Annual Report to the Florida Legislature

ON THE STATUS OF

COMPETITION

IN THE

Telecommunications Industry in Florida

AS OF MAY 31, 2004

FLORIDA PUBLIC SERVICE COMMISSION

This report was prepared by the Florida Public Service Commission's
Office of Market Monitoring and Strategic Analysis

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LIST OF ACRONYMS

ALEC	Alternative Local Exchange Company
BEBR	Bureau of Economic and Business Research
BOC	Bell Operating Company
CLEC	Competitive Local Exchange Company
Commission	Florida Public Service Commission
CTIA	Cellular Telecommunications & Internet Association
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
FCC	Federal Communications Commission
IP	Internet Protocol
ISP	Internet Service Provider
ILEC	Incumbent Local Exchange Carrier
IXC	Interexchange Carrier
Joint Board	Federal-State Joint Board
LATA	Local Access and Transport Area
MSO	Multiple System Operator
NANPA	North American Numbering Plan Administrator
NCTA	National Cable and Telecommunications Association
NXX	End Office Code
NPA	Area Code
OPC	Office of Public Counsel
OSS	Operational Support Systems
PSTN	Public Switched Telecommunications Network
RBOC	Regional Bell Operating Company
SLC	Subscriber Line Charge
SMSA	Standard Metropolitan Statistical Area
TELRIC	Total Element Long-Run Incremental Cost
TRO	Triennial Review Order
UNE	Unbundled Network Element
UNE-P	Unbundled Network Element - Platform
USOA	Uniform System of Accounts
UWB	Ultra Wideband
VoIP	Voice over Internet Protocol

EXECUTIVE SUMMARY

This report is pursuant to the statutory requirements set forth in Section 364.386 and Section 364.161(4), Florida Statutes.

Chapter I: Introduction and Background

In addition to providing the annual overview and analysis of local telecommunications competition in Florida, this year's report includes a closer examination of the trends in the access line market.[1]

Chapter II: An Introduction to the Changing Competitive Landscape

Chapter II provides context to the report by discussing the evolving competitive landscape to which providers of communications services – including incumbents and competitors – are subject. The chapter discusses, among other subjects, the emergence of advanced communications platforms and the impact of competition on providers of wireline telecommunications services.

Chapter III: Status of Local Wireline Telecommunications Competition in Florida

Section A of Chapter III discusses Incumbent Local Exchange Carrier (ILEC) and Competitive Local Exchange Company (CLEC) market share in the local wireline telecommunications sector in Florida. As an overview, responses from ILECs and CLECs to the Florida Public Service Commission (Commission) data requests indicate that as of May 31, 2004, in Florida:

- CLECs have increased their overall market share from 16% in 2003 to 17% in 2004.
- The CLECs' share of the business market has remained stable, 30% in both 2004 and 2003.
- The CLECs' share of the residential market has increased from 9% in 2003 to 10% in 2004.

[1] With this report, a change was made in the reporting period to provide additional time for companies to respond to the data request and for Commission staff to analyze the data. The data contained herein represents a snapshot of Competitive Local Exchange Company (CLEC) activities on May 31, 2004, with the report year running from July 1, 2003, to May 31, 2004 (as opposed to June 30th as in prior reports).

- Total local exchange access lines in Florida continue to decline – even as Florida's population continues to grow.[2]

Section B discusses changing market trends in this sector. Section B also discusses the potential impacts of recent regulatory changes on the market for local wireline telecommunications.

Chapter IV: Advanced Communications Landscape

Innovation, competition, and regulatory change are rapidly changing the communications landscape of the country generally, and in Florida specifically. Various platforms are competing for mass market and business customers. Innovation and competition are resulting in enhanced service offerings and falling prices for consumers. ILECs, CLECs, and Interexchange Carriers (IXCs) are certain to face increased competition from wireless, cable telephony, and VoIP. Chapter IV discusses the subjects of intermodal competition and broadband.

Chapter V: Discussion of Items Required by Chapter 364, Florida Statutes

Chapter V sets forth the Commission's specific findings required pursuant to Section 364.386(1), Florida Statutes. These findings are supported by the information and data contained in this report.

Furthermore, pursuant to Section 363.161(4), Florida Statutes, Chapter V and Appendix D address CLEC complaints filed against ILECs. Notably, the number of complaints continued to decline from 81 in the 2002 report to 58 in 2003, and to 41 in this year's 11-month report period. Also, the Commission received 254 negotiated agreements and 10 requests for arbitration between July 1, 2003, and May 31, 2004. Since June 1996, the Commission has reviewed and approved 2,871 negotiated interconnection agreements.

Chapter VI: State Activities

Chapter VI discusses select state activities in which the Commission has been engaged as part of its ongoing efforts to promote wireline telecommunications competition in Florida.

In implementing the Tele-Competition Innovation and Infrastructure Enhancement Act of 2003, the Commission found, based on the record before it, that intrastate access rates currently provide support for basic local telecommunications services. The Commission further found that the existence of such support prevents the creation of a more attractive competitive local exchange market because it keeps local rates at artificially low levels. This results in an artificial barrier for market entry by efficient competitors.

[2] This decline in local exchange access lines does not result solely from telephone subscribers switching to alternative voice providers. The decline reflects a combination of voice lines being replaced by data connections (including residential broadband connections), as well as subscribers choosing alternatives to local exchange access for their voice communications.

The Commission also:

- Concluded a summary docket on collocation,
- Implemented the requirements of the Federal Communications Commission's (FCC) Triennial Review Order (TRO) dockets,
- Continues its work in performance metrics relating to ILECs,
- Oversaw the return of $4.5 million from Sprint and BellSouth, under Service Guarantee Programs, to their customers for missing service installations and out of service repair,
- Continues its work in the Florida Telecommunications Competitive Interests Forum, and
- Continues to work to increase Lifeline awareness and subscribership among eligible Floridians.

Chapter VII: Federal Activities

The Commission has continued to monitor and, as necessary, provide comments, on key federal issues such as:

- The Triennial Review Order and its subsequent partial vacatur and remand,
- The regulatory framework for broadband wireline access to the Internet,
- The regulatory framework for IP-Enabled Services (or Voice over Internet Protocol),
- Intercarrier compensation,
- Universal service,
- Reporting requirements for ILECs,
- Review of TELRIC pricing rules for UNEs, and
- Local number portability and
- NASUCA Truth in Billing

CHAPTER I: INTRODUCTION AND BACKGROUND

Chapter 364, Florida Statutes, sets forth the guiding principles by which the Commission regulates wireline telecommunications companies. Regulation is primarily focused on incumbent local exchange companies (ILECs). Competitive local exchange companies (CLECs) and intrastate interexchange carriers (IXCs) are subject to minimal regulation. The Commission does *not* regulate wireless service[3], Voice over Internet Protocol service (VoIP)[4], cable modem service, or satellite service.

Chapter 364 requires the Commission to prepare and deliver a report on "the status of competition in the telecommunications industry" to the Governor and Legislature by December 1 of each year. Specifically, Section 364.386, Florida Statutes, requires that the report address the following issues:

- The overall impact of local exchange telecommunications competition on the continued availability of universal service.
- The ability of competitive providers to make functionally equivalent local exchange services available to both residential and business customers at competitive rates, terms, and conditions.
- The ability of customers to obtain functionally equivalent services at comparable rates, terms, and conditions.
- The overall impact of price regulation on the maintenance of reasonably affordable and reliable high-quality telecommunications services.
- What additional services, if any, should be included in the definition of basic local telecommunications services, taking into account advances in technology and market demand.
- Any other information and recommendations which may be in the public interest.

A 1997 amendment to Section 364.161(4), Florida Statutes, requires the inclusion of a summary of all complaints filed by CLECs against ILECs.

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[3] Federal law preempts states from regulating rates of wireless providers unless a state petitions the FCC and demonstrates the market is failing to protect consumers from unjust prices or wireless is a substantial substitute for wireline. 47 U.S.C. §§ 332(c)(3)(A). Federal law does not prohibit states from regulating "other terms and conditions of service." Florida law exempts wireless from Commission jurisdiction (Section 364.02(13)(c)). As set forth more thoroughly in Chapter II, Florida's deregulatory approach to wireless has resulted in the development of a highly robust, competitive wireless market in the state.

[4] Certain VoIP providers have *voluntarily* pursued and obtained CLEC certificates. VoIP generally is not regulated by the Commission in accordance with Sections 364.01(3), F.S. (The Legislature further finds that the provision of voice-over-Internet protocol (VoIP) free of unnecessary regulation, regardless of the provider, is in the public interest.) and 364.02(12), F.S. ("Service" is to be construed in its broadest and most inclusive sense. The term "service" does not include voice-over-Internet protocol service for purposes of regulation by the commission. Nothing herein shall affect the rights and obligations of any entity related to the payment of switched network access rates or other intercarrier compensation, if any, related to voice-over-Internet protocol service.)

In prior years, the data presented a snapshot of CLEC activities on June 30, with the report year running from July 1 of the previous year through June 30 of the current year. This year, the snapshot of data is taken on May 31, with the reporting period running from July 1, 2003 through May 31, 2004. This change provided additional time for companies to respond to the data requests and for Commission staff to analyze the data. Beginning with the 2005 report, the report year will run from June 1 of the previous year through May 31 of the current year, with May 31 continuing as the snapshot date.

Prior to discussing the required topics (Chapter V), this report begins with an introduction and overview in Chapter I of the federal Telecommunications Act of 1996 (the 1996 Act) and Chapter 364, Florida Statutes. Chapter I also discusses the approach used in preparing this report, including efforts to streamline the data gathering process and reduce the reporting burden on non-facilities based CLECs.

Chapter II gives context to the rest of the report by discussing the evolving competitive landscape to which providers of wireline telecommunications – including incumbents and competitors – are subject. Chapter II discusses competing communications platforms and the changing nature of competition.

Chapter III provides a detailed analysis of the status of local wireline telecommunications competition in Florida, examining the data by percentage of market share, number of access lines, and by various areas, such as exchange and ILEC territory. Chapter III also discusses some of the potential impacts on the market for local wireline telecommunications of the FCC's Triennial Review Order (TRO) and its subsequent partial vacatur by the D.C. Circuit Court of Appeals (known as the USTA II decision).

Chapter IV discusses how the communications landscape is changing rapidly due to innovation, competition, and regulatory change. Competition for mass market and business customers is resulting in enhanced service offerings and lower prices for consumers. Wireline telecommunications providers, including ILECs, CLECs, and IXCs, are facing increased intermodal competition from wireless, cable, and VoIP providers. Chapter IV also discusses the broadband market.

Chapter V discusses issues required by Chapter 364, Florida Statutes. Chapter VI and Chapter VII contain reviews of key state and federal activities, respectively.

The appendices include tables containing the CLECs providing service in Florida, the exchanges with providers, the percentage of CLEC access lines by exchange, the summary of CLEC complaints, and the list of certificated CLECs as of May 31, 2004. A glossary of telecommunications terms is provided after the appendices.

A. PROVISIONS AND GOALS OF CHAPTER 364, FLORIDA STATUTES, AND THE TELECOMMUNICATIONS ACT OF 1996

1. Chapter 364, Florida Statutes

In 1995, the Florida Legislature amended Chapter 364, Florida Statutes, to provide for competition in the state's telecommunications industry. The Legislature found that "the competitive provision of telecommunications services, including local exchange telecommunications service, is in the public interest and will provide customers with freedom of choice, encourage the introduction of new telecommunications service, encourage technological innovation, and encourage investment in telecommunications infrastructure." The 1995 Florida Act, together with the 1996 Act (federal), spurred the development of a CLEC industry. Since 1995, the communications landscape has evolved dramatically, with wireless, cable telephony, and IP-enabled communications offering many consumers alternatives to plain old telephone service ("POTS").

As of May 31, 2004, 420 CLECs were certificated by the Commission to operate in Florida, down from 432 in 2003. In 2004, 175 CLECs reported offering service, a slight decrease from 179 in 2003.[5] Unlike the ILECs, CLECs are not required to file tariffs for Commission acknowledgment. Instead, each CLEC is only required to file a price list if it offers basic local telecommunications service. In addition, Section 364.337(2), Florida Statutes, states in part, that "[T]he basic local telecommunications service provided by a competitive local exchange telecommunications company must include access to operator services, '911' services, and relay services for the hearing impaired." CLECs must also provide a flat-rate pricing option for basic local telecommunications services; the statute states that "mandatory measured service for basic local telecommunications services shall not be imposed."

2. Federal Telecommunications Act of 1996 (the 1996 Act)

The 1996 Act established a national framework to promote competition in the local telecommunications marketplace. The FCC's Local Competition Order specified that opening the local exchange and exchange access markets to competition was intended to "pave the way for enhanced competition in all telecommunications markets."[6] Additionally, the opening of all telecommunications markets to all providers was expected to blur traditional industry distinctions. As such, not only have CLECs entered the local market, but less traditional providers such as wireless, cable and broadband communications providers have also entered this market using existing or new technologies to compete against traditional wireline providers for a share of the market for voice communications.

[5] The number of CLECs providing service in 2003 was erroneously reported as 150 in the 2003 Annual Report on Competition. The correct number was 179.

[6] FCC 96-325, CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, Paragraph 4.

The 1996 Act established three methods by which CLECs can enter the local exchange market: resale, leasing of unbundled network elements (UNEs), and investing in their own facilities.[7] Because ILECs dominate the last mile of the local network, CLECs must either use the ILEC's local loops, build their own facilities, or enable facilities currently in place (e.g., cable networks) to provide local telephone service. A brief description of each entry strategy provided for in the 1996 Act follows.

Resale

Resale is a method of market entry often used as a starting point for non facilities-based CLECs to gain exposure in the marketplace. Under this method, CLECs are able to purchase at a discount and resell any telecommunications services that ILECs offer to retail customers. Those CLECs that focus on serving customers who have been disconnected by the ILEC or who prefer prepaid service may view resale as a long-term strategy.

