Before the
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of	)	**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	)	

COMMENTS OF THE JOINT CLECS

Broadview Networks, Inc., BridgeCom International, Inc., XO Communications Services, Inc. and CTC Communications Corp. (the "Joint CLECs") hereby offer the following comments in response to the Commission's *Order Initiating Proceeding and Inviting Comments* in the captioned proceeding.[1]

I. INTRODUCTION

In its *Initiating Order*, the Commission announces its intention to undertake a "broad review of . . . [its] telecommunications policies, practices and rules in light of the fast changing telecommunications environment," with the stated intent of "eliminat[ing], 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 of wired and wireless, IP-enabled or traditional circuit-

[1] *Proceeding on Motion of the Commission to Examine Issues Related to the Transition to Intermodal Competition in the Provision of Telecommunications Services* (Order Initiating Proceeding and Inviting Comments), Case 05-C-0616 (NYPSC June 29, 2005) ("*Initiating Order*").

switched, voice, data, or video as even-handedly as possible given current statutory constraints."[2] In undertaking this review and implementing subsequent changes to its regulatory framework, the Commission, however, recognizes that it is essential that it "fully understand the current status of competition in the state."[3] To this end, the Commission seeks "advice and assistance from consumers and the industry" regarding actions it can take "to embrace and implement policies that encourage ever more robustly competitive, facilities-based markets and to avoid regulatory policies that hinder their development."[4] The Joint CLECs – each of whom is a facilities-based provider of competitive local exchange service operating in the State of New York – are eager to assist the Commission in this important endeavor.

As an initial matter, the Joint CLECs concur that the principles articulated by the Commission nearly a decade ago as the framework for transitioning to a competitive telecommunications marketplace remain viable to this day.[5] Certainly, the provision of quality telecommunications services to consumers at reasonable rates should be the Commission's primary goal, and competition, where feasible, is generally the most efficient means of achieving this important end. But as the Commission has correctly recognized, its regulatory framework "must be designed for the present transitional market, not for . . . the fully competitive market that may ultimately develop" and

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2 *Initiating Order*, Case 05-C-0616 at 4.

3 *Id.* at 5.

4 *Id.* at 21.

5 *Proceeding to Develop a Regulatory Framework for the Transition to Competition* (Opinion No. 96-13), Case 94-C-0095, 3 - 4 (NYPSC May 22, 1996).

accordingly, regulatory protections should not be abandoned "merely on the promise that the market may eventually provide them."[6]

The Joint CLECs also agree that the Commission's "general regulatory framework . . . guided by these principles continues to be sound."[7] The Joint CLECS, accordingly, urge the Commission to continue to take "actions to remove barriers to competition (thus maximizing the availability of competitive alternatives), to create and maintain a level playing field (thus maximizing the effectiveness of competition), and to maintain consumer protections (thus minimizing any detrimental effects from imperfect markets)."[8] And in so doing, the Joint CLECs further agree that the Commission should exercise regulatory restraint "[w]here competition is robust" and intervene "to restrain the exercise of market power and ensure adequate consumer protections" where it is not.[9]

To strike an appropriate balance between "regulatory restraint" and the need for regulatory "intervention," the Commission is absolutely correct that a full understanding of the "current status of competitive alternatives in the consumer market" in the State of New York is essential.[10] And that understanding, in turn, requires an assessment of not only the different requirements of the various consumer market segments within the State, but a determination of which service platforms and providers are actually capable of meeting those requirements. To assist the Commission in

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6 *Initiating Order*, Case 05-C-0616 at 3.

7 *Id.* at 3.

8 *Id.*

9 *Id.* at 2.

10 *Id.* at 2, 4.

understanding the state of competition in New York, the Joint CLECs and other competitive providers of local exchange service ("CLECs") in the State have commissioned Economics and Technology, Inc. ("ETI") to analyze the actual extent of intermodal competition in the market segment that each of the Joint CLECs serve – *i.e.*, predominantly the small to medium size business market. That analysis -- entitled "Hold the Phone: Debunking the Myth of Inter-Modal Alternatives for Business Telecom Users in New York" – is submitted for the Commission's consideration as Attachment A to these Comments (the "ETI Report").

II. ARGUMENT

A. The Business Market is Distinct from the Residential Market

The *Initiating Order* offers a number of broad pronouncements regarding the availability of competitive alternatives in the State of New York. Thus, the *Initiating Order* declares that "[i]ntermodal competition is rapidly changing the face of the telecommunications industry."[11] According to the *Initiating Order*, "[i]n the consumer (residential and small business) market, traditional wireline companies now compete with wireless and cable television companies in both the local and long-distance markets."[12] And, the *Initiating Order* continues, "emerging applications, such as Voice over Internet Protocol ("VoIP"), . . . provide local and national telecommunications services to residences and business users."[13]

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[11] *Initiating Order*, Case 05-C-0616 at 21.

[12] *Id.* at 3.

[13] *Id.* at 1.

Whatever may be the "current status of competitive alternatives" for the residential market, these broad pronouncements seriously overstate the competitive alternatives available to business users. As the ETI Report emphasizes, "[b]usiness customers, regardless of size, depend upon and utilize telecom services differently than residential subscribers."[14] And citing to a survey of business users undertaken at the behest of the New Jersey Board of Public Utilities, ETI notes that while businesses of different sizes may not "fall within the same product market with respect to their telecom needs," the "[t]elecom requirements of business of all sizes are actually more similar than different, and it is far betters to group large and small businesses together for purposes of market definition than it is to group those small businesses with residential users."[15] Indeed, all of the responding businesses – large and small – identified quality and service as the most important factors in selecting a telecommunications service provider.[16]

When assessing telecommunications needs and the viability of available service alternatives, differentiating between large, medium and small businesses is problematic because large corporate or institutional users often maintain, and invariably have the need to communicate with, numerous small business locations, such as retail stores, automobile dealerships, travel agencies, bank branches, transportation and dispatch facilities, etc. Hence, it is the commercial activity being carried on at a location,

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[14] ETI Report at 3.

[15] *Id.* at 3 - 4 *citing Local Business Telephone Service in New Jersey: A Survey of Small Businesses* conducted by the Eagleton Institute of Politics, Center for Public Interest Polling, the State University of New Jersey, Rutgers ("Eagleton Survey") at 11 and fn 3 ("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.").

[16] *Id.* at 4 - 5.

regardless of the size of the customer of record or the aggregate number of locations maintained by the customer, that is consequential.

