www.sprint.com/business/products/products/pcsIntegratedOffice_enterprise.jsp> (March 21, 2005).

[101] Roberta Wiggins and Eugene Signorini, Competition Among U.S. Wireless Carriers Intensifies in the Pursuit of Enterprise Customers, The Yankee Group, April 2004, p. 1.

[102] *Id.*, p. 7.

At the same time, business customers are centralizing control of spending on wireless voice and data services and looking to bundled service pricing as a means to reduce costs.[103] Ten percent of the customer base for voice and data services provided by Cingular Wireless is comprised of business accounts.[104] The Yankee Group reports that business subscribers make up approximately 70 percent of Nextel's base pre-merger.[105] Individuals who use T-Mobile services to address their business communication needs are estimated to account for up to 20 percent of the total installed base of T-Mobile USA.[106]

4. VoIP Providers Are Increasingly Serving Enterprise Customers

Q. SHOULD VOIP COMPETITION BE INCLUDED IN THE RELEVANT MARKET?

A. Yes. VoIP is on the rise in the enterprise segment. In-Stat/MDR reported that "the percentage of companies using VoIP grew from 3 percent in 2003 to 12 percent in 2004."[107] In-Stat also found that "more than 30% of firms, even those with less than 100 employees, are interested in and, more importantly, planning to

[103] *Id.*, p. 2.

[104] *Id.*, p. 8.

[105] *Id.*, p. 9.

[106] *Id.*, p. 11.

[107] Ed Sutherland, Enterprise VoIP Adoption? Gradual but Rapid, Say Experts," Wi-Fi Planet, March 28, 2005 <http://www.wi-fiplanet.com/voip/article.php/3493136> (September 15, 2005).

adopt IP telephony solutions in 2005."[108] The penetration rates are even higher for enterprise customers: "Fifty two percent of enterprises are deploying some form of VoIP, 46 percent have deployment plans, and only two percent do not plan to use VoIP, according to a survey by the testing and monitoring firm Empirix."[109] According to Bank of America:

> The operational cost savings are there with VoIP. The voice world has always been complex and harder to manage than the data world. Convergence gives us the ability to look at our whole technology entity. It will let us be more predictive of failures and other network events, which gives us the ability to keep system availability at a certain level.[110]

Q. MR. WOOD (AT 37–39) ARGUES THAT VOIP IS NOT A SUBSTITUTE AVAILABLE TO ENTERPRISE CUSTOMERS BECAUSE, HE CLAIMS, IT IS ONLY A SWITCHING APPLICATION PROVIDED OVER A BROADBAND CONNECTION. IS HE CORRECT?

A. No. Mr. Wood overlooks the fact that VoIP service is an integral part of network packages sold to enterprise customers. The fact that such customers have broadband access means that additional suppliers, even ones without traditional long-haul wireline networks, can compete in the enterprise market using Internet backbone services for transport.

---

[108] "Businesses Likely to Embrace IP Telephony in 2005, But Are Needs Being Met?" In-Stat Press Release, February 14, 2005 <http://www.instat.com/press.asp?ID=1244&sku=IN0401365EM> (September 15, 2005).

[109] "Fifty Two Percent of Enterprise Already Deploy VoIP: Survey," Information Week, March 7, 2005 <http://informationweek.networkingpipeline.com/voicedata/60406845> (September 15, 2005).

[110] Phil Hochmuth, "Bank of America's 'Higher Standards' for VoIP," NetworkWorld, December 20, 2004 <http://www.networkworld.com/news/2004/122004bofa.html> (September 15, 2005).

Q. MR. WOOD (AT 40) CLAIMS THAT THERE IS NO EVIDENCE THAT VOIP PROVIDERS WILL BEGIN TO SUPPLY MIDSIZED BUSINESS CUSTOMERS WITHIN ONE YEAR IN RESPONSE TO A "SMALL BUT SIGNIFICANT NON-TRANSITORY INCREASE IN PRICE." DO YOU AGREE?

A. No, Mr. Wood is wrong. There is no evidence that VoIP providers seek only large customers and ignore smaller ones. Further, even today, midsized business customers typically have access to broadband facilities.

5. Emerging Technologies: Wi-Fi, WiMAX, BPL, Satellite Broadband

Q. SHOULD EMERGING TECHNOLOGIES BE INCLUDED IN THE RELEVANT MARKET?

A. Yes. Emerging technologies have taken root in the business world. A number of CLECs are now using fixed wireless technologies to expand their networks, and companies like AirBand and TowerStream are supplying fixed-wireless broadband access to wholesale and retail customers. The intervenors took no account of this competition in their analyses.