Unbundled Network Elements (UNEs)

UNEs are the building blocks of ILEC networks used to provide telecommunications services. This method of entry requires ILECs to unbundle their networks and lease the piece parts or elements to CLECs at rates based on a total element long-run incremental cost (TELRIC) methodology.

Facilities

Facilities-based CLECs are those that have invested in facilities that may consist of loops and/or switching equipment to serve end-users. Frequently, CLECs enter the market using resale or UNE-based services while investing the financial resources necessary to build a telecommunications network that, in whole or in part, allows services to be provided independent of the ILECs. CLECs deploying facilities typically do so to serve the business market. Because of the high costs of deploying facilities, the residential market does not provide sufficient economies of scale to cover the costs of deployment.

According to a recent court decision, the purpose of the 1996 Act "is to stimulate competition – preferably genuine, facilities-based competition."[8] The resale components of the 1996 Act confine a competitor to deriving revenue between resale and retail rates. Resale may not be a viable long-term strategy for many CLECs and may discourage optimal facilities investment. Unbundling connotes an unbundling of existing (static) facilities. Many facility owners believe that there is little or no incentive to invest in upgrades and improvements if they will ultimately be required to unbundle those same upgrades and improvements.

[7] Other policies such as number portability, interconnection, pricing, etc. also facilitate CLECs' entry into this market.

[8] 359 F. 3d 554 (D.C. Cir. 2004) (known as USTA II) , pets. for cert. filed, Nos. 04-12, 04-15, 04-18. June 30, 2004.

Many CLECs serve the residential and small business markets primarily by leasing ILEC unbundled loops, transport and switching (known as UNE-Platform, or UNE-P), and to a much lesser extent, through resale. Other CLECs, such as Florida Digital Network, provide voice service using their own facilities.

While true facilities-based competition in the local wireline telecommunications market is not yet widespread, intermodal and facilities-based competition currently exists in the advanced telecommunications market primarily through cable companies, wireless providers and a handful of wireline providers that mainly target the business market. In the mass-market (residential and small business consumers), competition from wireless and cable companies is growing. In other words, in many markets, consumers may soon be able to choose between multiple platforms offering voice service.

B. METHODOLOGY

As in prior years, the Commission prepared this report based on responses by CLECs and ILECs to data requests. The annually updated data request consists of both quantitative questions (e.g., access line counts) and qualitative questions (e.g., has a company experienced any significant barriers in entering the Florida market). To ensure that the report better reflects the changing nature of the communications industry as a whole, questions on VoIP were added this year. Because the vast majority of VoIP providers would not have received the data request, responses are understandably limited.

The data are only as valid as the quality and completeness of the responses received. As part of our on-going effort to increase efficiency and to reduce the reporting burden where possible, the Commission made several changes to the data gathering process. Staff revised the data requests again this year to streamline them and reduce reporting requirements. Draft versions of the CLEC data request were provided to some of the larger CLECs in order to elicit their feedback. Commission staff then conducted conference calls with these CLECs and revised many of the questions based on CLEC input. In an effort to streamline the data request process, the Word and Excel files comprising the ILEC and CLEC data requests were made available on the Commission's website. This saved time for both the responding companies and the Commission by eliminating the need for companies to individually request Commission staff to provide electronic copies of the data requests. As in previous years, the Commission requested companies to provide their responses on disk, by CD or electronic mail so that Commission staff would not have to manually enter responses into a database.

Commission staff are confident that the data presented and the analyses that follow are reasonably accurate based on the information provided by the ILECs and the reporting CLECS. As in previous years, precise market share calculations are impossible because a number of CLECs failed to respond; however the response rate has been increasing. The 2004 response rate was 85% compared to 80% in 2003. Lack of a 100% response from CLECs may result in understatement of market share; however, this should not materially affect the conclusions reached in this report regarding the data.

CHAPTER II: AN INTRODUCTION TO THE CHANGING COMPETITIVE LANDSCAPE

This Chapter provides an introduction to the rapidly evolving landscape that wireline telecommunications providers – both incumbents and competitors – now face.[9] While much of this report is focused on traditional ILEC versus CLEC competition, policymakers cannot ignore substantial changes in the broader communications market that are unquestionably impacting Florida's local telecommunications market. Fortunately for Florida's consumers, innovation and investment by competitors across platforms is providing an array of new products and services, and price wars among both new and old competitors are breaking out.

Part A discusses the rapid pace of innovation that is occurring in the market. Part B discusses the decline of the traditional telecommunications sector.

A. INNOVATION IN A RAPIDLY CONVERGING MARKET

Convergence of voice, video, and data technologies into multi-faceted product offerings by numerous providers has drastically changed the communications industry. In addition to competition from rival telephone companies, both incumbent and competitive telephone companies now face competition from wireless, VoIP, cable companies, and others. Consider the following:

- "A battle royal between cable and telephone companies for the residential phone market is about to sweep the country….By the end of 2006, more than half of all 110 million or so households in the U.S. will likely have the option of getting phone service from their cable companies. By 2008, cable companies will be selling phone service to 17.5 million subscribers, compared with 2.8 million at the end of 2003, according to an estimate by research firm Yankee Group."[10]

- "In Omaha, Neb., cable giant Cox Communications Inc. has toppled the regional Bell and become the area's largest phone company. Over in New York, Cablevision Systems Corp. has signed up 115,000 phone customers."[11]

- "Over the past four years, the nation's largest phone companies have lost local phone lines by the millions as consumers fled to cellphones and e-mail. Many customers are giving up their second, and even their primary, phone lines. The intrusion by cable

[9] Chapter IV provides an in-depth discussion of the advanced communications landscape, which continues to rapidly evolve, and the technologies that are driving innovation and investment and that are increasing the choices available to consumers.

[10] Grant, Peter. "Here Comes Cable...and it Wants A Big Piece Of The Residential Phone Market." The Wall Street Journal. September 13, 2004. p. R6.

[11] Latour, Almar. "Free for All." The Wall Street Journal. September 13, 2004. p. R1.

companies only made things worse, forcing the Bells to expand into other areas that promise more growth, such as wireless, high-speed Internet and television." [12]

- Email & Instant Messaging continue to be used as substitutes for voice communications. For example, among high-speed Internet users, instant messaging displaced 20% of local calls and email displaced 24% of such calls. Among dial-up Internet users, instant messaging displaced 18% of local calls, and email displaced 23% of local calls.[13]

- EarthLink has announced a new service that will let subscribers make free telephone calls using the Internet.[14]

- "According to Synergy Research Group Inc., Internet phones will account for about a third of the nearly 35 million business lines expected to be added this year, up from 18% last year and less than 4% in 2001."[15]

The following subsections highlight several of the advanced communications technologies that are driving innovation and investment and are spurring this non-traditional, but extremely promising, form of competition in the communications sector.

1. Wireless

In Florida and across the nation, the wireless industry has proven the success of competitive markets that are not overly burdened with costly and unnecessary regulations. Wireless competition is fierce and empowers consumers to make informed choices among numerous options. Approximately 98% of Americans can choose from at least 3 wireless providers, and 83% have a choice of 5 or more wireless carriers.[16] As a result, prices have continually declined (1993 average wireless bill = $61.49, as compared to 2003 average bill = $38.73).[17] In fact, the FCC reported a 13% decrease in the price per minute in 2003.[18] Though

[12] Latour, Almar. "Free for All." The Wall Street Journal. September 13, 2004. p. R1.

[13] J.D. Power & Associates. "2003 Residential Internet Service Provider Study (August 2003)."

[14] Earthlink Free Online Calling. <http://www.earthlink.net/extras/onlinecalling/>. Accessed November 3, 2004.

[15] Totty, Michael. "Is Now the Time For Net Calling." The Wall Street Journal. September 13, 2004. p. R6.

[16] "Innovation: The Keystone of the Commercial Mobile Wireless Experience." Cellular Telecommunications & Internet Association (CTIA) Presentation to FCC. April 2004. <http://files.ctia.org/pdf/CMRSINNOVATIONmar04.pdf>.

[17] "The Wireless Industry and Its Contributions." Cellular Telecommunications & Internet Association (CTIA) Presentation to FCC Wireline Competition Bureau. September 2004. <http://files.ctia.org/ppt/WCB_Wireless_Contributions_Presentation.ppt>.

[18] "Ninth Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services." FCC. WT Docket No. 04-111. September 28, 2004. Page A-11.

wireless prices are decreasing, the wireless industry continues to invest heavily in its network and in innovative new products and services. These trends will be discussed in the following section, along with a focus on Florida's market-based approach regarding the wireless sector and a glance at a few initiatives by the wireless industry to address consumer needs despite the lack of regulatory mandates.

a. Florida's Market-Based Approach to Wireless

In Florida, the Legislature has taken a "hands-off" approach to wireless services generally, allowing the industry to flourish and the state's consumers to benefit from the competition. Commercial mobile radio service (CMRS) (i.e., wireless) providers are expressly excluded from the statute that confers jurisdiction to the Commission over "telecommunications companies."[19] Due to this wireless exemption, the Commission does not make eligible telecommunications carrier (ETC) designations for purposes of universal service funding for Florida CMRS providers; instead, the FCC determines eligibility.[20] Florida CMRS providers do, however, remain expressly liable for certain taxes prescribed by statute and any universal service or other fees pursuant to statute.

Florida's approach to the wireless industry has been extremely successful. Florida's consumers today enjoy the benefits of a vigorously competitive market for cellular service. Approximately 23 wireless competitors serve the state, including all six nationwide providers. Some 77% of Floridians have a choice of five or more wireless carriers. Statewide subscribership is high at over 10 million.[21] With the express statutory exemption, regulatory risk is minimized, and carriers are demonstrably more willing to invest in the state. Finally, consumer welfare is maximized. Florida's consumers benefit from an array of services, offered at competitive prices, by numerous and fiercely competitive providers.

b. Wireless Investment & Innovation

The substantial investment and constant innovation by the wireless industry suggest the effectiveness of deregulatory approaches (like Florida's) with respect to such competitive markets. Even as prices decline, wireless carriers have invested approximately $146 billion

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[19] Under Section 364.01(1), Florida Statutes, the Commission has jurisdiction over "telecommunications companies," and Section 364.02(13)(c), Florida Statutes, excludes CMRS providers from the statutory definition of a "telecommunications company."

[20] Designation as an ETC allows a company to receive universal service support. The 1996 Act places responsibility on the states to determine which carriers are qualified for universal service funding. However, in cases where the state, like Florida, does not have jurisdiction to make the ETC designation, the FCC will determine eligibility according to 47 U.S.C. § 214(e)(6).

[21] FCC Report on Local Competition: Status as of December 31, 2003. Released June 2004.

nationwide, including over $19 billion in 2003 alone.[22] This investment includes a 17% increase in cell sites in service from year-end 2002 to year-end 2003,[23] which expands coverage and improves overall quality of service.

Wireless carriers are also constantly innovating in order to either meet competitors' offerings or to gain a competitive edge with new features. CMRS-related patents in the United States have increased from 876 in 1996 to a record high of 2,390 in 2003 (not including unlicensed wireless, Wi-Fi, or Ultra Wideband (UWB) patents, which are also on the rise).[24] Innovations such as walkie-talkie functionality, digital camera additions, and voice dialing have become more of a standard feature due to consumer demand and have increased consumer value. While new features are being added, phones are continually decreasing in size, and calling areas are expanding.[25] Carriers are rapidly adding digital services, such as e-mail, calendar, Internet access, and text message functionality, to their cell phones and plans. By year-end 2003, the wireless industry had achieved 140 million digital subscribers.[26] Wireless carriers are also increasingly providing wireless broadband functionality to consumers – directly competing with the popular cable modem and DSL broadband options that together account for the vast majority of the broadband market. These and other substantial strides by the wireless industry – and the resulting benefits for consumers – are occurring in a relatively unregulated market.

c. Wireless Voluntary Efforts

Competitive markets can and do respond to the needs and demands of consumers. In fact, in industries that are as fiercely competitive as the wireless industry, a focus on consumer satisfaction is critical to survival. The following subsections provide a few examples of the wireless industry's voluntary efforts to address consumer issues. These show that market forces work in competitive arenas.

i. Voluntary Consumer Code

In September 2003, CTIA unveiled its "Voluntary Consumer Code," which is designed to encourage greater wireless carrier communication and disclosure to consumers on a voluntary

[22] "The Wireless Industry and Its Contributions." Cellular Telecommunications & Internet Association (CTIA) Presentation to FCC Wireline Competition Bureau. September 2004. <http://files.ctia.org/ppt/WCB_Wireless_Contributions_Presentation.ppt>.

[23] "CTIA's Semi-Annual Wireless Industry Survey Results." CTIA. 2004.

[24] "Innovation: The Keystone of the Commercial Mobile Wireless Experience." Cellular Telecommunications & Internet Association (CTIA) Presentation to FCC. April 2004. <http://files.ctia.org/pdf/CMRSINNOVATIONmar04.pdf>.

[25] Luke, Robert. "Cingular: From Elite to Everyman." The Atlanta Journal-Constitution. October 4, 2004.

[26] "Innovation: The Keystone of the Commercial Mobile Wireless Experience." Cellular Telecommunications & Internet Association (CTIA) Presentation to FCC. April 2004. <http://files.ctia.org/pdf/CMRSINNOVATIONmar04.pdf>.

basis.[27] Among other aspects, "the Code" requires companies to disclose key rates and terms of service,[28] requires various disclosures in product advertising, and calls for trial usage periods, better billing of taxes and fees, and stronger privacy policies. The Code also includes a promise to work with state agencies like the Commission to better coordinate responses and resolve consumer complaints, even though wireless companies are not subject to Commission jurisdiction.