Business users, however, can be readily distinguished from residential users when evaluating telecommunications needs and the viability of available service alternatives. As the ETI Report notes, "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."[17]

Small business locations hence cannot be lumped together with residential customers simply because their geographic location or capacity requirements are the same because these business locations have very different service needs. For a residential user, a service interruption or outage might be no more than an annoyance depending on the customer, versus business impacting. By comparison, business customers require uninterrupted and secure service because the very activities of the business itself are conducted via telecommunications service. Similarly, aside from general privacy concerns, residential customers typically do not require security measures as stringent as those required by customers conducting sensitive commercial transactions or connecting to an enterprise network. Moreover, because small business locations can be critical to a larger company's operations and commercial success – either as a component of, a supplier to or a purchaser from the larger company – the same security and reliability levels must be maintained for service to these locations despite their comparatively small scale.

[17] ETI Report at 3 – 4.

This is not to suggest that there are not separate market segments within the overall business market segment. Certainly as the size of the location grows, the complexity of the service requirements will likewise increase and the identity of the competitive providers able to satisfy the needs of the location will change. As noted above, the Joint CLECs each serve the small to medium size businesses, generally providing DS0 and DS1 level service. This market segment is in many ways discrete from the Fortune 1,000 or Fortune 500 market segment. The critical issue here, however, is that businesses – despite their differing telecommunications needs -- generally share similar security and reliability needs which requirements are qualitatively different from those of residential users.

B. Intermodal Service Alternatives are Either Not Available to, or do Not Satisfy the Needs of, Business Customers

As emphasized in the ETI Report, "[i]n order for intermodal services to be 'competitors' of 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 falling within the same product market."[18] Moreover, as the ETI Report points out, a service "cannot be used as a substitute if it is not available to the subscribers that might otherwise purchase it."[19]

As the Joint CLECs will discuss in greater detail below, none of the intermodal service alternatives identified in the Initiating Order – *i.e.*, "cable or IP-

[18] ETI Report at 8.

[19] *Id.* at 9.

enabled cable telephony (such as PacketCable)," "wireless," or "Voice over Internet Protocol services (such as Vonage) via a broadband connection"[20] -- are viable substitutes for businesses for wireline telephony. Furthermore, one such identified intermodal service – *i.e.,* cable telephony – is generally not available to business users. For their small and medium size business customers, the Joint CLECs compete with each other, with other CLECs and with Verizon and other incumbent local exchange carriers ("ILECs") in the State of New York; the Joint CLECs simply do not encounter cable telephony, wireless or non-facilities-based VoIP providers as competitors in this market segment.[21]

1. Cable Telephony is Neither Available Nor Viable as a Service Alternative for Business Users

As the ETI Report notes, "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."[22] The ETI Report's conclusions echo those of the Department, which recently found that "the telecommunications market

[20] *Initiating Order* at 6.

[21] *Unbundled Access to Network Elements* (Order on Remand), 20 FCC Rcd. 2533, ¶ 193 (FCC February 4, 2005) ("*TRRO Order*").

[22] ETI Report at 9.

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'."[23]

As the Federal Communications Commission ("FCC") has found, "most cable systems are currently deployed in primarily residential areas."[24] Thus, as the ETI Report explains, "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."[25] And even in cases where a cable company's coaxial plant runs past a business address in a mixed business/residential neighborhood, unless the building in which the business is located is already being served by the cable company, the costs of bringing cabling into the building and installing inside wire

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[23] Department of Public Service Staff White Paper, submitted in Joint Petition of Verizon New York Inc. and MCI, Inc. for a Declaratory Ruling Disclaiming Jurisdiction over or in the Alternative for Approval of Agreement and Plan of Merger, Case 05-C-0237, and Joint Petition of SBC Communications Inc., AT&T Corporation, together with its Certificated New York Subsidiaries, for Approval of Merger, Case 05-C-0242 on July 6, 2005 at 31 ("Merger Whitepaper").

[24] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996* (Third Report), 17 FCC Rcd. 2844, ¶ 45 (FCC February 6, 2002). "Cable modem service is primarily residential service, but may also include some small business service." *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996* (Fourth Report to Congress), 19 FCC Rcd. 20540, 20553 (FCC September 9, 2004).

[25] ETI Report at 16 - 17. The FCC concurs in this assessment noting that "cable providers are focusing their marketing strategies on residential users and 'small and medium businesses . . . that are near the residential network" and that "most of the businesses that cable companies serve, or are likely to serve, are home offices or very small stand-alone businesses." *TRRO Order*, 20 FCC Rcd. 2533 at ¶ 193.

generally render cable telephony prohibitively expensive for a small to medium-size business.[26]

The lack of availability of cable telephony to business users, however, is only one of the reasons the service is not a viable competitive alternative to landline telephony for such users. As described by the ETI Report, "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."[27] As the ETI Report explains, "[c]able networks do not have the same degree of back-up electrical power as do the ILEC networks,[28] and the 'shared platform' nature of cable modem service raises data security and transmission performance issues that are particularly important to business customers, [29] who routinely transmit highly sensitive or mission-critical financial and commercial data."[30] Again the

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[26] ETI Report at 10. As the Department has recognized, "many business locations are not wired for television in the way that residential buildings are. Thus, business locations often do not have cable facilities in place which can quickly be upgraded for the provision of packet cable telephone services. Merger Whitepaper, Cases 05-C-0237 and 05-C-0242 at 41.

[27] ETI Report at 17.

[28] Whereas wireline subscriber infrastructure is powered primarily from the central office, cable networks are powered at various points via electrical interconnections on the same utility poles to which the cables are attached. These arrangements do not have the kind of backup power facilities that are designed into wireline systems.

[29] Cable modem data transmission speeds are not consistent, due to the "shared platform" architecture that the service utilizes; data transmission speeds decrease as the number of users connected to the same network link increases. Indeed, because of this "shared platform" architecture, cable companies often place bandwidth limitations on their business users. Finally, because of the manner in which cable systems were constructed, the bandwidth efficiency in cable networks' upstream path is much lower than that in the downstream path. Richard C. Chandler, et al., *The Technology and Economics of Cross-Platform Competition in Local Telecommunications Markets*, HAI Consulting, 35 (2002).

[30] ETI Report at 17. Even the smallest of business customers may transmit data relating to financial transactions or other proprietary or competitively sensitive data, and therefore require adequate security protections.

FCC concurs, noting that "bandwidth, security, and other technical limitations on cable modem service render it an imperfect substitute for service provided over DS1 loops."[31]

All the various data points confirm that cable telephony is neither viewed nor used as a substitute by business customers for traditional wireline service. Providers of cable telephony reported to the FCC that they supplied fewer than 90,000 coaxial cable connections to medium and large businesses ***nationwide***,[32] which as the ETI Report calculates, represents roughly three percent of addressable business locations.[33] Analyzing what New York specific data exists, the ETI Report calculates that cable telephony represents "something between 1.5% and 3.75% of all landlines in the State of New York" and estimates a "cable telephony penetration into the business local exchange service market in New York of between 1% and 2% at the end of 2004."[34]

The FCC's assessment of the penetration of cable telephony into the business market segment mirrors that of the ETI Report. The FCC has concluded that

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[31] *TRRO Order*, 20 FCC Rcd. 2533 at ¶ 193. It bears repeating here that businesses – both large and small – identify service and quality as the as the most important factors in selecting a telecommunications service provider. ETI Report at 4 – 5.