Q. HOW ARE INTERMODAL ALTERNATIVES FOR DS1 AND HIGHER BIT RATE LOOPS DEVELOPING?

A. Intermodal alternatives for DS1 and higher bit rate loops (e.g., DS3) are growing. According to Infonetics, WiMAX equipment sales which totaled $16.4 million in 2004 is expected to increase to $124.5 million in 2005, a growth of over

650 percent.[111] Vonage recently announced a partnership with TowerStream to offer VoIP over TowerStream's "pre-WiMAX" fixed wireless broadband network. In exchange, TowerStream promises to offer businesses "a true alternative to the existing phone companies for both voice and broadband in one offering."[112] AT&T, Intel, Sprint, and Fujitsu Microelectronics are all currently developing WiMAX technology for deployment in 2006.[113] Airspan Networks Inc. has launched "self-installable" WiMAX products for indoor use by residential or small businesses and for outdoor professional use by larger enterprises. Moreover, Airspan currently offers AS.MAX, the " industry's most complete range of WiMAX Product portfolio consisting of four different Base Station solutions and a range of indoor and outdoor CPEs."[114] Time Warner Telecom is looking at WiMAX as a way to expand its range within its 44 metropolitan markets, where it has fiber connections to 5,280 buildings. BellSouth has officially launched its pre-WiMAX wireless broadband service in Athens, Georgia, and plans to offer the service in select Florida cities later this

[111] See Michael Hall, "Report: WiMAX Off to Strong Sales Start," *Wi-Fi Planet*, July 28, 2005 <http://www.wi-fiplanet.com/news/article.php/3523806> (September 16, 2005).

[112] Vonage Press Release, "TowerStream and Vonage Form Alliance to Offer VoIP Over Fixed Wireless Broadband," August 2, 2005 <http://www.vonage.com/corporate/press_index.php?PR=2005_08_02_0> (September 16, 2005).

[113] AT&T plans to test trial WiMAX on two corporate customers in New Jersey in May and plans for full deployment in 2006. *See* Wireless Watch, "AT&T to deploy WiMax in 2006," *The Register*, October 18, 2004 <http://www.theregister.co.uk/2004/10/18/sbc_moves_to_converge/> (17 September 2005). Intel's Broadband Wireless Group plans to integrate WiMAX into laptops by 2006 and into handsets by 2007. *See* Rupert Goodwins, "Intel plots path of WiMax," *CNET News.com*, September 7, 2005 <http://news.com.com/Intel+plots+path+of+WiMax/2100-1006_3-5349359.html> (September17, 2005).

[114] See Airspan Products <http://www.airspan.com/products_sub.htm> (September 30, 2005).

year.[115] And as I mentioned earlier, Speakeasy has already been offering WiMAX to business customers in Seattle, the first of several cities the company plans to provide this service.

C. Bidding for Enterprise Customers Will Remain Highly Competitive

Q. WILL BIDDING FOR ENTERPRISE CUSTOMERS REMAIN COMPETITIVE?

A. Yes. The transaction will not have an adverse effect on bidding for enterprise customers in Washington. As explained in my Direct Testimony (at 81), there are many bidders for enterprise services other than MCI, including not only wireline carriers but also systems integrators.[116] Verizon is rarely, if ever, a competing prime bidder against MCI on large enterprise contracts.[117] As a result, the loss of

[115] See WiMaxxed News, "Qwest Initiates Wimax Trials," July 28, 2005 <http://www.wimaxxed.com/wimaxxed_news/qwest_initiates.html> (August 10, 2005); *see also* Information Week, "BellSouth Officially Launches Pre-WiMax Service", August 4, 2005 <http://www.informationweek.com/story/showArticle.jhtml?articleID=167100889> (August 10, 2005).

[116] Systems Integrator IBM Global Services won a contract with Lloyd's bank to provide converged voice and data systems, including 70,000 VoIP phones, Networking Pipeline, *IBM Inks $971 Million Deal To Overhaul Lloyd's Financial Network,* December 7, 2004; Affinia Group Inc., a global supplier of automotive components signed Electronic Data Systems to provide support for all IT and communications services, *Affinia Group Signs IT Services Agreement with EDS,* December 8, 2004, Press Release.