Ultimately, either wireless providers will respond effectively to the concerns of their customers, or they will suffer a quick demise as customers migrate to one of their numerous competitors. This basic reality serves to police this industry without the need for the heavy hand of regulation seen in other venues. In competitive markets such as this one, voluntary disclosure of terms and conditions of service is far preferable to regulation of those terms and conditions. Such regulation imposes often-substantial transaction costs on carriers, and these transaction costs are, directly or indirectly, passed on to consumers. The bottom line is that, in a competitive market like wireless, the market will respond to consumer needs better – and at less cost – than will simply more regulation.

ii. Voluntary Anti-SPAM Efforts

The wireless industry has been proactive in stamping out text-messaging spam. On March 11, 2004, the FCC considered a Notice of Proposed Rulemaking (NPRM) and Further NPRM to protect consumers from unwanted mobile service commercial messages under the CAN-SPAM Act. Congress directed the FCC to take into consideration the "unique technical aspects" of wireless devices, including their small screen size and limited keyboards, when formulating such rules. In committing to working with the FCC to address this issue, Steve Largent, the President & CEO of CTIA, stated, "CAN-SPAM not only limits unwanted messages, but also governs all types of commercial e-mail. Mobile devices, with their smaller screens, limited keyboards and finite message lengths present a special challenge for commercial messages, which must include such extras as an easy way to opt-out."

iii. Voluntary Consumer Complaint Assistance

Even prior to the Voluntary Consumer Code, many wireless carriers worked with states (regardless of state jurisdiction over wireless providers) to quickly resolve wireless complaints received by state commissions and other relevant state agencies. For example, although the Commission has no jurisdiction over wireless providers, several wireless carriers provide the

[27] See CTIA's website at http://www.ctia.org/wireless_consumers/consumer_code/index.cfm for a list of carriers that have "fully implemented and adopted the Consumer Code."

[28] Many wireless carriers provide consumers with detailed information on their websites regarding billing, terms and conditions of service, and "frequently asked questions," to better assist consumers in making informed decisions. As but one example, Cingular Wireless' website at: www.cingular.com includes helpful links such as "plan terms," "return policy," "common questions," and "understanding your bill," presumably aimed at providing consumers with information they seek.

Commission with phone numbers of individuals within their companies that will be able to provide more direct assistance to the consumer.

2. Voice over Internet Protocol (VoIP)

Florida leads the nation in recognizing the potential benefits of voice over Internet protocol (VoIP) technologies for consumers. Consistent with the goal of promoting competition and in order to allow the technology to flourish in the state, the Florida Legislature took the proactive step of declaring VoIP "free of unnecessary regulation" and exempting it from the statutory definition of "service" for purposes of Commission regulation. This model has already spurred several companies, such as Vonage, AT&T, and Bright House Networks, to offer VoIP service – a technology that makes use of a broadband connection to deliver voice service, at least in part, over the Internet – in Florida.

As Forbes recently reported:

> Unlike the regulated monopolies of old, VoIP service is inherently competitive--even hyper-competitive. A customer's VoIP phone company (such as AT&T or Vonage) no longer needs to own the physical wire into their customers' homes. Instead, the calls hitch a free ride on customers' existing broadband Internet connections. The result: Instead of one phone company having a lock on a consumer, an unlimited number of VoIP companies like Vonage and AT&T can compete for a customer's business.[29]

VoIP service providers, an ever-growing group of diverse companies, are driving innovation. AT&T, for instance, offers innovative call-conferencing features as well as a "do not disturb" feature to block unwelcome calls.[30] Vonage and Boingo Wireless recently announced their partnership to make voice over Wi-Fi services available to customers, specifically targeting the business traveler by providing greater mobility of the Vonage VoIP product.[31] Internet service providers (ISPs) are also offering Internet-based phone services. Earthlink, for example, has followed AOL's lead by recently announcing a new service that will allow its subscribers to make **free calls** using the Internet so long as there is a computer on the other end that is connected to the Internet and has added the capability to receive such calls.[32]

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[29] Woolley, Scott. "Cheap Talk." Forbes.com. October 4, 2004. <http://www.forbes.com/2004/10/04/cz_sw_1004voip.html>.

[30] AT&T CallVantage Plans & Pricing. <https://www.callvantage.att.com/signup/OfferDetails?offerid=CPCVU&soac=76613>. Accessed November 3, 2004.

[31] Vonage Holdings Corporation. "Boingo Wireless And Vonage Team to Simplify Wireless VoIP Services." Press Release. October 18, 2004. <http://www.vonage.com/corporate/press_index.php?PR=2004_10_18_0>. Accessed November 3, 2004.

[32] Earthlink Free Online Calling. <http://www.earthlink.net/extras/onlinecalling/>. Accessed November 3, 2004.

Price wars between VoIP providers have already begun. Following AT&T's[33] October 1, 2004 announcement that it was dropping the price of its CallVantage offering to $30 per month, Vonage announced the same day that it was dropping its price to $25 per month.[34] In its coverage of this price war, Forbes.com has found that the local Bells stand to lose from this trend, noting that, "According to the U.S. Federal Communications Commission, local phone service is the only major telecom service whose price has risen in this century."[35] The article adds that, "The recent price cuts will make old-fashioned phone service look even more expensive."[36] Some of the Bells are even responding with offers to match some of the more popular elements of their VoIP competitors' products. For instance, SBC is the latest Bell company to offer a single messaging system, allowing subscribers of SBC's local phone service to access messages from home phones, cellphones (provided a subscriber of Cingular, an SBC affiliate), e-mail, and faxes in a single place by checking by phone or over the Internet.[37]

While VoIP is not an exact substitute for traditional telephone service, in terms of technology, it is nonetheless benefiting consumers – even those that stick with traditional landline service. VoIP's competition with local telephone companies may lead to more competitive plans and pricing by the local providers than might have otherwise occurred. Perhaps more importantly, VoIP provides options for consumers. VoIP options often include many enhanced features beyond traditional voice service that a consumer may value more than those attributes they have given up by switching to an alternative technology. Though some might discount VoIP's significance in the telecommunications industry, the low costs to enter the voice market via this technology, the ease of adding marketable features to the service, and the relatively hands-off regulatory treatment (at least in states like Florida), would appear to make it a viable contender for the consumer communications dollar.

In determining the optimal regulatory treatment of VoIP, policymakers might consider the success of the relatively "hands off" regulatory approach taken with respect to the wireless industry. Although initially underestimated as a competitor to traditional phone service, wireless service now offers features that today's standard wireline phone has not matched – such as instant messaging, calendars, cameras – all in addition to mobility – and at prices that consumers find competitive.

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[33] AT&T CallVantage Plans & Pricing.<http://www.usa.att.com/callvantage/plans/index.jsp?soac=64528>. Accessed November 3, 2004.

[34] Vonage Premium Unlimited Plan. <http://vonage.com/products_premium.php>. Accessed November 3, 2004.

[35] Woolley, Scott. "Cheap Talk." Forbes.com. Oct. 4, 2004. <http://www.forbes.com/2004/10/04/cz_sw_1004voip.html>.

[36] Ibid.

[37] SBC Unified Communications Lite Pricing. <http://www05.sbc.com/Products_Services/Residential/ProdInfo_1/1,,1351--12-3-12,00.html>. Accessed November 3, 2004.

3. Broadband over Power Line

Broadband over power line communications (BPL or Access BPL), another promising technology in the competitive telecommunications arena, uses the largely untapped communications capabilities of the nation's power grid. Because power lines reach virtually every home and community, BPL provides potential to become an additional major communications pipe into the home. The Federal Energy Regulatory Commission (FERC) and the Federal Communications Commission (FCC) have been examining the technology and its ability to improve communications for the American public and enhance power supply system management.

By a joint statement on October 14, 2004, Chairman Pat Wood III of the FERC and Chairman Michael K. Powell of the FCC agreed that BPL holds great promise for the American public. Specifically, FERC Chairman Wood and FCC Chairman Powell stated that:

- Ubiquitous broadband deployment is important to the economic, educational, social, medical, and cultural welfare of the country. In order to achieve this goal, national policies should facilitate rapid deployment of all broadband technologies, including BPL. Policymakers at all levels should coordinate their efforts to promote a minimally intrusive policy framework for such technologies.

- The provision of high-speed communications capabilities over utility poles and electric power lines provides an opportunity to increase the competitive broadband choices that are available to customers and the power supply system management options of utilities.

- These services should be allowed to develop according to market demands with minimal regulation.

Chairman Wood and Chairman Powell have urged utilities to pursue new and developing technologies, such as BPL. In addition, they agreed to continue to encourage the development of new technologies that provide additional competitive broadband options, promote continued U.S. leadership in broadband technology, and improve power supply system security, reliability, and efficiency. They also agreed to monitor experience with Access BPL to ensure that existing regulations do not stifle the development of this nascent technology.

As part of its goal to promote access to broadband services for all Americans and to encourage new facilities-based broadband platforms, the FCC also adopted changes to its rules to encourage the development of Access BPL systems while safeguarding existing licensed services against harmful interference.[38] In areas where consumers already have broadband access, BPL can enhance competition by providing another broadband alternative.

[38] Report and Order (FCC 04-245). Federal Communications Commission. ET Docket No. 04-37. October 14, 2004.

The Southern Company recently shared its evaluation of BPL technology with the Commission.[39] It referred to recent and anticipated advances, including: improved technology, multiple active BPL vendors, and faster computing capability in chip sets. Southern listed some factors that may create a window of opportunity, including: growth in broadband demand; increased penetration rates for DSL and cable modems; and concerns about availability and reliability of DSL and/or cable in some areas. Southern said that many utilities are testing BPL. Southern concluded that BPL technology works; the question now shifts to "how well."

B. DECLINE OF TRADITIONAL TELECOM SECTOR

According to the October 2004 U.S. Chamber of Commerce Report, "Sending the Right Signals: Promoting Competition Through Telecommunications Reform," post-1996 Telecom Act losses have been substantial. Market capitalization in telecommunications plummeted from $1,135 billion in March 2000 to $375 billion by July 2004 – a staggering 67% decline. A similar trend was observed with respect to the communications equipment manufacturers, experiencing a 74% decline in market capitalization ($1,282 billion to $338 billion) over the same time period. Job losses followed suit, with a loss of 380,500 jobs between March 2001 and May 2004 in telecom service, Internet service, and equipment manufacturing. In fact, 29% of jobs lost during this period were in telecommunications.[40]

The U.S. Chamber's report suggests that some federal and state regulatory policies are depriving the communications sector of substantial innovation and investment that could put the ailing sector on the road to recovery. The report maintains that ". . . regulators are regulating for a world that no longer exists, one of limited telecommunications technologies and limited competition in the field."[41] While not all customers have numerous alternatives to traditional telephone service today, the decline of the traditional telecom sector – and the emergence of alternatives to traditional telephony - are hard to ignore. ILEC access lines are decreasing, due at least in part to competitive technologies such as wireless, broadband, and VoIP.

Florida-specific data supports this trend of declining ILEC access lines. Specifically, ILECs lost 12% of their lines to CLECs and intermodal competitors between 2001 and 2004.[42] Even in the face of continued Florida population growth, the net number of residential access lines continues to decline. In the most recent reporting period, ILEC residential losses of almost

[39] Presentation to the Florida Public Service Commission on Broadband over Power Line Technology by the Southern Company. Florida Public Service Commission Internal Affairs Meeting. August 16, 2004.

[40] "Sending the Right Signals: Promoting Competition Through Telecommunications Reform." U.S. Chamber of Commerce. October 6, 2004. The Commission notes that its reference to this study should not suggest an endorsement of the policies or conclusions contained therein.

[41] "Sending the Right Signals: Promoting Competition Through Telecommunications Reform." U.S. Chamber of Commerce. October 6, 2004. Page 3.

[42] Responses to Commission Data Requests.

399,000 lines were slightly offset by approximately 3,400 additional CLEC lines.[43] While some of this line loss is attributable to secondary phone lines (used for dial-up Internet access) being replaced with DSL or cable modem service, other intermodal competitors such as wireless and VoIP service providers are believed to account for some of the difference as well.

Not even the regional Bell companies are protected from the risks of today's increasingly competitive market, as they too are facing the pressures of access line loss in their core business along with other ILECs. "The threat [to the phone companies] from cable is not theoretical," says Scott Cleland, CEO of Precursor, a research firm that serves institutional investors. "It is real, and it is devastating." He notes that in Orange County, California, and Omaha, Cox [Cable] has a 40 percent market share for voice.[44] As one Wall Street Journal reporter put it, "For the Bells, it's time to adapt or die."[45] The Bells are losing a substantial number of access lines to competitors – to wireline competitors and to newer rivals such as wireless companies and VoIP providers.

Wall Street has observed this trend and has reservations about the outlook for traditional phone companies, including those that sprung from Ma Bell. In September 2004, the Wall Street Journal reported that:

> Sometime in the next week, Standard & Poor's, citing a deterioration in their core phone businesses, likely will lower its credit rating for the three biggest Baby Bell telephone companies: Verizon Communications Inc., SBC Communications Inc. and BellSouth Corp. Such a move would be the first time the ratings firm has acted against these three companies at once….The potential downgrade highlights how significantly the business has changed for the nation's three largest local phone companies, which once had near monopolies in their regions. In the past few years, though, they have lost millions of local phone lines as people switch to wireless phones and Internet phone service provided by cable-television companies and upstart phone companies such as Vonage Holdings Corp. Five years ago, BellSouth was rated Triple-A, S&P's highest rating, while Verizon hasn't seen its rating cut in more than four years.[46]

Even as the Bells attempt to address their relative weaknesses in providing the complete bundle of voice, video, and data by investing in concepts such as movies on demand over the Internet, telecom investors show apprehension, and shares remain relatively flat.[47]

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[43] Responses to Commission Data Requests.

[44] Pethokoukis, James. "War of the Wires." U.S. News & World Report. Sept. 27, 2004. <http://www.usnews.com/usnews/issue/040927/tech/27cable.htm>.

[45] Rhoads, Christopher. "Outside the Lines." The Wall Street Journal. September 13, 2004. Page R6.

[46] Brown, Ken and Lucchetti, Aaron. "Downgrades Toll For 3 Baby Bells As Core Lines Weaken." The Wall Street Journal. September 27, 2004. p. C1.

[47] Latour, Almar. "Free For All." The Wall Street Journal. September 13, 2004. p. R1.

