Before the
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Examine Issues Related to the Transition to Intermodal Competition in the Provision of Telecommunications Services	))))))	**Case No. 05-C-0616**

INITIAL COMMENTS OF CONVERSENT COMMUNICATIONS OF NEW YORK, LLC

I. Introduction

This proceeding raises very important questions about how the Commission should regulate the activities of telecommunications providers in New York, and the Notice correctly recognizes, at the outset, that the various tools available to regulators must be carefully applied in recognition of the state of competition in each relevant market. As the Commission points out: "The primary reason for regulation is to protect consumers from abuses by dominant suppliers of essential services . . . " Notice at 2. At the same time, the Commission's Notice suggests that intermodal competition is "rapidly" changing the industry. Notice at 3-5, 21. Specifically, the Commission is looking to establish a record to test this proposition, in order to "fully understand the status of competition in the state." Notice at 5.

Conversent Communications of New York, LLC ("Conversent") is a facilities-based CLEC competing for small and medium sized businesses in certain regions of New York, and therefore the comments that follow will focus on assisting the Commission's

understanding of the state of competition in this discrete market for telecommunications services.

As pointed out in an analysis of small to medium sized businesses, conducted by Economics and Technology, Inc. ("ETI"), specifically examining whether intermodal competition truly can be considered as a substitute for ILEC Wireline services (attached as Exhibit "A," the conclusion that logically follows is that it is largely a myth that small to medium sized business customers view these intermodal offerings as adequate substitutes.[1] The ETI report also points out that it is also a myth to believe that there is a direct correlation between Verizon's access line losses and intermodal competition – no such correlation exists and there are substantial independent factors at play that prove the fallacy of trying to correlate Verizon access line loss to substitution by intermodal competition.[2]

Accordingly, without sufficient competition from any of the inter-modal alternatives suggested in the Commission's Notice, the only available source of competition for small to medium sized business customers in New York are CLECs, who must by necessity obtain access to Verizon last mile loop facilities in order to provide competitive choice for price and service to these New York customers.[3]

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[1] The ETI Report is captioned "Hold the Phone: Debunking The Myth of Inter-Modal Alternatives For Business Telecom Users in New York." This report was prepared to provide the Commission a realistic assessment of the actual extent of inter-modal competition used by small to medium sized businesses.

[2] See ETI Report, Exhibit "A,"; see also "Reassessing the Impact of Access Lines on Wireline Carriers," Equity research report prepared by Raymond James & Associates, Inc., dated July 11, 2005 (attached as Exhibit "B").

[3] Conversent has provided brief responses to the numerous questions raised by the Commission's Appendix to its Notice, and these answers can be found attached as Conversent's "Appendix 1"

II. The Commission Should Not De-Regulate Verizon's Retail Activities Before Fully Understanding The Degree of Actual Competition For All Customers In The Local Telecommunications Market.

The Commission has taken the first step in its Notice, by setting forth its understanding of the state (and type) of competition that exists generally in the markets for telecommunications services. However, as discussed below, the Commission's assessment is much too general to form any conclusions on the future of regulation. The Commission should proceed cautiously, by drilling down to examine the degree of competition, or lack of competition, experienced by different types of customers.[4]

In order to fully understand the degree to which customers view intermodal competition as a realistic and functional substitute for wireline service, the Commission must shift its focus from press releases, marketing pieces, and "supply side" counting of access lines and fiber based collocations. Instead, the Commission should undertake a more rigorous "demand side" evaluation of the markets relevant to telecommunications needs and demands of different customers. In other words, before venturing towards deregulation of companies large and small in various markets, the Commission must look at the actual state of competition in the first instance, as viewed from the customer, not as portrayed by just the mere existence of facilities alone that may or may not be actually deployed to customer use, as was done in the FCC's TRO proceeding, and as indicated in Staff's TRO index analysis supplied to the FCC.[5]

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[4] The FCC agrees that evaluating the markets first is an absolute pre-requisite to any policy re-examination of regulation: For example, the FCC has offered this guidance in its LEC Classification Order: "[I]n defining the relevant product market, one must examine whether a 'small but significant and non-transitory' increase in the price of the relevant product would cause enough buyers to shift their purchases to a second product, so as to make the price increase unprofitable . . . If so, the two products should be considered the same product market." 12 FCC Rcd at 15782, para. 41 n. 119.

[5] The FCC further explained the demand oriented evaluation in its AT&T Reclassification Order, 11 FCC Rcd at 3274, para. 5 (listing various factors relevant to market power, including "the number, size and distribution of competing firms, the nature of barriers to entry, [ ] the availability of reasonably

In any event, the examination of the various markets must be rigorous and based on a sufficient administrative record that will withstand legal and public scrutiny. The first step for the Commission in setting forth a foundation from which to examine an appropriate regulatory response is, as always, defining the relevant markets.

III. The Commission Must Examine The Degree of Actual Competition in at Least Three Distinct Retail Customer Markets – Mass Market, Small/Medium Business, and Large Business/Enterprise Market.

A. The Small To Medium Business Market Is A Separate Market From The Mass Market Or Large Business Enterprise Market

The Staff has signaled its belief that the telecommunications market consists of two broadly defined customer types: mass market (mostly residential) and business customers (See, e.g., Staff's White Paper). As Conversent pointed out in its comments on the Staff's White Paper to the proposed VZ/MCI merger, separating the market into these two large categories presents a danger of analyzing these markets in an overly broad manner that can lead to a distorted view of the degree of competition for small to medium sized business customers.

In particular, the small and medium sized business market must be examined as a separate customer market in this proceeding, for the fundamental reason that these customers demand services that are different than the typical mass market customer, yet at the same time do not exhibit the same levels of demands of the large business enterprise customer. And, the Commission should examine the small to medium business customer separately because it is widely suspected that most business customers in New

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substitutable services, and whether the firm controlled bottleneck facilities" (citations and internal quotations omissied). Finally, the FCC views a "dominant" carrier as a carrier that possesses market power where the control the firm can exercise in setting the price of its output." In the Matter of the Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services, CC Docket No. 01-337, para. 19, n. 44. The Commission should similarly undertake the a rigorous analysis of the markets.

York are small to medium sized, so that the Commission's determinations in this proceeding will likely have the greatest overall impact to the vast majority of business customers that fall into this middle tier of customers.

This is why the mass market ***should be defined as residential and single line business customers only***. This would be consistent with recent legislation recently enacted in New York. For example, in New York Bill No. 2103-B, the legislature has required the Commission to conduct a special study showing carrier change charges for "residential and single line business customers." Defining the mass market this way would also comport with a consensus of how several ILECs, CLECs and IXCs have presented this to the FCC in proceedings related to new rules for inter-carrier compensation.

In proceedings at the FCC, related to developing new rules for inter-carrier compensation, a group of large ILECs and CLECs called "The Intercarrier Compensation Group," (made up of MCI, AT&T, SBC, Level 3, Global Crossing, Sprint, and others) have proposed to treat the "mass market" for inter-carrier comp purposes as "primary residential, non-primary residential, and single-line business customers."[6] For these reasons, there is a developing consensus that, from a regulatory perspective, the mass market should be limited to residential and single line business customers. In no case, therefore, should the Commission lump all "small businesses" into a "mass market" analysis.[7]

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[6] See ICF Plan, submitted as an Ex Parte Filing in FCC Docket No. 01-92, dated October 5, 2004, page 64, and found at page 130 at this link: http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6516492297 .

[7] Indeed, the Small Business Association views a "small business" as "an independent business having fewer than 500 employees." See www.sba.gov/advo/. These customers should not be treated the same as "residential" customers when evaluating the future of regulation.

Of course, on the other end of the spectrum, there are large businesses or "enterprise customers", that typically have larger offices in many regions of the country. These customers certainly are not like residential customers; however, these large enterprise customers also are not like most localized small to medium sized business customers in New York either.[8] Because Conversent compete in the market to serve small to medium sized customers the remainder of these comments will be addressed to this specific customer category.

B. There Is Very Little Evidence of Inter-Modal Competition In the Small To Medium Sized Business Market.

In its Notice, the Commission has sought to evaluate how to establish a "flexible regulatory framework that promotes innovation and encourages economic investment in this state's telecommunications infrastructure." Notice at 6. The Notice further posits that there are four "basic alternatives" to Verizon's traditional wireline service (Cable Telephony, CLECs using Verizon UNE loops, wireless and VoIP via broadband). Id.

However, the question that remains is which kind of customer views any of these "basic alternatives" as realistic substitutes for traditional wireline services provided either by Verizon retail or via a CLEC accessing UNE loops and other Verizon bottleneck facilities? As ETI's recent analysis shows, for most small to medium sized business customers, these various intermodal offerings are not an option at all, for a variety of reasons. See Exhibit "A."

Moreover, this is further supported by the Staff's merger analysis, where the Staff tentatively, and correctly, determined that both the retail and wholesale small and

[8] Staff's Report appears to suggest that "enterprise customers" are "entities purchasing four or more business lines." Staff Report at pg. 27 and ft.n. 69. Conversent believes it is more accurate to say that such entities are small/medium sized business customers and that "enterprise" customers should only be reserved for the very largest of business customer.

medium sized business markets were highly concentrated even before the Verizon/MCI merger request. Staff White Paper at 20 (citing statistics from the FCC's Local Competition Report as of June 30, 2004).

VoIP: At the most basic price level, VoIP presents a real hurdle, since the cost of the broadband connection must be considered in any review of the level of actual use by business customers of VOIP service. When this cost is factored in, VOIP service is more expensive than most local and long-distance packages for traditional calling. Even the FCC in its unbundling analysis pointed out that VoIP cannot be viewed as a sufficient substitute at this time: "although we recognize that limited intermodel competition exists due to VoIP offerings, we do not believe that it makes sense at this time to view VoIP as a substitute for wireline telephony." FCC TRRO para 39, ft.n. 118. This is even more true for business customers that have lower thresholds for poor service quality and where reliability is a key component of the service needs of the customer. The ETI analysis lends further proof of this. See Exhibit "A". For these reasons, VoIP does not represent a complete alternative or substitute to traditional wireline services, at least as far as small to medium sized business customers are concerned.

Cable: Conversent also believes that for customers that are not residential and single line business customers (such as most small business customers) cable telephony over independent cable plant is not a realistic alternative either. Again, the ETI analysis confirms this fact, by pointing out that most of the business offerings being made by the large cable companies today are not cable offerings at all, but are really traditional wireline CLEC offerings, provisioned over fiber optic facilities (not coaxial cable) such

that there is nothing intermodal about these offerings at all. See Exhibit "A," Chapter 4 – Discussing "The Myth of Intermodal Competition."

As the ETI further points out, cable is not well positioned to meet the "connectivity" needs of most business customers as the cable networks are largely designed to reach residential customers, not businesses. Cable is thus targeted largely to mass market, single line homes and home oriented business customers. Id. ETI's analysis reveals further that there are "shared-network" issues with cable that many business customers fear would compromise data security and transmission performance needs, particularly where highly sensitive financial and commercial information is involved. Id. Finally, ETI's analysis shows that the investment in cable to serve businesses is slowing, not growing. Id.

These problems did not escape the FCC, even when evaluating the state of competition for unbundling purposes in its TRO analysis:

> Some incumbent LECs, nevertheless, argue that the Commission should reach similar conclusions about the state of competition in local exchange markets, particularly based on competition from cable companies. As discussed more fully below, we consider such evidence of competition from cable providers as part of our impairment analysis. Our review shows that cable companies predominantly compete in the mass market for broadband services throughout the country. **To the extent that they compete in other product markets, like the enterprise services market, such competition is evolving more slowly and in more limited geographic areas.**

TRRO 39 (internal citations omitted; emphasis added). This concern also appears in Staff's analysis in its White Paper, highlighting the limits of cable as an alternative in the small to medium sized business market:

> many business locations are not wired for television in the way residential buildings are. Thus, business locations often do not have cable facilities in place which can be quickly upgraded for the provision of packet cable telephone services.

Staff Report at 41. Furthermore, as Staff pointed out in its White Paper, "cable telephone providers" also "rely on large part on Verizon special access circuits" and that Verizon's network "remains the 'middle man' in most carrier-to-carrier hand offs of local traffic between networks." Staff Report at 23, at ft.n. 56.

> Staff also believes that the telecommunications market transition to cable-based telephony is of little assistance to the enterprise market at this point in time since most small and medium-sized businesses are not "cabled-up" (i.e. current cable-based services are television rather than voice-driven) and larger businesses generally have T-carrier systems for their telecommunications needs, so there is no pressing requirement in this market for broadband services either.

Staff Report at 31.[9] For these reasons cable is not a realistic intermodal alternative for most small to medium sized business customers.

Wireless: As for wireless, the available evidence of actual small to medium business customer experience confirms Staff's views that wireless competition cannot be viewed as a sufficient substitute to wireline services. At most, as shown in the attached ETI Report, there is very little, if any, substitution of wireless for wireline services used by businesses. There are reliability, quality of service problems, and a lack of access to white listings directory services that render wireless a poor substitute for traditional wireline services. As the ETI Report shows, the evidence strongly supports the notion that wireless and wireline are not even in the same product markets. See ETI Report, attached as Exhibit "A." Indeed, just last week the FCC too evaluated the Sprint/Nextel merger by analyzing cell phones as a distinct "product market." *In The Matter of the Applications of Nextel Communications, Inc. and Sprint Corporation For Consent To*

[9] As noted above, Conversent also agrees that VoIP is simply not a competitive alternative for a company that requires the bandwidth and dependency of a T1 dedicated loop (or even for some DS0 voice and data loops).

Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order released August 8, 2005, at para. 43 (Nextel Order).

At most, all that can be agreed upon is that small to medium sized companies make use of wireless services *as a supplement* to wireline services, especially for businesses that have mobile employees (such as construction workers). However, again, these services are used to supplement, not to replace, a businesses basic wireline provided voice and data services. As the FCC recently pointed out, "most mobile telephony subscribers are residential customers," not business customers. Id.

The ETI Report is further corroborated by recent expert testimony submitted to the FCC (in consideration of the Verizon/MCI merger) "Although 45 percent of all businesses surveyed in New Jersey used wireless services to make some of their local calls, the study found that only 'about one percent of businesses name wireless as their primary means of making local telephone calls."[10]

These findings are also consistent with findings that the FCC made in connection with the merger between Cingular Wireless and AT&T Wireless. *In re Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations,* WT Docket No. 04-70, Memorandum Opinion and Order, FCC 04-255 (Oct. 26, 2004). There, the FCC noted that SBC and BellSouth had strong incentives to protect their wireline operations competition from their own wireless operations.

[10] Declaration of Susan Baldwin and Sarah Bosley, dated May 9, 2005, filed in the Verizon/MCI FCC proceeding, WC Docket No. 05-75, at pg. 49 (citing and quoting a survey entitled: "Local Business Telephone Service in New Jersey: A Survey of Small Businesses" conducted by the Eagleton Institute of Politics, Center for Public Interest Polling – at 11, ft.n.3)

The FCC pointed out that Cingular's "strategies are influenced by SBC's and BellSouth's concerns about wireline revenues and access lines." *Id.* ¶ 243. The FCC found that Cingular "developed and marketed many of its wireless products and services to complement – and specifically not to replace – residential wireline voice services." *Id.* ¶ 244. Specifically, SBC, BellSouth, and Cingular developed a new category of products that integrated wireless and wireline features and functionality. *Id.* ¶ 244 n. 579.

Verizon, of course, would have the same concerns as SBC and BellSouth about competition from its wireless operations eating into wireline access lines, access MOUs, and revenues. The ETI Report further highlights that it is highly problematic to associate wireline and wireless as substitute products, where the "loss" of even a Verizon wireless residential customer is not a "loss" when that customer merely goes to Verizon's wireless services. Not surprisingly, Verizon has developed similar wireline/wireless integrated product offerings in likely response to those concerns, targeted, not surprisingly, to mostly residential customers. Thus, even if it is true that Verizon's wireline operations are losing customers and revenue to wireless, a prime beneficiary of that trend is Verizon itself. Analysts are quick to recognize that Verizon has gained significant revenue from its own Verizon's wireless operations, as shown in the investment analyst report provided as Exhibit "B." Comparing the most certain increase in Verizon's wireless subscribers to Verizon's claims of access line loss puts an end to any notion that Verizon is suffering from wireless competition.

For example, Verizon's "Freedom" plans offer local services with various combinations of long distance, wireless and Internet access services in a discounted bundle available on one bill. Verizon 2004 Annual Report at 20. Verizon also has

introduced a new product, "iobi Home," which it describes as "a 'control panel' with a wide assortment of features that helps our customers manage *all* their communications services and devices." Verizon 2004 Annual Report at 7 (emphasis added). Verizon, therefore, is holding its wireless operations back from full competition with its Verizon wireline operations, much as SBC and BellSouth held back Cingular from full competition with their wireline businesses.

Indeed, according to recent industry analysis, access lines are not an accurate measure of an ILEC's financial health, as Verizon is successfully gaining revenue and market share for data and wireless services that more than offset wireline access line loss.[11] Thus, Verizon's complaints about loss of access lines to inter-modal competitors does not give an accurate picture of the extent of inter-modal competition or of Verizon's financial health. The Staff's report, therefore, properly removes wireless as a substitute product in this retail market when examining this proposed merger.

As for other advanced services, such as emerging technologies such as Wi-Fi, while Conversent agrees with Staff's exclusion of these technologies in its examination, Conversent does take issue with Staff's suggestion that there is "growing evidence" that "consumers increasingly view these new technologies as substitutes for wireline voice service," at least as far as small/medium businesses are concerned. Staff Report at 24. At most, all that can be said is that these technologies currently can be regarded only as *potential* threats in the future.

The conclusion is therefore inescapable that small to medium sized business customers do not view inter-modal telecommunications services (wireless, VoIP or

5. See "Reassessing the Impact of Access Lines on Wireline Carriers," Equity research report prepared by Raymond James & Associates, Inc., dated July 11, 2005 (attached as Exhibit "B").

Cable) as realistic substitutes for existing wireline services provided either by either Verizon retail or through CLECs that require access to Verizon last mile loop facilities. For small to medium sized business customers, the conclusion is inescapable that the only true source of competition in the near future will be through facilities-based CLECs, such as Conversent.

However, as revealed in data recently supplied by ILECs to the FCC, CLECs, that use ILEC loops (not switching or UNE-P) are barely holding their own. For example, in the FCC's most recent study on the "trends in telephone service" it is revealed that the number of CLEC access lines provided without switching (UNE-Loop) has remained almost the same for several years.[12] Therefore, when the Commission evaluates how it should regulate companies that provide services to small and medium sized businesses, the goal should be establishing a regulatory framework that promotes competition by facilities based CLECs, as this is largely the only source of competition that will be available to most small to medium sized customers.

IV. The Commission Should Not Isolate Its Examination of Retail Regulation From an Examination Of Verizon's Control and Market Power In Important Wholesale Markets Crucial To The Development of Facilities Based Competition By CLECs.

Because CLECs represent the only alternative to Verizon for most small to medium sized business customers in New York Conversent urges the Commission to also consider the degree of market power exhibited by Verizon in wholesale markets, when considering a review of regulations over retail services. It would not be appropriate for the Commission to reduce or eliminate regulatory oversight of Verizon's

[12] See Trends in Telephone Service Report prepared by the FCC's Industry Analysis and Technology Division, Wireline Competition Bureau, April 2005 at www.fcc.gov/wcb/trends.html. In Table 8.4, at page 8.8, reporting ILECs reported that on December 2002 CLECs used a total nationwide of 4,259,000 access lines without switching (or UNE-L) – that figure only increased marginally to 4,290,000 as of June 2004.

retail operations where the facilities used by Verizon to provide retail service are also used to provide wholesale services to CLECs and where Verizon has dominant market power in this wholesale market.[13]

By this, it is undeniable that Verizon is able to take steps to raise prices by either restricting output or by raising prices by increasing a rival' costs, such as by restricting a CLECs access to bottleneck facilities that are required for a CLEC to offer services.[14] There is no question that Verizon has an incentive to use its market power in the local exchange markets to unfairly disadvantage a rival that requires wholesale access to parts of Verizon's network in order to reach end user customers.

There are a number of ways Verizon can act on this market power, such as by providing poor quality of service to wholesale customers, providing poor interconnection services, imposing unnecessary delays, to name a few examples. Verizon's efforts to convince the Commission to deregulate its activities must be viewed as a means to allow an unfettered ability to further use its control over essential network facilities to disadvantage competitors. Where there is little or no inter-modal alternative available to the small to medium sized business the Commission should not countenance a framework whereby Verizon can use its dominant control over wholesale facilities to drive out competition by CLECs that have invested millions of dollars in their own network facilities in order to interconnect with Verizon and serve customers in New York.

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[13] The Staff's White Paper, which is part of this record, left no room for argument that Verizon, even before its merger request with MCI, had overwhelming market power in wholesale loop and transport markets.

[14] The recent example of Verizon's multi-year campaign to block a CLEC's ability to obtain high capacity UNE loops at cost based rates, where only "routine modifications" were required, under a guise of a "no facilities" policy, is just one indication of the extent to which Verizon can manipulate market power in wholesale markets to raise a rivals' costs.

It is also highly questionable whether any inter-modal competition, such as cable modem service, would sufficiently discipline Verizon's behavior in retail markets without regulatory safeguards (leaving only a duopoly); it would certainly not discipline Verizon's behavior in wholesale markets. Certainly, if there were more widespread competitive providers of loops this could discipline Verizon, through alternative loop suppliers to CLECs, but the problem of duplicating loop facilities is well documented, and at least for the near future, Verizon will own and control the vast majority of loops used to serve almost all customers.

V. The Commission Should Not Blithely Accept That Deregulating Verizon Will Lead To Investment Or Deployment Of Advanced Network Facilities In Markets Where Verizon Still Has Dominant Market Power.

A. The Commission Should Regulate To Stabilize and Promote Facilities Based Competition By CLECs In Markets Where Verizon Has Dominant Market Power. This Will Provide The Necessary Incentives For Further Investment By All Carriers.

The Commission has indicated that it intends to "eliminate, consistent with the public interest and to the extent practicable, the asymmetrical aspects of current policies, practices, and rules, so as to treat each telecommunications provider . . . as even-handedly as possible given the current statutory constraints." Notice at 4. That said, the Commission's ultimate goal is "to establish a flexible regulatory framework that promotes innovation and encourages economic investment in this state's telecommunications infrastructure." Notice at 6. Conversent shares the Commission's goals that regulation should, essentially, be fair and even handed, and should be tied to promoting competition through facilities-based investments.

However, as with the arguments being raised by Verizon in the merger proceeding, merely deregulating Verizon's activities does not provide any incentive for

Verizon to roll out more advanced services to customers in markets where Verizon exercises dominant market power. In such markets, Verizon can be expected to behave as a rational monopolist would – by reducing supply and raising prices, not by investing in new technology or building out new plant. The Commission should be skeptical of Verizon's promise to deploy out fiber-to-the homes as a quid-pro-quo to further deregulation. As a matter of simple economics Verizon will not build out its network unless there is a guarantee of a sufficient return on its investments.

Competitors certainly have no guarantee when making such decisions, and the Commission should not protect Verizon by adopting a deregulatory posture that would ensure a monopoly return on its investments. Where Verizon continues to dominate a market – such as the small to medium sized business market, and the wholesale markets used by competitors to serve such customers, the best regulatory response to promote innovation and to encourage investment is to regulate in a manner to allow CLECs to gain market share and revenues that can be used to invest in greater deployment of advanced telecommunications facilities that can further provide alternatives to Verizon's network. De-regulating Verizon will only put an end to further investments by CLECs.