[32] Industry Analysis and Technology Division, Wireline Competition Bureau, *High Speed Services for Internet Access: Status as of December 31, 2004* (July 2005). And as the ETI Report explains, given the way that data is reported to the FCC, the FCC category "Residential and Small Business" is comprised almost exclusively of residential users; the remainder encompasses virtually all businesses. ETI Report at 16, fn. 26.

[33] ETI Report at 17 - 18.

[34] *Id.* at 21 - 23.

"cable companies predominantly compete in the mass market for broadband services" and that there is "little evidence that cable companies are providing service at DS1 or higher capacities."[35] Indeed, the FCC found that "most of the businesses that cable companies serve, or are likely to serve, are home offices or very small stand-alone businesses, neither of which typically requires high-capacity loop facilities" and that competition beyond this extremely limited market would "evolve[] more slowly and in more limited geographic areas."[36] And perhaps the most telling is the FCC finding (which mirrors the experience of the Joint CLECs) that "businesses that do require DS1 loops are willing to pay significantly more for them than the cost of a cable modem connection, which also indicates that the two are not interchangeable."[37]

Two final points bear noting with regard to cable telephony. First, "most of the business service offerings being made by the big cable companies and their affiliates today . . . are not cable telephony offerings at all – instead they are the offerings of traditional wireline CLECs, provisioned over fiber optic facilities, not coaxial cable."[38] As such, as the ETI Report explains, "their operations will face the same hurdles as other

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[35] *TRRO Order*, 20 FCC Rcd. 2533 at ¶¶ 39, 193. "[L]arger businesses generally have T-carrier systems for their telecommunications needs, so there is no pressing requirement in this market for [cable modem] broadband services." Merger Whitepaper, Cases 05-C-0237 and 05-C-0242 at 31.

[36] *TRRO Order*, 20 FCC Rcd. 2533 at ¶¶ 39, 193.

[37] *Id.* at ¶ 193. There can be as much as an order of magnitude differential in the price of cable modem service and T1 service, depending on the particular offerings being compared.

[38] ETI Report at 10 - 11.

CLECs in providing service to business customers."[39] Second, much of cable telephony are VoIP-based offerings which are not only available only in conjunction with high speed cable modem service,[40] but may suffer from the deficiencies -- identified below -- which would render VoIP service an imperfect substitute for traditional wireline service for business users.[41]

2. Wireless Service is Not a Viable Service Alternative for Business Users

The FCC, the primary regulator of wireless services, has long recognized that wireless service is a "complementary technology to wireline narrowband service."[42] Recently, the FCC has reaffirmed that the "substitution between wireless and wireline services is currently limited," finding that only "a relatively limited number of mass market consumers have chosen to substitute one service for the other."[43] As the FCC has recognized, consumers generally consider "the costs (including opportunity costs) of cutting the cord and using wireless telecommunications in lieu of wireline

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[39] ETI Report at 10. Cable companies must, like other CLECs, must purchase ILEC fiber transmission if they wish to serve a large portion of the enterprise customer segment in the cities in which they have a presence. Moreover, "[c]able television providers rely in large part on Verizon special access circuits to connect to E911 access points. Also Verizon remains the 'middle man' in most carrier-to-carrier hand offs of local traffic between networks." Merger Whitepaper, Cases 05-C-0237 and 05-C-0242 at 23, fn 56.

[40] Cable modem service is only available over the cable companies' coaxial network which, as discussed above, seldom reaches business locations.

[41] ETI Report at 19 - 20.

[42] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* (Report and Order on Remand), 18 FCC Rcd. 16987, ¶ 230 (FCC August 2, 2003 ("*TRO Order*").

[43] *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation* (Memorandum Opinion and Order), 19 FCC Rcd. 21522, ¶¶ 239, 242 (October 26, 2004).

telecommunications services to be prohibitive."[44] Moreover, the FCC notes that wireless connections "in general do not yet equal traditional landline local loops in their quality, their ability to handle data traffic, and their ubiquity."[45]

Various data points confirm the limited substitutability of wireless for wireline service. For example, according to the FCC, less than four percent of numbers ported to new carriers are from wireline to wireless carriers.[46] And the FCC has estimated that only "5 to 6 percent of all households now have wireless phones only."[47] And as the ETI Report notes, other studies reflect even lower rates of substitution.[48]

The FCC suggests that the "relatively limited number of mass market consumers" that have chosen to substitute wireless for wireline service may include some "very small business customers." What data exists, however, confirms that the percentage of business customers "cutting the cord" is but a fraction of the small percentage of residential consumers doing so. As the ETI Report notes, the Eagleton Survey of New Jersey businesses found that "while 45% of its respondents utilized wireless services, only 1% reported using wireless as their 'primary' means of making

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44 *Id.* at ¶ 241.

45 *TRO Order*, 18 FCC Rcd. 16987 at ¶ 230.

46 Wireless Telecommunications Bureau, Wireline Competition Bureau, Consumer & Governmental Affairs Bureau, Federal Communications Commission, *Number Portability: Implementation and Progress*, 5 (May 13, 2004).

47 *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, 19 FCC Rcd. 20597, ¶ 212, fn. 572 (September 28, 2004). Merger Whitepaper, Cases 05-C-0237 and 05-C-0242 at 23 ("The FCC's report on wireless competition puts the percentage of people substituting wireless for wireline service at 3% to 6%. The Wall Street Journal also reported that 'while the number of wireless-only homes is increasing – close to 6% of all U.S. homes at the end of last year according to Forrester Research Inc. – the trend isn't accelerating as quickly as many experts predicted.").

48 ETI Report at 23 – 26.

calls."[49] And even this miniscule percentage is likely overstated, because, as the ETI Report explains, "[g]iven the way the survey questions were asked, it is possible that even this 1% still maintained their traditional landline phones."[50]

The heavy opportunity costs to businesses of "cutting the cord" render wireless service a nonviable substitute for wireline service. For example, as the ETI Report notes, wireless service does not provide a business with a white pages directory listing.[51] Reliance on wireless services leaves a business with multiple employees with no common point of contact. As with cable telephony, wireless service continues to pose significant reliability and security challenges for business users. And such challenges are all the more serious when transmitting proprietary or competitively sensitive data of the business or those with whom it is transacting business.[52]

Finally, ILECs like Verizon that provide both wireline and wireless services, market their wireless service as a complement to, not as a substitute for, wireline services. As the FCC has found, such ILECs develop and market wireless products and services "to complement and specifically not to replace" wireline services, seeking "to win wireless customers by encouraging them to use wireless service in a

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[49] ETI Report at 26

[50] *Id.* at 26 - 27. Moreover, as the ETI Report explains, given the way that data is reported to the FCC, the FCC category "Residential and Small Business" is comprised almost exclusively of residential users; the remainder encompasses virtually all businesses. *Id.* at 16, fn. 26.