While there are numerous policy proposals aimed at reversing the continued decline of the traditional telecommunications sector, the aforementioned U.S. Chamber of Commerce study serves as a recent example. To promote investment, the Chamber recommends the following reforms: (1) Phase out rules that require network-sharing, and end regulated wholesale rates set at theoretical costs; (2) Increase availability of prime radio spectrum to commercial wireless providers; (3) Exempt both high-speed cable modem and DSL from common carrier regulations through classification as "information services," and preempt state regulation altogether; (4) Exempt all regulation of VoIP through classification as an "information service," and preempt state regulation altogether; (5) Collect funds for achieving universal service goals in a competitively neutral manner, such as appropriations from general tax revenues; and (6) Disperse universal service funds directly to targeted consumers to allow consumers to choose among communications alternatives. By implementing these six recommendations, the Chamber estimates substantial economic improvements, including $58 billion in new capital investment over five years, increased productivity, increase in average employment levels of over 212,000 jobs in five years, accelerated rollout of innovative products and services, added consumer value, achievement of social policy objectives like universal service, and enhanced U.S. competitiveness in the global arena.[48] The Commission notes that it has neither analyzed nor endorsed this study. Whether its conclusions or recommendations have merit, the study points out that the health of the telecommunications sector is of significant enough importance to our economy to warrant close examination by policymakers.

[48] "Sending the Right Signals: Promoting Competition Through Telecommunications Reform." U.S. Chamber of Commerce. October 6, 2004.

CHAPTER III : STATUS OF LOCAL COMPETITION IN FLORIDA

A. WIRELINE MARKET SHARE ANALYSIS[49]

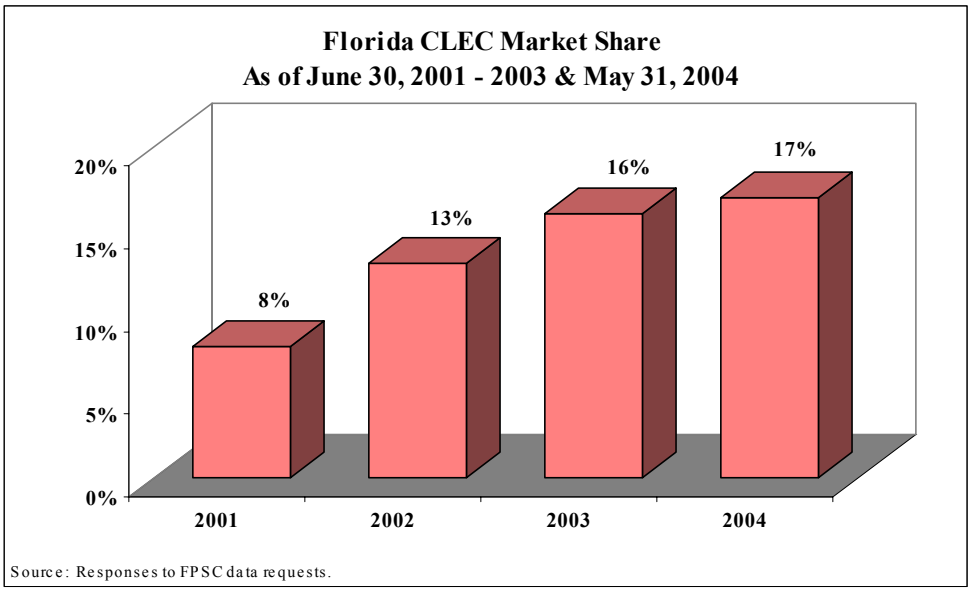
1. CLEC Market Share Growth[50]

Calculations based on responses to the Commission's data request indicate the following Florida market share information as of May 31, 2004:[51]

- Overall CLEC market share increased to 17% from 16% last year.
- CLEC business market share is 30%, the same as last year.
- CLEC residential market share increased to 10% from 9% last year.

Figure 1 provides the overall CLEC market shares for 2001 through 2004.

Figure 1



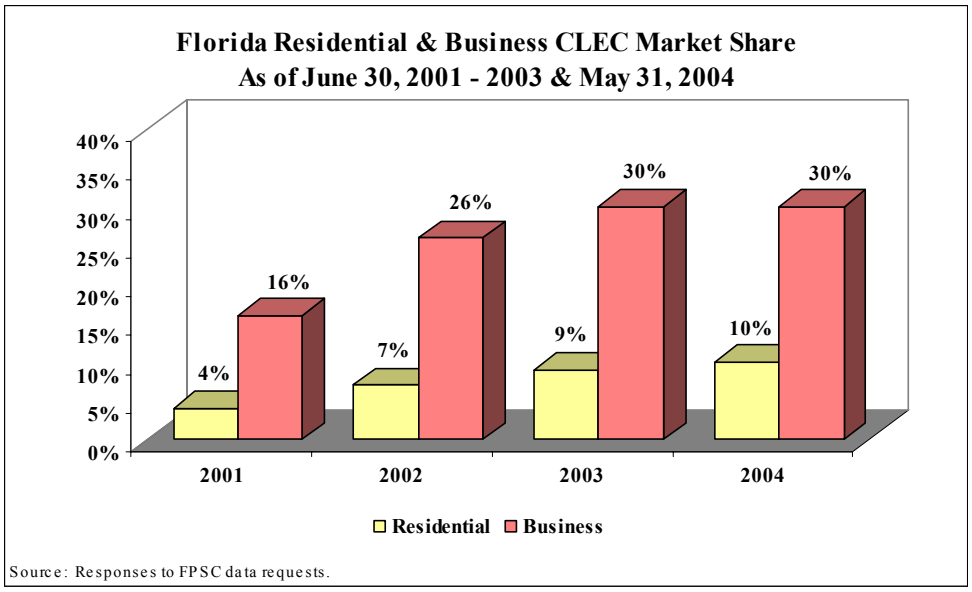
[49] This section discusses data regarding the market shares of incumbent and competitive local exchange providers. It does not analyze the overall market for voice communications or the market share of non-jurisdictional companies (e.g., wireless or VoIP providers).

[50] CLEC business line counts reported in the 2003 Annual Report on Competition have been restated for the 2004 report. This revision was necessary because a CLEC that reported a substantial number of lines for the 2004 report failed to submit its data in time to be included in the 2003 report. Restating the 2003 lines results in more comparable year-to-year figures. The restated 2003 data affected business lines only and are reflected in Figures 2 through 4, 6 through 9, and Tables 1 through 5 that follow.

[51] Commission results may differ from that reported by the FCC for comparable periods due to FCC procedures that capture data only from CLECs serving 10,000 or more access lines.

Figure 2 provides a breakdown of the CLEC residential and business market shares.

Figure 2



Source: Responses to FPSC data requests.

2. Access Line Comparisons

Based on responses to the Commission's data requests, local exchange companies were serving 11,715,986 lines in Florida as of May 31, 2004. Table 1 summarizes the changes in access lines for both ILECs and CLECs for the 2001 through 2004 reporting periods. Total access lines in Florida declined approximately 1/2% in the reporting period, the third straight year of decline. Business lines showed a strong increase during the year, but were offset by a significant loss of residential lines, presumably to broadband, wireless and VoIP providers. Total access lines in Florida have declined 3% since 2001. Over this same period, ILECs have lost 12% of their lines to CLECs, broadband and intermodal providers. CLEC lines have increased by 107% since 2001. However, the number of CLEC lines has increased by only 6% since 2003. (See further discussion of access line trends in Section II.B.)

Table 1 Florida Access Line Comparison

	2001			2002			2003			2004			Increase over 2001
	Residential	Business	Total	Residential	Business	Total	Residential	Business	Total	Residential	Business	Total	
ILECs	7,931,047	3,139,959	11,071,006	7,513,073	2,748,419	10,261,492	7,203,749	2,688,870	9,892,619	6,804,789	2,925,322	9,730,111	<12%>
CLECs	366,653	594,223	960,876	546,040	959,294	1,505,334	726,638	1,143,936	1,870,574	730,094	1,255,781	1,985,875	107%
Total	8,297,700	3,734,182	12,031,882	8,059,113	3,707,713	11,766,826	7,930,387	3,832,806	11,763,193	7,534,883	4,181,103	11,715,986	<3%>

Source: Responses to FPSC data requests.

3. CLEC Market Penetration by ILEC Service Area

Table 2 provides a breakdown of ILEC access lines by the three major ILECs (BellSouth, Sprint, and Verizon) and a total line count for the rural ILECs (ALLTEL, Frontier, GT Com, ITS, Northeast Florida, Smart City and TDS/Quincy). The rural ILECs' lines are combined to preserve the confidentiality of CLEC lines. CLECs show the heaviest market penetration in BellSouth's territory, followed by the territories of Verizon and Sprint, then the rural ILECs.

Table 2 Florida CLEC Market Penetration by ILEC as of May 31, 2004

	ILEC			CLEC			Total			CLEC Share		
ILEC	Res	Bus	Total	Res	Bus	Total	Res	Bus	Total	Res	Bus	Total
BellSouth	3,724,738	1,677,735	5,402,473	665,725	895,036	1,560,761	4,390,463	2,572,771	6,963,234	15%	35%	22%
Verizon	1,580,228	597,162	2,177,390	24,140	231,631	255,771	1,604,368	828,793	2,433,161	2%	28%	11%
Sprint	1,357,953	599,258	1,957,211	37,275	125,738	163,013	1,395,228	724,996	2,120,224	3%	17%	8%
Rural ILEC	141,870	51,167	193,037	2,954	3,376	6,330	144,824	54,543	199,367	2%	6%	3%
Grand Total	6,804,789	2,925,322	9,730,111	730,094	1,255,781	1,985,875	7,534,883	4,181,103	11,715,986	10%	30%	17%

Source: Responses to FPSC data requests.

Figure 3, showing CLEC market share by ILEC, reflects some growth in CLEC penetration during the reporting period, although less growth than in previous years. Data also show CLEC market share in BellSouth's territory is more than double that achieved in Verizon's territory and almost triple that achieved in Sprint's territory. The key factors underlying this differential are that BellSouth has lower UNE rates and its territory includes the most densely populated areas of the state. These factors combined offer more favorable conditions for CLECs to compete.

Figure 3

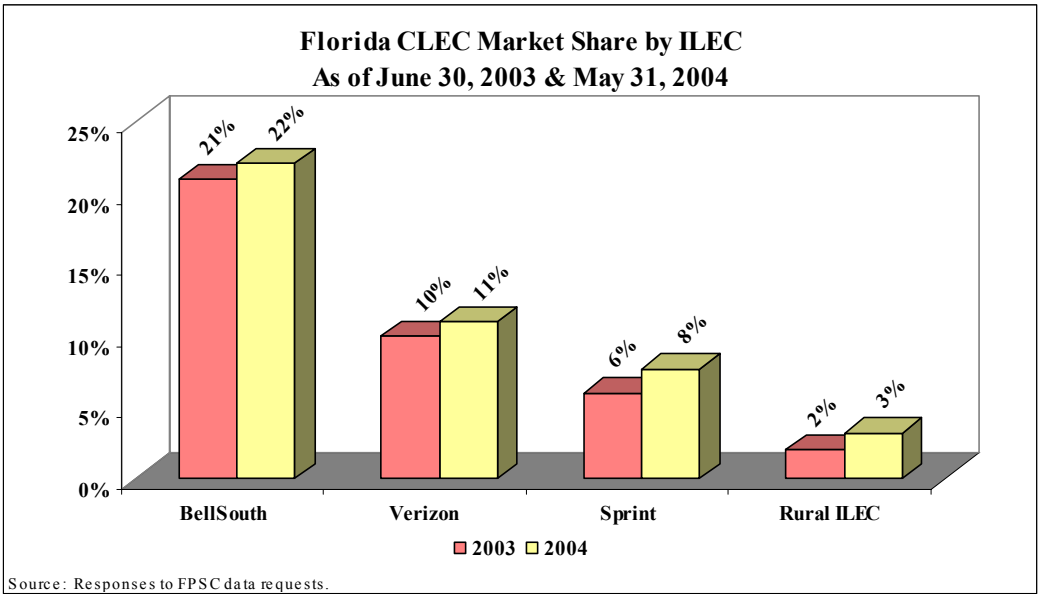
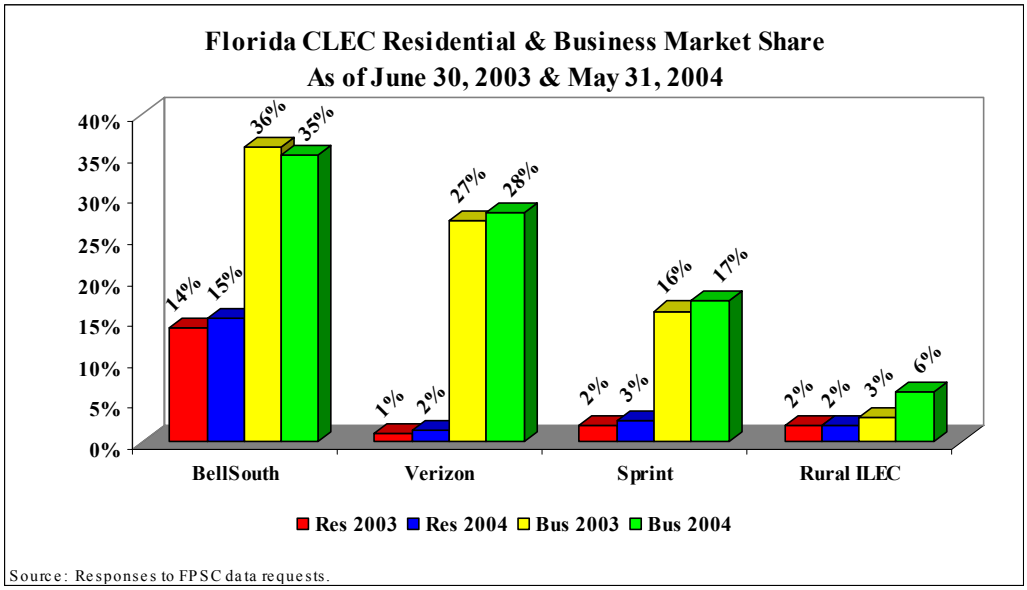


Figure 4 shows CLEC share of the residential and business markets by ILEC. The figure highlights that substantial residential competition is taking place mainly in BellSouth's territory. As will be discussed later, CLECs currently rely primarily on UNE-P to serve the residential

market, and UNE-P rates are lowest in BellSouth's territory. While additional reasons may exist, CLECs appear to have found it less profitable to enter the residential markets (at least using the UNE-P strategy) in Verizon's and Sprint's territories due to low margins between the ILEC's local rates (which ILECs and some facilities-based CLECs argue are artificially low) and the UNE-P rates (which many CLECs argue are too high).