There is well-documented analysis that CLECs were the driving force behind the widespread deployment of advanced services to customers. For example, it is widely believed that Verizon, like other ILECs, delayed implementation of lesser priced DSL service and technology that had been around for decades, for fear of cannibalizing more expensive T-1 services.[15] This shows that a de-regulatory policy applied to Verizon that has the effect of solidifying Verizon's dominant market power, under the guise of seeking

[15] See *The Broadband Problem – The Anatomy of a Market Failure and a Policy Dilemma*, Charles H. Ferguson, Brookings Institution Press (2004) at pp 57-96.

a form of "regulatory parity" will, as long as Verizon controls the local wireline market, stifle innovation, frustrate the deployment of advanced telecommunications facilities, and will not encourage investment as a means to provide competitive alternatives to customers.

VI. Conclusion

The Commission's initial conclusions that 1) "intermodal competiton is rapidly changing the face of the telecommunications industry" and that 2) "traditional competitors are losing ground" based on mere access line counts, do not stand up to scrutiny, at least as far as the small to medium sized business market is concerned. As discussed in detail above, and as further analyzed in the ETI report attached to these comments, the Commission must test its hypothesis against the actual demands and usage experiences of this distinct customer class. On the contrary, the evidence is overwhelming that *small to medium sized business customers do not* view cable, wireless, VoIP or any other developing technology as adequate substitutes for their traditional wireline services.

Consequently, despite many changes in the regulatory landscape and the industry, the existence of CLECs remains, as it has for much of the last decade, the only source for competition by an alternative to Verizon for these specific customers in New York. The Commission's regulations must, therefore, be focused in such a way to spur investment and competition from CLECs into this market still dominated by Verizon.

The Commission cannot ignore the relevance of regulation of important wholesale markets where Verizon still controls access to important last mile bottleneck facilities. For this reason, under no circumstances should the Commission tread down the path of

de-regulating Verizon's activities in markets where it still has the means and incentive to use its dominant market power to the disadvantage of consumers, competitors, and the healthy development of facilities based competition in New York.

Respectfully Submitted,

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Dated: August 12, 2005

HOLD THE PHONE!

Debunking the Myth of Intermodal Alternatives for Business Telecom Users In New York

prepared for
the UNE-L CLEC Coalition by

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Preface

DEBUNKING THE MYTH OF INTERMODAL ALTERNATIVES FOR BUSINESS TELECOM USERS IN NEW YORK STATE

The UNE-L CLEC Coalition is a comprised of Competitive Local Exchange Carriers (CLECs) that provide telecommunications services to business subscribers in the state of New York: XO Communications Services, Inc., Conversent Communications, LLC, Covad Communications Company, Broadview Networks, Inc. and BridgeCom International, Inc and CTC Communications, Corp.

In a recent Order investingating the impact of intermodal alterntatives on incumbent local service provider market power, the NY PSC states that among the principles governing this policymaking proceeding is that "[r]egulation should reflect market conditions" and that the "regulatory framework must be designed for the present" not for 'the fully competitive market that may ultimately develop."[1] Realizing that most of the discussions in both regulatory circles and the popular and trade press to date have focussed upon residential markets we have undertaken this study in an effort to inform the decisionmaking process relative to the conditions that exist at this point in time in the business market.

The UNE-L CLECs have asked Economics and Technology, Inc. (ETI) to prepare this report in order to provide a realistic assessment of the actual extent of intermodla competition for business local telecommunications services in New York.

This paper was prepared by Susan M. Gately, Lee L. Selwyn and Colin B. Weir. The authors gratefully acknowledge the contributions and valuable assistance provided by the members of the UNE-L CLECs in the preparation of this report. The views expressed herein are, however, those of the authors.

Boston, Massachusetts
August 2005

1. *Order* at 2.

Executive Summary

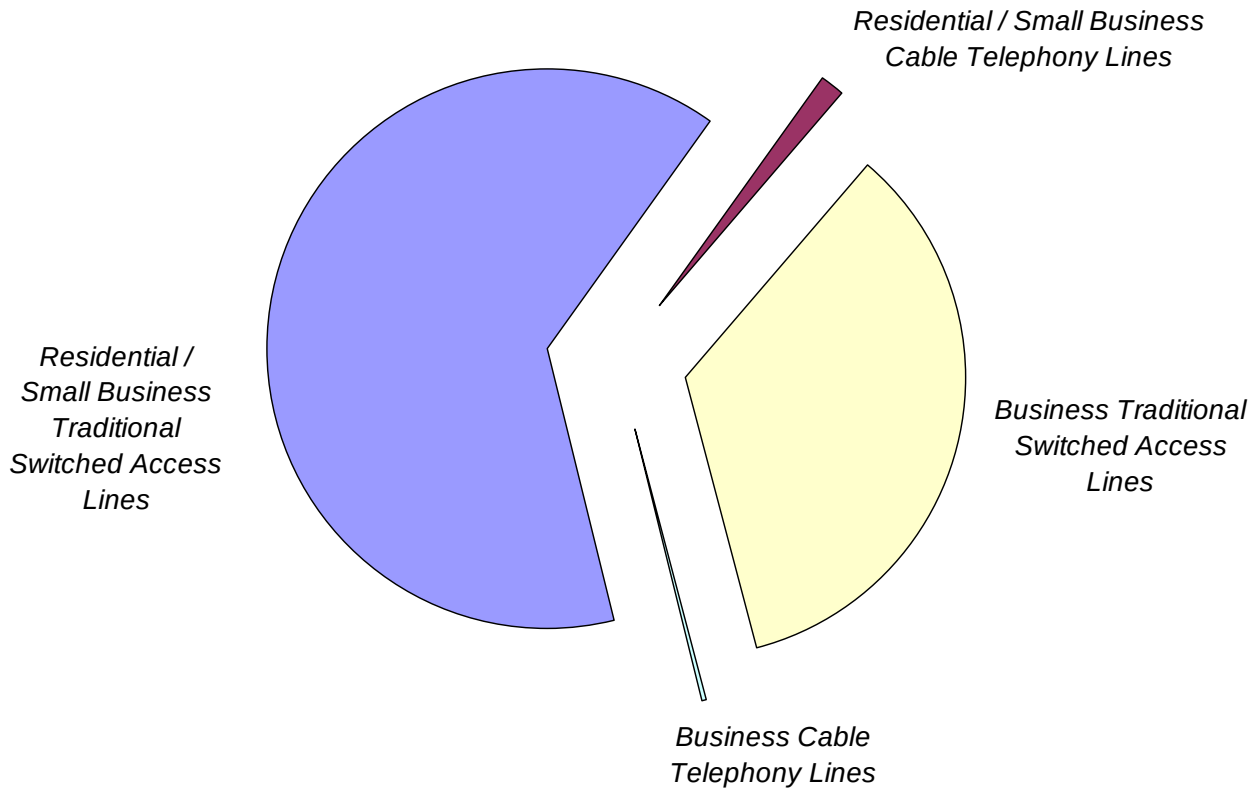
DEBUNKING THE MYTH OF INTERMODAL ALTERNATIVES FOR BUSINESS TELECOM USERS IN NEW YORK STATE

In its ongoing investigation of the impact of "intermodal competition" in the consumer market in New York upon the market power of incumbent local exchange carriers (ILEC), the New York regulators have included "small business" customers in the "consumer" market. Contrary to popular opinion, for the vast majority of business subscribers in the state of New York, intermodal telecommunications services do not represent a viable *substitute* for the traditional landline offerings of the incumbent local exchange carriers and, as such, do nothing to diminish or to constrain the market power of the incumbent provider (which, in most cases, is Verizon).

Evaluation of the impact of intermodal telecommunications alternatives upon a market requires, as a threshold matter, defining the relevant market correctly. Therefore, as an initial matter, it is necessary to evaluate residential and business markets (even very small business customers) separately because they are not in the same "relevant product market." The telecom needs of business users are sufficiently different from those of household users so as to more than overcome any superficial similarities between residential and small business telephone services that may exist with respect to the technical nature of those services.

Once the focus has been shifted to *business* telecommunications users it becomes clear that the intermodal telecommunications *alternatives* that are available in New York today do not represent *competitive substitutes* to traditional landline local exchange services. In order for the intermodal alternatives being evaluated by the PSC to constrain the market power of the incumbent LECs in New York, those services need to be *available to business users*, and they need to be viewied as and used by business customers as *substitutes* to traditional local services.

Cable telephony services (offered over coaxial cable plant) fall short of meeting this mark for business subscribers in large part because they simply are not available to them. The truth of this statement is borne out by the data on the Figure below that reveals that even with the most generous interpretation of the data possible, something less than 2% of business switched access lines in New York are reported as being provided over cable telephony services.



All available evidence demonstrates that *wireless* service, while much more generally available, is used by business subscribers as an adjunct to, rather than a replacement for, traditional landline local exchange services. While even less empirical analysis has been done on *business wireless substitution* than on residential, a 2003 study commissioned by the New Jersey BPU of 801 small businesses in New Jersey found that only one percent of businesses use wireless service as their "primary" means of communication. Corroborating this finding and extending its applicability to larger business users, Verizon, (New York's largest ILEC and largest wireless service provider), filed comments with the FCC just two months' ago estimating its share of the total market for "retail enterprise telecommunications business of large and mid-sized customers". In that analysis, Verizon *included* all of its business retail revenues, and the revenues of services far removed as "customer premises equipment (CPE), network management, and IP hosting, storage and security" but *excluded* wireless services. We are aware of no evidence that would support a finding that business users are using wireless services as a substitute for traditional landline services.

As with wireless, we are unaware of any evidence that business users have in fact begun to substitute *VoIP* for landline local services. VoIP services require a high speed internet

connection. Our analysis reveals fewer than 200,000 DSL or cable-modem high speed internet connections being used by business subscribers in the New York as of the end of 2004. Verizon does not make DSL service available to subscribers that are not subscribing to another local service line (be it Verizon's or a CLEC competitor's), meaning that small business subscribers can use VoIP with Verizon DSL only to *complement* other local service options, not as a replacement thereof. Cable modem services would provide another option, if cable service were generally deployed and available to business subscribers – but it is not.

One day, technology may truly permit businesses to utilize intermodal alternatives – those available today and those still on the drawing board or to be invented, and regulators may find it appropriate at the time to adjust regulation of incumbent service providers that provision business local services (including high speed internet access), but that day has yet to arrive in New York.

Table of Contents

DEBUNKING THE MYTH OF INTERMODAL ALTERNATIVES FOR BUSINESS TELECOM USERS IN NEW YORK STATE

1 INTRODUCTION

Evaluation of the effect of so called "intermodal" telecom alternatives upon the market power of an incumbent landline provider (in this case Verizon) must by informed by examination of those alternatives in terms of both availability and substitutability for relevant market segments.[2] Throughout this paper, the focus will be upon business, not residential, market segments. Contrary to popular opinion, for the vast majority of business subscribers in the state of New York, *intermodal* telecommunications services do not represent a viable *substitute* for the traditional landline offerings of the incumbent local exchange carriers and, as such, do nothing to diminish or to constrain the market power of the incumbent provider (which, in most cases, is Verizon).

To date, most discussions of *intermodal* competitive alternatives as they exist for residential, small, medium and large businesses have presumed both that intermodal services are generally *available* to subscribers in most geographic locations, and that the alternatives are viewed by purchasers as *substitutes* for traditional ILEC circuit-switched wireline phone services. Generally, these discussions fail to differentiate between residential services furnished for household use and services furnished to business purchasers of all sizes. With respect to *business* subscribers, large and small (including those the PSC has included in its "consumer" market)[3], each of the intermodal alternatives falls short of satisfying the communications needs of virtually all businesses in New York state, either because they are not *available* at the geographic locations where businesses require connectivity, or because they do not represent functionally equivalent alternatives, or both.

The FCC has recognized that intermodal alternatives are not always reasonable substitutes for ILEC wireline services due to the lack of comparability in availability, quality, price, or the

2. The *intermodal* telecommunications alternatives being evaluated by the PSC include cable telephony services, wireless services and Voice over Internet Protocol-based services (VoIP).

3. *Order Initiating Proceeding and Inviting Comments*, NY PSC Case No. 05-C-0616, *Proceeding on Motion of the Commission to Examine Issues Related to the Transition to Intermodal Competition in the Provision of Telecommunications Services*, Issued and Effective June 29, 2005, at 3. ("*Order"*)

maturity of the alternative provider.[4] Moreover, specific customers (or customer classes), particularly business customers, may have specialized requirements (e.g., data security or full-time reliability) that effectively preclude the use of non-ILEC non-wireline alternatives. As detailed below, at least for the present, it is clear that intermodal providers are not capable of supplying a sufficient quantity or quality of service to represent a serious competitive choice for the access needs of business customers. That being the case, intermodal alternatives cannot be relied upon to constrain the market power of the incumbent wireline service provider.

In the instant case, the NY PSC is investigating the impact that these so-called intermodal competitive alternatives have upon the market power of the incumbent local service providers in New York. The *Order* specifically focuses upon what are described as "consumer" services – both residential and small business. Combining residential and "small business" subscribers (however small business is defined) together into a single group may have had some utility when it comes to evaluating whether or not it was economically viable for facilities-based competitors to deploy owned-facilities for the last-mile connection to a customer, or whether the UNE-Platform should be available, but when evaluating the use of *intermodal* alternatives by "consumers," these two very different groups of "consumers" must be evaluated separately.

In the chapters that follow, we discuss the following:

- Why it is important to properly define the market for use of intermodal communications alternatives by business customers and distinguish that from the residential market (*Chapter 2)*.

- Why cable telephony, wireless services, and VoIP are not viable *substitutes* for business customers' use of traditional landline local services (*Chapter 3*).

- Why cable telephony, wireless services and VoIP have not reduced the incumbents market power in the markets for business local services and high speed internet access. (*Chapter 4)*

4. *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338; Federal Communications Commission, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-989; *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, *Report and Order on Remand*, 18 FCC Rcd 16978 ("*TRO*") at para. 97.

2 DEFINING THE RELEVANT PRODUCT AND GEOGRAPHIC MARKETS

Different markets exist for business and residential local exchange customers

Evaluation of the impact of intermodal telecommunications alternatives upon a market requires, as a threshold matter, correctly defining the relevant market in question. Business customers, regardless of size, depend upon and utilize telecom services differently than residential subscribers. Regardless of whether a "business" is small (perhaps a medical office with four telephone lines, or even a beauty shop with just one line) or mid-sized (such as a law firm, a brokerage office, a school, a hotel, or a publishing company) with anywhere from 10 to 100 or more telephone lines, on up to a large corporate headquarters, financial institutions or university campuses with thousands of lines, the requirements for reliable and high quality communication with the outside world are the same – and are almost always *mission-critical* from the business user's standpoint. No phone service, no orders or reservations. No phone service, no credit card authorizations. No phone service, no means of communicating with customers and addressing their inquiries and needs. No phone service, no means of efficiently communicating with suppliers and vendors. In short, no phone service, no revenues.

The PSC's *Order* talks abut the "consumer market" and includes both residential and small business subscribers in that market definition, but it is important to note that both the availability and utility of intermodal alternatives to business users (large or small) is very different than that for residence customers. Market power across the broad base of telecommunications users cannot be based upon the services available to and used by residential consumers when those residential customers' needs are not the same as the needs of other users. If, and to the extent that the PSC finds that intermodal choices available to residential consumers have reduced ILEC market power (which we do not believe to be the case), it does not follow that the ILECs will not maintain market power in the provision of service to business users, large or small.

This is not to suggest that *all businesses* of whatever size fall within the same product market with respect to their telecom needs. However, what can certainly be said is that the

telecom needs of business users are sufficiently different from those of household users so as to more than overcome any superficial similarities between residential and small business telephone services that may exist with respect to the technical nature of those services. Telecom requirements of business of all sizes are actually more similar than different, and it is far better to group large and small businesses together for purposes of market definition than it is to group those small businesses users with residential users.

A study conducted in 2003 by Rutgers University for the new Jersey Board of Public Utilities ("BPU") makes this abundantly clear. The Rutgers study surveyed 801 businesses in New Jersey as to the relative importance to them of various attributes of telecommunications service:

> The survey results also indicate that smaller businesses are not looking for anything radically different than large businesses in terms of their local telephone service. [5]

Interestingly, the survey found that *price* ranked fourth in importance to small business users in choosing a local phone service provider, and the availability of optional features (one of the purported hallmarks of VoIP services) ranked last among the factors measured. Most of the survey respondents were small businesses.[6]

> Survey participants were also asked to rate the importance of six factors in choosing local telephone service. Ratings were given on a ten point scale, with 10 being the highest. While cost is the major consideration of companies that would actively consider switching their local telephone service provider, it ranks lower than quality and service among all New Jersey small businesses.
>
> Of the six factors measured, quality (mean=9.2) and service (mean=9.1) rank the highest, both receiving a greater than 9 average rating (Table 3.5). These are followed by convenience (8.6) and price (8.5). Flexibility (7.5) is in the next tier and the package of optional services available (6.4) is considered the least important of the six factors asked about in the survey.

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5. *Local Business Telephone Service in New Jersey: A Survey of Small Businesses*, Conducted for the New Jersey Board of Public Utilities by the Eagleton Institute of Politics, Center for Public Interest Polling, The State University of New Jersey, Rutgers ("Eagleton Survey"), at 11, and footnote 3. Available online at http://www.bpu.state.nj.us/wwwroot/telco/NJBPU_LPB_REPORT.pdf (accessed August 12, 2005).

6. The survey was designed to represent all small businesses in New Jersey with 250 or fewer employees. *Id.*, at 2.

> These rankings are basically the same regardless of the size of the business, number of telephone lines serviced, annual local telephone expenditures, and current local exchange provider. [7]

Business is in its own "relevant product market"

Market definition is a central issue in competition and antitrust analysis, and formal methods have been developed to facilitate this process. The US Department of Justice/Federal Trade Commission *Horizontal Merger Guidelines*[8] describes a "relevant product market" as consisting of

> a product or group of products such that a hypothetical profit-maximizing firm that was the only present and future seller of those products ("monopolist") likely would impose at least a "small but significant and nontransitory" increase in price. That is, assuming that buyers likely would respond to an increase in price for a tentatively identified product group only by shifting to other products, what would happen? If the alternatives were, in the aggregate, sufficiently attractive at their existing terms of sale, an attempt to raise prices would result in a reduction of sales large enough that the price increase would not prove profitable, and the tentatively identified product group would prove to be too narrow.[9]

In other words, products (or services) are considered to fall within the same "relevant product market" if consumers thereof consider them sufficiently close substitutes that a price increase in one product would result in a sufficiently large shift in demand to the substitute product as to make the price increase unprofitable.

The *Guidelines* suggest the following analytical process for making this assessment:

> In considering the likely reaction of buyers to a price increase, the Agency will take into account all relevant evidence, including, but not limited to, the following:

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7. *Id.*., at 23.

8. U.S. Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines*, ("*Horizontal Merger Guidelines*") available at: http://www.usdoj.gov/atr/public/guidelines/horiz_book/hmg1.html (accessed July 12, 2005).

9. *Horizontal Merger Guidelines*, at §1.11.

(1) evidence that buyers have shifted or have considered shifting purchases between products in response to relative changes in price or other competitive variables;

(2) evidence that sellers base business decisions on the prospect of buyer substitution between products in response to relative changes in price or other competitive variables;

(3) the influence of downstream competition faced by buyers in their output markets; and

(4) the timing and costs of switching products.[10]

The outcome of these analytical determinations is influenced by both demand and supply conditions. If alternative services are simply not available to a particular market segment, then the (monopoly) supplier will be able to increase its price without a consequential loss of demand. If such substitutes as may be available are not viewed by the purchasers as providing functional parity with the (monopoly) product and will not be influenced to purchase it merely because it is slightly less expensive, the (monopoly) supplier will be able to increase its price. Except for those businesses that by their nature operate out of a mobile vehicle (such as building contractors, real estate agents, and the like), businesses of all sizes have thus far demonstrated no willingness to use wireless services in place of wireline, even though an extremely small percentage of households have "cut the cord." Indeed, the mission-critical nature of business telecommunications may, if anything, induce firms to purchase intermodal "alternatives" not as substitutes but rather to achieve redundancy if their wireline service fails. There is little doubt that even for the smallest business customers, the incumbent LEC *will* be able to impose at least a "small but significant and nontransitory" increase in price without losing so much demand as to make that increase unprofitable. Whether or not this is also the case for the residential segment (and it most likely is) there is no doubt but that virtually all small and medium-size customers either have no access to so-called "intermodal" alternatives, or where such "alternatives" are present they are not sufficiently close functional substitutes for wireline telecommunications services as to materially constrain the prices charged by the incumbent LEC. For this reason, the small and medium sized business segment cannot be grouped with residential customers into the same relevant telecommunications product market.

10. *Id.*

3 DEBUNKING THE MYTH OF INTERMODAL ALTERNATIVES: THE BIG PICTURE

Substitutes or Complements?

In order for *intermodal* alternative services to be "competitors" to traditional wireline local access services, they must fall within the same relevant product market, which means that they must be perceived by consumers as providing sufficiently similar functionality to local wireline service as to be viewed as substitutes for local wireline service. Substitutability among products or services (which can be expressed quantitatively in terms of cross-elasticities) is at best a *relative* concept. Two products or services may be substitutable under certain conditions and for certain purposes, and yet be entirely non-substitutable for other purposes.

For example, automobiles and airplanes both provide transportation between two points, and may be substitutes for one another in certain cases. A trip from New York City to Albany takes about three hours door-to-door either by car or by plane, and, cost differences aside, people making such a trip might well see cars and planes as close substitutes for this purpose. On the other hand, airplanes are not particularly practical for very short distances, such as 10 or 20 mile commutes, and cars may not be practical for short business trips exceeding 300 or 400 miles. The fact that consumers view these two alternative modes of travel as close substitutes for trips of 150 to 300 miles provides no basis whatsoever for an inference that as a general matter cars and planes are close substitutes. Those who advance the claim that wireless and VoIP are substitutes for wireline telephone service identify limited, anecdotal instances of intermodal competition, and, from that, leap to the absurd conclusion that if direct competition occurs *somewhere*, then it must be possible *everywhere*.

"Intermodal Competition" – a rationalization for deregulation?

"Intermodal competition" in telecommunications, as that term is generally used, consists of services – principally wireless and cable telephony – provided over alternative media (i.e., not incumbent telco "loop" plant) that allegedly represent *substitutes* for basic local exchange

telephone service[11]. More recently, Voice over Internet Protocol (VoIP) has been added to the short list of putative intermodal alternatives although, as we discuss below, access to VoIP services often involves the very same incumbent telco "last mile" facilities as traditional phone service. Yet for business users, large or small, it is not clear that these services are *substitutes* at all.

As explained below, the identification of cable telephony, wireless service and VoIP as *substitutes* for business subscribers' use of traditional ILEC wireline telephony often rests upon a seriously flawed and largely subjective or anecdotal analysis. The theory is that the incumbent wireline providers (in this case Verizon) do not have market power because their customers will substitute wireless service or VoIP for their wireline telephone service. Economists do not think of "substitution" as an absolute concept: Products or services may be substitutes under certain circumstances but not in others, based on customer perceptions, price points, and technical considerations. In addition, there are service quality and safety issues – in particular the lack of reliable E911 service from many VoIP and wireless providers – that raise questions about their substitutability for traditional wireline service.