[117] "Verizon's counsel has undertaken an analysis of competition between MCI and Verizon on RFPs[dated October 1, 2004 until about May 1, 2005] to document the fact that Verizon and MCI rarely compete head-to-head on the various contracts for which the companies bid. … Preliminary analysis indicates that a very small minority of bids involved head-to-head competition between the two companies. … [T]he upper-bound estimate demonstrates … that Verizon and MCI have different strengths and therefore rarely bid on the same RFP and even more rarely bid to provide the same services under a particular RFP." "Attachment 5: Reply Declaration of Eric J. Bruno, Kathy Koelle, Veronica Pellizzi, and Judy K. Verses," *In the Matter of Verizon Communications and MCI, Inc. Applications for Approval of Transfer of Control before the Federal Communications Commission, WC Docket NO. 05-75,* May 23, 2005, ("*Bruno et al FCC Reply*"), ¶ 22.

a single bidder should not be of concern to the Commission. In claiming otherwise, Mr. Wood presents a hypothetical bidding example that pits one competitive bidder against the ILEC (post-merger). However, his example is completely speculative and unrealistic.[118] It posits post-merger enterprise competition being reduced from three to two competitors and, in doing so, disregards extensive evidence demonstrating that there are numerous other competitors bidding for enterprise contracts. The California Attorney General's opinion (at 21) regarding the SBC/AT&T transaction also confirms that enterprise services have been competitive for a long time and have become more so.

D. The Transaction Will Not Harm Competition For Wholesale Fiber Facilities

Q. MR. WOOD (AT 21) CLAIMS THAT MCI IS THE SECOND OR THIRD LARGEST ALTERNATIVE SUPPLIER OF HIGH-CAPACITY FIBER FACILITIES SUCH THAT THE MERGER "FAR EXCEEDS THE GUIDELINE STANDARD OF MARKET CONCENTRATION BY ANY MEASURE, AND THUS IS NOW SUBJECT TO CAREFUL, ADDITIONAL SCRUTINY BY DOJ AND THE FCC." HOW DO YOU RESPOND?

A. Mr. Woods is wrong here. As a threshold matter, the DOJ and FCC are indeed reviewing the transaction but it is by no means clear that they have subjected it to "additional scrutiny," as Mr. Wood suggests. These agencies will render their decisions in due course and Mr. Wood is wrong to attempt to characterize their deliberations in any way. But, if Mr. Wood is correct, this only reaffirms that this

[118] Wood Declaration, pp. 67-69.

issue is a federal one—because the special access at issue is regulated by the FCC and not this Commission—and that it is not relevant for the Commission's consideration of the merger.

In any event, as I have explained, special access services are provided by many firms that are not required to provide any information about their customers, such as how many they have, and the locations where they have deployed fiber. As Verizon explained in the FCC's special access proceeding, available information on fiber deployment and the number of lit buildings likely substantially understates actual competition.[119]

Q. IS MCI A UNIQUE COMPETITIVE FORCE IN PROVIDING SPECIAL ACCESS TO BUSINESS CUSTOMERS?

A. No and neither Mr. Wood nor any other witness has provided any data that demonstrate otherwise. The data that the Parties have provided, on the other hand, show that MCI does not provide substantial competition for special access services. It serves only a small fraction of the buildings served by CLECs in Verizon's area of Washington with its own facilities. Specifically:

- MCI serves only 13 end-user buildings with its own fiber in Verizon's service area;

- Of the 13 end-user buildings, 3 are also served by competitive fiber;

[119] *See*, Before the Federal Communications Commission, In the Matter of: Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25, "Comments of Verizon," June 13, 2005, p. 3.

- Of the 10 that are not, all are within 0.1 miles of competitive fiber;

- Additionally, for those 10, there are an average 2.8 competing providers within 0.05 miles, 4.9 within 0.1 miles, and 5.9 within 0.25 miles; and

- CLECs have lit 247 buildings with 464 connections for an average of 1.9 carriers per building.

MCI resells only a fraction of the special access circuits it purchases from Verizon (i.e., only about one third of DS-1 circuits and less than ten percent of DS-3 circuits that MCI purchases from Verizon are used by MCI to provide circuits to other carriers). Page 1 of Exhibit WET-5C shows that other competitors have more extensive fiber routes in Verizon's area of the Seattle Tacoma Bellevue region.

It should also be noted that MCI is not receiving the largest discounts for special access services purchased from Verizon. In fact, at least two other carriers receive larger discounts and MCI's average price per DS 1 channel termination is approximately the same as the average Verizon charges in Washington to all carriers in the state.

Q. THE MAP ON PAGE 1 OF EXHIBIT WET5C ALSO SEEMS TO SHOW THAT MCI'S FACILTIES EXTEND INTO QWEST'S SERVICE TERRITORY IN THE SEATTLE AREA. WHAT DO YOU INFER FROM THAT INFORMATION?

A. Although it is somewhat difficult to see it because other carriers also serve Qwests' part of the Seattle area, once the merger is completed it will give Verizon immediate access to local facilities in Qwest's area. This can be seen more clearly on pages 2 and 3 of Exhibit WET-5C.