[51] *Id.* at 11 - 12

[52] Once again it bears repeating here that businesses – both large and small – identify service and quality as the as the most important factors in selecting a telecommunications service provider. ETI Report at 4 – 5.

complementary manner to their wireline service."[53] Verizon's "Freedom service plans," for example, "offer local services with various combinations of long distance, wireless and Internet access services in a discounted bundle available on one bill."[54]

3. VoIP Service is Not a Viable Intermodal Competitive Alternative for Business Users

Although the FCC has recognized that "limited intermodal competition exists due to VoIP offerings," it has declined to "view VoIP as a substitute for wireline telephony."[55] As described by the FCC, "VoIP is purchased as a supplement to, rather than a substitute for, traditional local exchange service."[56] The basis for the FCC's assessment is manifest. VoIP is merely an application that can ride over a broadband facility; hence it does not represent facilities-based intermodal competition. A VoIP provider simply does not control the facility over which its service is provided. Indeed, a VoIP provider is no less dependant on Verizon (or potentially a cable company) than is a CLEC for the necessary last mile access to its customers. And it is the control of that bottleneck facility from which Verizon derives its market power. As *the Initiating Order* recognizes, "the unavailability of stand-alone broadband could be an impediment to the proliferation of VoIP telephony."[57]

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[53] *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation* (Memorandum Opinion and Order), 19 FCC Rcd. 21522, ¶¶ 244 - 45 (October 26, 2004).

[54] Verizon 2004 Annual Report; ETI Report at 27.

[55] *TRRO Order*, 20 FCC Rcd. 2533 at ¶¶ 39, fn. 118.

[56] *Id.*

[57] *Initiating Order* at 8.

While the Department has concluded that VoIP service "represents an increasingly viable alternative to traditional wireline services,"[58] VoIP service represents such a viable alternative, as the ETI Report demonstrates, only for residential users. Indeed, the intermodal VoIP competition to which the Department refers as "an increasingly viable alternative to traditional wireline services" – *i.e.*, that provided by Vonage – is almost exclusively provided to residential users in conjunction with DSL or cable modem service.[59] As the ETI Report concludes, "[c]ommercial 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."[60] As ETI explains, VoIP service may face various "service quality, technical [and] operational hurdles." Moreover, VoIP service , like wireless services, may lack features critical to the operation of a business such as white pages directory listings.[61] And one of the principal attractions of VoIP service – *i.e.*, additional features -- are as the ETI Report makes clear, the least important factor identified by businesses in selecting a telecommunications provider, ranking well behind quality, service, convenience, price and flexibility.[62]

The ETI Report's assessment of VoIP is that "VoIP is not serving as an outright alternative to traditional phone service," and that "the purchase of VoIP is

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58 Merger Whitepaper, Cases 05-C-0237 and 05-C-0242 at 22 - 23.

59 Id. at 22 - 23.

60 ETI Report at 29.

61 *Id*. at 11 - 12.

62 *Id*. at 4 - 5.

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, as an inexpensive way of making long distance phone calls."[63] Moreover, as the ETI Report emphasizes, if VoIP 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."[64] Therefore, it is not a competitive alternative and will not restrain the exercise of market power.

C. Competitive Alternatives for Businesses in the State of New York are Provided Almost Exclusively by CLECs

As the ETI Report makes clear, "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 the market power of the incumbent provider (which, in most cases, is Verizon)."[65] CLECs thus provide virtually the only alternative service option for business users in the State, including business users operating at both the DS0 and DS1 levels. And given the looming elimination of the unbundled network platform ("UNE-P" or "UNE Platform") in March of next year, alternative service offerings for business users will increasingly be available from only a relatively limited (and shrinking) universe of facilities-based CLECs such as the Joint CLECs.

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[63] ETI Report at 32.

[64] *Id*. at 32 – 33.

[65] *Id*. at 1.

That in a nutshell is "the current status of competitive alternatives" in the business market in the State of New York. Business users may secure local exchange service from either the ILEC or one of a handful or two or three facilities-based CLECs. Intermodal competition has not changed the face of the competitive landscape for business users in the State. To paraphrase the *Initiating Order*, "intermodal forms of competition are [not] gaining acceptance in the [business] marketplace and thus are [not] creating substantial facilities-based competition."[66] The only marketplace change experienced by business users is a diminution of competitive alternatives as UNE-P providers either merge with facilities-based CLECs or exit the market.

If a business user requires a DS1 circuit (or for that matter, multiple DS0 loops), it cannot look to a cable company, a wireless carrier or a VoIP provider. It must deal with an ILEC or a CLEC. Whatever intermodal service offerings may be available to residential subscribers, such offerings are not viable alternatives for business users. Intermodal competition may be "flourishing," as the *Initiating Order* suggests, but if it is, it is doing so solely in the residential market.

If the Commission desires to preserve competitive alternatives for business users in the State of New York, it cannot look to intermodal forms of competition; rather it must rely on facilities-based CLECs. And facilities-based CLECs must continue to rely on Verizon and other ILECs for "last-mile" access to those business users, as well as for other loop and transport facilities. While the business market in the State of New York is competitive, it is competitive because facilities-based CLECs are able to compete. Given ILEC control of "bottleneck" facilities, however, continued

[66] *Initiating Order* at 1.

regulatory intervention is essential to preserve the ability of CLECs to compete. As the Commission has recognized, "[w]here market dominance persists or emerges for bottleneck facilities or functions that are critical for fair competition, active government oversight must exist."[67]

The Joint CLECs urge the Commission to retain a regulatory framework which reflects the current state of the business market in the State of New York, not a theoretical market which may or may not emerge sometime in the future. Relaxing regulatory oversight of Verizon's wholesale or business offerings in anticipation of the availability of future competitive options would deny business users in the State of New York the benefits of the vibrant competition CLECs have provided over the past decade and continue to provide today. As the *Initiating Order* recognizes, "regulatory protections should [not] be abandoned merely on the promise that the market may eventually provide them."[68]

Based on the forgoing, the Joint CLECs urge the Commission not to base its assessment of the "level of competition" in the business market on the "competitive index" submitted by the Department to the FCC in conjunction with its Triennial Review Remand proceeding. Critical elements of the competitive index are the weights assigned

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[67] *Initiating Order* at Appendix A, 5.