Viewed solely through anecdotal evidence, these "intermodal" services may appear to be sufficient substitutes for some uses of traditional wireline telephone services: but being a *substitute* for some functionalities of the overall traditional wireline service is not the same as being a *substitute* for the entire offering. When the effect of these intermodal alternatives in constraining the continued market power of the incumbent telcos is examined in a comprehensive and analytical manner, it becomes evident that their relative importance is minimal at best. Moreover, to the extent that the very same incumbent telcos or their corporate affiliates are themselves the *source* of the putative "intermodal" alternative, characterizing these services as "competitive" with traditional wireline telephony is disingenuous (see discussion of wireless at pages 23 - 28 below).

It can't be a substitute if it isn't available

Regardless of how perfect a substitute a particular service might otherwise be, it cannot be used as a substitute if it is not available to the subscribers that might otherwise purchase it. Unfortunately for the business subscribers in New York, there is really very little need to evaluate whether cable-telephony represents a viable substitute for traditional landline services because cable telephony services are, for the most part, not deployed to the locations where businesses operate. While there may be *some* cable telephony (and high speed cable-modem

11. See the discussion in the *Order* of the need to re-examine and rationalize what is described as the "wholly inconsistent approach to the regulation of *substitute* services based on the types of technology employed." [*emphasis added*] *Order* at 4.

internet access) available to *some* business users located in mixed use (residential and business) neighborhoods, cable service is not generally available at most business locations. As is discussed in more detail in Chapter 4, cable infrastructures generally do not "pass" business locations and thus cannot readily serve the vast majority of business customers.

Even in cases in which a cable company's coaxial plant may run past a business address in mixed business/residential neighborhoods, cable telephony services may not be available to the businesses located at that address. If cable service is not already being provided within a building, cable companies frequently look to potential cable telephony subscribers to pay the costs associated with bringing cabling into the building and installing inside wiring. While a bar or restaurant located within a commercial building in a mixed use location may view delivery of cable for purposes of video programming as warranting expenditure of capital to pay for a cable provider to bring facilities into an otherwise unserved building, a small business looking only for cable telephony or high speed cable modem internet access is likely to find the up-front costs of $1000 or more to be prohibitively expensive. Corroborating what everybody knows, in the 2003 New Jersey survey of 800 small business, not one business reported using a cable company for the provision of its local service.[12] While cable deployment in New Jersey may not be identical to New York, many of the players are the same, and it is unlikely that the business subscribers in New York find themselves in a position to utilize cable-based telephony service offerings any more than those in New Jersey.

Recent announcements by cable companies of their entry into the business service market have clouded the issue somewhat. While companies such as Cablevision (through its Lightpath brand name) and TimeWarner Cable have indeed begun to develop and deploy business data services, those services *are not provided over coaxial cable facilities.* These services are being provided over fully fiber-optic networks and differ in no respect from the services offered by other facilities-based CLECs. As such, their operations will face the same hurdles as other CLECs in providing services to business customers, and their existing *cable* infrastructure will not help in the least.

The much heralded Cablevision project in Westchester County is decidedly *not* an example of cable-based telecom services being provided to business customers. Cablevision Lightpath is an *affiliate* of Cablevision, but Lightpath is a CLEC, not a cable TV company. Cablevision Lightpath describes its network as follows: "Lightpath uses fiber optic cable throughout its infrastructure, even in the coveted local loop or "last mile."[13] The services being offered by Lightpath do not involve the use of Cablevision's coaxial (video distribution) cable, and as such

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12. *Local Business Telephone Service in New Jersey: A Survey of Small Businesses* at Table 2.2.

13. See description of "LightPath's Network Advantage" on the Cablevision Lightpath website www.optimumlightpath.com/Interior84.html.

Lightpath is a traditional facilities-based CLEC and decidedly *not* an "intermodal competitor" to Verizon or any other ILEC in the business telecom services market.

Intermodal alternative services such as VoIP and Wireless lack features critical to business users

While some portions of voice service provided by intermodal alternatives are very similar to traditional wireline voice service, wireless and VoIP service differ with respect to several key elements required by business customers. Business subscribers to wireless and VoIP services, for example, are in some cases unable to obtain white pages directory listing services.[14] Historically, cable telephony services (which, as discussed above, are not generally available to business subscribers) have included white pages directory listings, but the newest VoIP based cable telephony offerings, like Cablevision's "Optimum Voice" do not include directory or directory assistance listings. Wireless service customers not only do not automatically receive a white pages listing, and they may even be prohibited from getting one.[15] For many intermodal businss customers the only option available is a separate purchase of yellow pages advertising, but a yellow pages ad won't help customers dialing directory assistance or looking up "Betty's Beauty Spot" in their local white pages directory.

An inquiry to Vonage customer service revealed that, for both Residential and Business customers, Vonage does not provide its customers with a white pages listing. The Customer Service representative referred the customer to their incumbent local phone company (Verizon) to inquire about such a listing, but was not sure if the local phone company was actually capable of providing such a service. As discussed below, in point of fact, Verizon does not make white pages directory listings available to Vonage or any other VoIP service providers' customers.[16]

Business customers who choose to use a wireless phone exclusively will find themselves in a similar bind. A representative from Verizon Wireless indicated that both residential and business customers do not receive white pages listings in their local phone books. When asked whether Verizon would provide a white pages directory listing to a Verizon Wireless subscriber

14. It is worth noting that customers of CLECs and some cable providers are able to obtain directory listings in the white pages. It is unclear whether VoIP services associated with a CLEC (e.g., AT&T's CallVantage service) would be able to provide customers with a white pages listing. However, if the pending mergers between AT&T and SBC, and MCI and Verizon are completed, the level of CLEC-affiliated VoIP service will drop precipitously.

15. *See* footnote 20 *infra*.

16. It is possible that Vonage does offer directory listing to some of its subscribers, but even if that is the case, the inability of its customer service representatives make a listing available to a new business subscriber in the case of our trial means that the at least some, if not most, Vonage customers do not have directory listings.

who wanted one, the Customer Service representative explained that Verizon expressly prohibits wireless customers from obtaining white pages listings.

Indeed, an examination of Verizon-New York's local service tariff reveals that there is no tariffed stand-alone white pages directory listing offering available to customers that are not purchasing Verizon local services.[17] Business customers of both VoIP and Wireless services would have to forgo the opportunity of having a white pages business listing if they choose to use one of these intermodal alternatives exclusively.

In large part, the inability of the existing intermodal alternatives to provide the level of service that would be necessary for business subscribers to be able to use them as *substitutes* for the traditional local services, is the fact that they are, by design, residential services. Generally, as a matter of *design* they have lower reliability indexes and a longer mean-time-to-repair (MTR) than traditional landline services, because those service levels are acceptable for the targeted product market. In other words, to the extent that any of these services have longer MTRs, or lower service quality levels, it is not necessarily a matter poor service, they simply offer a different level of service. And while a level of service that includes service outages of one or more days may be frustrating, it is possible that it is none-the-less acceptable, for *residential* home computer users. The same service levels *are not acceptable for business users*. A Dr.'s office, for example can't depend upon VoIP for its local service that rides a Verizon DSL line, because it can't have its phone service out for multiple days.

The myth of widespread access line substitution

The decline of the second line market

The recent decline in ILEC access lines has been attributed by many to the growth of competition generally and, more recently, to intermodal competition from wireless and other services. Verizon reported a decline of 1.4-million switched access (local service) lines in service in New York for the period from the end of 2 Q 2003 to the end of 2 Q 2005 representing

17. Verizon New York, Inc., PSC New York No 1., Communications, Section 9. Listings are provided without charge for "each individual line," "each PBX or intercommunicating system," "each order equipment installation with direct central office connections," "each subscriber to two-party or four-party line service." Additionally, "Access Service customers, as defined in Section 16 of this tariff, and each mobile unit or pocket receiver provided by a Radio-Telephone Utility, as described in Section 1 of this tariff, may have a billed main listing and additional listings in the alphabetical directory, subject to the same regulations as the listings of Telephone Company subscribers."

12.96% of the total 2003 base.[18] However, no substantive evidence that competitive alternatives are the only – or even the primary – source of the decline in demand for ILEC access lines has ever been presented. There have unquestionably been other economic and market forces that have contributed more significantly to access line erosion. One source may have been the economic downturn that began in 2001. The largest influence, however, is undoubtedly the substantial *growth* in the demand for high-speed Internet access via DSL and cable modem services. Beginning in the mid-1990s, the growing interest in dial-up Internet access stimulated the demand for additional residential access lines; by 2000, some 26% of all US households had at least one additional phone line.[19] DSL and cable modems *replace* those additional dial-up access lines that had been installed principally for the purpose of accessing the Internet. And, of course, the ILECs themselves provide a substantial share of these alternative (high-speed) Internet access arrangements.

Corroborating this interpretation is the fact that residential access line attrition occurred at a much greater rate than business line attrition (residential users having made up the bulk of the "2nd line for internet access" market). During the same time frame discussed above (2003 to 2005) residential access lines declined by 15.6%, while the rate of business line loss was half that at 7.7%.[20] Table 1 below demonstrates that between 2000 and 2004, the total loss of traditional access lines (whether provided by ILECs or CLECs) was less than the number of DSL and high speed cable lines that were added.

Once the transition from dial-up to high-speed Internet access has been completed, the outlook for the ILECs with respect to their basic core local telephone services is not one of continually declining demand. In fact, in New York, Verizon's share of the local wireline primary access line market remained relatively unchanged during the period 2002-2004.[21]

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18. Verizon Investor Relations website, http://investor.verizon.com/business/xls/access_lines-2q-05.xls (accessed August 15, 2005).

19. The SEC 10K Annual Reports of all of the RBOCs note significant growth in "additional residential lines" during this period. SBC Communications, filed March 10, 2000; Bellsouth Corp., filed March 2, 2000; Qwest Corporation, filed March 3, 2000; Bell Atlantic Corp., filed March 30, 1999.

20. Verizon Investor Relations website, http://investor.verizon.com/business/xls/access_lines-2q-05.xls (accessed August 15, 2005).

21. From 2002-2003, primary access lines in New York actually *increased* by 4.6%, while the most recent ARMIS data shows that lines decreased 5.6% during 2004. FCC, ARMIS Report 43-08, Operating Data Report: Table III, YE 2002-2004. Available at http://www.fcc.gov/wcb/eafs/ (accessed April 11, 2005).

Table 1
ILEC DSL is keeping pace with Cable-based High-Speed Internet Services and Growth in both combined is outpacing Access Line Losses
NEW YORK

	Number of High Speed Lines (000's)		**ADSL as % of ADSL/Coax High Speed Lines**	**Traditional Access Line Losses (000's)**
Date	**ADSL**	**Coaxial Cable**		
2000	124	378	32.8%	144
2001	286	780	36.7%	146
2002	392	1,185	33.1%	364
2003	497	1,592	31.2%	500
2004	641	1,977	32.4%	608
TOTAL '00-'04	n/a	n/a	n/a	1762

Source:Industry Analysis and Technology Division, Wireline Competition Bureau reports: *High Speed Services for Internet Access: Status as of December 31, 2004*, June 2005 at Tables 9 & 10 and *Local Telephone Competition: Status as of December 31, 2004*, July 2005 at Tables 8 & 9.

4 DEBUNKING THE MYTH OF INTERMODAL ALTERNATIVES: THE DETAILS

Cable telephony

The Commission notes that "cable telephony with its managed network and E911 capabilities, provides an option that is rapidly being accepted as an equivalent to traditional wireline services."[22] And, of the various intermodal alternatives, cable telephony, of the circuit switched variety, does track most closely to the traditional ILEC wireline service. For *residential subscribers*, the primary shortcomings vis-a-vis traditional ILEC services are the lack of power in the event of an electrical outage and, in some cases the lack of a white pages directory listing – elements that a reasonable consumer could decide to do without. For *business customers* of all sizes, however, these issues may not be so easily overlooked. For *business customers*, cable telephony is really not an option at all, because it is simply not available.

Regardless of cable telephony's merits or prospective potential as a full-fledged substitute for plain old telephone service (POTS) for residential subscribers, the substitutability of these alternatives for most *business* uses is close to nonexistent. As discussed above, most of the *business service* offerings being made by the big cable companies and their affiliates today, offerings prominently covered in the press, are not cable telephony offerings at all -- instead they are the offerings of traditional wireline CLECs, provisioned over fiber optic facilities, not coaxial cable – there is nothing *intermodal* about these offerings at all.[23]

22. *Order* at 6.

23. The most recent Cablevision 10K annual report indicates that Lightpath, the subsidiary that provides its "Commercial" telephony offerings, is a CLEC. Cablevision Systems Corp., 2005 10K Annual Report, March 16, 2005. Time Warner Cable does not appear to offer any business voice telephony service http://www.twcnyc.com/index2.bus.cfm?c=new_bus/overvw (accessed August 12, 2005). Time Warner Cables latest Quarterly Report indicates that its residential "Digital Phone" program is its only voice service. All *business* telecommunications services are provided over TimeWarner Cable's all fiber network. http://www.twcnyc.com/index2.bus.cfm?c=new_bus/privatenetwork (accessed August 12, 2005).

The three largest cable providers in New York state are Adelphia, TimeWarner, and Cablevision.[24] Of these three, only TimeWarner Cable and Cablevision presently offer voice services.[25] The voice offerings of both TimeWarner Cable and Cablevision are described as and specifically directed at *residential* customers.[26] As discussed in Chapter 3 above, cable telephony as an intermodal alternative is, quite simply, not available to business subscribers large or small.

Despite this fact, cable telephony services continue to be portrayed as, and perhaps are, the most significant facilities-based alternative to the ILECs, *even though, if true, it is true only with respect to mass market (principally residential and "home business") services*.[27] Cable is not

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24. New York PSC website, http://www.dps.state.ny.us/cable.html (accessed August 12, 2005).

25. In its last 10k (for the year ended December 31, 2003) Adelphia disclosed that its was in the process of developing a VoIP-based service for use by its cable modem subscribers that it hoped to begin offering sometime in 2005. Adelphia 10K at 6. As of August 10, 2005, no voice offering is listed among available services on Adelphia's website.

26. Time Warner Cable describes its Digital Voice offering as a "NEW Residential Phone Service." http://www.twcdigitalphone.com/newyork/index.htm (accessed August 12, 2005). Cablevision, in its latest Quarterly report to the SEC differentiates its "Consumer" VoIP voice offering (Optimum Voice) which is marketed with its traditional Cablevision offerings from its "Commercial" voice offering, which is marketed separately under the "Lightpath" brand. *See* http://www.optimumvoice.com and http://www.cablevision.com (accessed August 12, 2005); and Cablevision Systems Corp. 2nd Quarter 2005 10Q Report, August 9, 2005.

27. Throughout this report various references are made to FCC-reported competitive metrics that are disaggregated between categories of "residential and small business" and "business." The actual label for the "business" category in the FCC's reports is "other" and is described as including "medium and large business, institutional and government customers."(see *Local Competition Report: 2004* at Table 2, footnote 1.) From our review of the FCC Form 477 used by service providers to report their information, the instruction sheets that accompany those forms, and the FCC's Rules, it is our belief that the vast majority of – if not all – business lines are being reported in the "Other" category, and that the data labeled as "Residential and Small Business" likely includes *only* residential lines. The FCC had originally instituted the reporting requirements for Form 477 (the collection instrument underlying the FCC's *Local Telephone Competition* and *High Speed Services for Internet Access* reports) in an order issued on March 30, 2000. (see *Local Competition and Broadband Reporting*, CC Docket No. 99-301, *Report and Order*, 15 FCC Rcd 7717 (2000) at para 77) In that same March 2000 order the FCC states that form 477 filers providing local service telephony data should delineate residential and small business users from others "to be identified by separate billing addresses to which fewer than four lines are in service." It is this initial description found *only* in the Commission's order, not its Form 477 or its accompanying instruction sheets, that appears to be the basis of the data descriptions found and reported upon in the current FCC reports. The FCC adopted the distinction previously adopted in the *UNE Remand Order*, at paras. 292-294. The discussion in this *Order* relative to what carriers should report as "residential and small business" high speed internet access lines specifically states that carriers treat "for purposes of this information collection, the percent of total broadband lines and wireless channels used by residential and small business customers, as a group, to be synonomous with the percent of total broadband lines and wireless channels used to deliver those broadband service offerings that are, in the judgement of the respondent, used *primarily* by residential consumers." (at para. 69) In that Order, the FCC announced its desire to "monitor developments affecting certain broad categories of customers," such as residential

(continued...)

well positioned to meet the connectivity needs of business users, for several reasons.[28] First, the networks constructed by cable companies are largely designed to reach residential dwellings, not business locations. With the possible exception of local retail shopping areas interspersed within or adjacent to residential neighborhoods, cable infrastructures generally do not "pass" business locations and thus cannot readily serve the vast majority of office buildings and other business sites. In the context of its monitoring of advanced services deployment, the FCC found that:

> Residential and small business subscribers, not surprisingly, account for over 96 percent of the reported high-speed lines delivered over cable systems. This is consistent with our understanding that most cable systems are currently deployed in primarily residential areas.[29]

In addition, because cable companies are primarily oriented towards a mass-market customer base, their coaxial-based telephony and data (*i.e.*, cable modem) offerings generally fall short of ILEC offerings in the areas of service reliability and security. Cable networks do not have the same degree of back-up electrical power as do the ILEC networks, and the "shared platform" nature of cable modem service raises data security and transmission performance issues that are particularly important to business customers, who routinely transmit highly sensitive or mission-critical financial and commercial data.[30]

Given the shortcomings of CATV-provided business services, it is not surprising that cable providers reported supplying fewer than 16,000 coaxial cable modem connections to medium and large businesses *nationwide* at the time the FCC reached its conclusions in the *Triennial*

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27. (...continued)
and large business users. Although no new rules have been adopted to change the delineation of residential and small business users, the current Form 477 instructions provided by the FCC do not explicitly reference nor instruct carriers to use the "fewer than four lines" test, and in fact suggest a much more open and ambiguous test including in the definition of "residential" end user premises as places where the carrier markets service primarily designed for residential use. The Forms themselves have columns headed "residential lines" (in the case of the telephony lines) and "residential premises" (in the case of high speed internet access). As such, while it is possible that some small business lines are included in the categories identified as "residential and small business," it is far more likely that *all* business lines are included in the "other" category (which we have reported as "business" throughout this report). The FCC makes Form 477, including instructions available on its website at http://www.fcc.gov/Forms/Form477/477.pdf. *See* internal pages 52-53.

28. A group of large business users, The Ad Hoc Telecommunications User's Committee has discussed these issues in greater detail in comments it has filed in the FCC's broadband services proceeding, CC Docket No. 01-337. See, *01-227 Ad Hoc Comments,* at 17-19; and *Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 01-337, *Reply Comments of Ad Hoc Telecommunications Users Committee*, filed April 22, 2002, at 4-6.

29. *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, CC Docket 98-146, *Third Report*, FCC No. 02-33, 17 FCC Rcd 2844 (2002) at 2864, para. 45 (footnotes omitted, emphasis supplied).

30. This may be precisely why the cable companies are developing non-cable business platforms.

Review proceeding, and report only 87,000 such connections today.[31] Considered in relation to the roughly three million commercial buildings nationwide, these connections represent approximately 3 percent of potentially addressable business locations. Clearly, cable has thus far had minimal impact upon the ILECs' virtual monopoly on connectivity supplied to businesses, and this situation appears unlikely to change any time soon.[32]

Upgrading cable systems from their traditional one-way analog video distribution capability to a network architecture capable of supporting digital video and two-way services such as high-speed Internet access and circuit switched telephony is a costly undertaking. Moreover, the rate at which the cable systems have been adding new telephony customers has clearly been slowing nationally (see Figure 1). While New York-specific numbers are not available, the trend in New York is likely no different than the national trend. Up to now, at least, the bulk of the required investment has been directed at upgrades to support digital cable services (on-demand, pay-per-view, etc.) and Internet access, and it is not at all clear that substantial additional investment in

31. *Triennial Review Order* at 18 FCC Rcd 17010, para. 41. Citing, FCC Industry Analysis and Technology Division, Wireline Competition Bureau, *High Speed Services for Internet Access: Status as of June 30, 2002*, rel. December 2002 ("*High Speed Services for Internet Access: 2002"*). Analysis of the most recent IATD report reveals that for the period ended December 31, 2004, 2.7-million high speed coaxial cable connections serving new "residence and small business" cable high speed connections were added, and that only approximately 20,000 new coaxial cable connections were added that served business subscribers, with the total number of connections to high speed cable connections to business users still less than 90,000 in total. See, Industry Analysis and Technology Division, Wireline Competition Bureau, *High Speed Services for Internet Access: Status as of December 31, 2003*, rel. June 2004 ("*High Speed Services for Internet Access: 2003*"); *High Speed Services for Internet Access: 2002*; and, *High Speed Services for Internet Access: 2004*

32. A report issued by Cahners In-Stat Group claims that businesses account for only 5% of cable modem subscribers, and penetration is only expected to increase to 10% by 2005. *See, Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 01-337, *AT&T Comments*, filed April 22, 2002, at p. 41 (citing Cahners In-Stat Group, *Despite Service Provider Pratfalls, Cable Modem Subscriber Growth Remains Robust*, December 1, 2001, at p. 1).

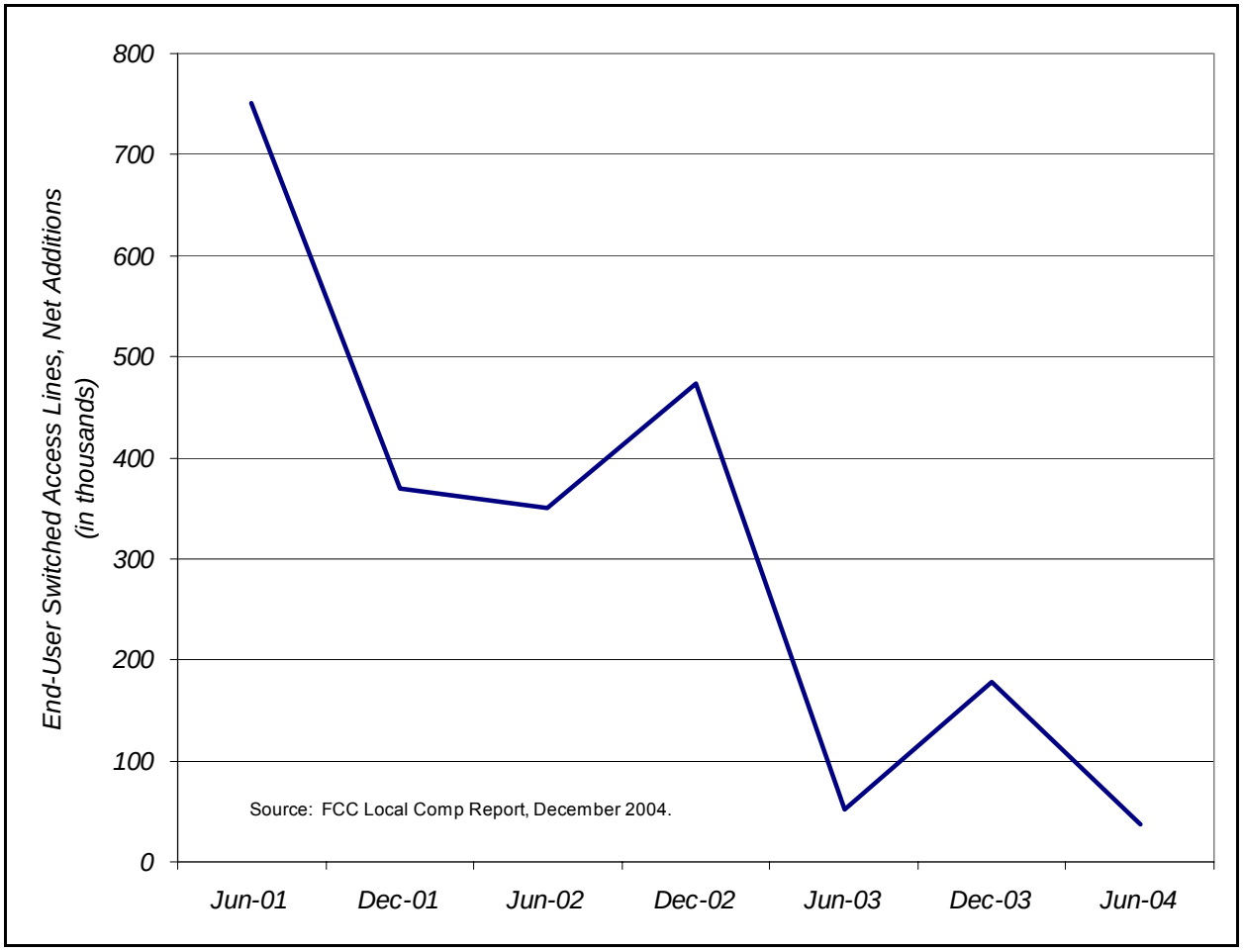

Figure 1. The rate at which cable systems have been adding new telephony customers has slowed to a trickle.

circuit-switched telephony will occur.