Q. MR. WOOD (AT 83) SUGGESTS THAT AFTER MCI MERGES WITH VERIZON SPECIAL ACCESS PRICES WILL INCREASE. IS HE CORRECT?

A. No. There are at least two reasons to conclude that this transaction will not cause increases in prices for special access services. *First*, Verizon and MCI have made clear that they intend to honor existing contracts and the corresponding contract rate levels. To the extent special access services are provided pursuant to federal tariff, the FCC has granted pricing flexibility for those services in those MSAs where there is sufficient competition to grant pricing flexibility. In such MSAs, competition will protect against the kinds of increased prices about which the intervenors profess concern. Otherwise, the prices are regulated by the FCC and are protected in that way.

Second, as discussed, continued competition from other facilities-based competitors in virtually all of the areas where MCI has deployed local fiber in Washington will constrain the merged company from being able to raise prices.

Q. SHOULD A NEW YORK PUBLIC SERVICE COMMISSION STAFF WHITE PAPER INFLUENCE THIS PROCEEDING?

A. No, Mr. Wood's (at 58-59) reliance on a NYPSC Staff White Paper as support for his claim that the transaction will harm competition in the enterprise segment is entirely misplaced. Mr. Wood (at 9-10) specifically cites a HHI calculation in that paper and asserts that its measures of concentration for various markets for business services in New York provide lower bounds for the concentration of those markets in Washington. But the White Paper has no bearing on this transaction in Washington and its HHI calculations are flawed for many of the same reasons the HHI calculations done by the intervenors here are flawed. As a threshold matter, the White Paper to which Mr. Wood alludes sets forth what the NYPSC Staff called "preliminary analyses" and "tentative conclusions" regarding the transaction's possible effects on competition in New York. By its own admission, the NYPSC Staff did not have complete information with which to conduct its analyses. Verizon and MCI responded to the White Paper and included information that points out the many flaws in the NYPSC Staff's preliminary analyses and tentative conclusions. In short, the White Paper is *not* a NYPSC determination and amounts to nothing more than one party's preliminary, and fatally flawed, views on the transaction.

Beyond that, for reasons I discussed previously it is incorrect to rely exclusively on historical HHI analyses to reach conclusions about a merger's effect on competition, as the White Paper does and as Mr. Wood is evidently advocating.

Moreover, the White Paper calculates HHIs for various groups of services and customers and makes no effort to ensure that any such group is a relevant market. The NYPSC Staff, in fact, acknowledges in several places that their calculated HHIs probably overstate market concentration because they omitted relevant competitors and relevant technologies.[120]

Further, NYPSC Staff's calculations for wholesale transport services rely on self-reported data from a fifteen-month old proceeding, in which 17 carriers submitted data, despite the presence of 20 additional carriers on maps submitted to the New York Public Service Commission by Verizon.[121]

Further still, relevant carrier services were omitted from the study. For example, carriers providing transport between wire centers A & B and B & C were not counted as serving the A & C route, and carriers serving buildings near Verizon or MCI lit buildings were not counted as competing for those buildings' services.

Finally, there are numerous other problems with the NYPSC Staff's White Paper, all of which are discussed in Verizon's Comments and Reply Comments on the White Paper, submitted on August 5 and August 21, respectively.

[120] See NYPSC Staff White Paper, pp. 22, 25.

[121] See Verizon White Paper Response, pp. 40-41, Exhibit 2. The HHI calculations regarding the other market segments that the NYPSC Staff analyzed were also materially flawed, however, to the extent Mr. Wood does not rely on them in his Washington analysis, I do not discuss the flaws in those calculations here. Petitioners' response to the White Paper was filed with the NYPSC and is available at http://www.dps.state.ny.us/VZ-Comments-Redacted.pdf.

Q. MR. WOOD (AT 26) MAINTAINS THAT BARRIERS TO ENTERING WHAT HE CALLS THE SPECIAL ACCESS MARKET ARE HIGH. DO YOU AGREE?

A. No. The fact that at least 20 different firms have deployed fiber in the areas served by Verizon in Washington, and more than 100 different providers have deployed competitive fiber in Verizon's serving areas around the country show that entry barriers are not prohibitively high.[122] Nevertheless, even assuming that barriers to entry are high, this merger will have no material impact on barriers to entering the market and deploying fiber.

Q. HAS MR. WOOD'S CLIENT, XO, DEPLOYED FIBER IN WASHINGTON?

A. Yes. According to a map on XO's website, the company offers its XOptions® Flex bundled service to various cities included in its metropolitan area markets, including Seattle, Tacoma, and Spokane.[123] The website also states that the service is:

> Designed for both growing businesses and those with critical Internet, data and voice applications, [and] XOptions Flex delivers it all on a single bill - from one vendor with one invoice for one flat rate* XOptions Flex utilizes our national local network - something the RBOC's can't offer - so all voice calls travel

[122] See Direct Testimony of William E. Taylor, July 8, 2005, Table 1, p. 54, Updated Version. *See also* Verizon MCI Public Interest Statement filed before the FCC in WC Docket No. 05-75, p. 3

[123] See XOptions® Flex Market Availability <http://www.xo.com/about/network/maps/flex_large.html> (September 30, 2005).