Figure 4



4. Competitive Presence by Exchange

Table 3 shows that the number of exchanges with three or more competitors continues to increase, although at slower rates of increase than in previous years.[52] The number of exchanges with three or more CLECs increased from 243 in 2003 to 248 in 2004. Three or more CLECs now compete in 90% of Florida exchanges compared to 87% last year. However, the number of exchanges without CLEC providers increased from 8 in 2003 to 13 this year. Overall, approximately 95% of Florida exchanges have at least one CLEC competitor.

[52] The 2003 Report erroneously stated that the number of exchanges with two or more CLECs was 12; the correct number was 11.

Table 3 Summary of Florida Exchanges With & Without CLEC Providers			
	2002	**2003**	**2004**
Exchanges with one CLEC provider	20	15	13
Exchanges with two CLEC providers	14	11	3
Exchanges with three or more CLEC providers	229	243	248
Exchanges without a CLEC provider	14	8	13
Exchanges without a business CLEC provider	61	57	56
Exchanges without a residential CLEC provider	19	13	17
Total exchanges in Florida	277	277	277

Source: Responses to FPSC data requests.

As the following tables indicate, CLECs concentrate on larger metropolitan areas. As discussed in our 2003 report, there are a number of reasons for this. The majority of Florida's most populated exchanges are in BellSouth's territory. Higher population densities improve economies of scale. These economies are reflected in BellSouth's costs and resulting UNE rates and explains in part why each exchange shown in Table 4 is in BellSouth's territory.

Table 4 Florida Exchanges with the Most CLEC Providers						
	Residential		**Business**		**Total CLEC Providers**	
Exchange	**(2003)**	**(2004)**	**(2003)**	**(2004)**	**(2003)**	**(2004)**
Miami	78	85	65	81	98	110
Fort Lauderdale	73	82	54	70	91	106
West Palm Beach	68	82	53	67	86	105
Orlando	67	76	53	62	88	104
Jacksonville	67	76	49	64	84	103
Hollywood	69	77	45	59	47	100
Coral Springs	53	77	35	61	67	99
North Dade	64	71	53	57	84	92
Perrine	55	66	42	52	74	87
Daytona Beach	54	56	41	52	75	82

Source: Responses to FPSC data requests.

Table 5 further illustrates the concentration of CLECs in the larger metropolitan areas. This table shows that 58% of CLEC access lines are concentrated in the ten largest Florida exchanges, whereas these exchanges serve 44% of total access lines in Florida. Six of the largest exchanges are in BellSouth's territory, three are in Verizon's, and one is in Sprint's. For reasons mentioned previously, CLECs have achieved significant residential market penetration only in the BellSouth exchanges.

Table 5 Ten Largest Exchanges CLEC Market Share by Customer Type											
			Total Lines in Exchange			CLEC Total			CLEC Market Share		
	Exchange	ILEC	Res	Bus	Total	Res	Bus	Total	Res	Bus	Total
1	Miami	BellSouth	661,666	536,100	1,197,766	115,057	180,308	295,365	17%	34%	25%
2	Tampa	Verizon	445,673	338,277	783,950	10,486	110,541	121,027	2%	33%	15%
3	Fort Lauderdale	BellSouth	300,925	253,998	554,923	60,408	106,105	166,513	20%	42%	30%
4	Jacksonville	BellSouth	303,666	233,391	537,057	59,271	90,282	149,553	20%	39%	28%
5	West Palm Beach	BellSouth	326,746	166,876	493,622	43,550	53,658	97,208	13%	32%	20%
6	Orlando	BellSouth	268,556	216,786	485,342	42,987	89,883	132,870	16%	41%	27%
7	Hollywood	BellSouth	221,784	95,220	317,004	54,997	37,285	92,282	25%	39%	29%
8	St. Petersburg	Verizon	213,830	101,524	315,354	2,729	25,346	28,075	1%	25%	9%
9	Clearwater	Verizon	199,073	103,788	302,861	1,757	37,755	39,512	1%	36%	13%
10	Tallahassee	Sprint	101,155	119,575	220,730	4,343	18,352	22,695	4%	15%	10%
Grand Total			3,043,074	2,165,535	5,208,609	395,585	749,515	1,145,100	13%	35%	22%
% of Total Lines in FL			40%	52%	44%	54%	60%	58%			

Source: Responses to FPSC data requests.

A complete listing of CLEC providers by exchange is shown in Appendix B. The listing indicates that in the majority of Florida's exchanges, the number of CLEC providers has increased in both the residential and business marketplace.

B. STATUS OF COMPETITIVE MARKETS

1. Changing Market Trends

The previous section provided a description of the current market share positions of the Florida ILEC and CLEC providers. This section examines the underlying changes in access lines since 2001. This examination includes a closer look at the growth trends indicated by the data in Table 1 on page 21.

a. Overall Access Line Trends

The first trend discussed is the disparate growth rates for Florida residential access lines and Florida business access lines. From 2001 to 2002, total Florida access lines declined for the first time. However, as Figure 5 shows, business lines have since recovered and exhibited a particularly strong growth of 9% in 2004. This points to a strong business climate in Florida as an underlying factor. Residential lines, in contrast, show continued declines. A drop of 5% in 2004 represents the largest annual percentage loss to date. This decline indicates that traditional access lines are likely being lost to residential broadband providers and intermodal competitors. Intermodal competitors are those such as cable and wireless carriers providing service using their own technology and facilities rather than traditional telephone facilities.

Figure 5

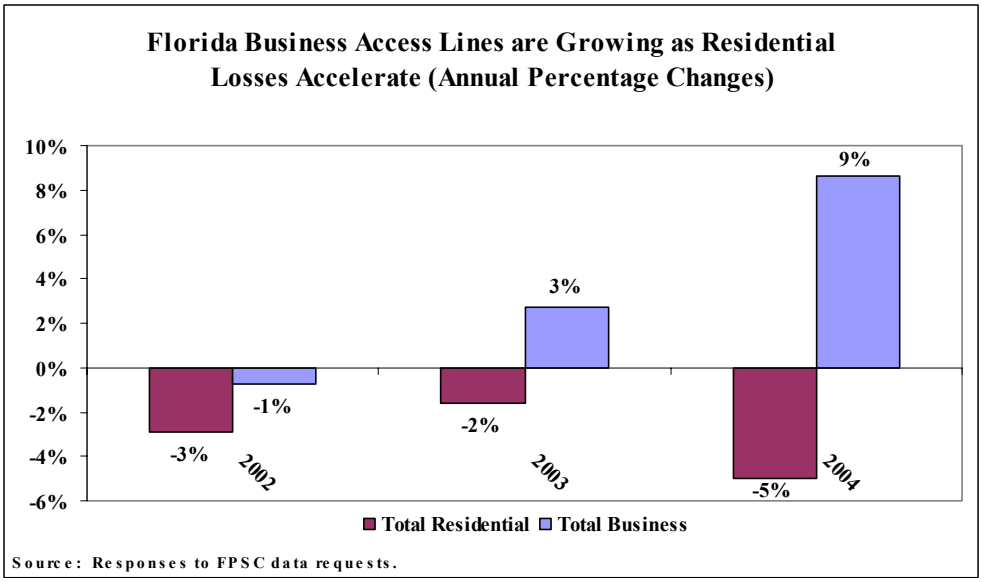
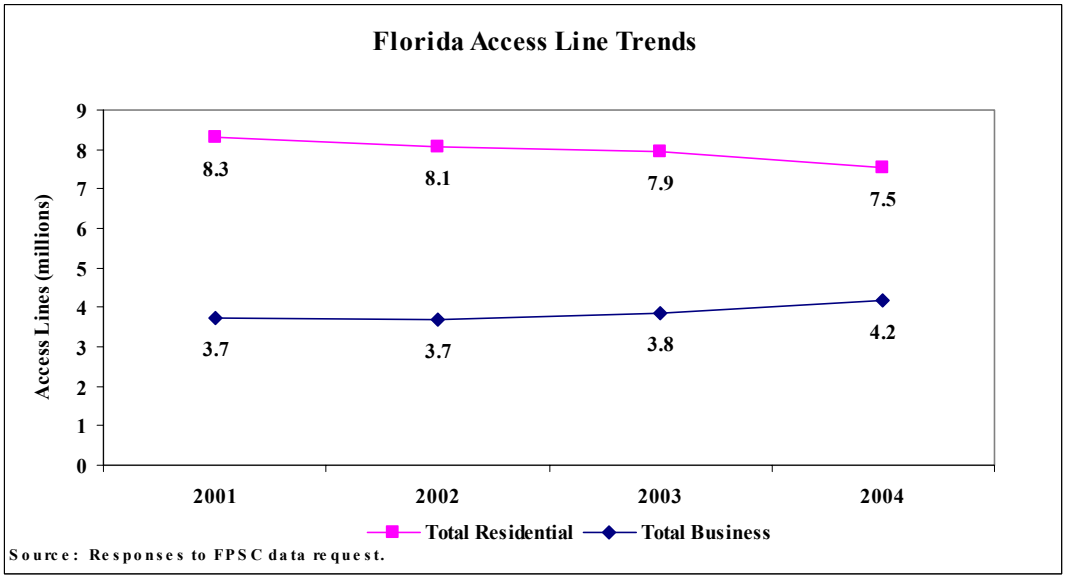


Figure 6 presents the data in terms of absolute line counts. This shows a loss of nearly 763,000 residential access lines over the past three years, with total residential access lines declining to 7.5 million lines. In the same period, businesses have added approximately 447,000 lines to total approximately 4.2 million.

Figure 6



b. ILEC versus CLEC Line Trends

Examining CLEC and ILEC access line growth, the data appear to indicate that both CLECs and ILECs are finding it increasingly difficult to compete in today's market and regulatory environment. Revealing that CLECs are not the beneficiaries of the recent ILEC access line decline, Figure 7 shows a large reduction in CLEC access line growth since 2001. While CLECs achieved 57% gains in overall access lines in 2002, and 24% growth in 2003, there was only marginal overall growth of 6% in 2004. This was comprised entirely of gains in the business market where annual growth was 10%. In the residential market, CLECs essentially had no growth, down from a 49% growth rate only two years earlier.

Figure 7

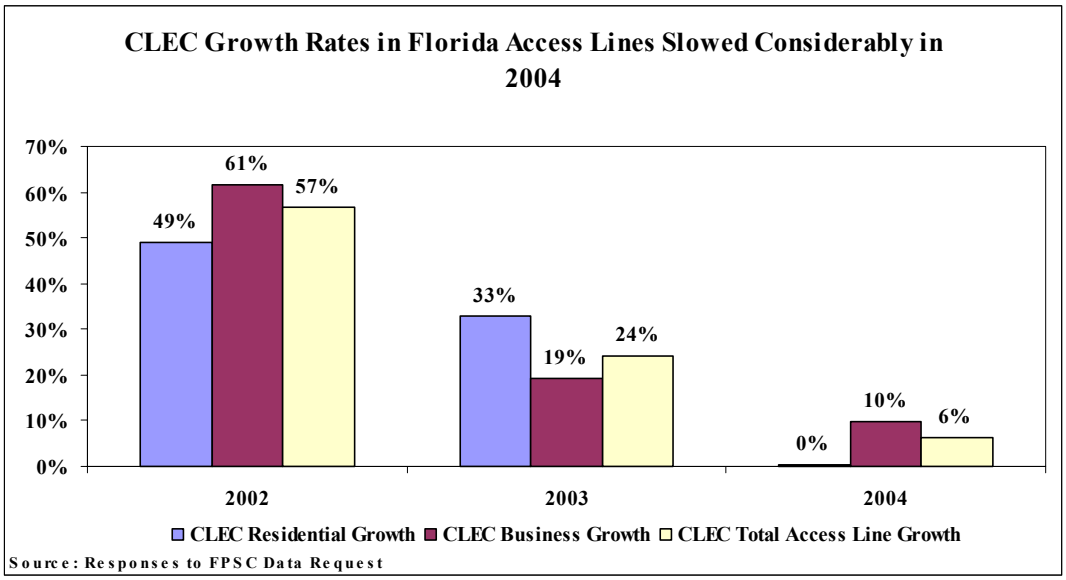
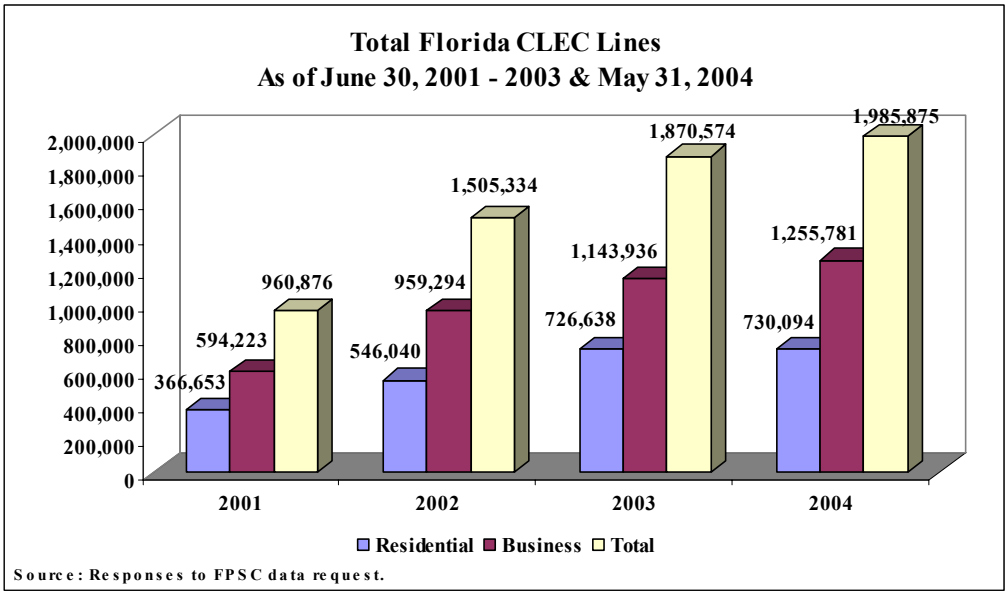