Cablevision, for example, a provider specifically identified in the *Order* as offering cable telephony services,[33] has implemented a VoIP offering in place of the circuit switched cable telephony offering it provided in the past (we discuss VoIP in more detail below). In fact, a review of Cablevision's most recent SEC 10-Q filing reveals that as of June 30, 2005 it had only *8,592 residential voice customers remaining across its entire operating territory, including those in New York.*[34] All other Cablevision voice customers receive service over Cablevision's

33. *Order* at 6.

34. Cablevision News Release, "Cablevision Systems Corporation Reporting Second Quarter 2005 Results" August 9, 2005, available at http://www.Cablevision.com/index.jhtml?id=2005_08_09 (accessed August 12, 2005).

Optimum Voice platform -- a VoIP-based service available *only in conjunction* with subscription to Cablevision's *Optimum OnLine* high speed cable modem service[35] Cablevision's *Optimum OnLine* cable modem service is priced at $44.95 for cable subscribers and $49.95 stand-alone. *Optimum Voice* is priced at $34.95, but requires the subscriber also to order *Optimum Online*, for a total monthly bill of $79.90 (plus the cable TV charge) or $84.90 (without cable). TimeWarner Cable (the second provider identified in the *Order* as offering cable telephony services)[36] has also announced plans to switch to a VoIP-based alternative, although it is unclear as to what extent, if at all, it has begun migrating customers in the New York area. There continues to be no indication that cable telephony's utility to or use by business customers is in any material sense increasing or operating to constrain ILEC prices and market power.

As far as medium and large business use of cable telephony services to meet data transmission needs, following an investigation, the FCC expressed skepticism of claims about cable alternatives to traditional ILEC services for enterprise customers. In the recent *Triennial Review Remand Order*, the FCC noted the following fallacies in the ILECs' assertions regarding intermodal competition from cable providers and other intermodal sources with respect to high-capacity loop facilities used by enterprise customers:

- "First, the record before us contains little evidence that cable companies are providing service at DS1 or higher capacities. ... [M]ost of the businesses served by cable companies are not large enterprise customers, but mass market small businesses that would never generate enough traffic to require a high-capacity loop."[37]

- "In addition, the record suggests that where cable companies do provide service to business customers, they provide cable modem service, rather than service that is comparable to service provided over high-capacity loops. Competitive LEC commenters explain that bandwidth, security, and other technical limitations on cable modem service render it an imperfect substitute for service provided over DS1 loops. Commenters also note that businesses that do require DS1 loops are willing to pay significantly more for them than the

35. Optimum Voice is marketed as a "exclusively for Optimum Online Customers." The Legal Disclaimer states "Optimum Voice[SM] is a cable modem service available exclusively to residential Optimum Online® customers and requires Internet access via Optimum Online to complete activation." It also states that "Optimum Voice does not support directory listed numbers, pay services or third-party billing" that it "Optimum Voice uses household electrical power to operate and will not function in the event of a power outage" and that Cablevision does not support the use of Optimum Voice as the connection between emergency medical alert systems and central station monitoring." See, Cablevision website at: http://www.optimumvoice.com/index.jhtml?pageType=legal_disclaimer (accessed August 12, 2005).

36. *Order* at 6.

37. *TRRO*, at para. 193, footnotes omitted.

cost of a cable modem connection, which also indicates that the two are not interchangeable."[38]

- Finally, at least two competitors maintain that, based on their internal data, they rarely lose enterprise customers to cable providers.[39]

Our own discussions with both CLECs and business end user customers confirms the FCC's findings. CLECs report that they rarely, if every face competition from cable telephony for business subscribers, and business customers report that cable telephony is generally not considered among the solution set when evaluating competitive local service options.

Competition from cable telephony in New York

The hype about the level of competition to traditional wireline services offered by cable telephony in New York overstates its real importance in the market. Consider the following:

- At the end of 2004, there were approximately 12-million switched access (local service) land lines in New York state, including cable telephony lines.[40]

- Of those 12-million land lines, less than 450,000 (3.75% of total lines) were provided over facilities *owned* by a CLEC,[41] including cable telephony lines.

- New York-specific data on the split of the 450,000 CLEC-owned lines between traditional telephony and cable telephony lines is not reported. Nationwide, however, cable telephony lines account for 43.6% of total CLEC-owned switched access lines (11.3% of total CLEC switched access lines).[42] Assuming the split between CLEC traditional telephony and cable telephony lines is the same in New York as in the rest of the country, that translates into approximately 195,000 cable telephony lines or 1.6% of the total switched access lines in the New York state.

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38. *Id.*

39. *Id.*

40. *Local Competition Report: 2004*, Table 6.

41. *Local Competition Report: 2004*, Table 10.

42. *Local Competition Report: 2004*, at Tables 3 and 5. Cable telephony lines as a percentage of total CLEC-owned lines determined using data from both Tables 3 and 5. Cable telephony lines as a percentage of total CLEC lines comes straight from Table 5.

- Bottom line – at the end of 2004, cable telephony lines represented something between 1.5% and 3.75% of all landlines in the state of New York.

- The story for business lines is even less compelling. 4.2-million of the 12.1-million switched access (local service lines) in New York are reported as belonging to "business" subscribers.[43] Starting with the total number of cable telephony lines in New York calculated above (roughly between 200,000 and 450,000 lines), and applying the typical residential/business split for cable telephony lines found nationwide to that total (81% residential, 19% business),[44] results in an estimate of between 35,000 and 85,000 business lines. Taken together, the data reveals cable telephony penetration into the business local exchange service market in New York is between 1% and 2% at the end of 2004.

43. *Local Competition Report: 2004* at Tables 6 and 11.

44. *Local Competition Report: 2004* at Table 5 and NCTA Industry Overview, Statistics and Resources, available at http://www.ncta.com/docs/pagecontetnt.cfm?pageID=86 (accessed August 12, 2005).

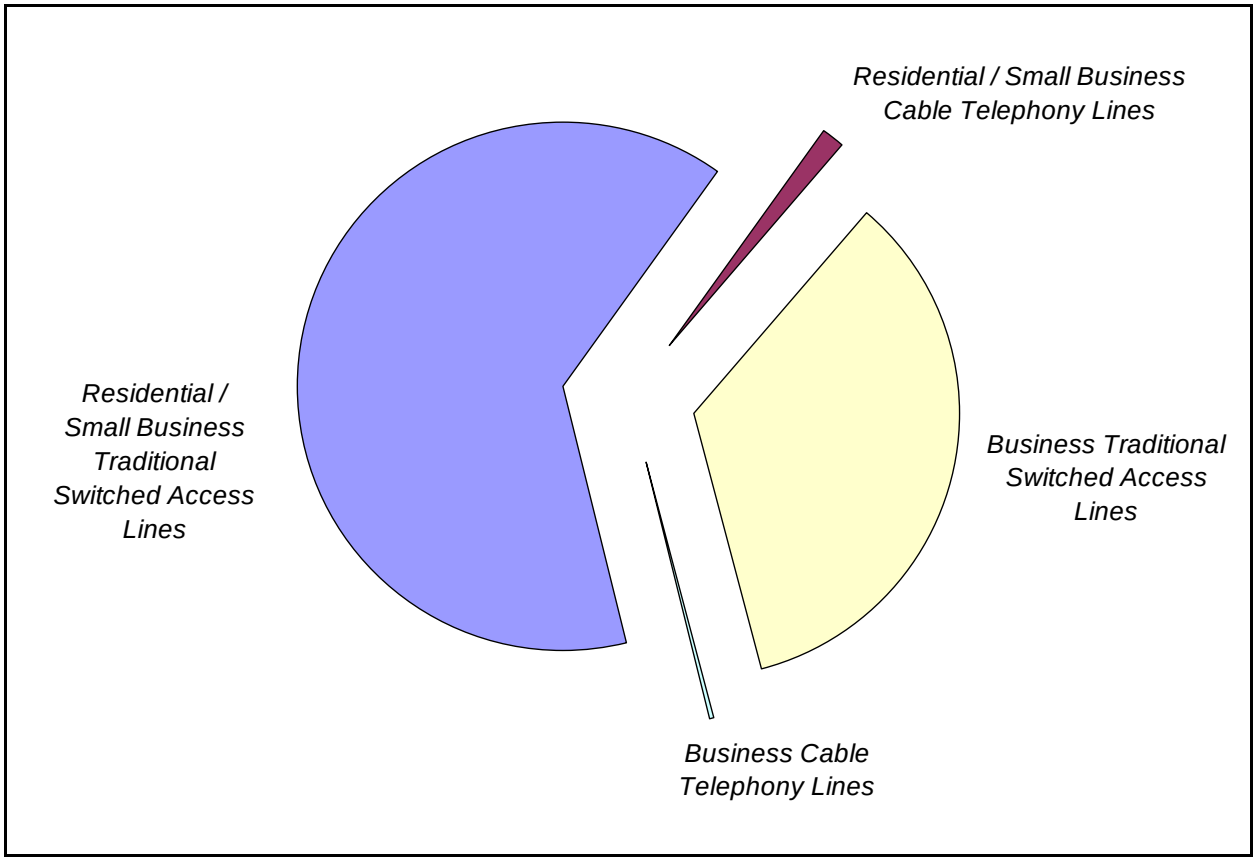

Figure 1. Cable telephony represents a small fraction of the overall end-user access lines in New York.

Figure 2 above illustrates the tiny percentage of total switched access lines accounted for by cable telephony services in the state of New York.

Wireless

The vast expansion of wireless phone subscribership in recent years has occurred with little corresponding drop in wireline service demand. This would *not be the case* if consumers (residential and business) *in general* viewed wireless as a substitute for their wireline phone. As Figure 3 demonstrates, during the 1999 to 2004 time frame, when the FCC reported a total drop of 1.8–million land lines in the state of New York, more than 6–million wireless phones were

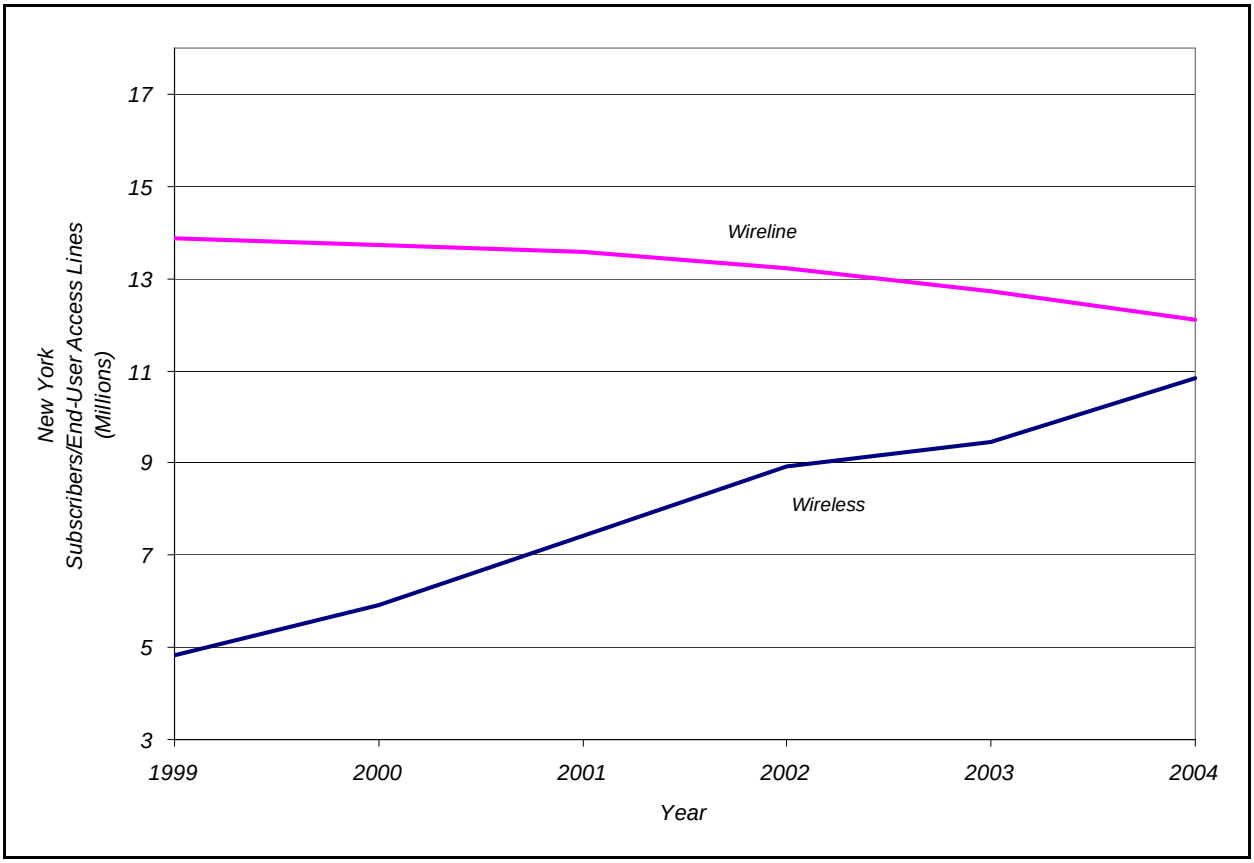

Figure 3. Complimentary Goods: Explosive growth in demand for wireless services has not been met with an equivalent drop in demand for wireline service.

added in New York.[45] Whatever intermodal substitution may be taking place is extremely limited. Consumers are subscribing to *both* services, and by doing so are confirming that they see the products as complements, not substitutes. Indeed, it is the utter *lack* of substitution of wireless for wireline by the vast majority (indeed, very close to all) of businesses and households that provide compelling, essentially *irrefutable* evidence that wireless and wireline are *not in the same relevant product market* and that *wireless is not an "intermodal competitor" or "substitute" for traditional wireline telephone service*.

A recent paper presented at the American Association of Public Opinion Research by Julian V. Luke, Stephen J. Blumberg, and Marcie L. Cynamon of the Centers for Disease Control and Prevention, National Center for Health Statistics presents an independent, unbiased view of the

45. *Local Competition Report: 2004* at Tables 7, 8 and 13.

extent of wireless substitution, and its demographics.[46] Using data from the National Health Interview Survey, January-December 2003, the authors determined that 3.1% of civilian, non-institutionalized adults have only a wireless phone, and 3.7% of all households are wireless-only.

Moreover, the small number of customers willing to substitute wireless for wireline service is by no means evenly distributed. 7.1% of adults between the ages of 18 and 24 years are "wireless-only" (and indeed, many may not have "cut the cord" so much as never had a wireline phone at all). Substitution rates are 4.3% for those 25 through 44 years, 1.6% for those 45 through 65 and 0.5% for those over 65 years old. Thus, even if 7.1% of young adults consider wireless a true substitute for wireline, 92.9% of that same demographic *do not*. Even larger percentages of older adults and senior citizens don't buy the "wireless substitution" story, and all but 2.6% of households with children were unwilling to substitute wireless for wireline services, with the highest percentage of substitution among rental households (7.5%) and adults living with roommates (8.7%) or alone (6.2%). Household size appears to play a large role in household substitution, with 6% of one person households identified as "wireless-only" but only 2.0-2.2% of households with three or more people identifying as such.

To be sure, some RBOCs, including Verizon, have cited studies (conducted by or for them) that purport to show somewhat higher, but typically still single-digit, substitution rates.[47] However, even these likely exaggerated statistics still confirm that well in excess of 90% of all households do not consider wireline and wireless to be substitutes, and hence not in the same

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46. Currently, health surveys done by these, and other, organizations use random digit dialing frames consisting of wireline-only telephone numbers. To ensure the accuracy of health surveys, researchers must control for "unreachable" customers who have substituted wireless for wireline services, including the specific demographics (and health characteristics) of the substituting populations. The authors of this paper utilized a series of questions added by the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention to the National Health Interview Survey (NHIS) to ascertain the prevalence and demographics of households that have substituted wireless telephone service for their residential landline telephones. Luke, Julian V., Blumberg, Steven J., and Cynamon, Marcie L., "The Prevalence of Wireless Substitution," presented at 59th Annual Conference of the American Association for Public Opinion Research, May 15, 2004; and updates from slide presentation.

47. *Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements; 2000 Biennial Regulatory Review of the Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules*, WC Docket No. 02-112 and CC Docket No. 00-175, Ex Parte Submission of Qwest Communications, filed October 28, 2003; *Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements; 2000 Biennial Regulatory Review of the Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules*, WC Docket No. 02-112 and CC Docket No. 00-175, Ex Parte Submission of Verizon Inc., filed October 15, 2003.

relevant product market.[48] Indeed, conservative estimates indicate that 94% of all wireless households also have a wireline phone.[49]

To the extent that consumers seem willing to shift their calling entirely or primarily to a wireless phone, but nevertheless retain their wireline service, there is cause for continued skepticism about whether such consumers truly perceive the two services as "substitutes." In any event, and whichever one of the various studies of wireless substitution are to be believed, the low single-digit substitution rates and skewed demographics indicated most consistently by the research on this subject cannot possibly impose any consequential constraints on the incumbent LECs' market power or prices, and there is no evidence that further growth in wireless/wireline substitution will come quickly enough, be widespread enough, or even ultimately be sufficient to discipline RBOC activities. This is especially true given E911 service location problems, and so-called "dead zones" with unreliable or no wireless coverage.

Little research has been conducted about businesses' propensity to use wireless services as a substitute or replacement for landline services. The 2003 Rutgers survey for the New Jersey DPU of 801 New Jersey small businesses found that while 45% of its respondents utilized wireless services, only 1% reported using wireless as their "primary" means of making calls.[50] Given the way the survey questions were asked, it is possible that even this 1% still maintained their traditional wireline phones. The use of wireless phones as *replacements* or *substitutes* for landline phones is unlikely to be any more prevalent with businesses in New York today,

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48. Former FCC Chairman Michael Powell, along with numerous ILECs, have cited to the substitution of wireless for wireline services as proof that the ILECs' bottleneck market power is eroding. This perception of substitution has been reinforced by the popular media, which have carried any number of stories about individuals who have "cut the cord" and now use only their wireless phone, both at home and away. Various studies have attempted to quantify this phenomenon, yet have presented widely varying results, with estimates of substitution varying from 2.5% to as much as 20% (the high end of the range is found in surveys of very limited geographic scope). Much of the variation is due to the study methodology and, where that involved customer surveys and interviews, the manner in which the specific questions were framed. For example, a study performed by RoperASW asked about households using cell phones only to make and receive calls. Other studies asked about the customer's "primary" phone, or where they make "most" of their calls. These surveys typically result in a higher rate of substitution – it is also likely that they pick up many respondents who maintain their wireline connections for incoming calls, emergencies, and occasional use.

49. TNS data indicates that 70% of US households have wireless phones, and 96% of US households have wireline phones. *See*, http://www.tnstelecoms.com/press-10-20-04.html (accessed August 12, 2005). Based upon US Census data, there are 108-million households in the country, from which we can estimate 76-million wireless households and 4-million households without wireline service. Even if we assume that 100% of all households without wireline service have wireless service, this still results in more than 94% of wireless households retaining wireline service.

50. *Local Business Telephone Service in New Jersey: A Survey of Small Businesses* at 11.

particularly given the inability of business subscribers to obtain white pages directory listings for wireless phones discussed in Chapter 2 above.

Even if the claimed wireless alternative is validly included within the same product market as basic wireline telephone service and viewed as a substitute – which it should not be – describing these services as "competitors" to ILECs – and to Verizon in particular – strains credulity to its limits. At the end of 2004, Verizon Wireless controlled some 30% of the national wireless market and it likely enjoys *substantially* larger shares within its home region in New York due to the historical grants to the RBOCs in the mid-1980s of the so-called "B-block" wireline set-aside cellular licenses and more recently to aggressive joint marketing efforts by the Verizon wireline and wireless affiliates. In the 2003 survey of small business users in New Jersey conducted for the NJ BPU, 44% of the small business respondents reported Verizon Wireless as the supplier of their wireless services.[51] Moreover, in its most recent 10 Q filing Verizon maintains that it "effectively" increased its market share again last quarter. Thus, a "loss" of a wireline phone to wireless in New York– even in the extremely limited number of cases where that actually occurs – in many, if not most instances is *not a loss* of the customer to Verizon.

Verizon offers its New York residential customers a $5 discount if they combine their wireline and wireless billing into a single account.[52] Called "One Bill," the service is expressly marketed to both residential and business subscribers.[53] Far from positioning themselves as substitutes, it appears that such joint marketing programs are more likely to stimulate additional demand for both wireline and wireless Verizon services. The fact that Verizon perceives a demand for these integrated service arrangements and benefits of joint wireline/wireless marketing programs cannot be squared with *unsupported* contentions that wireline and wireless are substitutes for the residential or business market segments.

Corroborating this finding and extending its applicability to larger business users, Verizon, (New York's largest ILEC and largest wireless service provider), filed comments with the FCC just two months' ago estimating its share of the total market for "retail enterprise telecommunications business of large and mid-sized customers". In that analysis, Verizon *included* all of its business retail revenues, and the revenues of services far removed as

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51. *Local Business Telephone Service in New Jersey: A Survey of Small Businesses* at 11.

52. Verizon New York, Inc., PSC NY No. 1, Section 2, Part AAA, 11st Revised Page 232, Effective January 20, 2005 and Section 30.1, Part AAA, Original Page 78, Effective January 20, 2005.

53. *See*, http://www.verizon.com/Business/fyb/Packages/Packages/Veriations+For+Business+/225/225_MA.htm (accessed August 12, 2005). Verizon "ONE–BILL".