> securely over a dedicated IP connection rather than the public Internet.[124]

XO's website also reveals that:

> Metro Area Networks (MANs) allow XO to control customer traffic and ensure an efficient data transfer to the Inter-city network. metro-area networks are composed of enough metro fiber-optic cable to circle the globe more than 45 times – 1.16 million metro fiber miles throughout 40 major US cities, including the largest 30 cities in the United States.
>
> Unlike non-facilities-based providers or long-haul providers, XO, with its MANs, has access to the end customer. The MANs enable XO to offer such dynamic products as Ethernet and SONET services that carry data faster and more efficiently than our competition.[125]

Q. ARE ECONOMIC CONDITIONS FOR HIGH-CAPACITY AND TRANSPORT SERVICES FAVORABLE TO THE DEVELOPMENT OF COMPETITION?

A. Absolutely. As I have stated, these services have been highly competitive for quite some time. High-capacity, point-to-point services were one of the first telecommunications services to have been provided through competition, beginning with MCI's point-to-point long-haul services in the 1950s. The first examples of competition in the local exchange market began in the 1980s, with point-to-point connections between large users of telecommunications services and their IXC's point of presence. This is not surprising as demand conditions for these services are quite favorable for the development of competition.

[124] See XOptions® Flex, Overview <http://www.xo.com/products/smallgrowing/integrated/flex/index.html> (September 30, 2005).

Q. ARE THE PRICES OF VERIZON'S SPECIAL ACCESS SERVICES RELEVANT TO THIS TRANSACTION IN ANY WAY?

A. No. Mr. Wood (at 50) claims that Verizon's special access prices are "exorbitant," proving that Verizon is a dominant provider of high-capacity building access service. Putting aside for now whether his claim is correct (and, as I will show, it is not), the issue here is not whether Verizon is the dominant provider of special access services in Washington but whether the transaction will somehow increase Verizon's ability to raise special access prices above competitive levels. The evidence I have presented shows the transaction will not have that effect because, among other things, MCI is not a big provider of these services and does not exert any influence on Verizon's Special Access prices. Moreover, interstate special access prices are regulated by the FCC, not state commissions and, since the merger has no impact on the regulation or provision of these services, the price of these services is not relevant to this Commission's review of the merger. In fact, the FCC is presently reviewing the issue of special access pricing. There is no reason (or legal basis) for the Commission to attempt to address interstate FCC special access pricing policies in this State proceeding.

In any event, Mr. Wood's claim that Verizon's special access prices are "exorbitant" is utterly without merit. That claim is based on his assertion that rates of return calculated using ARMIS data have increased recently. However,

[125] See XO® Network, Network Details <http://www.xo.com/about/network/details.html> (September 30, 2005).

ARMIS rates of return cannot explain economic rates of return, and only economic rates of return can be used to reach any meaningful conclusions about supra-competitive prices. Moreover, data submitted in the FCC's special access NPRM has shown that average revenue per circuit for special access services in general and for DS1 and DS3 services individually have fallen steadily.[126]

Q. WHY CAN'T ARMIS RATES OF RETURN BE USED TO EVALUATE COMPETITIVE CONDITIONS FOR SPECIAL ACCESS SERVICES?

A. Verizon is a multiproduct, multistate firm that provides regulated and unregulated services over a single network using an integrated regional management structure. For such firms, economists have long understood that fully distributed costs allocated to particular services in particular jurisdictions are not economic costs and should not be used for ratemaking purposes or for assessing the degree of competitiveness in a market. That conclusion stems from the impossibility—not just in practice but in principle—of assigning fixed common costs and network investment in any economically meaningful way to particular services in particular jurisdictions. As Professor Kahn and I explained:

> The regulatory expedient of assigning fixed costs among categories (*e.g.*, between regulated and unregulated or between interstate and intrastate jurisdictions), in proportion to variable costs or demand volumes, though "reasonable," is not cost-causative, and the resulting costs are not economic costs. It might be equally reasonable to allocate railroad overhead costs to services by

[126] Declaration of William E. Taylor (WC Docket No. 05-25, RM No. 10593) on behalf of Verizon, June 9, 2005, ¶ 6.

volume, weight or value, but shippers of feathers, coal and diamonds would undoubtedly disagree about the results.[127]

Q. MR. WOOD (AT 77–80) ATTEMPTS TO APPROXIMATE THE FINANCIAL IMPACT OF THE MERGER ON SPECIAL ACCESS RATES. WOULD YOU PLEASE SUMMARIZE HIS APPROACH?