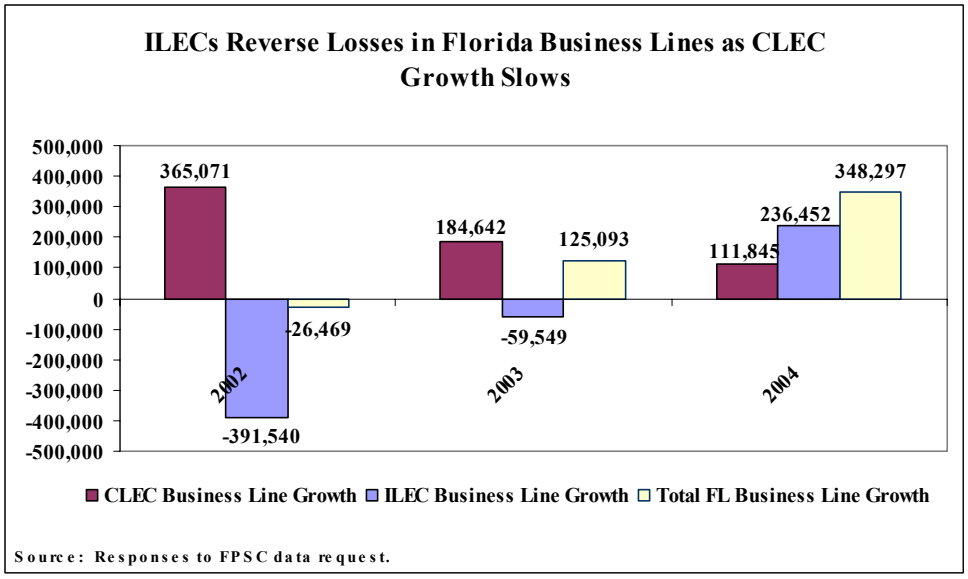
Figure 8 illustrates the percentage growth in CLEC access line counts for the most recent three years. The number of CLEC residential and business access lines each doubled from 2001 to 2004. The slow growth in 2004 is again distinguished from the strong gains of previous years.

Figure 8



Since Florida markets were opened to competition with the 1995 Florida act and the 1996 federal act, CLECs have made the greatest penetration in the business market. In competition with CLECs, ILECs have been offering discounted services to small and medium-sized businesses willing to sign extended contracts. These ILEC programs appear to be effective, as indicated by recent trends in business access lines. While total business line growth in 2004 was 9% (as shown in Figure 5) and CLECs maintained business line growth of 10% (Figure 7), this data does not capture the true magnitude of the shift in new business market share. Figure 7 above reveals that CLEC business line growth has fallen dramatically since the 61% growth posted in 2002. Further, Figure 9 below shows that the recent trend of ILEC business line losses and strong CLEC gains has reversed in 2004. In 2002 ILECs lost almost 400,000 business lines and CLECs gained over 365,000 such lines. In 2004 CLECs gained only 111,845 business lines, while ILECs gained over 236,000, accounting for 68% of the 2004 business line growth. Net business gains by both ILECs and CLECs, which occurred for the first time since 2001, indicate an improving business climate for the state as a whole.

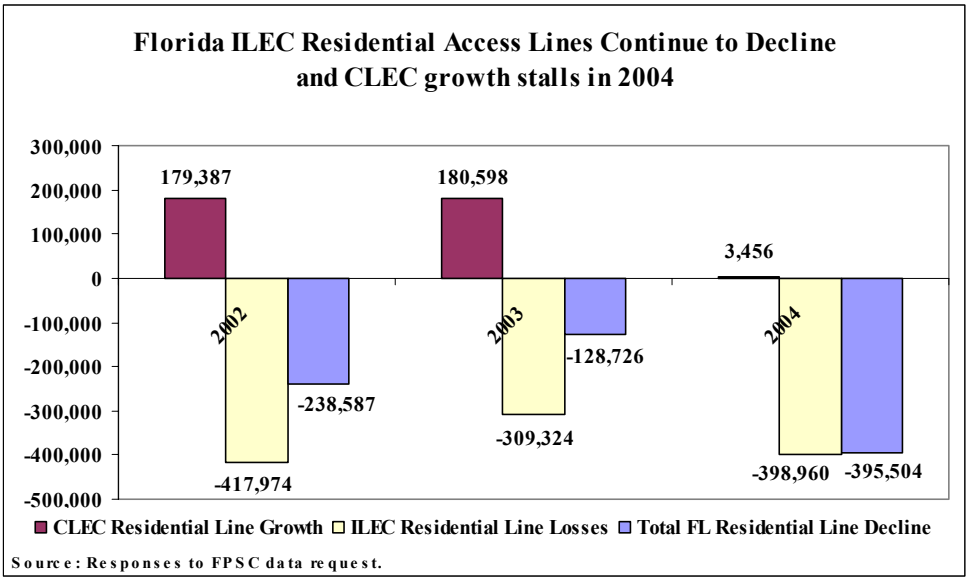
Figure 9



Just as in the business market, CLECs have seen strong growth rates in residential lines sharply curtailed in 2004. After gaining over 180,000 lines in 2003, as shown in Figure 10, CLECs saw only a marginal increase of 3,456 residential access lines in 2004. This decline in growth rates may be attributable to a number of factors, including: an overall depressed telecom sector; decreases in the level of capital flowing from Wall Street to the CLEC community; regulatory uncertainty regarding the fate of UNE-P; BellSouth's re-entry into the long distance market; price and service competition from ILECs' and others' bundled service offerings;[53] and competition from intermodal competitors such as wireless, cable and VoIP carriers.

[53] These bundled offerings may include choices of local, long distance, DSL, and now satellite TV and wireless services at discounted prices.

Figure 10



While the net number of business lines increased for this reporting period, the net number of residential access lines continued to decline, even in the face of continued Florida population growth. The largest net loss to date occurred in the 2004 reporting period when ILEC residential losses totaled approximately 399,000 lines and CLECs added only 3,456 residential lines. This points to the growing number of lines replaced by broadband connections and the influence of intermodal competition in the residential voice market. Intermodal competition is discussed in greater detail in Chapter IV.

Section 271 of the 1996 Act also has contributed to the development of the competitive environment faced by market participants today. Section 271 allowed the RBOCs to re-enter the market for long distance services, subject to an extensive pre-qualification process by the FCC and state commissions. BellSouth began offering long distance service in Florida after receiving FCC approval for the Florida market in December 2002. Upon re-entry into long distance, RBOCs quickly achieved significant market share. In July 2004, BellSouth announced a total of 5.1 million long distance customers and 39.7% penetration of its mass market customers region-wide. In Georgia and Louisiana, where BellSouth first gained 271 approval two years ago, the penetration rate is up to 44.1%. In Florida and Tennessee, where BellSouth has been competing for only six quarters, the penetration rate is 35.8%.[54] Verizon reported even stronger long distance results, with 45% long distance penetration of regional access lines as of the first quarter of 2004.[55]

[54] BellSouth Investor News. April 22, 2004. <http://www.bellsouth.com/investor/pdf/1q04p_news.pdf>.

[55] Verizon 1Q 2004 Earnings slide presentation. April 27, 2004. <http://investor.verizon.com/financial/quarterly/VZ/1Q2004/>.

2. Impact of Regulatory Changes

In addition to competition from other local exchange providers and from intermodal competitors, ILECs and CLECs faced significant regulatory uncertainty this past year. As discussed in this report, UNE-P is currently the most prevalent strategy used by CLECs in Florida. By combining an ILEC's switching with its loop and transport elements, UNE-P allows CLECs to compete with little or no investment in their own facilities. Facilities-based competitors, like Florida Digital Network and Knology, combine their own switching facilities with existing loop and transport facilities of the ILEC (sometimes called the "bottleneck" facilities) to provide service. The majority of Florida CLECs have, thus far, relied on UNE-P to serve the mass market and have built a substantial customer base by offering unlimited local and long distance services for a single discounted price. The prevalence of UNE-P will likely change in the near future, however, due to regulatory and related court decisions aimed at promoting facilities-based strategies and due to CLECs' efforts to modify their business plans accordingly.

While there are numerous regulatory decisions by the FCC and state commissions that are impacting ILECs and CLECs, the following discussion focuses on those regulatory changes that have implications on the future of the UNE-P strategy as well as on the future of facilities-based strategies.

a. TRO and Its Appeal

On August 21, 2003, the FCC released its *Triennial Review Order* (TRO),[56] which contained revised unbundling rules and responded to the D.C. Circuit Court of Appeals' remand decision in *USTA I*.[57] The TRO had eliminated enterprise switching as a UNE on a national basis. For other UNEs (e.g., mass market switching, high capacity loops, dedicated transport), the FCC made a national finding of impairment, but acknowledged there may be areas where impairment does not exist; the FCC delegated to the states the task of identifying these areas.[58] In addition, the TRO imposed new obligations on ILECs (e.g., commingling and conversion of special access to Enhanced Extended Links (EELs)). The TRO did not address the issues of UNE pricing or retail rates charged by ILECs or CLECs. The TRO was subsequently appealed to the D.C. Circuit Court of Appeals.

[56] In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, rel. August 21, 2003.

[57] United States Telecom Association v. FCC, 290 F.3d 415 (D.C. Cir. 2002) (USTA I).

[58] The FCC directed the states to make their determinations within nine months of the effective date of the order. In response to the *TRO*, the Commission opened three dockets. See Chapter VI for more information on the Commission dockets regarding implementation of the TRO.

On March 2, 2004, the D.C. Circuit Court of Appeals, in *United States Telecom Ass'n v. FCC*[59] *(USTA II),* vacated and remanded certain provisions of the TRO. Among other holdings, the D.C. Circuit held that:

- The FCC cannot delegate its authority to the states, except for fact-finding and other limited circumstances.[60]

- The states cannot be granted the authority by the FCC to make the impairment findings that the law requires the FCC to make.

- The FCC used an improper analysis in concluding that mass market switching was impaired nationally.

- The FCC used an improper analysis in concluding that certain dedicated transport was impaired nationally.

The FCC did not appeal the D.C. Circuit decision to the U.S. Supreme Court. In addition, the Solicitor General of the United States did not appeal the decision. Certain parties in the proceeding did appeal. The United States Supreme Court, however, declined to hear the appeal, and the D.C. Circuit decision stands.

The D.C. Circuit's ruling has provided guidance to the FCC regarding its unbundling duties under the 1996 Act. The Court specifically rejected the FCC's delegation of impairment findings to state commissions. The Court indicated the FCC could weigh other goals of the 1996 Act against impairment. The Court ruled that the market test for elements should not be too specific and must consider the *ability* of a CLEC to enter the market. The Court provided clarity by specifically upholding certain FCC decisions in the TRO, including not requiring ILECs to unbundle the broadband capabilities of hybrid copper-fiber loops and fiber-to-the-home loops. The Court also sent guidance through the following statement regarding the purpose of the 1996 Act:

> The purpose of the Act is not to provide the widest possible unbundling, or to guarantee competitors access to ILEC network elements at the lowest price that government may lawfully mandate. Rather, its purpose is to stimulate competition – preferably genuine, facilities-based competition.[61]

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[59] 359 F. 3d 554 (D.C. Cir. 2004) (*USTA II*), cert. denial, Nos. 04-12, 04-15, 04-18 (October 12, 2004).

[60] Specifically, the Court states: "We therefore vacate, as an unlawful subdelegation of the Commission's §251(d)(2) responsibilities, those portions of the Order that delegate to state commissions the authority to determine whether CLECs are impaired without access to network elements, and in particular we vacate the Commission's scheme for subdelegating mass market switching determinations. (This holding also requires that we vacate the Commission's subdelegation scheme with respect to dedicated transport elements, discussed below.)" *USTA II* at 18.

[61] *USTA II* at 31.

b. FCC's Interim and Final Rules

As a result of the Court's mandate, the FCC released an *Order and Notice ("Interim Rules")*[62] on August 20, 2004, requiring ILECs to continue providing unbundled access to mass market local circuit switching, high capacity loops, and dedicated transport until the earlier of the effective date of final FCC unbundling rules or six months after Federal Register publication of the *Order and Notice*. Additionally, the rates, terms, and conditions of these UNEs are required to be those that applied under ILEC/CLEC interconnection agreements as of June 15, 2004.[63] In the event that the interim six months expires without final FCC unbundling rules, the *Order and Notice* contemplates a second six-month period during which CLECs would retain access to these network elements for existing customers, at transitional rates. Besides establishing interim measures, the *Order and Notice* seeks comment on, among other things, alternative unbundling rules that will respond to *USTA II.*

The FCC is seeking to finalize its rules by year end 2004. On August 23, 2004, certain ILECs filed a *Mandamus Petition*[64] with the D.C. Circuit in response to the FCC's *Order and Notice*, specifically seeking vacatur of the interim Triennial Order. Most notably, the ILECs strongly objected to the FCC allowing the addition of new customers during the first six months and the continued availability of switching, dedicated transport, and enterprise loops despite the lack of any impairment finding. On October 6, 2004, the Court entered an order holding the matter in abeyance until January 4, 2005. Numerous parties have indicated that if the FCC does not produce its final rules by year end 2004, they will seek a court order finding no impairment for switching, dedicated transport, and enterprise loops and a determination that such order be binding on states.