"customer premises equipment (CPE), network management, and IP hosting, storage and security" but *excluded* wireless services.[54]

Use of wireless phones for long distance calling is not "intermodal competition"

The most common application in which customers may use their wireless phone from home is to originate long distance calls. Most wireless rate plans include long distance calling at no additional charge (as long as total usage stays within the block of time selected by the customer) and, where the rate plan provides "free" night and weekend calling or "free" on-net or "family" calling, or provides a block of time that significantly exceeds the customer's needs, customers would perceive wireless-originated long distance as "free." Not surprisingly, consumers have shifted substantial portions of their long distance calling to their wireless phones.[55] Despite that *usage substitution*, as noted, *very few consumers have actually disconnected their wireline service altogether*, and many still choose long distance wireline calling plans. In its financial disclosures to the SEC, Verizon provides insightful information – specifically that its revenue per wireline subscriber continues to *increase*, suggesting that Verizon continues to extract revenue from its long distance customers, including those with wireless phones which, according to believers in intermodal competition theory, constitute an easily accessible, cost-effective long distance substitute.

54. *See*, Declaration of Jeffrey E. Taylor, Appendix I to the Comments of Verizon Communications Inc., filed June 13, 2005, in the FCC Docket WC 05-25.

55. Because of the difficulty in pinning down the number of customers actually "cutting the cord," the issue of intermodal substitution for wireline local service is often cited in terms of declining wireline *minutes of use*. In fact, such statistics are extremely misleading as a means for measuring the effect of competition on local wireline incumbents. Statistics as to declining minutes of use do not provide any information as to *line* substitution of wireless (or other intermodal alternatives) for wireline services. Since most local wireline services provide flat rate outgoing local calling and unlimited inbound usage, ILEC revenues are impacted only to the extent that originating long distance calls are shifted to wireless, which is able to offer lower-priced (or "free") long distance calling precisely because wireless carriers *do not pay any originating access charges at all* and pay terminating access charges on only about half of the long distance calls that they carry. Moreover, the source of these wireless exemptions from access charges is FCC policy and not any inherent cost advantage unique to wireless carriers. It is, to say the least, disingenuous for the FCC to, on the one hand, confer an enormous competitive advantage upon the wireless industry with respect to access charge obligations and then, on the other hand, use the resulting usage substitution as a basis for portraying wireless as "competing" with wireline.

VoIP

Commercial VoIP services do not, at least today, represent a viable substitute for traditional landline local telephone access for business users, be they large or small, or somewhere in between. VoIP services require a high speed internet connection. Our analysis reveals fewer than 200,000 DSL or cable-modem high speed internet connections being used by business subscribers in the New York as of the end of 2004 -- limiting total use of VoIP by small business subscribers at that outside number.

That is not to say that business users are not experimenting with VoIP services, or using them as adjuncts to their more traditional telephony services. The hype over VoIP services has been escalating dramatically over the past several years, heightened by FCC and state commissions proceedings like this one that are attempting to grapple with unresolved regulatory concerns. Despite all of the trade press coverage and regulatory concern, VoIP deployment by businesses is still not, for the most part, being used to communicate with the outside world. At most, VoIP is being deployed in *internal* telecom systems supporting voice communication among multiple locations of the same company.

Some of the confusion over VoIP services arises from the use of the term to describe a technology and network protocol, and the use of the very same term to describe a commercial service offering utilizing that technology. When most business customers speak of "using VoIP" it is VoIP as a *protocol* utilized to transmit calls over their own internal networks. Conversely, when most residential customers speak of "using VoIP" it is using VoIP-based *services* like Vonage.

There are really only two reasons why a business subscriber would choose to utilize VoIP services in place of traditional wireline services: first, if it offered true cost savings relative to the purchase of the ILECs' circuit switched services, and second if it offered functionalities not available to voice subscribers. To be sure, some of the claims being made for VoIP are true – VoIP services do offer some functionalities that are not available with traditional voice services, and VoIP services *may* be less expensive to purchase than traditional voice services – *if a customer already subscribes to high-speed Internet access via DSL or cable modem services*. As At current rates, a small business customer has to expend $30-$40 for DSL or cable modem Internet access, *plus* $10 to $30 for VoIP service, for a total of $40 to $70 – putting the total service price for a customer that does not otherwise require high speed internet access in roughly the same range, or more as the traditional landline service. The enhanced functionalities most talked about as appealing to small business customers (the ability to have a local appearance at a location other then the customer's physical address, and the ability to utilize the same VoIP service from both an office and home location) may be compelling for a limited subset of small business subscribers, but not for most. In other words, VoIP has a long way to go before it

becomes a serious competitive threat to incumbent local carriers' provision of traditional circuit switched voice services to business subscribers..

Business customers needing less than three DS1's worth of access capacity at a given location generally find that the ILECs and cable companies are really the only show in town with respect to the "last mile" high-speed Internet access services that are essential for VoIP use.[56] This suggests that over time the prices of DSL and cable modem service are likely to drift upward. Second, as illustrated by a recent column in *PC Magazine*, VoIP lacks the quality and consistency necessary to permit widespread business adoption by business customers buying less than a full DS1 for high speed internet access (in other words, precisely the "small business" customers the PSC has combined in the "consumer" market basket in its investigation in this proceeding.) . As *PC*'s longtime technology columnist John Dvorak points out,

> [I]f you're sitting on a real T1 line rather than a DSL connection, the quality [of a VoIP call] is usually identical to the switched service. That's because the T1 line is a different level of service than flaky DSL. ... But the T1 is still the premium-level service, and the only line that appears to work flawlessly with VoIP systems all the time. ... [W]ith the current Internet slogging along under constant denial-of-service attacks and overloaded with spurious e-mail transmissions, the idea that VoIP is going to push aside land lines any time soon is wishful thinking. And now phonecos such as SBC are selling the VoIP equipment themselves, while indicating that if you use a VoIP phone that hooks to the company's switched network you are going to have to pay them – unless, of course, you use the company's VoIP service.[57]

To date, VoIP appears to have been adopted by somewhere around one to two million subscribers; however, there is no data as to the number of businesses that have *only* VoIP-based services – i.e., that have discontinued their primary wireline phone. In order for a business to use a VoIP service *in place of* traditional wireline telephone service, it would need to obtain a high-speed Internet connection independent of any wireline phone line.[58] Cable modem service would be a candidate if it were available. Otherwise, the business would typically need to order SDSL (symmetric DSL) from the ILEC or a third-party reseller, such as XO or Covad. SDSL service typically costs about $150 to $200 per month. If multiple VoIP access lines were required, a minimum of T-1 bandwidth (1.544 mbps) would be required, which typically

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56. This may change as CLECs roll-out DSL offerings of their own in the future.

57. Dvorak, John, "The Problem with VoIP Phones," *PC Magazine*, January 24, 2005.

58. Notably, Verizon does not offer so-called "Naked DSL" to its subscribers except in the limited circumstances where an existing Verizon customer that is already purchasing both local service and DSL from Verizon switches to an alternative circuit-switched local service provider. See, *Verizon Offering 'Naked DSL' After Voice Provider Switches*, TR Daily, April 18, 2005.

involves recurring rates of between $250 and $300 per month. VoIP will rarely be an economic choice as a *total substitute* for wireline telephone service for most small and medium-sized businesses, even if it were otherwise entirely equivalent in functionality, which of course it is not.

As discussed above because of VoIP's dependence upon high speed internet access connections, and the current limitations on the availability of those services VoIP as a intermodal alternative for business users remains unfulfilled. During the last 2 years only 61,000 business high speed cable connections were added nationwide: even if *all* of those new connections were added in New York (which is not plausible) they would represent only a small fraction (1.5%) of the total business lines in New York.[59] Our own analysis of high speed connections provided to business users in New York reveals similar results. Figure 4 below reveals that, of 2.8 – million high speed access lines in New York at the end of 2004, 2.6 – million of them were provided to what the FCC classifies as "residential and small business" customers – with only 186,000 high speed internet access lines (about 7% of the total) provided to the totality of "other" business, institutional and governmental users across the entire state.[60] The only conclusions that can reasonably be drawn are the following: either that high speed internet access at the speeds available through ADSL and cable modem connections are not available to business users at locations where they are needed (which is true), or that connections at those bandwidths do not meet the needs of business subscribers, or both. In either case, the very limited access high speed internet access available to date is in and of itself enough to limit VoIP's utility to small business users such that it be relied upon to offer any kind of restraint upon the pricing of ILEC services for higher bandwidth dedicated access services.

59. See footnote 16.

60. *High Speed Services for Internet Access: 2004*, at Table 11. As discussed in Chapter 2, it is appears that the "residential and small business" data is entirely residential, and the "other" category contains businesses of all sizes.

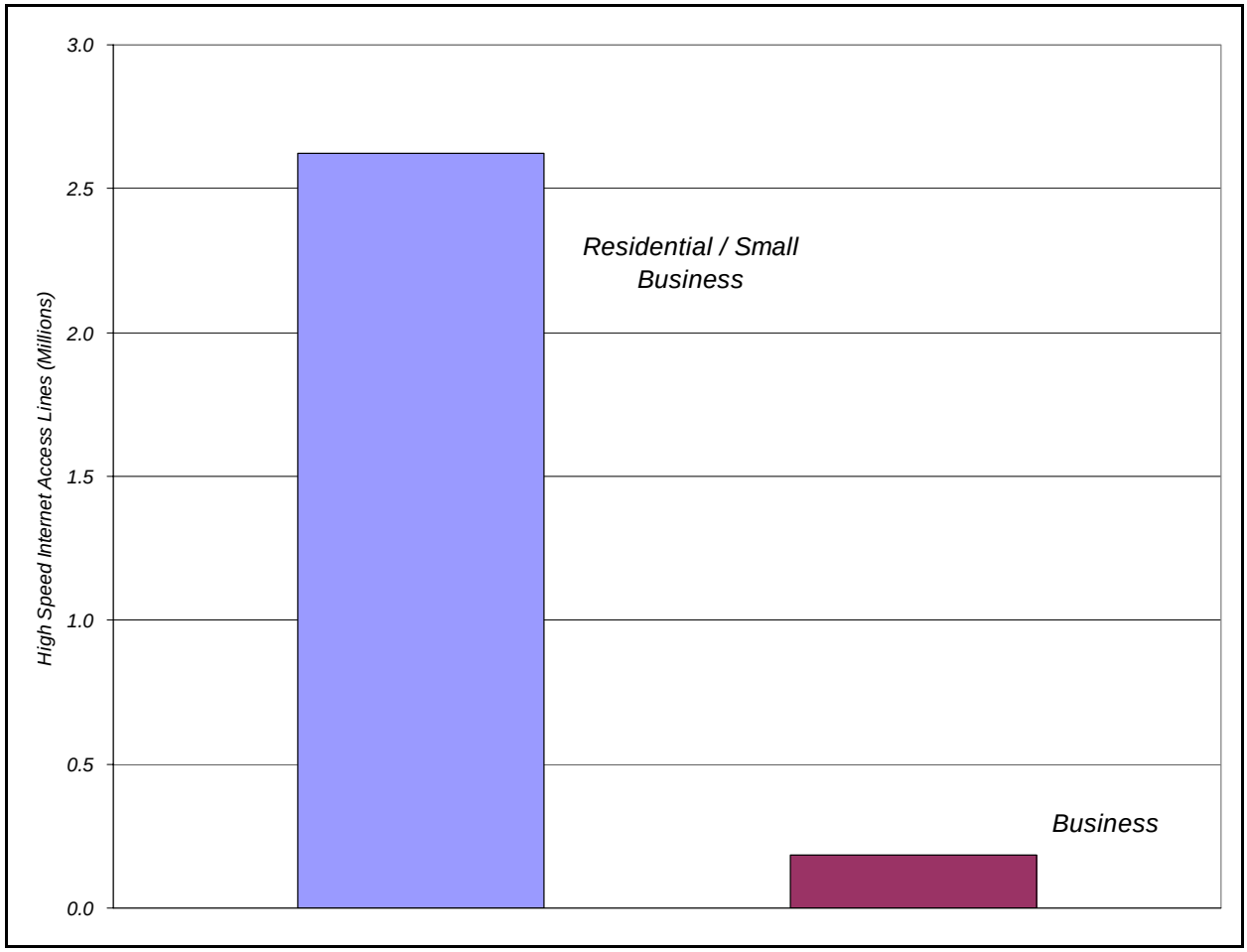

Figure 4. High Speed Internet Lines in New York are Primarily Provided to Residential Users.

Thus, it becomes clear on closer examination that the purchase of VoIP is primarily limited to a small number of computer-savvy early adopters who likely see it as a low-cost way of obtaining a second phone line, or as an inexpensive way of making long distance phone calls. VoIP is not serving as an outright alternative to traditional phone service, and there is no justification for the claim that VoIP is a sufficiently close substitute for basic wireline telephone service to constrain RBOC prices and market power.

In any event, all of the RBOCs have announced their own plans to offer VoIP services, as have cable companies such as Comcast. If, and when VoIP ever becomes a serious point-to-point voice telecommunications medium, it is the entities that control those critical last-mile

broadband links – the RBOCs and the cable operators – that will ultimately control this segment as well.

5 CONCLUSION

The future is not today

The PSC's *Order* states that among the principles governing this policymaking proceeding is that "[r]egulation should reflect market conditions" and that the "regulatory framework must be designed for the present" not for 'the fully competitive market that may ultimately develop."[61] One day, technology may truly permit businesses to utilize intermodal alternatives – those available today and those still on the drawing board or to be invented. At that time, business users of all sizes, from the local pizza parlor to the major banking conglomerates, will all have available to them a range of reliable, high-quality, and innovative telecommunications services at prices set by robust competitive market forces. Such an outcome would clearly be desirable, but it is not today's reality, and the repetitious claims as to *current* intermodal alternatives will not make it so. As we have demonstrated, neither wireless nor VoIP services are true substitutes for the business markets' use of wireline basic local exchange services, and cable telephony offerings are simply not available at the places where the vast majority of business customers are located: The evidence presented above demonstrates that these "alternatives" are not being perceived as such by business consumers because serious deficiencies in functionality, quality, reliability, and price are still present.

Most business consumers still must rely upon the wireline "last-mile" facilities provided by their local telephone company. Thus, for the present and for some time to come, wireless, VoIP may have some overlap with wireline local and long distance services, but they cannot fairly be viewed as substitutes capable of reducing an incumbent wireline providers market power.

61. *Order* at 2.

Exhibit "B"

RAYMOND JAMES®

Wireline
Industry Report

EQUITY RESEARCH

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Sr. Res. Assoc.

July 11, 2005

Reassessing the Impact of Access Lines on Wireline Carriers

- In this report, we assess the overall impact of wireless substitution on the telecom sector as a whole, with a focus on the different implications for both the Regional Bell Operating Companies (RBOC) and the Incumbent Local Exchange Carriers (ILEC) respective business models.
- While rural ILECs have less impending exposure to cable competition, their access line losses have been converging with the RBOCs' year-over-year percentage line losses every quarter since mid-2002 and we believe this trend of accelerating losses is unlikely to reverse in the near-term as our models for ALLTEL, CenturyTel, Citizens, and Iowa Telecom previously reflected.
- We expect cable telephony / stand alone voice-over Internet protocol (VoIP) services, including "peer-to-peer", to command over 20% market share of residential households in the U.S. by 2010.
- More importantly, we expect wireless substitution to have around a 25% market share of households by 2010, underscored by demographic data showing over 50% of U.S. households are one and two person, which we believe represent the best wireless replacement candidates regardless of age.
- The RBOCs and RBOC/IXC combinations are successfully repositioning themselves with increased exposure to wireless and enterprise, making declines in residential voice less meaningful, in our opinion, and poising them to be much different companies over the next few years.
- Historical trends suggest access lines should not be the sole measure of wireline carriers business direction, as average revenue per line has consistently trended up as access lines decline, with positive mix-shifts, up selling, and regulatory factors keeping revenue flat to up over the same period.
- Among the RBOCs, we believe Verizon faces significantly higher levels of competition from cable with over 77% of households in Verizon's territory having cable, while BellSouth's ~24% in-territory satellite penetration is likely to reduce the number of access lines susceptible to cable competition.
- We believe the rural ILECs will need to dramatically lower xDSL prices over the near-term to reduce access line losses and increase average revenue per line, which we expect to have an overall positive impact as higher xDSL penetration could shield 18% to 30% of household line erosion for these carriers over the next five years.
- We are increasing our access line loss estimates for ALLTEL, CenturyTel, Citizens, and Iowa Telecom to reflect recent trends and to coincide with our broader top-down view of the industry.

Please read disclosure/risk information on page 23 and Analyst Certification on page 24.

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In this report, we examine the impact of access line losses on the industry as a whole, including the impact of both wireless and cable VoIP competition, which we expect to be key determinants of the future of the wireline industry. We continue to view this market as being bifurcated between the RBOCs (and soon to be RBOC/IXC combinations), and the rural ILECs. In RBOC and RBOC/IXC land, consumer voice is likely to erode to very low levels relative to today's 80%-90% penetration, and enterprise, high-end data networking, and telecom systems management are expected to become more of the core businesses. **In rural markets, we believe the ILECs have a significant near-term opportunity to grow ARPU by offering dramatic price cuts on xDSL service in order to help reverse the trend of an increasingly defecting access line bases. We believe a xDSL price point around $20 per month in most cases would actually generate significant future revenue, while indirectly giving customers a strong incentive to retain their voice line and salvaging the Universal Subscriber Fund (USF) revenue streams associated with them.**

After noticing a trend of accelerating access line losses over the last few quarters, particularly for the rural ILECs, we have undertaken a thorough examination of access lines and expected losses in our coverage universe over the next five years. In our analysis, we have examined cable VoIP adoption potential, standalone VoIP (such as Vonage and Skype) adoption potential, wireless substitution trends (along with demographic data for the country as a whole), as well as the impact of business line and residential second line trends. These trends are then compared to total U.S. households as this metric (rather than consumer access lines themselves) offers a better picture of the potential for demographic shifts to impact the access line figures over time. After forecasting technological substitution for both wireless and VoIP, we have also taken the next logical step towards determining what these trends mean for the ILECs and RBOCs. Through our analysis, we have come to several conclusions.

First, wireless substitution is well-known as a the leading cause of access line losses currently and this factor is likely to increase over time, in our opinion, particularly when examining the large percentage of households that appear to be good candidates for cutting the cord. **We forecast wireless only households could be around 25% of total U.S. households by the end of the decade, with 25.8% of households currently classified as one-person and 32.6% of households currently classified as two-person households** according to the latest census data. We believe these one and two person households are the most appropriate candidates to go completely wireless, potentially with a free VoIP over broadband service such as Skype as a complement. It is our view that wireless only households could be more prevalent than cable VoIP customers at the end of the decade based on this data, which coincides with various studies and our research indicating younger (under age 34) customers are increasingly more likely to replace or forego signing up for a traditional landline phone. We expect this impact to be bifurcated between the RBOCs and the ILECs, with the largest market share loss expected from the RBOCs, and the potential revenue impact higher for the ILECs.

Second, we think **cable and stand alone VoIP will be a close second** in terms of taking share away from incumbent voice providers, with these competitors' share expected to exceed 20% of U.S. households by year end 2010. Rural ILECs may be able to escape much of this competition due to several factors including lower levels of upgraded plant competing in their territory, generally lower prices, higher interconnection costs per sub, and higher levels of customer service from the incumbent than that experienced in urban markets. The downside is that their largest markets generally do face

upgraded cable plant, which clearly has the potential for telephony competition. With the multiple system operators (MSO) increasingly becoming private entities, close to 100% voice deployment in many of their systems would not be a difficult stretch given their pending and recent releases from the scrutiny of equity investors.

Third, the RBOCs have actually been more aggressive in repositioning their wireline asset bases to capitalize on the enterprise customers they have access to, which should help stem some of the impact of consumer access line losses. Over time, we believe the RBOCs will have no choice but to continue to increase their reliance on non-voice related services as their place on the scale of lines lost is expected to be at the higher end of the national average. However, residential voice revenue is increasingly a less meaningful one in determining the overall revenue growth of the RBOCs due to their successful repositioning towards wireless, data, and enterprise related businesses.

Fourth, while rural ILECs may have less impending exposure to cable competition, their access line losses have been converging with the RBOCs' year-over-year percentage line losses every quarter since mid-2002. The rural ILECs have also been able to diligently sell incremental services to their customer bases over the past four years such as caller ID, voice mail, call waiting, long-distance, and Internet service, a fact that has consistently allowed them to keep revenue flat to up as access lines decline, in our opinion. Overall, we believe this issue deserves more attention from investors, as it implies to us that access lines, the traditional measure of the direction and success of the telecom industry, may not be the best indicator of a particular carriers overall business.

To a large extent the low-hanging fruit from additional revenue via the local line has been captured, with xDSL and potentially video being the next best opportunities for revenue growth, according to our thoughts. Also, the RBOCs clearly are loosing a higher percentage of lower revenue second lines (from an inflated base of these products), as opposed to the rural carriers that are likely losing higher quality primary lines. However, the rural ILECs have been slower to capitalize on the opportunity to sell xDSL, with pricing remaining higher than in urban markets, implying additional demand to be unlocked in their territory as xDSL and cable modem services are deployed. As a result, data revenue is not currently a significant factor in offsetting the various forms of revenue that are lost when a wireline customer defects, namely the local and long distance voice, network access, and USF declines as these are all attached to access line ownership to varying degrees.

Demographics Point to Increasing Wireless Substitution

Demographic data points to continued wireless substitution going forward, with this phenomenon more likely to accelerate rather than decelerate as consumers become more confident in voice quality and reduce usage of wireline phones and as younger consumers who are more comfortable without a landline become heads of households. The most recent FCC household subscribership data pinpoints wireless substitution at around 6% of households. This is consistent with the level of line losses to date in the industry. In addition, we note 25.8% of households are one-person while two-person households, many without children, are 32.6% of the population. Families with children under 18, the most likely household to retain a wireline phone, represent around 35.5% of households.

Category	Percent of Households	Likelihood of Ditching Landline
One-Person	25.8%	High
Two-Person	32.6%	Medium to High
Family w/ children under 18	35.5%	Low
Married Couple – No Children	16.1%	Low to Medium
24 and Under	34.9%*	High
45 and Over	38.1% *	Low?

* Percent of total population currently 24 and under.

Source: U.S. Census Bureau and Raymond James estimates.

Some carriers have experienced a rising proportion of the retired population turning off their wireline phones upon returning from their annual extended sunbelt vacations (the 'snowbird' effect). This contingency has relied on a wireless phone for the winter while they are in their seasonal home and realize when they come back they have no need for a landline. While this is not a demographic, many people focus on as a wireless substitution market, we note many of these households fall into the one- to two-person demographic listed above as well as younger people more traditionally thought of in this class. The same reasoning can be inferred for one or two person households that travel significantly or simply have lifestyles that do not result in large amounts of time at home. One key factor, however, is that we believe most of these customers are also strong candidates/purchasers of broadband service and represent another argument for naked DSL, which we discuss further, below.

Cable Competition and VoIP Substitution

In order to get a sense for where cable could be in three to four years, we believe investors should look no further than Cox Communications. As of 1Q05, Cox had 22.3% penetration of basic video subscribers and 21.4% penetration of telephony ready homes passed (the company now has a significant number of standalone voice or voice and data customers). The company added over 111,000 voice subscribers in 1Q05, with the company deploying VoIP service to homes where switched voice service was not available. It is our view that Cox's penetration represents an indication of cable's likely impact on RBOC access lines over the next three to four years considering it was well ahead of the overall industry in voice deployment.