[68] *Id*. at 3. The FCC has taken a similar approach: "[O]ur impairment analysis considers the markets where this competition has occurred and reaches the appropriate unbundling conclusions based on this competition." *TRRO Order*, 20 FCC Rcd. 2533 at ¶ 39. As the FCC long-ago held in evaluating Bell Atlantic New York's application for in-region, interLATA authority in the State of New York, "a BOC must support its application with actual evidence demonstrating its present compliance with the statutory conditions for entry, instead of prospective evidence that is contingent on future behavior. *Application of Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York* (Memorandum Opinion and Order), 15 FCC Rcd. 3953, ¶ 39 (FCC December 22, 1999).

to "cable telephone (weight of 1)," "wireless (weight of 0.5)," and "VoIP telephone (weight of 0.75)."[69] As the Joint CLECs have shown, none of these intermodal offerings constitute a viable service alternative for business users. Hence, inclusion of cable telephone, wireless and VoIP telephone creates a false competitive picture, suggesting that "viable facilities-based telephone options are widely available in New York" to business users.[70]

While the competitive index cannot be used to assess the level of competition in the business market, the standard used by the Department in applying the index remains viable (with only slight modification as noted below). As described by the *Initiating Order*, the Department, in order to conclude that "the wholesale market was sufficiently open to competition to relax wholesale regulation," found that "an index value of 2.75 or above" and "at least three alternatives to the ILECs wireline service and at least three different platforms" had to be present.[71] Given that the only viable service alternative to Verizon and other ILECs for business users in the State of New York are facilities-based CLECs, which generate an "index value" of 1 or 0.5, protections against "market concentration" remain essential. As the *Initiating Order* has recognized, "to protect against the exercise of market power, government constraints may be required. In particular, oversight should be exercised where there are significant entry barriers, bottleneck facilities, or inadequate levels of intermodal competition."[72]

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69 *Initiating Order* at 9.

70 *Id.* at 9.

71 *Id.*

72 *Id.* at 13.

D. Responses of the Joint CLECs to Selected Commission Questions

1. Market Power and Regulatory Flexibility

Is there sufficient actual and potential competition for (i) wholesale telecommunications services and (ii) retail telecommunications service for business users to prevent a firm from raising its price or providing poor quality service without suffering commensurate competitive losses?

As to both market segments the answer is no. In the wholesale market, Verizon and other ILECs remain the exclusive providers of critical loop and transport facilities. As the FCC and the Commission have found, competitive alternatives exist on a very limited basis in limited areas.[73] In the business market, the vast majority of the loop and transport facilities that CLECs use to serve their business customers (including special access facilities which Verizon markets directly to business users) are obtained from Verizon and hence Verizon's dominance in the wholesale market renders competition in the business market imperfect.

What measure of competition should we consider when determining whether retail pricing flexibility is appropriate? Can the Department's competitive index be used for this purpose?

Properly and flexibly applied and with one modification, the measure advocated by the Department would be an appropriate gauge in assessing whether retail pricing flexibility would be appropriate. As suggested by the Department, "there should be at least three alternatives to the ILECs wireline service and at least three different platforms to protect against market concentration."[74] The modification to the

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[73] *TRRO Order*, 20 FCC Rcd. 2533 at ¶¶ 66 – 198; Ordinary Tariff Filing of Verizon New York Inc. to Comply with the FCC's Triennial Review Order on Remand (Order Approving Tariff Revisions), Cases 05-C-0203, 05-C-0363, 05-C-0487 (NYPSC August 11, 2005).

[74] *Initiating Order* at 9.

Department's measure that the Joint CLECs would propose is that none of "the three alternatives to the ILECs wireline service" and none of "three different platforms" should be reliant upon the ILEC for essential facilities necessary to serve customers. For the reasons set forth previously, the Department's competitive index, as currently constituted, should not be used to assess whether retail pricing flexibility would be appropriate in either the business retail market or the wholesale market. The Department's competitive index could be used if only those intermodal offerings which are viable service alternatives in these market segments are accorded any weight and the modification referenced above were to be incorporated.

Are the criteria and assigned weight in the Department's competitive index reasonable? In particular, is the VoIP telephone weight reasonable in light of current carrier policies concerning the availability of stand-alone broadband?

For the retail business and wholesale markets, inclusion of cable telephony, wireless and VoIP telephone is not appropriate because, as discussed previously, these platforms are not viable service alternatives in these market segments. The weight assigned to VoIP telephone is not reasonable not only because of current ILEC policies limiting the availability of stand-alone broadband, but because VoIP telephone is reliant upon ILEC (or cable) facilities for the delivery of service. This latter point renders the weight assigned to CLECs also inappropriate.

Can price levels from competitive areas serve as a first level gauge of reasonable for prices in non-competitive areas?

Prices set in a competitive marketplace are generally by definition reasonable, absent countervailing considerations. Thus, price levels from competitive areas should provide an appropriate first level – but not determinative – gauge for prices

in non-competitive areas. The key, however, is determining which areas are truly competitive.

How do we define competitive versus non-competitive?

As noted above, the measure proposed by the Department, as modified by the Joint CLECs, would be an appropriate means of assessing whether a market is truly competitive: *i.e.*, "there should be at least three alternatives to the ILECs wireline service and at least three different platforms to protect against market concentration,"[75] none of which is reliant upon the ILEC for essential facilities necessary to serve customers.

Should we allow rates in less densely populated areas to increase to their underlying cost level?

Given the limited availability of alternative service providers, such an action would not be appropriate in either the business retail or the wholesale market segments.

2. Level Playing Field

Have the FCC's recent rule changes restored an appropriate balance for facilities-based provision or is there more we can and could do?

There is much that the Commission can and should do to promote facilities-based competition, particularly in the retail business market segment. As noted above, CLECs represent virtually the exclusive service alternative to Verizon and the other ILECs for business users in the State of New York. Yet facilities-based CLECs remain heavily reliant on the ILECs for essential facilities necessary to serve business customers. Verizon and the other ILECs retain bottleneck control of "last-mile" access to

[75] *Initiating Order* at 9.

business users. Alternatives to ILEC loop and transport facilities are available on only a limited basis in limited areas. Accordingly, the price and quality of ILEC loop and transport facilities is absolutely critical to the ability of facilities-based CLECs to provide a viable competitive alternative to the ILECs.

Accordingly, where UNE loops and transport remain available, strict adherence to TELRIC pricing is essential. Where UNE loops and transport are not available, alternatives must be offered by the ILECs at commercially-reasonable rates, not rates dictated by the dominant and often exclusive provider of the facilities. Facilities availability must be, and service quality must be maintained, at parity with ILEC retail offerings. Ongoing wholesale provisioning, maintenance and repair issues must be effectively addressed. Persistent and systemic problems in Verizon's billing systems must be rectified.

The actions taken by the Commission in these critical areas will determine the extent and the quality of competitive service alternatives available to business users in the State of New York.

Where market dominance persists or emerges for bottleneck facilities or functions that are critical for fair competition, active government oversight must exist. Are the Commission's processes adequate to remedy potential bottleneck issues?