A. His main argument is that MCI resells special access service because it allegedly receives large volume discounts from Verizon. He maintains that MCI would have an incentive to resell the spare capacity at average variable cost (plus a profit), thus undercutting the ILEC's special access price. He further maintains that MCI and AT&T can make a credible threat to bypass the ILEC and can obtain good discounts that work to the benefit of other similarly situated carriers.

Q. IS THERE ANY FACTUAL OR ECONOMIC VALIDITY TO HIS ARGUMENT?

A. No. As previously discussed, Verizon offers special access discounts primarily based on term commitments, which are available to any carrier. Thus, the discounts MCI receives are available to other carriers.

Q. ARE UNES SUBSTITUTES FOR WIRELINE SERVICES?

A. Most definitely, but that is not the issue here. Mr. Wood states that UNEs should not be treated as substitutes for any competitive wholesale alternative to Verizon's special access services because of the uncertainty of FCC policy.

[127] Before the FCC, In the Matter of Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, WC Docket No. 04-313, CC Docket No. 01-338, Reply Declaration of William E. Taylor, October 15, 2004.,at 6.

Whatever the FCC policy is with respect to certain UNEs, the relevant point is that the merger would have no impact on such policy. Mr. Wood is simply speculating about the course of future federal policy on UNEs. He also ignores the relevant point that if a UNE is removed, it means that the FCC has determined that CLECs are no longer impaired in the sense that continued provision of ILEC UNEs at TELRIC rates is no longer necessary to promote competition.

E. The Transaction Does Not Raise Competitive Concerns Regarding Provision of Internet Backbone Services

Q. **DO YOU AGREE WITH MR. GILLAN THAT THE TRANSACTION WILL CREATE AN INTERNET BACKBONE PROVIDER WITH THE ABILITY AND INCENTIVE TO DISCRIMINATE AGAINST OTHER IP-BASED SERVICE PROVIDERS?**

A. No. The thrust of Mr. Gillan's argument is that the merged entity will have the ability to discriminate against other retail VoIP providers and ISPs because, in combination, the Verizon and SBC mergers will create two "mega-RBOCs" that "could redefine the tiering structure," and that with greater use of IP communications for voice and video transmission, "the danger of discrimination in IP networks is much larger going forward…."[128] Whatever the merged company's incentives might be after the transaction is completed, it will not have the ability to act on them.

[128] See Response Testimony of Joseph Gillan, on behalf of Covad Communications Co. September 9, 2005, pp. 42–45.

First, at least five other companies operate Internet backbones comparable to MCI's; and Verizon's Internet backbone is small and geographically limited in comparison. Thus, MCI's and Verizon's combined Internet backbones facilities would be comparable in size to those owned by several other companies and would continue to face intense competition from many other smaller Internet backbone providers. *Second*, in the face of such competition, and the economics of the Internet, the merged company would not be able to benefit from any effort to discriminate; thus, it would not even have the incentive to do so. *Third*, as even Mr. Gillan acknowledges, there are five other Tier-1 Internet backbone providers (i.e., Sprint, AT&T, Level 3, Qwest, and Global Crossing) that will continue to compete with the post-merger company.

Q. DO THE TRENDS IN MCI'S RELATIVE POSITION IN THE PROVISION OF INTERNET BACKBONE SERVICES SHOW THAT COMPETITION IS INTENSE FOR THOSE SERVICES?

A. Yes. Data on MCI's share of Internet traffic, revenues, or other measures of concentration all show that MCI's share has been declining as others have expanded into the Internet backbone business. While publicly available information does not permit precise calculations of the individual shares of all providers, all available data show that MCI is a much less significant provider of backbone-based services than it was five years ago.[129] Although there are problems in developing reliable revenue data, available information indicates that

[129] Kende Decl. ¶ 2.

the combined revenue of MCI and Verizon from backbone operations in 2003 was less than the revenues of the company with the highest backbone earnings.[130] Data provided by RHK likewise indicate that MCI is not the largest Internet connectivity provider, but rather is one of seven providers with traffic shares that range between 5 percent and 12.5 percent.[131]

MCI's share, as measured by the number of Autonomous System ("AS") connections, has also declined substantially, from 22 percent in 2000 to 12 percent in 2004.[132] The same data also show a substantial decrease in concentration for the market as a whole: the combined share of the top five backbone providers fell to 39 percent of all connections in 2004, a decrease from 58 percent in 2000.[133] The number of connections for each of the top four providers also declined from 2003 to 2004.[134]

The Verizon/MCI transaction will not alter substantially MCI's position. Verizon's backbone is small by any measure. It is concentrated primarily in the Northeast and MidAtlantic regions and does not extend to any foreign countries. Measured by AS connections, Verizon's backbone does not even rank in the top

[130] *Id*. ¶ 4.