However, we note cable's long-term competitive impact may be somewhat inhibited by satellite penetration in the U.S. This statement is supported by overall satellite and cable penetration as a percentage of "U.S. TV watching households," which widely varies by market. In analyzing this data by RBOC footprint, we believe Verizon's territory is most susceptible to cable competition because overall cable penetration is significantly higher than for

the other RBOCs. Conversely, we estimate cable penetration among TV watching households is the lowest for Qwest, which generally has the most rural territory, while BellSouth has the highest satellite penetration among the top 110 markets in the U.S. separated by RBOC. In the following tables, we highlight cable and satellite penetration among TV watching households in the top 110 U.S. markets among the RBOCs.

Cable Subscribers as a Percentage of Total TV Households (Top 110 Markets = ~88% of households)	
RBOC	Penetration
BellSouth	65.8%
Qwest	58.6%
SBC	62.0%
Verizon	**77.6%**

Satellite Subscribers as a Percentage of Total TV Households (Top 110 Markets = ~88% of households)	
RBOC	Penetration
BellSouth	23.6%
Qwest	22.8%
SBC	21.3%
Verizon	**13.8%**

Note: Data from May 2005.

Source: Nielsen Media Research/NSI and Raymond James estimates.

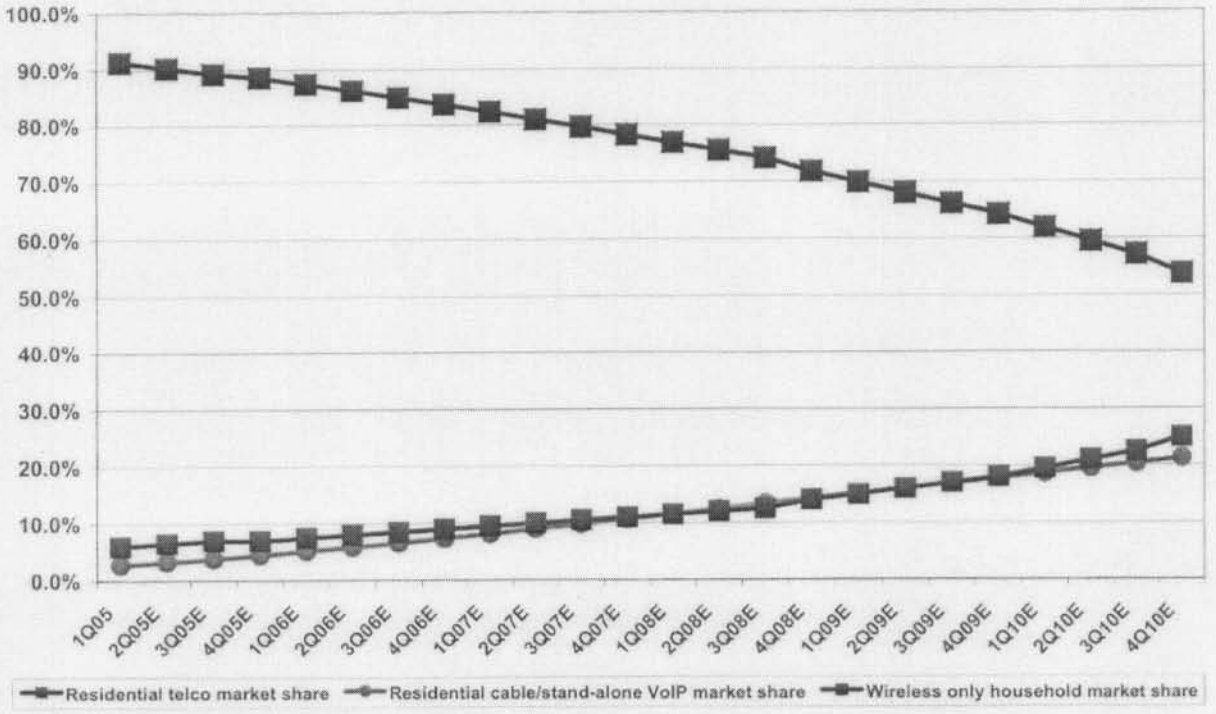
In addition, it remains to be seen what occurs with respect to stand alone VoIP competition. While Vonage is currently the only meaningful provider with a large number of paying VoIP customers in the U.S., to our knowledge, we believe services like Skype could represent more concerning alternatives over time. The company currently has around 125 million people who have downloaded the service worldwide (last time we checked the site, the company claimed to be adding new downloads at a pace of around 150,000 per day) and the functionality of the service is becoming increasingly strong.

We recently tested the free service from Skype and found the voice quality to be extremely strong. The company is trialing a service to download actual phone numbers for an annual fee so that users can more easily receive calls on their Skype phone from traditional phones. The PC to PC functionality with the ability to instant message also is an attractive feature and the service is being used in a number of different capacities, by both business and residential customers. We also note companies like Yahoo! are also deploying a PC to PC VoIP service, which may increase its' popularity among consumers in the U.S.

Combining the Two Substitution Factors to Make a Forecast

All of that being said, with "Skype-like" services being the wild-card, following we forecast the market for household telephony consumption in the U.S. through 2010. We use an operator by operator analysis for cable providers and stand-alone VoIP services in determining our projections based on current trends and expected market entrances over the next 18 months, while we forecast continued steady wireless substitution going forward as well. The point of our exercise is to demonstrate how much the market for traditional residential access lines could deteriorate over the next five years, and while the rate of decline could vary or be stretched out by a year or two, we believe this is the scenario that the industry is headed towards.

Household Market Share Estimates - 2005E - 2010E



Source: Raymond James estimates.

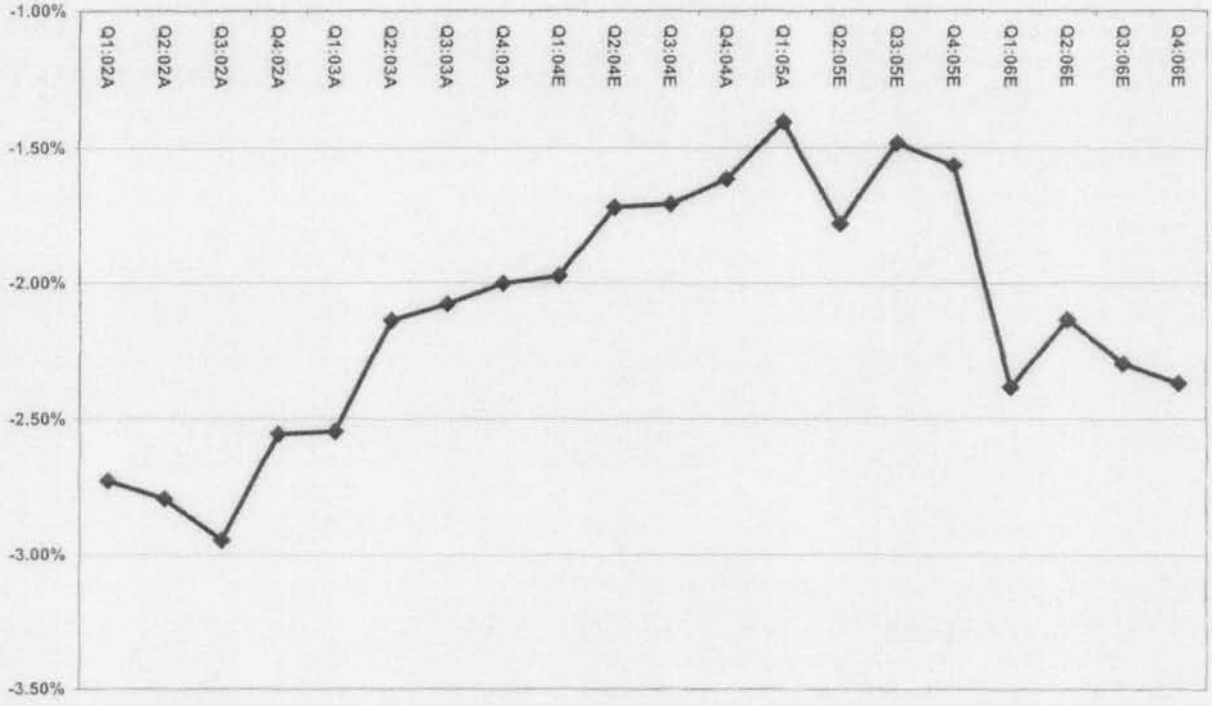
RBOCs vs. Rural ILECs: Substitution Converging or Diverging?

As we point out in our opening comments, the impact of wireless substitution has converged for the rural ILECs when compared to the RBOCs over the past few years, in our opinion. While a number of rural ILECs face pockets of competition (such as Citizens in Rochester and Iowa Telecom facing overbuilders in a handful of markets), to a large extent their access line losses

have been due to wireless substitution and second line losses, in our opinion. The RBOCs generally have greater but decreasing exposure to this second line factor, which explains part of the trend. However, it is our thought that the convergence of year-over-year line losses prior to a major explosion of cable competition can largely be explained by the rural ILECs' wireless substitution "factor" converging with that of the RBOCs.

Following is a graph of the spread between the RBOCs' switched access line losses on a year-over-year basis and the rural ILECs year-over-year loss percentage. We note the spread bottomed in 3Q02 at a 3% absolute difference and has risen up through 1Q05. Our current estimates call for a divergence in this spread going forward due to increases in cable competition expected for the RBOCs relative to the rural ILECs.

RBOC vs. RLEC Line Loss Comparison

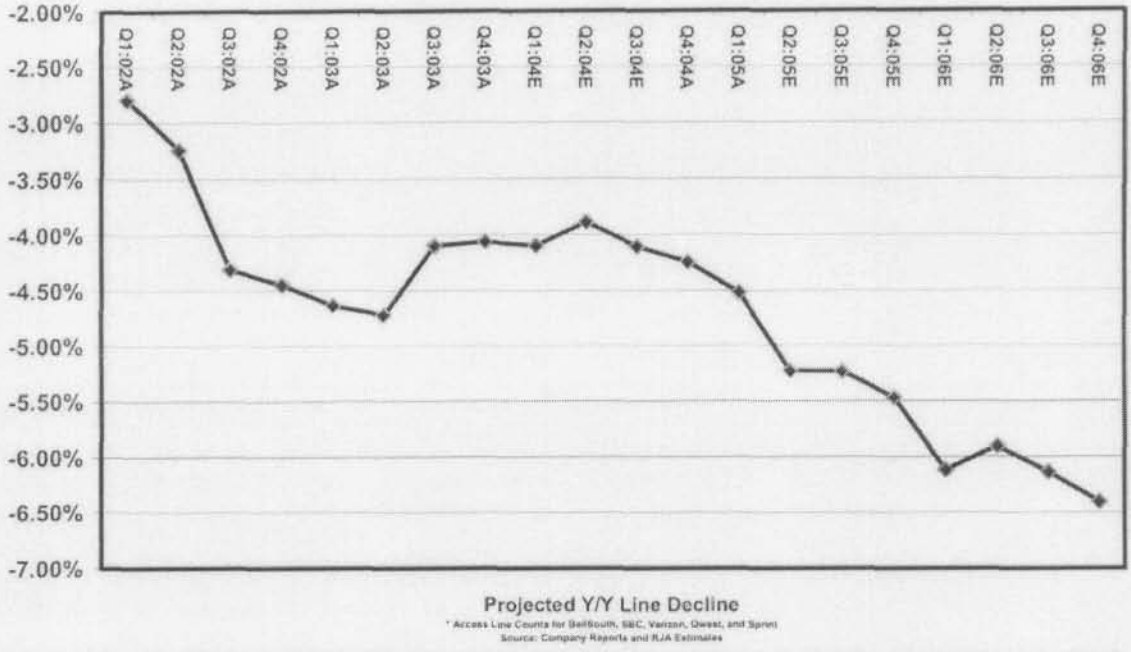


Note: RBOC lines are defined as switched access lines for Verizon, SBC, BellSouth, Qwest, and Sprint. Rural ILEC lines include urban operator Cincinnati Bell.

Source: Raymond James Estimates and Company Reports.

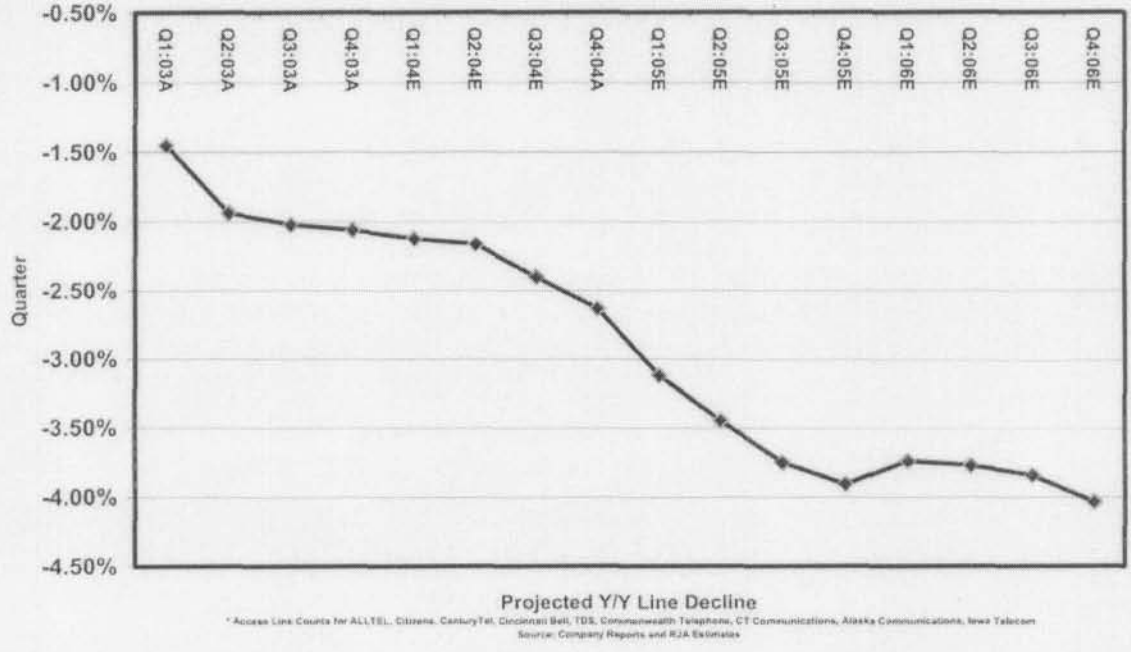
The convergence in line losses on a year-over-year basis has been due to 1) rural ILEC line loss acceleration and 2) RBOC line losses slowing as second line disconnects reach their peak. Following we show each entities year-over-year line losses and absolute rural ILEC line losses.

RBOC Line Losses



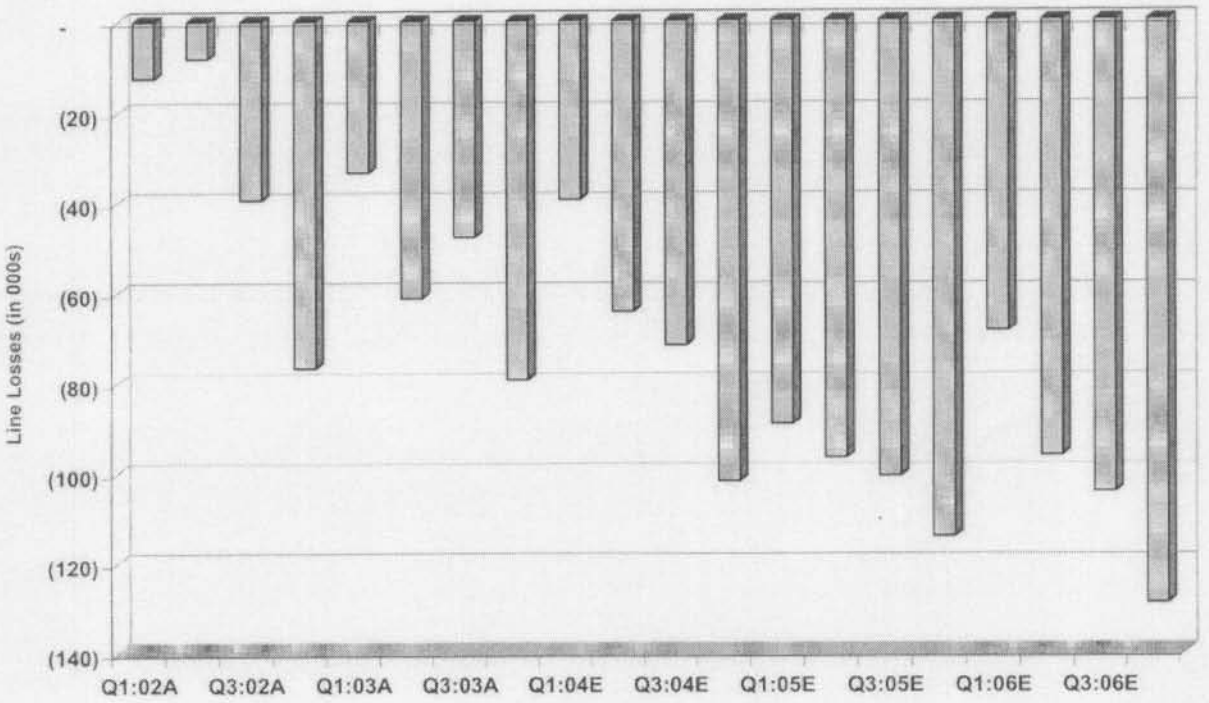
Source: Raymond James estimates and Company Reports.

Rural ILEC Line Losses



Source: Raymond James estimates and Company Reports.

Absolute Rural ILEC Access Line Losses - 2002A - 2006E



ILECs included are AT, CTL, CZN, TDS, CTCO, CTCI, ALSK, IWA, VCG, and CBB.

Source: Raymond James estimates and Company Reports.

Are Access Lines the Drivers We Think They Are?

Consumer voice stakes higher for rural ILECs. With line losses converging to date for the rural ILECs and the RBOCs, this trend bodes poorly for the rural ILECs, in our opinion. The rural ILECs have significantly higher leverage to consumer voice revenue. For instance, below we highlight voice/data revenue mix for the rural ILECs, which generally have a 75%/25% consumer/business access line mix vs. the RBOCs at around 65%/35%.

Data as a Percentage of Total ILEC Revenue			
	Q1'05	**2005**	**2006**
CTL	12.7%	12.8%	13.7%
CZN	7.7%	8.6%	11.4%
VCG	6.0%	6.9%	9.6%
VZ	21.8%	22.2%	24.1%
BLS	25.7%	26.2%	29.2%
SBC	30.3%	31.2%	33.6%
CBB	28.0%	27.7%	28.6%

Note: Verizon and SBC data estimates exclude any potential contributions from IXC acquisitions for comparability purposes.

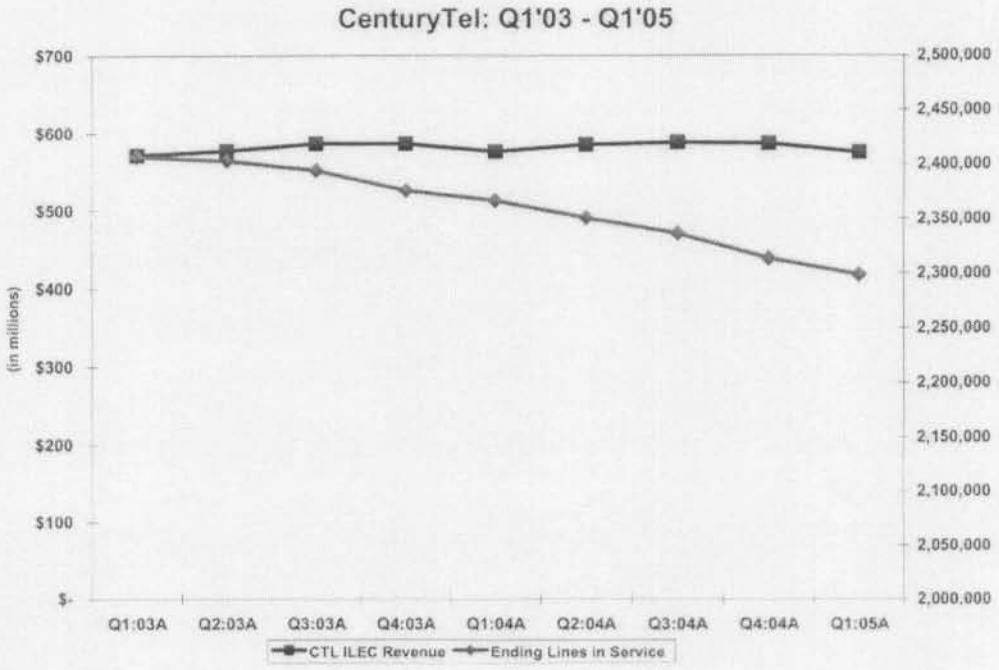
Source: Raymond James estimates and Company Reports.

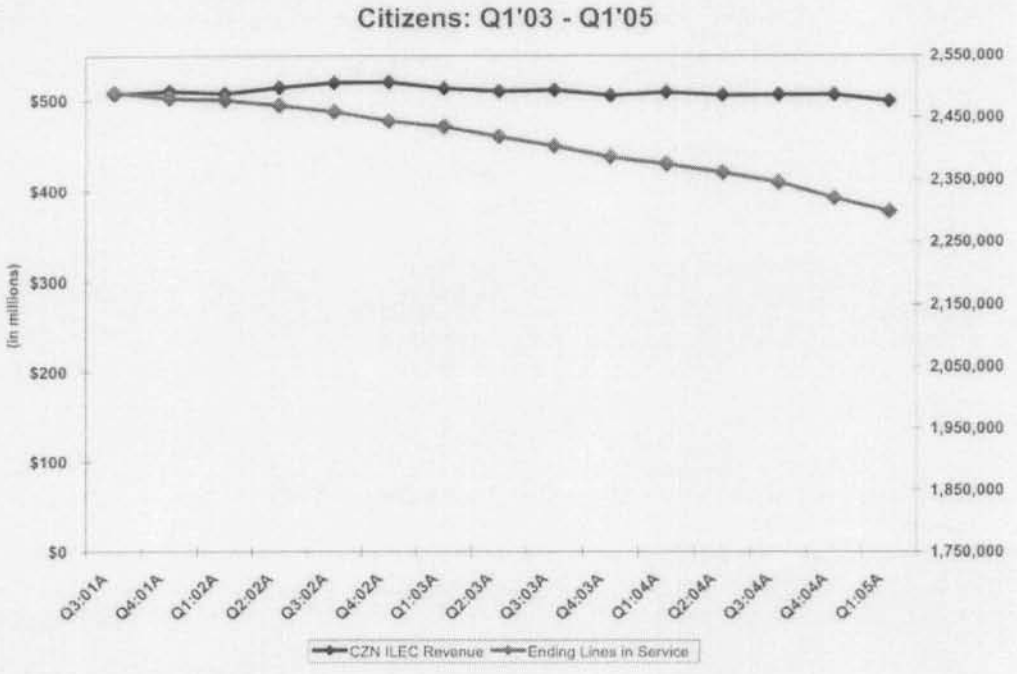
As shown above, with data being a significantly higher portion of revenue, the RBOCs' businesses are driven to a much lesser extent by traditional voice revenue streams. In addition, the RBOCs' and Cincinnati Bell have a greater ability to influence their aggregate revenue base with trends in data, which includes special access services to business and wholesale customers, as well as xDSL. While sales of xDSL are currently contingent on the consumer having an access line, we do not believe this will necessarily be the case going forward as the RBOCs prepare to actively pursue the wireless substitution market by offering naked xDSL, and (when they can) naked xDSL/wireless bundles.