To date, as the *Initiating Order* notes, the Commission has taken "actions to remove barriers to competition (thus maximizing the availability of competitive alternatives), to create and maintain a level playing field (thus maximizing the effectiveness of competition), and to maintain consumer protections (thus minimizing any detrimental effects from imperfect markets)."[76] The result has been robust

[76] *Initiating Order* at 3.

competition between ILECs and CLECs and among CLECs in the business services market. But the processes that have been effective in the past will no longer be effective following Verizon's acquisition of MCI and SBC Communications acquisition of AT&T.

In the past, the "playing field" in the regulatory arena has been relatively level. Verizon's resources were generally effectively countered by the resources of AT&T and MCI. Following their acquisitions, AT&T and MCI will no longer be active participants in the regulatory arena. The "playing field" will, accordingly, no longer be level, as the resources of Verizon will dwarf those of the remaining facilities-based CLECs. Processes which consume massive quantities of resources will thus no longer be viable in the future. The challenge will be to develop equally effective processes, but ones that are far more streamlined. New and innovative vehicles must be developed. For example, "price-cap" regulation might be substituted for existing rate investigations. Rapid ad hoc intervention by the Department to resolve operational and maintenance issues might take the place of the more formal complaint process in certain instances.

3. Service Quality

How should we adapt our service quality regulation to the marketplace realities?

It is essential that the Commission preserve in tact the carrier-to-carrier metrics and associated performance assurance plan. While the current structure is flawed in key respects, it nonetheless provides critical incentives to Verizon to maintain an acceptable level of wholesale service. A number of CLECs have proposed changes to the current structure which would render it more effective and the Joint CLECs urge the

Commission to adopt the proposed changes. But more critical is the retention of the metrics and the penalty pool.

III. CONCLUSION

As suggested by the *Initiating Order*, the Joint CLECs urge the Commission to continue its active intervention in the business retail, as well as the wholesale markets. The Initiating Order is dead on in its assessment that "[w]here market dominance persists or emerges for bottleneck facilities or functions that are critical for fair competition, active government oversight must exist."[77]

Respectfully submitted,

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[77] *Id.* at Appendix A, 5.

ATTACHMENT A

HOLD THE PHONE:
Debunking the Myth of Inter-Modal Alternatives for Business Telecom Users in New York

Economics and Technology, Inc.

August, 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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August 2005

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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

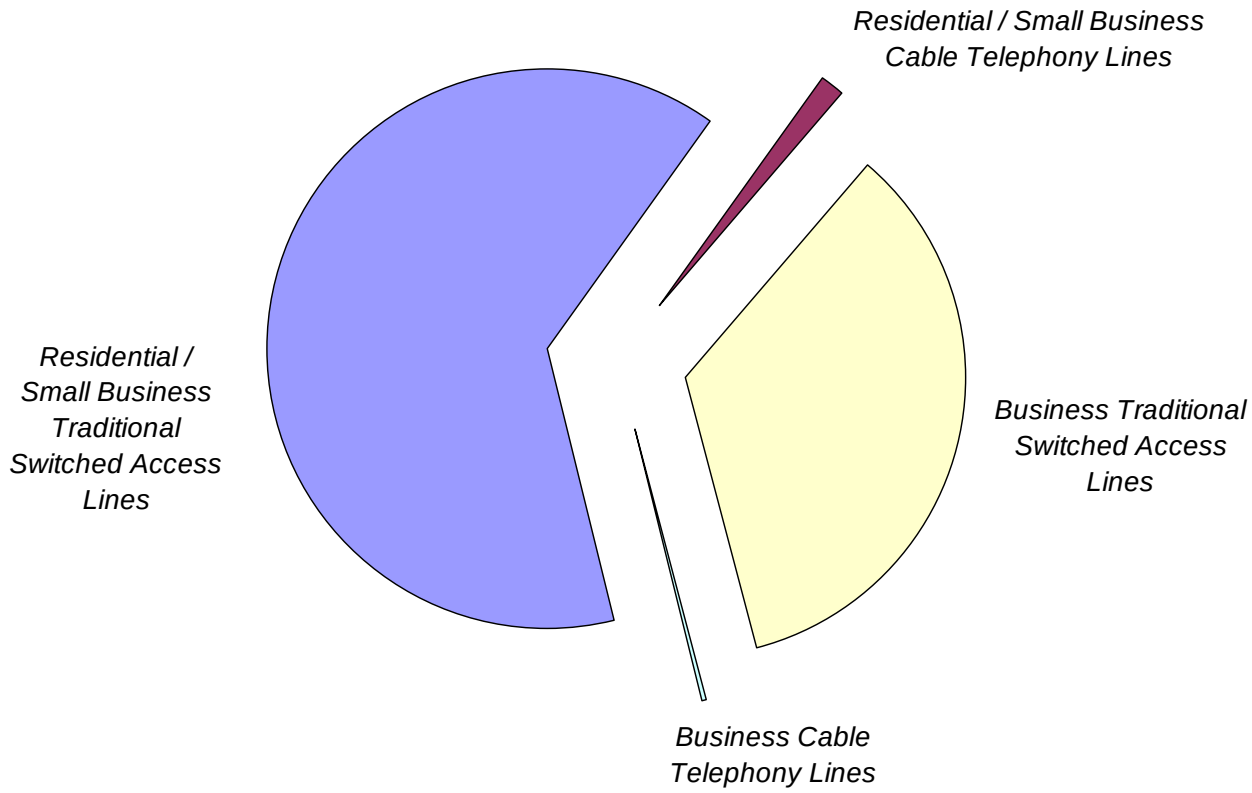
DEBUNKING THE MYTH OF INTERMODAL ALTERNATIVES FOR BUSINESS TELECOM USERS IN NEW YORK STATE

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).