[131] *Id*. ¶ 5.

[132] See *Global Internet Geography*, Teleography Research, 2004 (the "*Teleography Report*"), Figure 4. As noted therein, AS connections are at best a proxy for market share, as they only show who is "likely" to have the most customers, and this measure does not weight connections for traffic flows or revenues.

[133] Kende Decl. ¶ 7.

[134] *Id.*

50.[135] Thus, the proposed transaction would not significantly increase the relative size or competitive significance of MCI's backbone, and Mr. Gillan's professed concerns regarding increased concentration and competitive harm in the provision of Internet backbone services are unfounded.

Q. DO PRICING DATA REVEAL COMPETITION HAS BEEN INTENSE FOR INTERNET BACKBONE SERVICES?

A. Yes. The steep decline of Internet bandwidth prices provides additional evidence of the strong competition for Internet connectivity services. From 2Q2003–2Q2004, transit prices in major U.S. cities fell 55 percent. Thus, one study reported that the "Internet backbone is beset with ruinous price declines and brutal competition."[136]

Q. PLEASE ADDRESS MR. GILLAN'S CONTENTIONS ABOUT VERIZON'S ABILITY TO DISCRIMINATE.

A. Mr. Gillan states (at 45) that "Multi-Protocol Label Switching ("MPLS"), enables a network operator to prioritize packets, providing superior performance over the ordinary method of routing." Then, he argues that "it is important that Verizon not have the opportunity to act on its incentives to discriminate." Thus, he

[135] Kende Decl. ¶ 8.

[136] *Teleography Report*, Executive Summary. Moreover, ongoing technological changes have led to substitutes that make consumers less dependent on Internet transport services. For example, customers increasingly use caching to store frequently accessed content at locations closer to the end user, thereby reducing the amount of traffic that flows over Internet backbones. Developments in network architecture and routing schemes also have given Internet connectivity providers additional flexibility to choose from a variety of physical paths to the same destination, and these providers use this technology to avoid potential delays by rerouting traffic away from points of congestion. See Michael D. Pelcovits & Vinton G. Cerf, *Economics of the Internet*, 2 Emerging Telecommunications Networks; The International Handbook of Telecommunications Economics (Gary Madden ed., 2003). See Kende Decl. ¶ 6.

suggests Verizon could somehow "prioritize packets" so as to favor its own retail customers over other companies' retail customers that use MCI's internet backbone. Mr. Gillan's discrimination worries are entirely misplaced. A recent study by Professor Nicholas Economides concludes that efforts to degrade service to rival Internet backbone providers ("IBPs") would not succeed because they would harm the IBP that attempted do so.[137] More specifically, Professor Economides concluded that:

> Degradation of interconnections [provided to competitors] … sacrifices the benefits of network externalities. It would result in a loss of value in the large IBP's Internet businesses because it would limit its customers' ability to interact with the rest of the Internet. A rational business would not take this step. ***Because there are limited switching costs and negligible barriers to expansion and entry, transport customers would switch to other networks or new entrants rather than tolerate a degraded interconnection and alienate their customers. Networks monitor the quality of service aggressively on behalf of their end users and web-site customers, and they are able to identify and react to problems that would result from deliberate degradation of interconnection***.[138]

Applying Professor Economides' conclusions here, it is clear that there is no basis for Mr. Gillan's concern that, once Verizon controls MCI's backbone network, new state regulatory rules will be needed to assure that Verizon does not discriminate.

[137] Nicholas Economides, *The Economics of the Internet Backbone*, , NYU Law and Economics Research Paper No. 04-033, and NET Institute Working Paper No. 04-23, June 2005, p. 40 (the "*Economides Study*").

[138] *Economides Study*, p. 40 (emphasis supplied).

Indeed, putting aside the jurisdictional issues discussed in Dr. Danner's testimony, such a strategy would be doomed to failure as Dr. Economides explained in the context of interconnection. Any effort to assign lower priority to a competitor's content or traffic would fail because: (1) "networks monitor quality of service aggressively on behalf of their end users and website customers"; (2) "the limited switching costs and negligible barriers to expansion and entry" would result in lost traffic on Verizon's Internet backbone, as competitors switch their traffic to other IBP's networks; and (3) the quality of service perceived by Verizon's customers would not be just a function of what happens to their outgoing packets but also—and probably more so given how the Internet is used to gain access to information and entertainment—by what happens to their incoming packets. If many of their incoming packets are originated by non-Verizon customers, then Verizon's own customers would feel as if they were getting poor service ***from Verizon***. That would defeat Verizon's purported strategy.