On September 13, 2004, the Interim Rules went into effect, and the FCC seems poised to issue final rules by year end 2004. Many expect the FCC's final unbundling rules (pursuant to the USTA II decision) to provide for CLECs to transition off of ILEC switches and to their own switches over some period of time at least in certain circumstances.[65] The final rules may also provide for stepped increases for access to ILEC switching during an interim period. It is unclear precisely how future rates for local switching will be established, and who will set such rates.

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[62] In the Matter of Unbundled Access to Network Elements, WC Docket No. 04-313; In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, Order and Notice of Proposed Rulemaking, FCC 04-179, rel. August 20, 2004 (Order and Notice).

[63] Except to the extent the rates, terms, and conditions have been superseded by 1) voluntarily negotiated agreements, 2) an intervening FCC order affecting specific unbundling obligations (e.g., an order addressing a petition for reconsideration), or 3) a state commission order regarding rates.

[64] *United States Telcom Association v. FCC*, Petition for a Writ of Mandamus to Enforce the Mandate of the Court, August 23, 2004 (*Mandamus Petition*).

[65] Companies like Florida Digital Network, Supra, and Knology currently have self-provision switching.

If local switching is unbundled pursuant to section 271, the FCC has concluded that it must satisfy the "just and reasonable" standard,[66] a conclusion affirmed in USTA II.[67] There is substantial controversy as to whether such rates are subject to the section 252 arbitration process, with the states adjudicating any dispute concerning the appropriate rates for local switching, or instead are subject to review by the FCC.[68] It is unknown when these matters will be resolved.

As with any regulatory change, the extent to which companies doing business in Florida are impacted will vary. CLECs that are serving the mass market via a UNE-P strategy and that are operating at the margins may be negatively impacted. In contrast, some facilities-based CLECs serving the mass market will likely be positively impacted.

The final rules will undoubtedly have an impact on CLEC business plans. Some CLECs, like Supra Telecom, that are providing service via both UNE-P and their own facilities, may increase reliance on their own switches/facilities. Other CLECs may merge, as Florida Digital Network and ITC DeltaCom have done, in order to obtain a larger footprint and greater economies of scale. While some CLECs may choose to exit the market, other CLECs may change their product offerings. Z-Tel Communications announced in July that it would stop seeking new customers for local and long distance telephone service in 43 of the 48 states it now serves.[69] Rather than a nationwide approach based on UNE-P, Z-Tel stated their new business model is to be based on targeting select urban centers with the company's own facilities, loops leased from the incumbents (UNE-L), and VoIP as the service method. Tampa, Florida is one of the metro areas Z-Tel intends to continue marketing. In addition, AT&T recently announced it was ending efforts to gain new residential customers in the traditional landline voice business. The company said it will no longer pursue long distance or local customers, except via its new VoIP undertaking, which the company is rolling out nationwide.[70] As of September 30, 2004, AT&T was offering residential VoIP service in 170 major markets throughout the U.S., covering 62% of U.S. households.[71] MCI also reported in its 10-Q report filed with the SEC on August 9,

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[66] TRO, paragraph 663 states:

> Thus, the pricing of checklist network elements that do not satisfy the unbundling standards in section 251(d)(2) are reviewed utilizing the basic just, reasonable, and nondiscriminatory rate standard of sections 201 and 202 that is fundamental to common carrier regulation that has historically been applied under most federal and state statutes, including (for interstate services) the Communications Act. Application of the just and reasonable and nondiscriminatory pricing standard of sections 201 and 202 advances Congress's intent that Bell companies provide meaningful access to network elements.

[67] "Of course, the independent unbundling under §271 is presumably governed by the general nondiscrimination requirement of §202." USTA II at 53.

[68] *See* BellSouth Emergency Petition for Declaratory Rule and Preemption of State Action, WC Docket No. 04-245, Federal Communications Commission.

[69] Rodgers, Will. "Z-Tel CEO Outlines Survival Strategy." Tampa Tribune. July 29, 2004 <http://money.tbo.com/money/MGBB7FC68XD.html>.

[70] AT&T press release. July 22, 2004. <http://www.att.com/ir/tn/>.

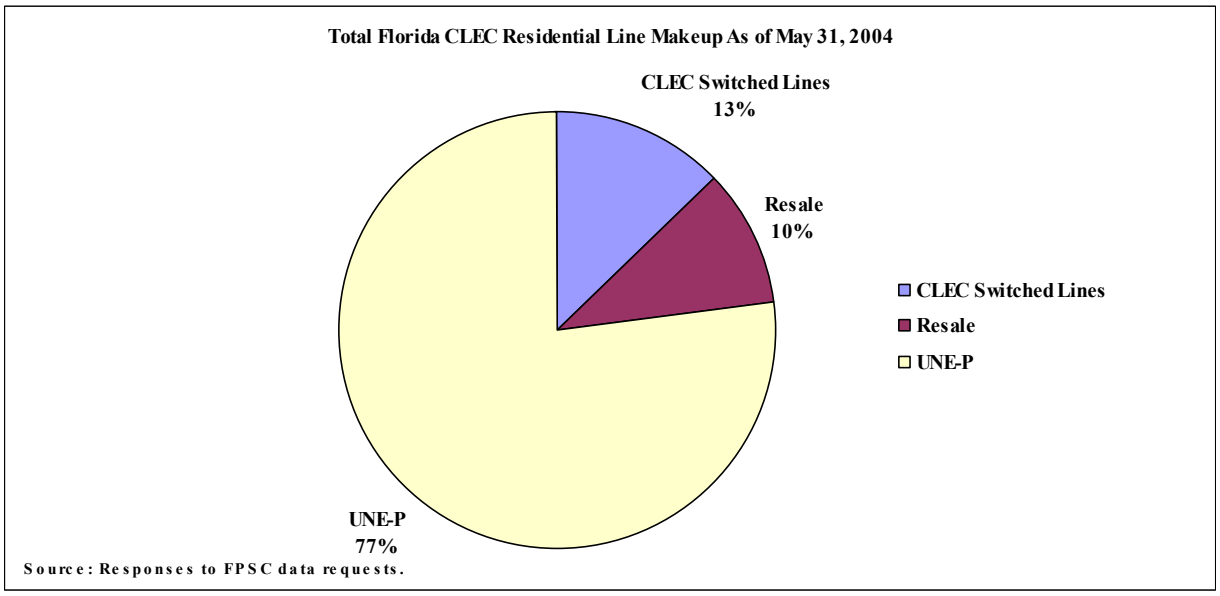
[71] "AT&T announces Third-Quarter 2004 Earnings." AT&T Press Release. October 21, 2004.

2004, that the company "may be forced to raise residential phone services prices in some markets and pull out of others, and has reduced its sales efforts pending clarity on its future pricing structure."[72]

Past Commission reports on competition have highlighted the importance of UNE-P to a CLEC's ability to compete for mass market customers. By combining switching with the loop and transport elements, UNE-P allows CLECs to compete with little or no investment in facilities (using resale to serve customers also requires no investment in facilities). CLECs in Florida, such as AT&T, MCI and Supra, have relied mainly on UNE-P to serve the mass market and have built a substantial customer base by offering unlimited local and long distance services for a single discounted price.

Figure 11 illustrates that a majority of CLECs in Florida have chosen a UNE-P strategy, as opposed to a UNE-L or total facilities-based strategy. Currently, 77% of CLEC residential lines are served via UNE-P, while another 10% are served through resale. Only 13% of CLEC residential lines are served through CLEC switches, and the majority of these lines are provisioned over cable company facilities that use traditional circuit switching technology.

Figure 11

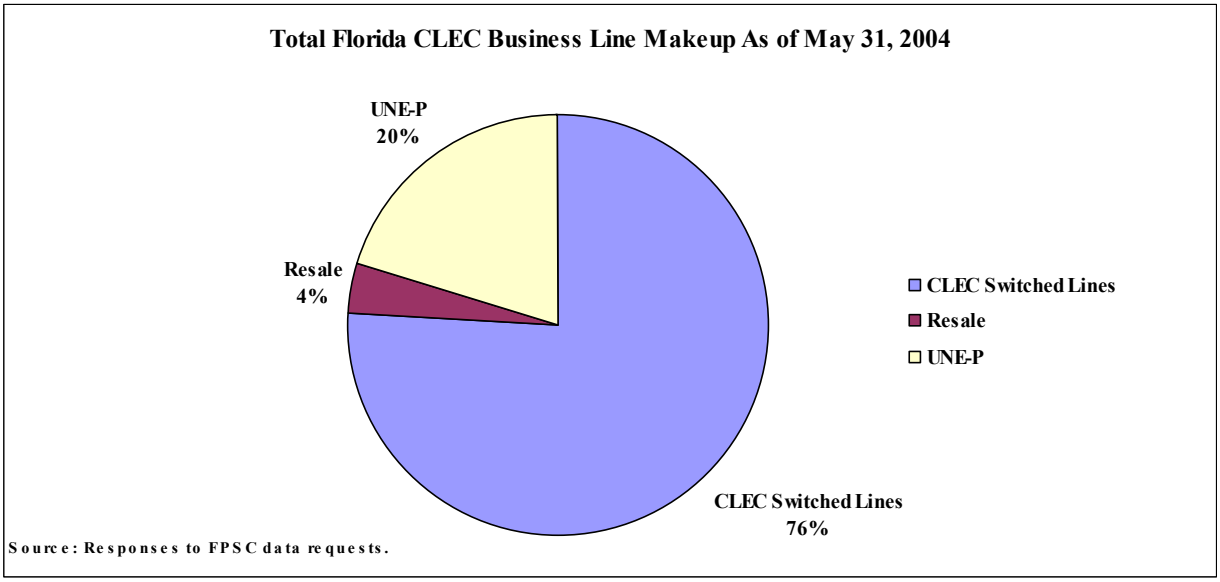


In the case of business offerings, the predominant method of service is facilities-based. These are lines served by CLEC switches and some combination of CLEC or ILEC loops and transport. Figure 12 shows that 76% of CLEC business lines are facilities-based, while 20% are served via UNE-P. Generally, these UNE-P lines are serving the small business market. Substantial increases in switching rates may make it unprofitable for some CLECs to serve such customers. The outcome of the FCC's new rules regarding UNEs on the margins faced by

[72] MCI Form 10-Q. Page 29. August 9, 2004. <http://global.mci.com/about/investor_relations/sec/>.

facilities-based CLECs is unclear. In particular, CLECs providing their own switching could still be subject to price increases for high-capacity loops, transport and enhanced extended links (EELs).

Figure 12



3. Market Shifts

As discussed in this report, major developments in the technological, competitive and regulatory arenas are contributing to significant shifts in the structure of the telecommunications market. The traditional telephone and cable networks have evolved into broadband digital networks capable of providing various combinations of voice, data and video applications. The competitive front in the voice market has progressed from not only an ILEC/CLEC focus, but to one that also takes into account the growing presence of intermodal competition. The Section 271 process of the 1996 Act also broadened the scope of competitive offerings as RBOCs reentered the market for long distance services, subject to an extensive pre-qualification process by the FCC and state commissions. In addition, the FCC's final unbundling rules will likely result in many CLECs shifting business plans away from UNE-P based offerings.

In this rapidly developing telecommunications marketplace, there may be an increased level of uncertainty regarding the future structure of competition. Some industry analysts believe incumbent voice providers could acquire market power in wireline communications. Others maintain that the future market for telecommunications could be concentrated around a small group of ILECs and cable providers resulting in reduced incentives for competition. However, some analysts believe that intermodal competition from wireless and cable providers will prevent such market contingencies. These analysts point to increasing price competition taking place among intermodal providers as evidence that it is already doing so. While the evidence of extreme outcomes, such as market power, is lacking, there is likely to be much debate about the future of telecommunications competition as the market evolves.

This chapter discussed certain data relating to ILEC and CLEC market share trends in Florida's market for wireline telephony. Specifically, the data cover certain shifts in residential and business share between Florida ILECs and CLECs. The following chapter discusses some of the macro trends which may be underlying market shifts in Florida, as well as the nation.

CHAPTER IV: ADVANCED COMMUNICATIONS LANDSCAPE

A. INTERMODAL COMPETITION

As discussed previously, major transitions taking place in the telecommunications industry have impacted the competitive pressures on providers seeking to serve mass-market consumers. Technological innovation and market conditions (e.g., limited pool of venture capital or financing for an increasing number of competitors) will undoubtedly impact how firms compete (and which firms win or lose). Some analysts predict that providers of traditional voice communications will face substantial competitive pressures (i.e., some firms will not survive) as intermodal providers emerge to serve mass-market consumers without reliance on ILEC telephone networks. Cable, wireless and other intermodal providers could bring in the anticipated vibrant, facilities-based competition that would forever change the face of the telecommunications market. As the Wall Street Journal recently reported:

> The cable and telecommunications industries are raiding each other's turf at such a dizzying pace that the lines between them are blurring like never before. Indeed, it's becoming almost impossible for communications companies to stay competitive without branching into a whole new business. Nearly all of the large cable operators in the U.S. are offering phone service over the Internet.[73] All of the regional Bells have formed partnerships with satellite operators to offer TV service, as SBC has done, and some, like Verizon, are building fiber-optic networks so they can offer television signals over their phone lines. For consumers, the competition means lower prices and more choice… [74]

In an August 2004 interview, Sprint CEO, Gary Forsee, predicted substantial competition from the cable and wireless sectors, stating:

> What the government has to pay attention to is overall competition. Is cable going to be able to gain traction and become a viable competitor to the RBOCs? I think that's probably the case. Wireless is a real competitive threat to the local-access business. The Vonage types, the power-line types, those are niches around the edge and will gain some share, but real competition will come from cable and wireless.[75]

A Wall Street Journal article bluntly noted the threat these other sources – cable, wireless, and VoIP – are posing to traditional telecommunications providers. "The cable industry's push into the phone business and a torrent of innovations such as Internet calling and

[73] Although there is a common misconception that all VoIP traffic travels over the Internet, the large cable companies actually offer VoIP over cable plant using Internet protocol.