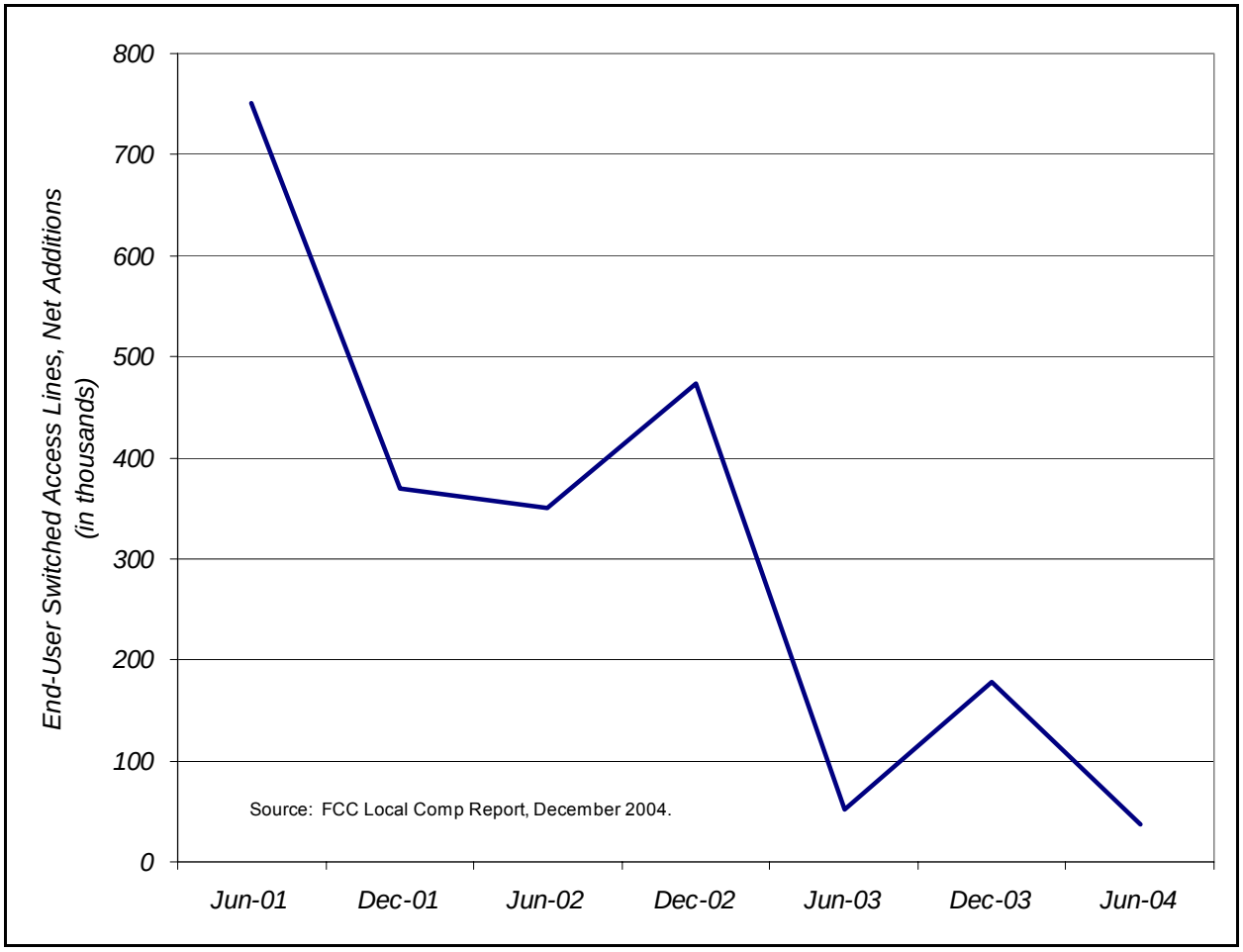

Figure 1. The rate at which cable systems have been adding new telephony customers has slowed to a trickle.

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).

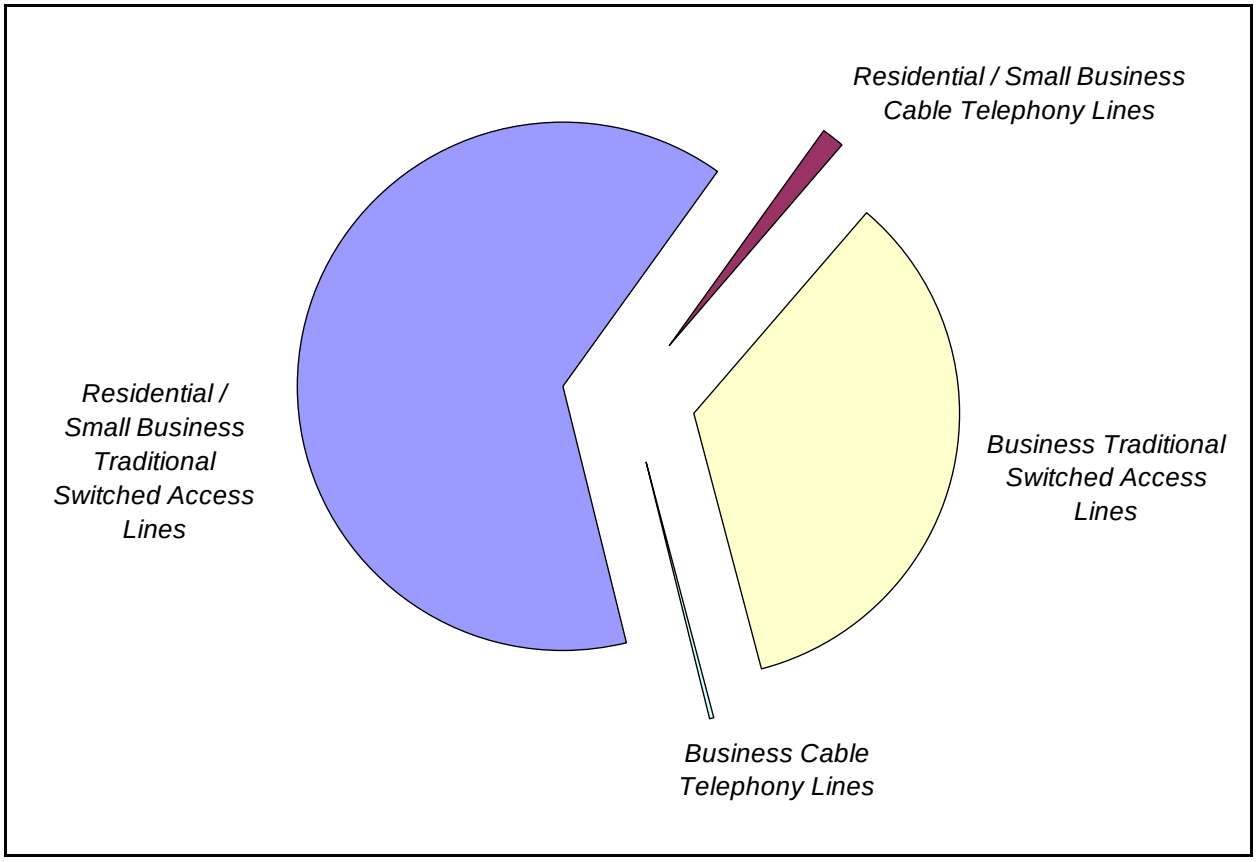

Figure 1. Cable telephony represents a small fraction of the overall end-user access lines in New York.