Mr. Gillan's concerns are also refuted by Professor Economides' conclusion that:

> Since users demand universal connectivity on the Internet, no network, however large, can afford not to offer universal connectivity. Therefore, no network would decide to degrade connections with the rest of the Internet networks unless the degrading network was certain that all ISPs not connected to it would immediately react to the degradation by instantaneously switching to the degrading network. This instantaneous switching is extremely unlikely to happen. Instead, many ISPs would reduce rather than increase use of a network that is degrading the quality of interconnections for a significant amount of Internet traffic. And, as long as there are ISPs who

have not switched to the degrading network, all customers of the degrading network suffer. Each one of these customers of the degrading network is receiving connectivity significantly below his expectations of universal connectivity, and is now willing to pay less for it. Thus, the loss in value from degradation is comparable on both sides of the degraded interconnections, and can in fact be higher for the larger network. This means that a large network can only harm its rivals by harming itself by just as much or more.[139]

F. Expansion Of Unbundling Obligations Is Not Justified By The Merger

Q. DOES THE FCC'S ACTIONS IN ITS TRIENNIAL REVIEW IMPACT THIS TRANSACTION?

A. No. Mr. Wood (at 50) refers to the FCC's Triennial Review process and claims it creates "extreme regulatory uncertainty." He (at 56) further claims that post-merger, "the non-impairment showings already made under the TRRO [would be] largely based on a phantom competitive presence." This Commission should ignore these claims for at least two reasons. *First*, this proceeding is not the proper forum to revisit the FCC's UNE policies or to ponder how they might affect competitors in the future. The merger will have no impact on the rules governing UNE impairment. Whatever the federal rules are, they will remain in place and be unaffected by the merger.

Second, both the FCC's UNE impairment rules and its special access flexibility rules rely entirely upon collocation activity by competitors. For example, for special access, the greater the collocation activity, the greater the flexibility

[139] *Economides Study*, pp. 39-40 (emphasis in original).

obtained by the carrier. However, evaluating competition based solely on collocation activity is a very conservative approach because it ignores intermodal competition and other competition from wireline noncollocated firms.

Q. SHOULD THE MERGER BE CONTINGENT ON VERIZON MAKING CERTAIN COMMITMENTS WITH REGARD TO UNES?

A. No. The intervenors propose that approval of the merger be conditioned on Verizon's agreement to make "voluntary" commitments to expand its provision of unbundled network elements beyond that mandated by the Telecommunications Act of 1996 or the FCC. Some intervenors further request that Verizon be forced to modify existing interconnection agreements.[140] The Commission should reject these recommended conditions for several reasons. As a threshold matter, such proposals go far beyond the legitimate bounds of this proceeding, which should be narrowly focused on any incremental harm that the transaction might cause. In addition, expanding the mandatory provision of network elements at TELRIC prices is anticompetitive—not procompetitive—when the elements in question can be obtained from market sources. As Justice Breyer reminds us,

> Increased sharing by itself does not automatically mean increased competition. It is in the unshared, not in the shared, portions of the enterprise that meaningful competition would likely emerge. Rules that force firms to share every resource or element of a business would create, not competition, but pervasive regulation, for the regulators, not the marketplace, would set the relevant terms.[141]

[140] *See for instance,* Response Testimony of Don Wood at 85-86

[141] *AT&T v. Iowa Utils. Bd.,* 525 U.S., p. 429 (Breyer, J., concurring in part and dissenting in part).

Finally, Mr. Wood (at 82-85) imagines that the FCC based its unbundling rules in its *TRRO* decision "on the supposition that MCI (and AT&T) would compete with each other to provide wholesale services on routes where UNEs are eliminated" and that "[a]s part of the FCC's misplaced assumption that the two largest CLECs would continue to contribute to the development a robust wholesale market, the TRRO placed a cap of 10 on the number DS1 unbundled loops and dedicated transport circuits that could be ordered to a building or on a particular route." Mr. Wood presents no proof that the FCC, in fact, relied on the assumption that MCI, AT&T, or any other CLEC operating in Washington or elsewhere would continue to provide wholesale services on routes where UNEs are eliminated. Indeed, to the extent that the FCC expressly ruled that the unbundling rules would be adjusted based on a "one-way ratchet," it appears that the FCC contemplated the possibility that some of the competitors whose facilities were considered in the elimination of UNEs might one day cease to provide wholesale services for whatever reason. Nonetheless, the FCC concluded that once adjusted, no further adjustments would be required. Any modifications to FCC decisions are within the province of the FCC.

* * *

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.