Meanwhile, the rural ILECs generate significantly more revenue per access line, when you add up xDSL, long-distance, basic voice, vertical services, directory services, access and USF. Currently, without an access line, all of these different revenue streams (with the exception of directory) are non-existent. It is our view that access lines lost to wireless substitution are intuitively less valuable lines, because people disconnecting for wireless are likely not using their wireline phone a lot and take less additional services on their basic lines, and generate less access revenue.

However, in many cases the rural ILECs do lose USF when lines are displaced by wireless, as well as network access revenue associated with usage. Fortunately, to date, the lines being lost for the rural ILECs appear to have been disproportionately lower value lines in less rural areas, with lines in their more urban areas generally producing less in subsidy revenue. For all of these reasons, revenue per line continues to rise due to an access line mix shift. In addition, the lines lost are predominantly residential, which increases their business/residential mix, which in turn increases revenue per access line. We also note the deployment of Internet access (both dial up and broadband) has forced some independent rural ISP's out of business, thus removing low ARPU wholesale lines from the access line count (and boosting ARPU) as a result.

The paradox of declining access lines and flat to increasing revenue
The result of all of this is that revenue (and in some cases, revenue growth) has declined at a slower rate than access lines, which is likely to continue, in our opinion. Finally, with revenue streams currently staying somewhat steady, the rural ILECs have to date been able to offset access line declines with upselling additional services to their embedded underpenetrated customer base. This is a very interesting point, in our opinion, as it contradicts conventional wisdom in telecom that access line declines have a direct correlation with the demise of business. Would revenue and EBITDA grow significantly higher without line losses? The answer is, of course, yes, but the ability demonstrated by the ILECs and the RBOCs to continue to drive revenue from the existing base is impressive, and bears some consideration when forming opinions as to the longer term health of these companies. All of these trends are demonstrated in the following graphs, which show access lines declining over the past year while revenue stays flat to up for most of the rural ILECs.




Citizens: Q1'03 - Q1'05
(in millions)
$500
$400
$300
$200
$100
$0
2,550,000
2,450,000
2,350,000
2,250,000
2,150,000
2,050,000
1,950,000
1,850,000
1,750,000
Q3:01A
Q4:01A
Q1:02A
Q2:02A
Q3:02A
Q4:02A
Q1:03A
Q2:03A
Q3:03A
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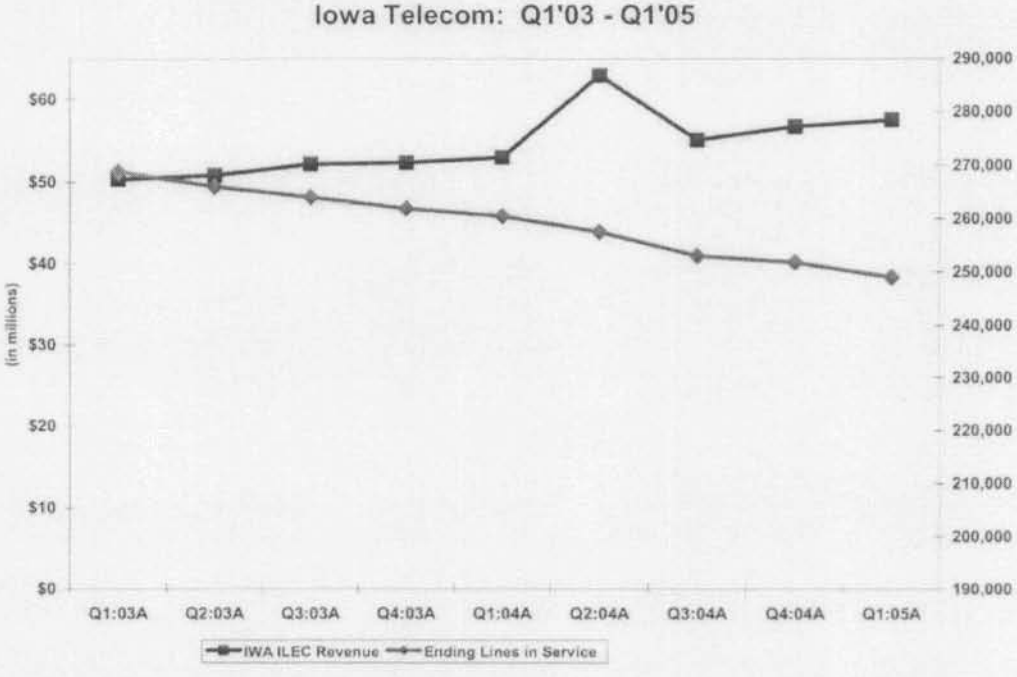
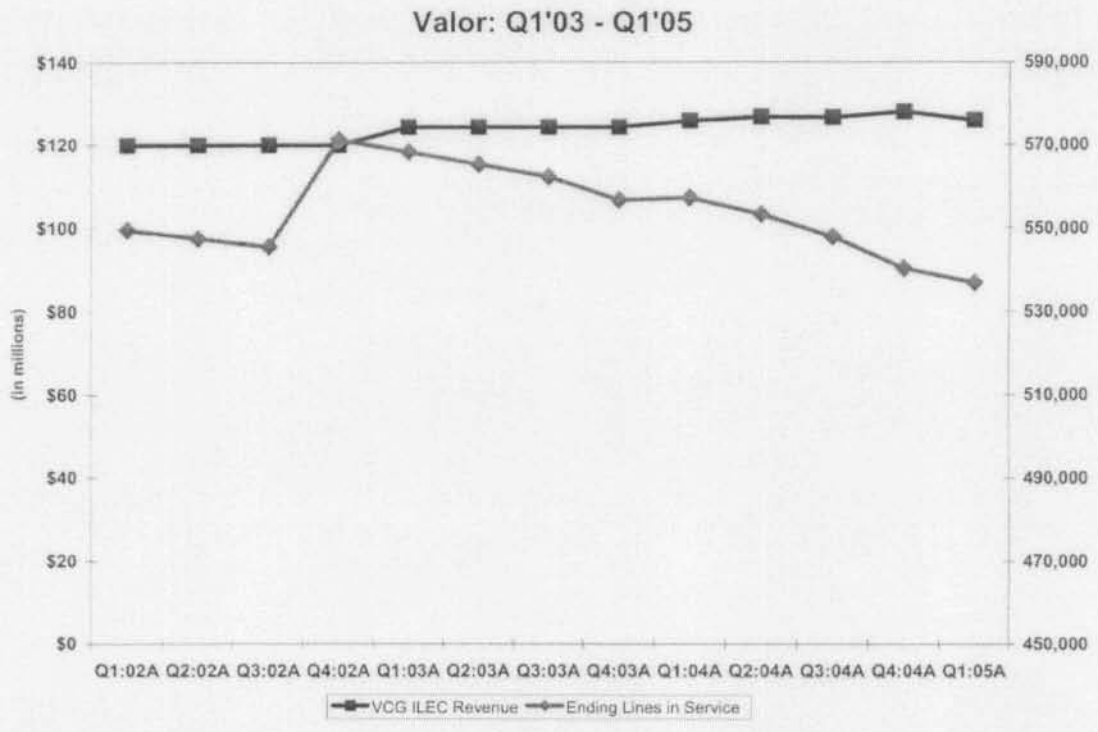
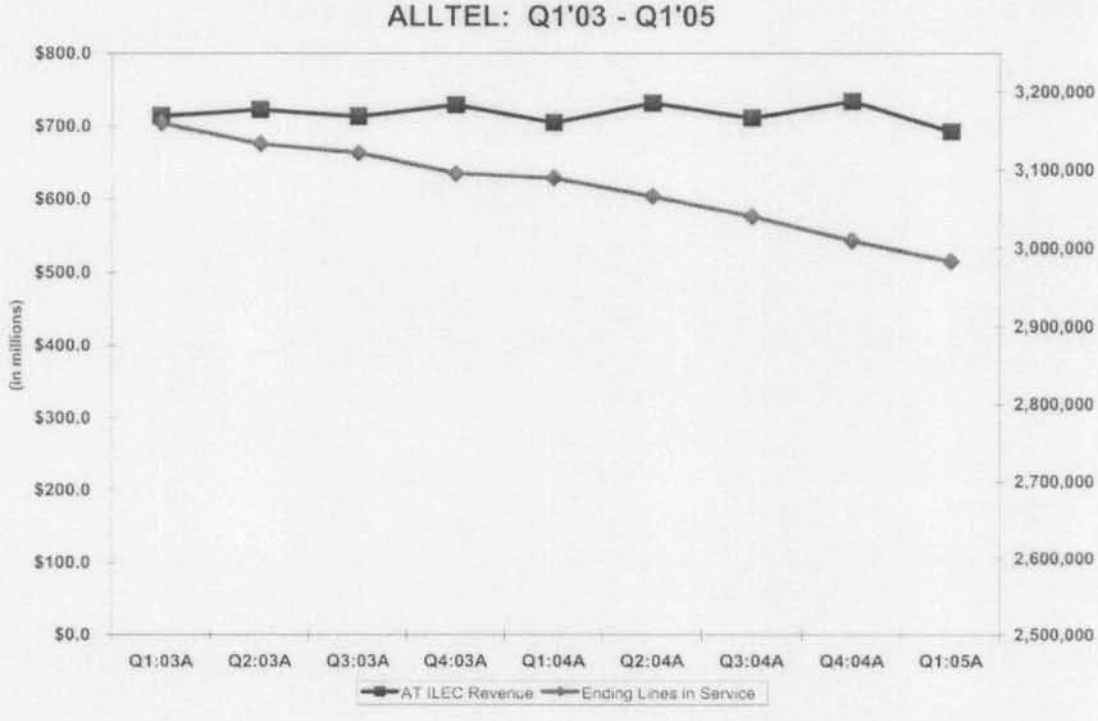
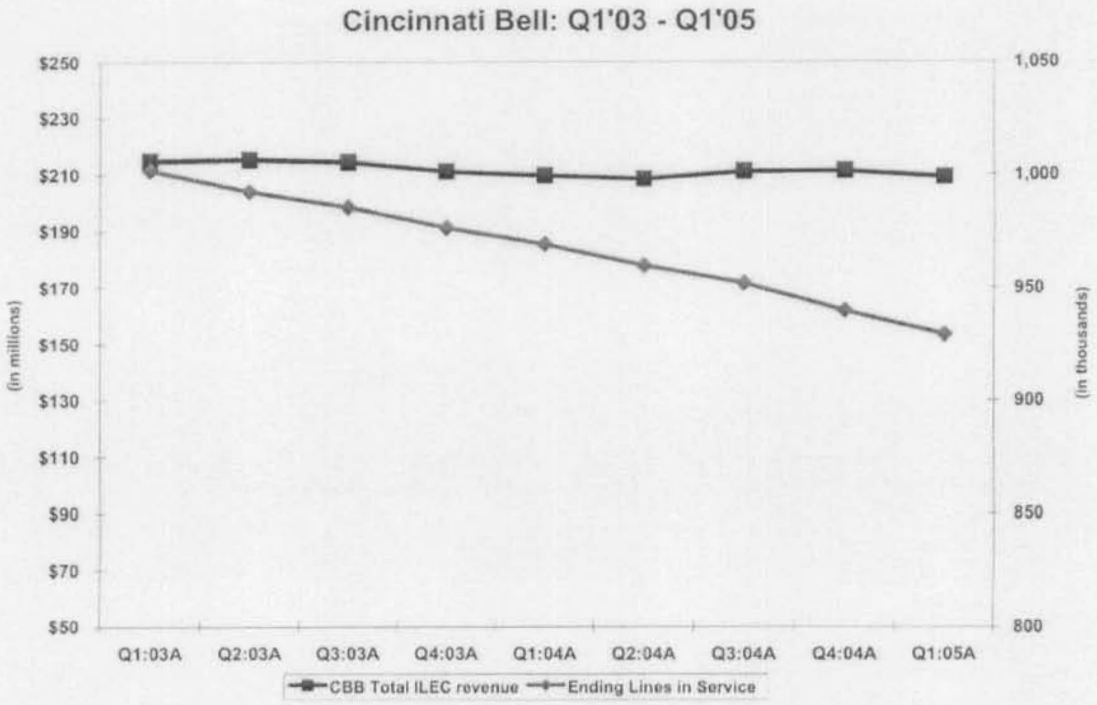
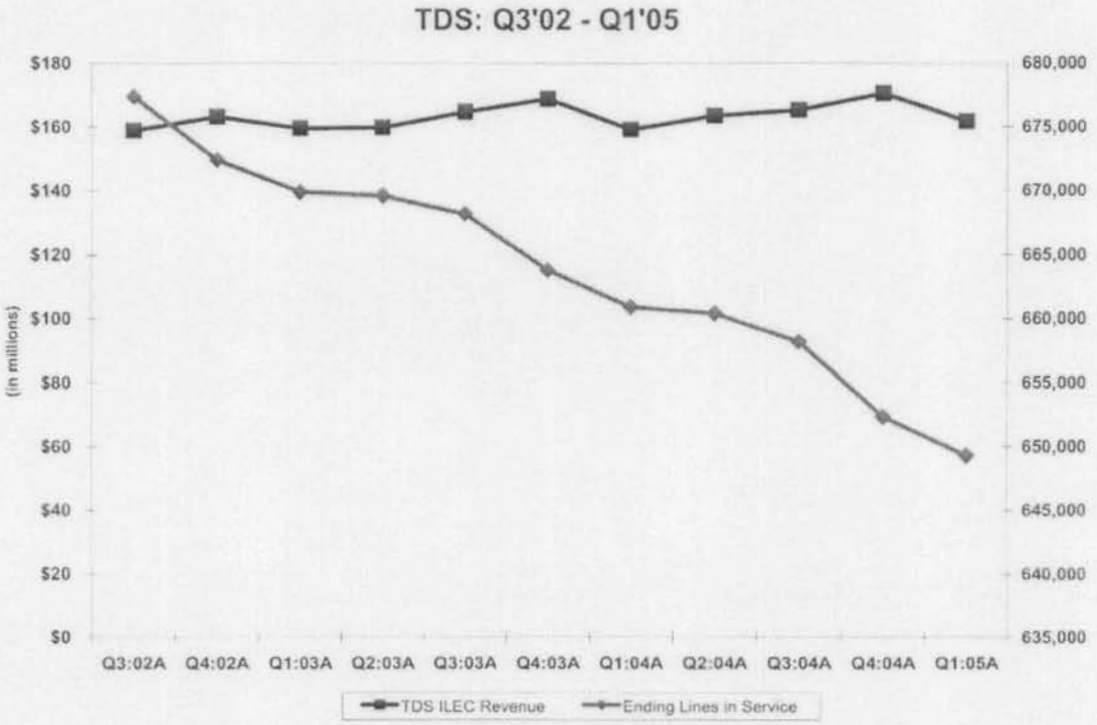
Q4:04A
Q1:05A
CZN ILEC Revenue
Ending Lines in Service


Iowa Telecom: Q1'03 - Q1'05
(in millions)
$60
$50
$40
$30
$20
$10
$0
290,000
280,000
270,000
260,000
250,000
240,000
230,000
220,000
210,000
200,000
190,000
Q1:03A
Q2:03A
Q3:03A
Q4:03A
Q1:04A
Q2:04A
Q3:04A
Q4:04A
Q1:05A
IWA ILEC Revenue
Ending Lines in Service

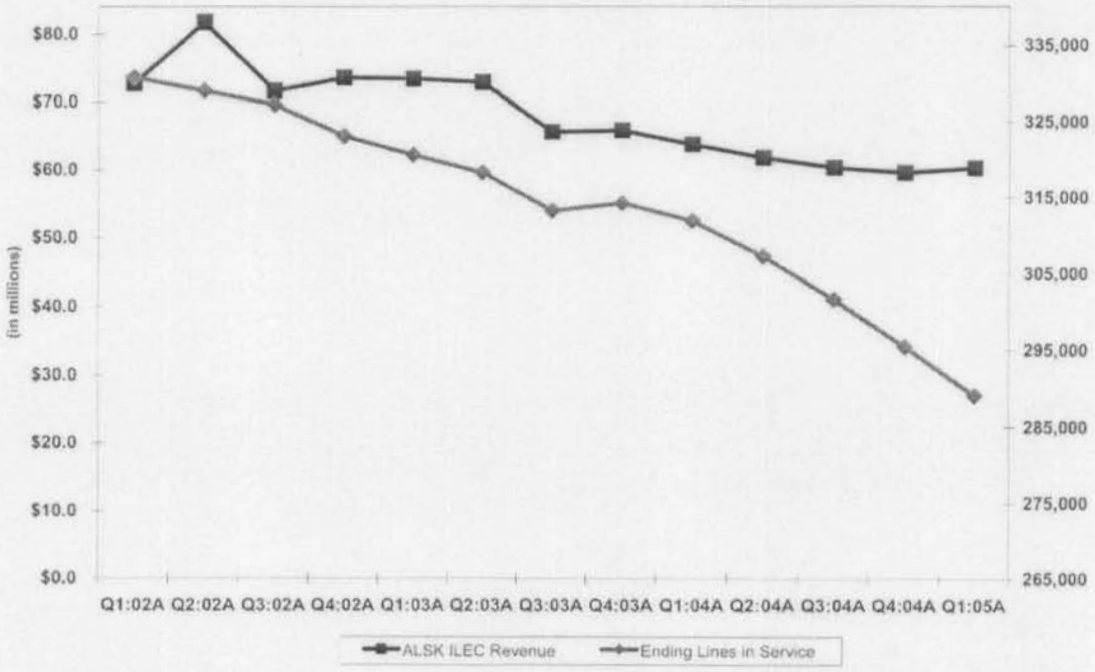

Valor: Q1'03 - Q1'05
$140
$120
$100
$80
$60
$40
$20
$0
(in millions)
590,000
570,000
550,000
530,000
510,000
490,000
470,000
450,000
Q1:02A Q2:02A Q3:02A Q4:02A Q1:03A Q2:03A Q3:03A Q4:03A Q1:04A Q2:04A Q3:04A Q4:04A Q1:05A
VCG ILEC Revenue
Ending Lines in Service


ALLTEL: Q1'03 - Q1'05
$800.0
$700.0
$600.0
$500.0
$400.0
$300.0
$200.0
$100.0
$0.0
(in millions)
3,200,000
3,100,000
3,000,000
2,900,000
2,800,000
2,700,000
2,600,000
2,500,000
Q1:03A Q2:03A Q3:03A Q4:03A Q1:04A Q2:04A Q3:04A Q4:04A Q1:05A
AT ILEC Revenue
Ending Lines in Service

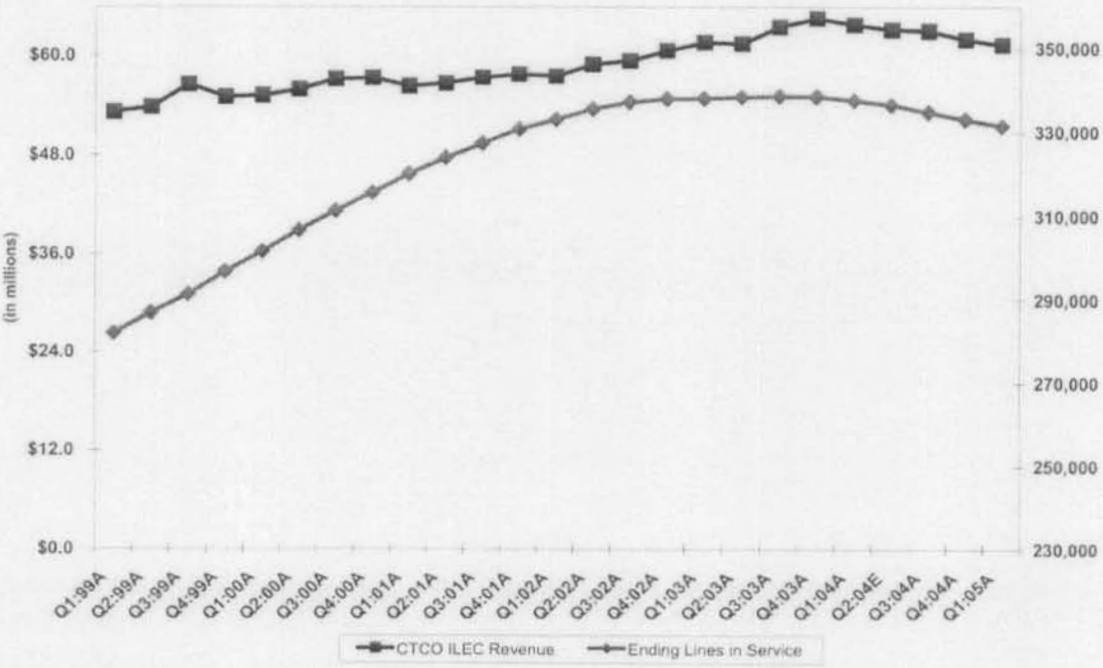

Cincinnati Bell: Q1'03 - Q1'05
$250
$230
$210
$190
$170
$150
$130
$110
$90
$70
$50
(in millions)
1,050
1,000
950
900
850
800
(in thousands)
Q1:03A
Q2:03A
Q3:03A
Q4:03A
Q1:04A
Q2:04A
Q3:04A
Q4:04A
Q1:05A
CBB Total ILEC revenue
Ending Lines in Service

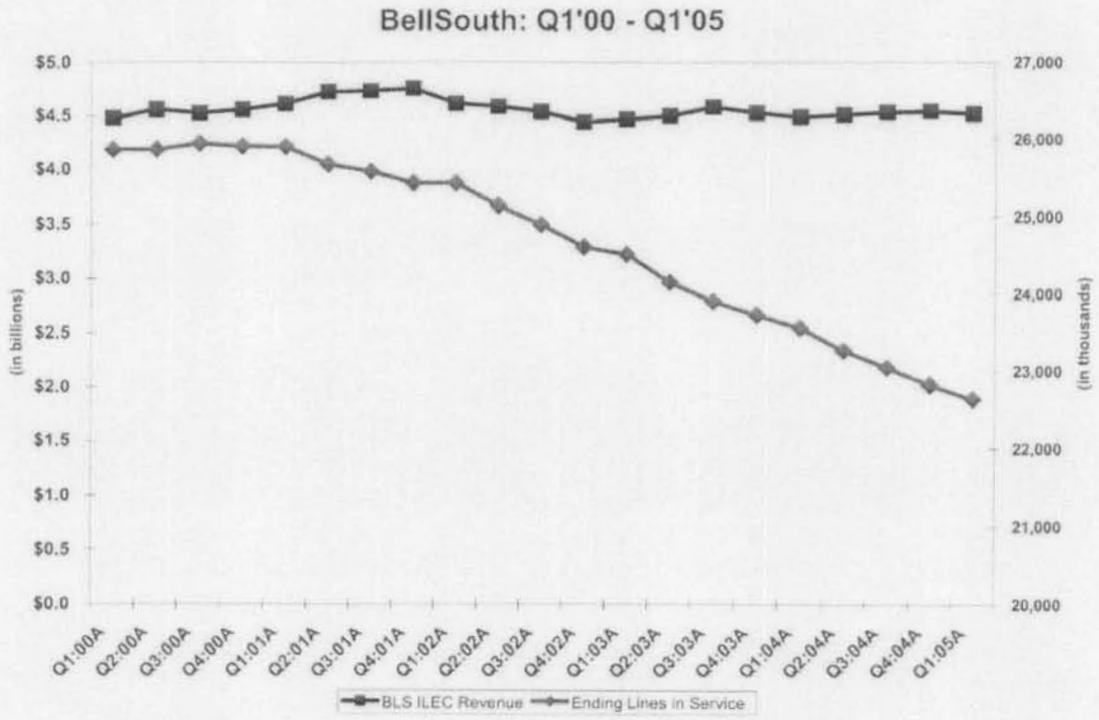

TDS: Q3'02 - Q1'05
$180
$160
$140
$120
$100
$80
$60
$40
$20
$0
(in millions)
680,000
675,000
670,000
665,000
660,000
655,000
650,000
645,000
640,000
635,000
Q3:02A
Q4:02A
Q1:03A
Q2:03A
Q3:03A
Q4:03A
Q1:04A
Q2:04A
Q3:04A
Q4:04A
Q1:05A
TDS ILEC Revenue
Ending Lines in Service