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

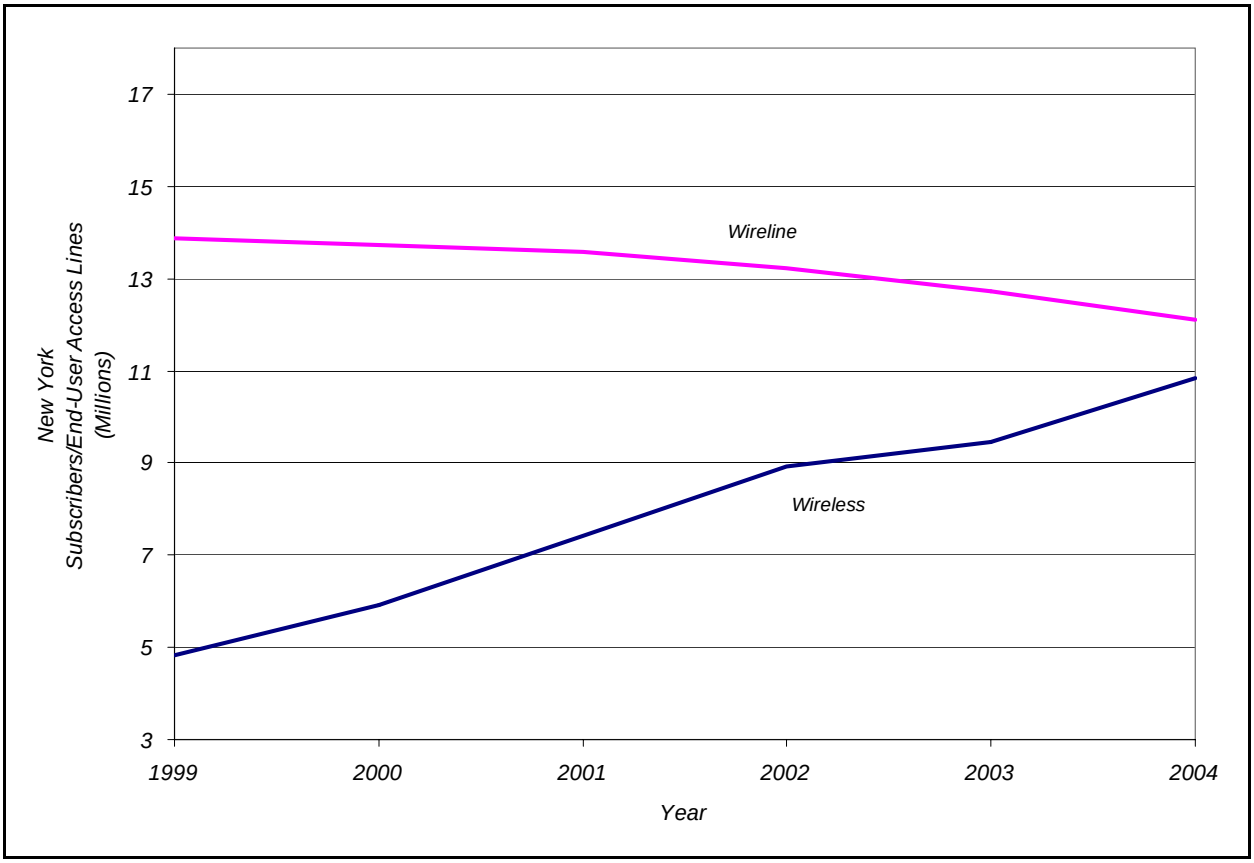

Figure 3. Complimentary Goods: Explosive growth in demand for wireless services has not been met with an equivalent drop in demand for wireline service.

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.

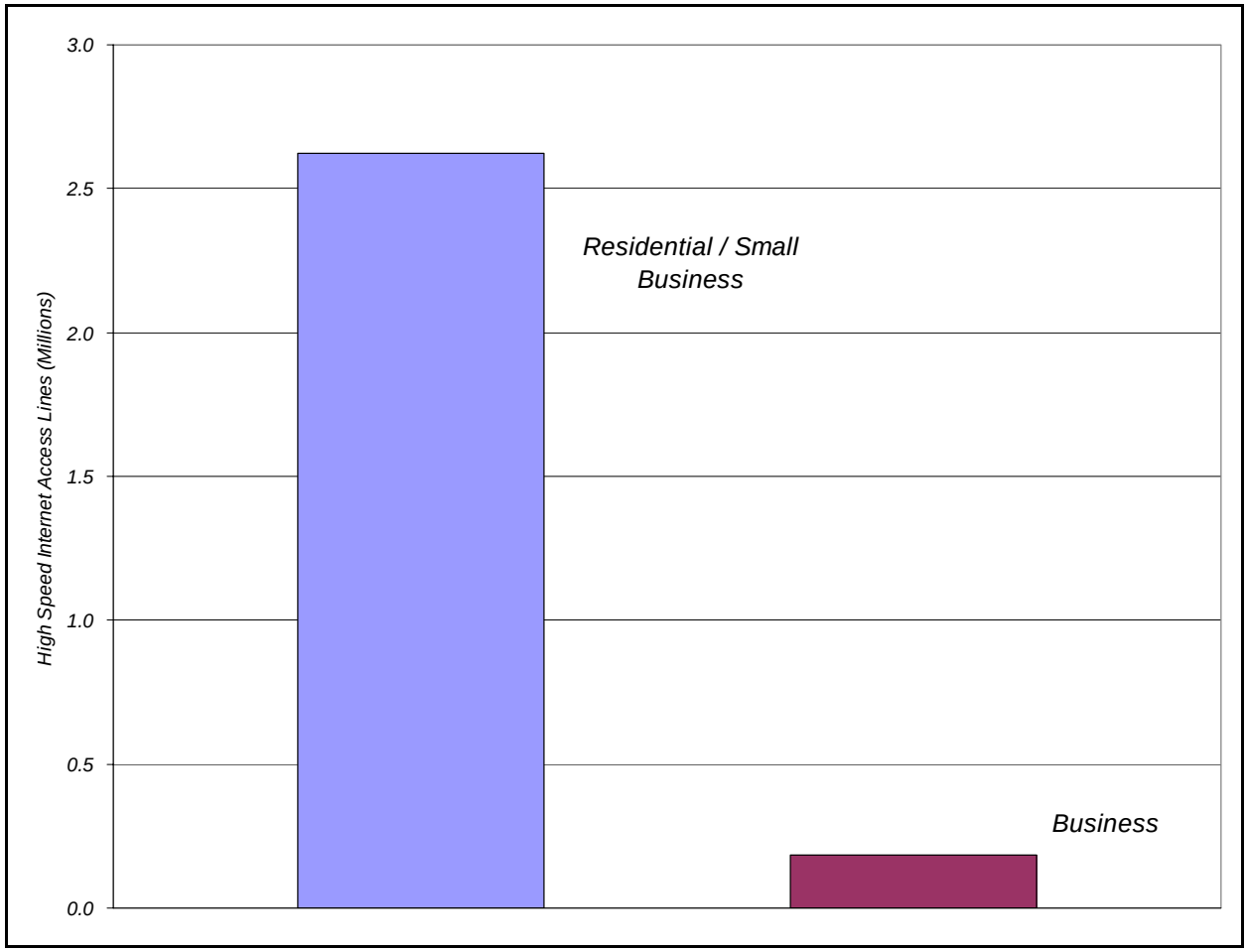

Figure 4. High Speed Internet Lines in New York are Primarily Provided to Residential Users.

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.