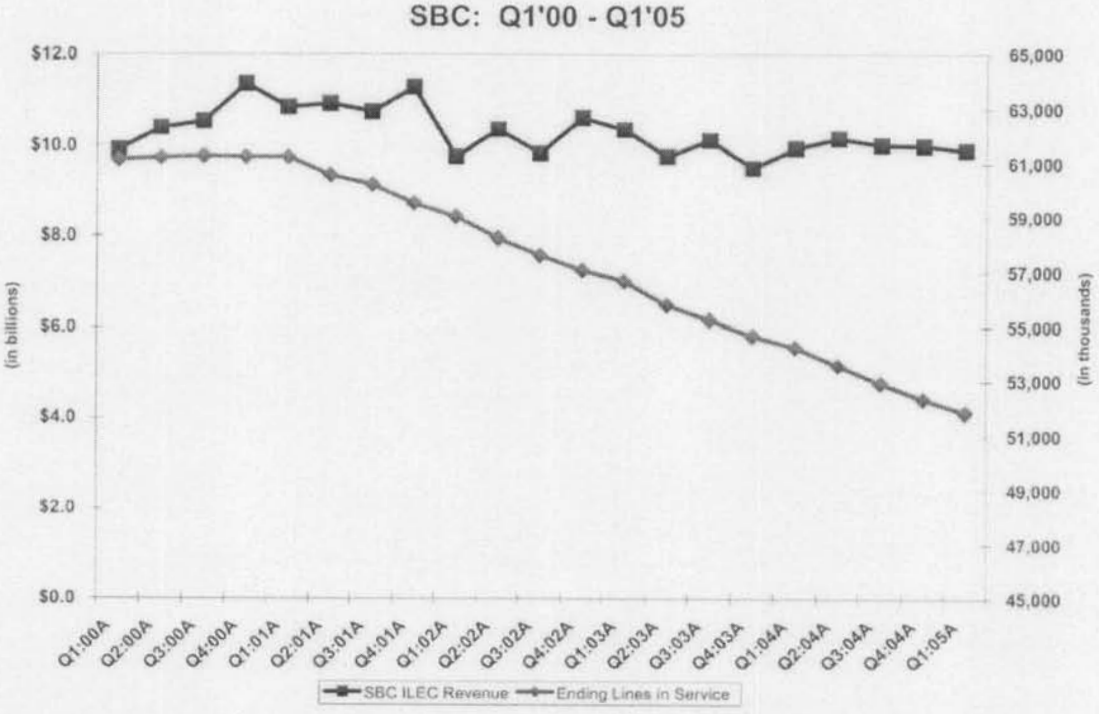
Alaska Communications: Q1'02 - Q1'05



Commonwealth: Q1'99 - Q1'05




BellSouth: Q1'00 - Q1'05
$5.0
$4.5
$4.0
$3.5
$3.0
$2.5
$2.0
$1.5
$1.0
$0.5
$0.0
(in billions)
27,000
26,000
25,000
24,000
23,000
22,000
21,000
20,000
(in thousands)
Q1:00A
Q2:00A
Q3:00A
Q4:00A
Q1:01A
Q2:01A
Q3:01A
Q4:01A
Q1:02A
Q2:02A
Q3:02A
Q4:02A
Q1:03A
Q2:03A
Q3:03A
Q4:03A
Q1:04A
Q2:04A
Q3:04A
Q4:04A
Q1:05A
BLS ILEC Revenue
Ending Lines in Service


SBC: Q1'00 - Q1'05
$12.0
$10.0
$8.0
$6.0
$4.0
$2.0
$0.0
(in billions)
65,000
63,000
61,000
59,000
57,000
55,000
53,000
51,000
49,000
47,000
45,000
(in thousands)
Q1:00A
Q2:00A
Q3:00A
Q4:00A
Q1:01A
Q2:01A
Q3:01A
Q4:01A
Q1:02A
Q2:02A
Q3:02A
Q4:02A
Q1:03A
Q2:03A
Q3:03A
Q4:03A
Q1:04A
Q2:04A
Q3:04A
Q4:04A
Q1:05A
SBC ILEC Revenue
Ending Lines in Service

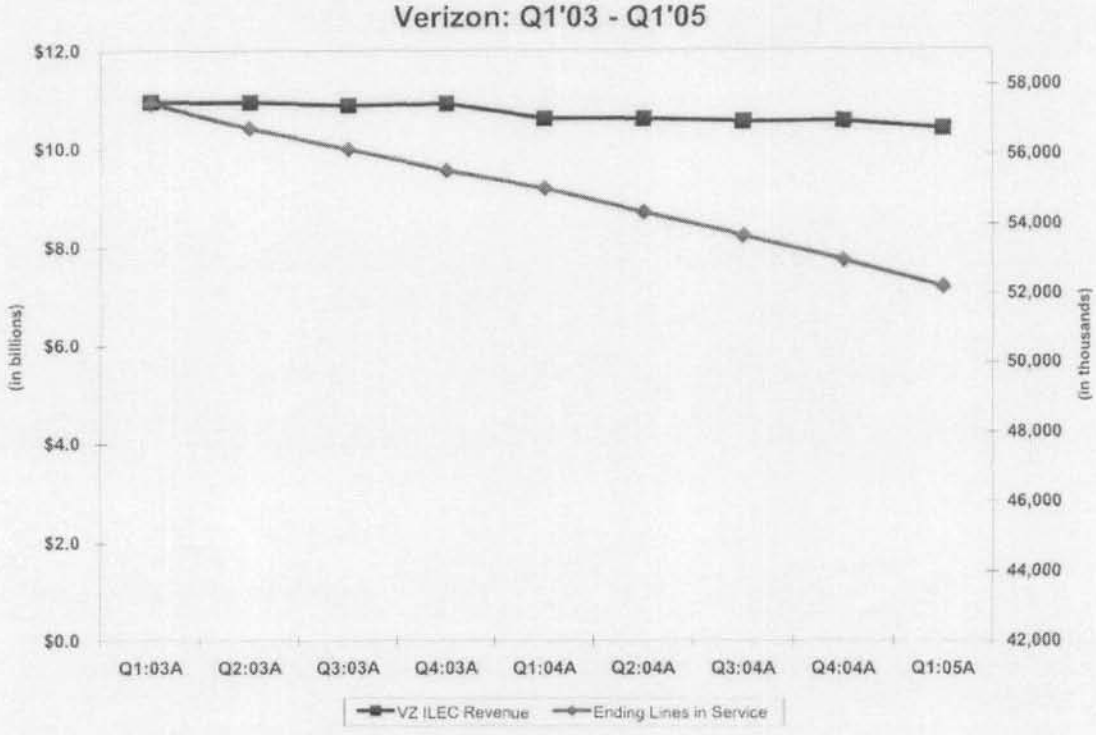
their high-value customer, as the xDSL product at a very low price point would incent the customer to retain the phone line they most likely do not need any more. So while the xDSL revenue per line is diminished to around $20 per month, the company could retain up to $100 per month in total revenue by offering the discount.

Taking xDSL retention a step further. All of this sounds interesting from a theoretical perspective, but let's do some math. Among covered companies, we estimate the rural ILECs and RBOCs average 9.3% xDSL penetration of total access lines (including business lines). Over time, we believe 30% household penetration of xDSL is not a stretch, especially for the rural ILECs, as xDSL subscribers grew 88% in 2004, compared to cable modem subscribers that grew at only 36% according to the latest data available from the FCC. Also, with inherently lower cable modem competition within their territory, we believe rural ILECs should be able to capture outsized share of total broadband demand. Considering current penetration of broadband in aggregate (cable and xDSL) stands at 32.5% according to the FCC, we see no reason this would not hold true for more rural and suburban markets as well, thus leading us to believe xDSL penetration will be higher on average due to lower overall availability of cable modems in their territories. xDSL pricing varies around the industry, with SBC at $14.95 with a bundle and Iowa Telecom offering 512k service with an additional service charge and a required two-year agreement at $39.95. While the impact of SBC's pricing move have yet to be seen, we believe Cincinnati Bell has been the most successful at gaining penetration of the service to date, with 14% penetration of access lines at a $29.95 price point within the bundle.

For argument's sake, let's say xDSL penetration triples at a $20 price point, with the service potentially priced slightly below this for residential customers but ARPU being counterbalanced by business xDSL customer bases. Comparing revenue generated per access line currently to this scenario, the average revenue per access line generated would increase by $2.28 on average due to higher penetration of the service per line. Put another way, prices may decline by more than half in some cases but revenue for the service would be up. We also note this analysis is without the benefit of customer retention we describe above, which is all the more essential for the rural ILECs due to their higher revenue generated per line.

xDSL as an Access Line Loss Shield. The other impact that we believe is overlooked in simple access line loss extrapolation models is the "line loss shield" associated with adding xDSL customers. Yes, as we have pointed out, line losses are accelerating for the rural ILECs, which is a negative. The real question, in our opinion, is when does top line revenue and average revenue per user (ARPU) begin to follow this trend, as we assert access lines in and of themselves are not necessarily the whole picture when looking at wireline business models. As stated above, the demand for broadband and xDSL appears sufficient to drive higher penetration levels over time, especially for ILECs with lower levels of competition.

According to our estimates, the rural **ILECs could loose anywhere from 18% to 30% of their households as wireline customers and still retain similar or better levels of top line revenue** as long as xDSL penetration reaches 30%. This analysis also assumes the price point is up to 50% lower than current levels, which we believe will incent current dial up customers to stay with the ILEC as they consider upgrading to high speed, as well as attract incremental demand. We also note our assumption only assumes the access line is retained 1/3 of the time by selling xDSL, which is likely a low number considering retention properties of voice and data bundles in the industry. Also, this says nothing of the potential positive impact of an offensive deployment of video via xDSL 2+ (IP TV) at some point in the future. **The bottom line is that**



Source: Raymond James estimates and Company Reports.

Periods were chosen to reflect our view of the cleanest data available post the majority of significant acquisitions and divestitures of access lines among the carriers shown.

How long will these ARPU trends continue as access line losses accelerate? The bear case for the rural ILECs, in our opinion, is that as access line losses accelerate (if you accept the proposition that they are accelerating), the ability to sell additional services into their base tops out. While xDSL still represents a significant opportunity, the ability to "move the needle" in this business relative to their embedded revenue per access line is somewhat limited. Meanwhile, long-distance penetration within their customer bases has grown substantially over the past few years and further incremental penetration of vertical services is likely to be at a slower pace. Finally, the potential benefits from these revenue sources could be offset by pressure on USF and intercarrier compensation revenue per line. Since USF is based on access lines in rural areas that can be disaggregated down to the wire-center level, acceleration in wireless substitution in more rural markets could cause USF erosion to accelerate as well.

We also note the impact rate-of-return regulation has on average revenue per line as access lines decline for carriers regulated under rate-of-return. We believe rate-of-return carriers have seen access revenue per line (the rate-of-return mechanism) come up as access lines come down. In other words, rate-of-return access revenue is not based on access lines, only USF and

volume driven access revenue is impacted by lines (for more information on regulatory factors that impacts the rural ILECs, please see our report on 04/08/05 titled *Rural ILECs: Analyzing the Differences*). So access revenue per line goes up as lines go down. This factor is mainly impacting Fairpoint, ALLTEL, and CenturyTel, with carriers like Iowa Telecom, Valor Communications, and Citizens regulated under price cap regulation.

The Critical Fight for the Broadband Anchor

xDSL Growth is Key. We have asserted for the past couple of years that broadband is clearly the anchor product for both the telcos and for cable. For this reason, we are not surprised by recent moves by SBC and Verizon to offer significant discounts on xDSL pricing, as we believe broadband is the stickiest product relative to basic voice or video. Going forward, this will be critical for the RBOCs, particularly as they need to protect their market share. In addition, we actually would go as far to assert the **rural ILECs should be offering even lower prices than the RBOCs for xDSL service in many of their markets,** as it provides consumers with incentive to keep their access lines, which generate significantly higher revenue streams.

While this final concept is not intuitive at first, lets take a longer look at ARPU for the rural ILECs and what they generally give up when they lose an access line. As we previously point out, all access lines are not created equal. However, we believe many of the rural ILECs' access lines have ancillary revenue streams associated with them, namely USF and access. Following we highlight ILEC ARPU estimates for 1Q05 for a number of rural ILECs and RBOCs.

ARPU Summary

Company	Q1'05 ARPU	Company	Q1'05 ARPU
CZN	$72.40	VZ	$66.39
CTL	$83.39	CBB	$75.05
VCG	$78.17	TDS	$83.05
IWA	$76.98	ALSK	$69.57
AT	$77.39	CTCO	$61.74
BLS	$66.55	SBC	$63.57

Source: Raymond James estimates and Company Reports.

With the rural ILECs generating over $70 to $80 per line per month in some cases, keeping these revenue streams in tact is key, in our opinion. It is our thinking that the ILECs, especially in more rural areas where xDSL deployment is possible, must incent their customer bases to retain their telephony line. The reason it is key in more rural markets is the USF revenue stream associated with these lines. Thus, if the rural ILECs were to offer xDSL at $20 per access line (or even $15 in some cases), this would have the impact of increasing the demand for the service closer to that of the national average, which would greatly increase the number of customers taking the service and generate more absolute revenue for this product line, in our opinion. But more importantly, the rural ILEC would then ensure they keep

we strongly suggest xDSL pricing will come down in rural markets, and this will at a minimum offset access line losses, and possibly more than make up for them over the next 5 years. The net result is that, while line losses are not to be taken lightly, the streets current concerns over line erosion and its impact on rural carriers to pay their dividends is a bit overblown.

Rate of change at the incumbents remains slow. We believe to the extent access lines defect, it will be significantly tougher to get the customer back with lower-priced xDSL or any other tactic. Unfortunately, we have heard little talk across the industry of lowering prices to reduce churn and at the same time stimulate demand, especially among rural ILECs. In our view, management teams are generally under the impression that investors would react unfavorably to price cutting in broadband due to the near-term impact on this revenue stream on their embedded customer bases. However, we believe the customer reactions, the repercussions this would have for the regulatory community (i.e. solving the perceived digital divide by offering lower prices), and the longer-term elasticity of demand alone would warrant such a move.

Lastly, the telcos, in general, have a significant advantage in winning the incremental broadband customer in that they own a large amount of the current dial-up customers and all of their connections. Conversion of these lines will be critical, in our opinion, as these customers are not only embedded Internet customers but also represent access lines. This is even more acute for rural carriers where independent ISPs, such as AOL and Earthlink are virtually non-existent. As a side note, we believe quite a few rural carriers have lost a number of business customers in the form of small mom and pop ISPs that have been disappearing due to broadband proliferation, which puts pressure on wholesale lines, but not necessarily on overall revenue.

Conclusions

So what does all of this mean for our coverage universe? First, it looks to us as though the RBOCs fundamentally have revenue streams that appear less susceptible to the changing landscape than the rural ILECs. While we have favored the rural ILECs' for their stability for some time, we believe the RBOCs have already "experienced the pain" of converting their asset bases to reflect the landscape as we expect it to stand in five years. While we expect access line losses at the RBOCs to accelerate further and remain higher than the rural ILECs, their other revenue streams could potentially more than offset this decline.

Second, several years ago, the rural ILECs pointed out their markets tended to lag the RBOCs' markets due to their customers' tendency to be more inert than customers in urban markets. We believe wireless substitution is slowly catching up in rural markets as wireless coverage improves and customers follow the trend of urban markets.

Looking forward, we believe the RBOCs will be increasingly driven by trends in the enterprise market, wireless, and xDSL services. The rural ILECs, however, continue to be driven by access line trends and voice services in the residential market. While rural ILECs remain more protected from the deployment of large amounts of competitive capital, be it from wireless or cable, we believe these competitive forces are increasingly creeping towards them and their need to react now is becoming more apparent.

Third, average revenue per line trends, driven by mix shifts and upselling among existing customers have so far shown little signs of slowing down. However, we believe long-distance upselling opportunities are slowly dissipating in a world where the lines between local and long distance are disappearing. In addition, the next leg of xDSL customer growth is likely be driven by lower pricing, which we believe will have to materialize at some point in the future. Rural ILECs that move more quickly to cut pricing will have a much less painful transition two to three years from now and will retain a growing number of customers to boot. We believe price cuts almost down to $15 for xDSL could be justified as a way to reverse access line losses and potentially to begin adding lines going forward. Therefore, in our opinion, the incremental penetration of xDSL customers could shield 18% to 30% erosion in household access lines and maintain current levels of revenue.

Lastly, we continue to point investors towards our assertions around access lines and their real impact on ILEC models. Had investors put access line trends in their models from a few years ago that reflected the actual increasing line loss trends, a disastrous scenario would likely have emerged. Therefore, the factors leading the ILECs to consistently drive revenue per line higher each year should be given heavier consideration, in our opinion, as they are an overlooked factor in the consistency of the sector. This is particularly the case for ILECs with high dividend payouts, as line losses are one of the most heavily scrutinized risk factors as those models are questioned in the marketplace, and they are among some of the least penetrated in terms of xDSL subscribers.

To adjust for our analysis in this report, we are increasing our access line loss estimates for ALLTEL, CenturyTel, Citizens, and Iowa Telecom. This has the impact of very slightly lowering our revenue and EBITDA estimates for these companies to varying degrees, although we note the incremental impact on revenue and EBITDA is largely insignificant. We have published separate notes on these companies detailing our estimate changes for each company.

Public companies mentioned in this report.

Company Name	Ticker	Priced as of 7/8/05	RJ&A Rating (if Applicable)
Alaska Communications Systems Group Inc.	ALSK	$10.09	Market Perform
ALLTEL Corp.	AT	$64.60	Outperform
BellSouth Corporation	BLS	$26.83	Market Perform
CenturyTel Inc.	CTL	$33.62	Market Perform
Cincinnati Bell Inc.	CBB	$4.49	Outperform
Citizens Communications	CZN	$13.16	Outperform
Commonwealth Telephone Enterprises Inc.	CTCO	$41.77	Market Perform
CT Communications Co.	CTCI	$13.10	Market Perform
Earthlink Inc.	ELNK	$9.14	
Fairpoint	FRP	$16.21	
Iowa Telecommunications	IWA	$18.81	Outperform
Qwest Communications Intl.	Q	$3.63	Underperform
SBC Communications, Inc.	SBC	$23.57	Underperform
Sprint Corporation	FON	$25.38	
Telephone and Data Systems, Inc.	TDS	$40.65	Underperform
Time Warner, Inc.	TWX	$16.42	
Valor Communications Group	VCG	$13.99	Outperform
Verizon Communications	VZ	$34.40	Market Perform
Yahoo	YHOO	$34.62	

Important Investor Disclosures

Stock Ratings: Within our four-tiered rating system, Strong Buy (SB1) means that the stock is expected to appreciate and produce a total return of at least 15% and outperform the S&P 500 over the next six months; *for higher-yielding and more conservative equities, such as REITs and certain MLPs, a total return of at least 15% is expected to be realized over the next 12 months.* Outperform (MO2) means the stock is expected to appreciate and outperform the S&P 500 over the next 12 months; *for higher-yielding and more conservative equities, such as REITs and certain MLPs, an Outperform rating is used for securities where we are comfortable with the relative safety of the dividend and expect a total return modestly exceeding the dividend yield over the next 12 months.* Market Perform (MP3) means the stock is expected to perform generally in line with the S&P 500 over the next 12 months and is potentially a source of funds for more highly rated securities; and Underperform (MU4) means the stock is expected to underperform the S&P 500 or its sector over the next six to 12 months and should be sold.

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Raymond James Relationships: RJA expects to receive or intends to seek compensation for investment banking services from the subject companies in the next three months.

Company Name	Disclosure
Alaska Communications Systems Group Inc.	**Raymond James & Associates makes a NASDAQ market in shares of ALSK.** **Raymond James & Associates acted as an agent in the private placement of debt for ALSK in August 2003 and co-managed a follow-on offering of 8.8 million ALSK shares at $8.50 per share in January 2005.**
BellSouth Corporation	**Raymond James & Associates participated in a public offering of preferred equity for BLS in January 2003.**
CenturyTel Inc.	**Raymond James & Associates co-managed public debt offerings for CenturyTel Inc. in August 2002 and February 2005.** **Raymond James & Associates received non-investment banking securities-related compensation from CTL within the past 12 months.**
Citizens Communications	**Raymond James & Associates received non-investment banking securities-related compensation from CZN within the past 12 months.**
Commonwealth Telephone Enterprises Inc.	**Raymond James & Associates co-managed a secondary offering of CTCO shares in December 2002.** **Raymond James & Associates makes a NASDAQ market in shares of CTCO.**
CT Communications Co.	**Raymond James & Associates makes a NASDAQ market in shares of CTCI.**
Iowa Telecommunications	**Raymond James & Associates co-managed an initial public offering of 22.0 million IWA shares at $19.00 per share in November 2004.**
SBC Communications, Inc.	**Raymond James & Associates received non-investment banking securities-related compensation from SBC within the past 12 months.**
Valor Communications Group	**Raymond James & Associates co-managed an initial public offering of 33.8 million VCG shares at $15.00 per share in February 2005.**

Specific Investment Risks Related to the Industry or Issuer

Wireline Telecom Services Risk Factors
Wireline telecom services remain highly regulated, and should regulation become less favorable, promoting more competition or reducing subsidies for these companies, the sector could be negatively impacted. Technological substitution remains a highly credible threat toward most wireline telecom services companies' revenue and earnings. A large amount of debt could leverage the industry to the downside should earnings and cash flows face significant pressure.

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Additional information is available on request.

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1. **Strong Buy** ..... Expected to appreciate and produce a total return of at least 15% and outperform the S&P 500 over the next six months. *For higher-yielding and more conservative equities, such as REITs and certain MLPs, a total return of at least 15% is expected to be realized over the next twelve months.*
2. **Outperform** ..... Expected to appreciate and outperform the S&P 500 over the next twelve months. *For higher-yielding and more conservative equities, such as REITs and certain MLPs, an Outperform rating is used for securities where we are comfortable with the relative safety of the dividend and expect a total return modestly exceeding the dividend yield over the next twelve months.*
3. **Market Perform** ..... Expected to perform generally in line with the S&P 500 over the next twelve months and is potentially a source of funds for more highly rated securities.
4. **Underperform** ..... Expected to underperform the S&P 500 or its sector over the next six to twelve months and should be sold.

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Total Return (TR)	More conservative investments with dividend yields of 2.5% or more and favorable appreciation prospects.
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Aggressive Growth (AG)	Companies with rapid growth potential and accompanying higher risks.
Cyclical (C)	Companies with fundamentals that are unusually sensitive to changes in major economic trends.
Speculative (S)	Small companies with high risks including variable earnings, financial and competitive factors as well as liquidity issues.
Venture Risk (VR)	Newer companies with a short, unprofitable operating history, limited revenues, and a much higher-than-normal risk associated with success.

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