[74] Latour, Almar, "Free for All," The Wall Street Journal, September 13, 2004, p. R1.

[75] Pappalardo, Denise and Paul McNamara. "Forsee Talks Telecom." Network World. August 9, 2004. <http://www.nwfusion.com/>.

advanced wireless technology are threatening the foundations of the nation's $300 billion telecom industry."[76] The scale of competitive rollout is an unprecedented challenge to ILECs. Comcast plans to have 95% of its cable network VoIP-capable by 2006. This would provide the ability to offer VoIP service to approximately 40 million homes.[77] Time Warner plans to have its Digital Phone service available to the nearly 19 million homes in its service territory by the end of 2004.[78] Cablevision already offers voice service throughout its service territory of over four million households[79] and Cox Communications currently has over one million customers using traditional and Internet-based voice service.[80]

Fortunately for consumers, the competition from these non-traditional voice providers is resulting in lower prices in some areas:

> In response to $29.95 digital-subscriber-line phone (DSL) service from telecom rival Verizon, Cablevision decided to do a little discount pricing itself. In June, the nation's sixth-largest cable operator, with 3 million subscribers in New York, New Jersey, and Connecticut, began temporarily offering new customers a "triple play" bundle of high-speed Internet service, unlimited phone service, and, of course, digital cable TV, for $90 per month for the first year. That dramatically undercut Verizon's combined voice, DSL, and satellite TV package of $135.[81]

The following discussion centers on these emerging intermodal competitors and the opportunities they bring to the market.

1. Voice over Internet Protocol

Voice over Internet Protocol (VoIP) is a technology that uses a broadband connection for voice communications over the public Internet or private IP-based networks. Although VoIP has been around for nearly a decade, entering 2003 it was still a relatively obscure technology used

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[76] Brown, Ken and Almar Latour. "Heavy Toll: Phone Industry Faces Upheaval as Ways of Calling Change Fast." Wall Street Journal. August 25, 2004. p. A1.

[77] Hibbard, Justin. "Comcast's Virile VOIP Story." Light Reading. May 27, 2004. <http://www.lightreading.com/document.asp?doc_id=53568&site=lightreading>. Accessed November 8, 2004.

[78] Greene, Tim. "Supercomm keynote: VoIP has Potential For Cable Companies." Network World Fusion. June 23, 2004. <http://www.nwfusion.com/edge/news/2004/0623sccable.html>. Accessed November 8, 2004.

[79] Maiella, Jim. "Cablevision Announces First Widescale Digital Voice-Over-Cable Deployment." Cablevision Website, Corporate Information. November 11, 2003.

[80] Senia, Al. "Exclusive: Cox Decides VoIP is Ready for Prime Time." America's Network Enews. September 13, 2004. <http://www.americasnetwork.com/americasnetwork/article/articleDetail.jsp?id=122134>. Accessed November 8, 2004.

[81] Pethokoukis, James. "War of the Wires." U.S. News & World Report. Sept. 27, 2004. <http://www.usnews.com/usnews/issue/040927/tech/27cable.htm>.

mainly by tech-savvy individuals for computer-to-computer voice communications. VoIP gained substantial momentum during 2003 as start-up companies like Vonage, Packet8 and Net2Phone began offering VoIP service that provided much of the functionality of traditional telephone service. Subscribers could make calls using a standard handset plugged into a device connected to the customer's broadband line, and call quality was much improved.

VoIP's momentum has grown since 2003 as signalled by a dramatic increase in subscribers and numerous service launch announcements by major cable Multiple System Operators (MSOs).[82] As year 2004 has progressed, VoIP's momentum has increased such that it appears to have made the transition from a technology-driven to a market-driven service.[83] Vonage has emerged as a market leader in 2004 with approximately 215,000 subscribers and an average of 10,000 new VoIP lines added per month.[84] In perhaps a more significant signal of VoIP's emergence, major MSOs have launched an all out assault on the market with aggressive schedules for VoIP service rollouts over the next two years. (See discussion of cable telephony later in this chapter, in Section 3.) The MSO rollouts are significant in several respects. In communities where MSOs offer service, subscribers have been signing up at a rapid pace, and some industry analysts expect these companies to gain the lead quickly over alternative voice providers like Vonage.[85] Moreover, if the MSOs meet their timetables, service will be available to a significant percentage of the nation's households by the end of 2006.

Adding further to VoIP's momentum, traditional telephone companies have entered the race. Verizon,[86] the nation's largest RBOC, and AT&T,[87] the largest IXC and CLEC, have launched service nationwide. Another RBOC, Qwest, also has announced that it will roll out business services nationwide by year-end and residential services thereafter.[88] Additionally, AT&T is not the only major CLEC entering the fray. Covad also sees a future in VoIP as it

[82] An MSO is a company that operates more than one cable TV system.

[83] "VoIP Finds Its Sweet Spots – You May Be Surprised Where." Connecticut Research, Inc. <www.connecticutresearch.net>.

[84] Vonage website. <http://www.vonage.com/>.

[85] Yankee Group press release. August 2, 2004.

[86] Verizon. "Verizon Rings In Next Generation of Voice Services With VoiceWing Broadband Phone Service." News Release. July, 22, 2004. <http://newscenter.verizon.com/proactive/newsroom/release.vtml?id=86115>. Accessed November 8, 2004.

[87] AT&T. "AT&T Introduces New Residential VoIP Plan." News Release. October 14, 2004. <http://www.att.com/news/item/0,1846,13281,00.html>. Accessed November 8, 2004.

[88] Qwest. "Qwest Launches Integrated Voice and Data Service Using VoIP Technology." Press Release. October 4, 2004. <http://www.qwest.com/about/media/pressroom/1,1720,1604_archive,00.html>. Accessed November 8, 2004.

plans to launch service in all 100 of its MSAs by the end of 2004.[89] MCI also has stated its intention to offer mass market VoIP service, but has not yet announced a launch date.[90]

As VoIP gains momentum, other ILECs may see a need to have their own VoIP offerings in order to compete. Offering VoIP may have both offensive and defensive purposes. ILECs can take the offensive by crossing territorial boundaries to compete for customers, because service can be provided over any broadband connection. Defensively, VoIP offerings may be needed to fight off the very real threat from cable companies' newer networks and triple-play offerings.

VoIP's impact on both the competitive and regulatory landscapes will be significant. Some experts believe that VoIP has the potential to become the long-awaited 'killer app' that may spur further broadband growth. Additionally, the technology may represent "the most significant paradigm shift in the entire history of modern communications, since the invention of the telephone," said FCC chairman Michael Powell earlier this year to journalists at the World Economic Forum.[91] As if to show he was not exaggerating, Chairman Powell re-emphasized that statement in a prediction to U.S. telecommunications groups that "a wave of competition from internet-based telephone calls would turn the industry on its head."[92]

The rapid growth of alternative providers like Vonage is possible, because VoIP can be provisioned without investment in extensive infrastructure; service can ride on broadband infrastructures built out by other companies. Low capital requirements will help fuel growth that by some estimates is expected to capture some 17.5 million users, about 16% of U.S. homes, by the end of 2008.[93] (See Figure 13) The majority of these are expected to be served by cable companies,[94] because their ubiquitous networks extending to customer premises and triple-play service offerings could provide a significant advantage over other alternative providers. VoIP may be a key weapon in cable's bundled service offerings in an all-out war to win consumers away from ILECs.

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[89] Covad. "Covad Launches Voice over IP Services Based on Cisco Equipment that Provides Enhanced Performance to Customers Nationwide." News Room. August 31, 2004. <http://covad.com/companyinfo/pressroom/pr_2004/083104_news.shtml>. Accessed November 8, 2004.

[90] MCI. "MCI and Time Warner Cable Partner to Deliver Next Generation, IP-Enabled Communications." Press Release. December 8, 2003. <http://consumer.mci.com/cablevoice/timeWarnerPR.jsp>. Accessed November 8, 2004.

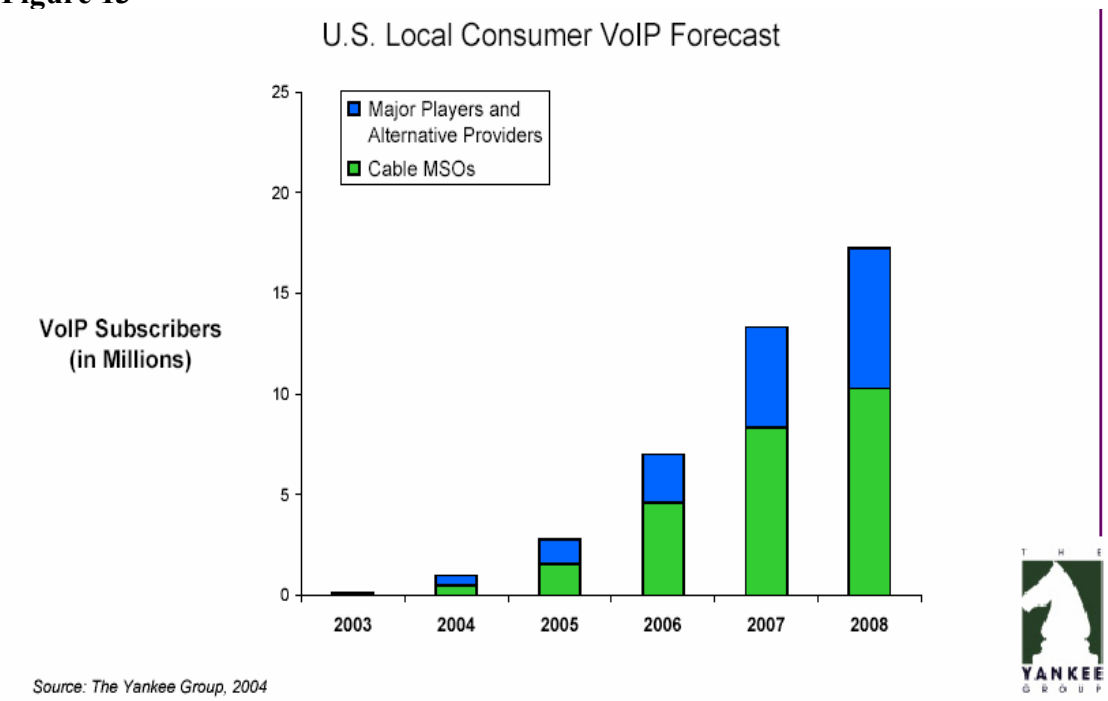
[91] Statement by FCC Chairman Michael K. Powell at the World Economic Forum in Davos, Switzerland on January 22, 2004.

[92] Remarks of FCC Chairman Michael K. Powell at the NCTA Convention on May 4, 2004.

[93] The Yankee Group news release. August 30, 2004.

[94] Ibid.

Figure 13



VoIP appears to be making significant inroads into the business market as well. According to Gartner analysts, VoIP is moving toward mainstream acceptance. While about 15% of all telephones shipped to businesses today use VoIP, shipments are expected to exceed 50% by 2006. Lower cost is an important component in adopting IP telephony systems and most enterprises are waiting for replacement cycles to remove older digital and analog telephone systems. The results of a ZDNet survey of over 400 IT professionals reveal that one third have paved the way for VoIP by converging a significant part of their voice and data networks. In addition to cost savings and integrated collaboration features such as videoconferencing, the benefit of increased productivity is cited as a key factor in adopting IP telephony.[95]

The proliferation of VoIP raises some potentially thorny regulatory issues that are under considerable debate. Some state utility commissions, such as California, Minnesota and New York, have asserted jurisdiction over VoIP services, although these rulings have been challenged in the courts. In Florida, the legislature found in 2003 that the provision of VoIP free of unnecessary regulation, regardless of provider, is in the public interest.[96] The Florida legislature specifically excluded VoIP from the definition of telecommunications service for purposes of regulation by the Commission. This exclusion is subject to the reservation of rights and obligations of any entity with respect to payment of access charges or other intercarrier compensation, if any, related to VoIP. Recently, the Commission submitted comments to the FCC that a national policy framework, consistent with Florida's deregulatory approach, would

[95] Farber, Dan. "Top Strategic Technologies for 2005." April 2004.

[96] Chapter 364.01(3), Florida Statutes.

best ensure that this new consumer-friendly technology is not squelched by a patchwork of varying state regulations.

At the federal level, both the U.S. Senate and House of Representatives have introduced legislation on the appropriate regulatory framework for VoIP calls. While bills in both chambers would prohibit states from extending their jurisdiction over VoIP, the Senate Committee on Commerce approved a bill that would allow state regulation in three areas: universal service, 911 services, and access charges. House legislation would give the FCC exclusive jurisdiction over VoIP in those three areas. Congress also has indicated interest in a complete rewrite of the Telecommunications Act that would address VoIP and other important issues. Meanwhile, the FCC may preempt state regulation of VoIP in a proceeding it currently has underway. Underscoring the magnitude of the proceeding, Chairman Powell stated that it "is really the curtain going up on a new era of communications" and "is the most important item in communications history, in some ways."[97] Other issues under consideration at the FCC deal with access of VoIP subscribers to emergency 911 services and law enforcement access for wiretapping under the Communications Assistance for Law Enforcement Act (CALEA).

One controversial regulatory issue is that VoIP providers currently do not pay many of the federal and state taxes and charges imposed upon traditional telephone companies. Telecommunications taxes are a significant source of state revenues, and states may seek to impose "old" taxes on this "new" technology. Other fees that currently do not apply to VoIP are Universal Service charges used to keep rates affordable in high-cost service areas and to subsidize low income subscribers. The debate over whether or not VoIP providers should pay the same taxes and fees as other voice providers will likely intensify as more voice traffic migrates off the PSTN and onto IP networks. At this point, it is unknown how and when the VoIP regulatory issues will be resolved.

With the migration of circuit-switched to packet-switched networks and advancements in VoIP protocols, VoIP may eventually reshape the entire competitive telecommunications landscape as we know it today. This reshaping, however, will take time as standardization of protocols and procedures will be needed for networks to interoperate.[98] Additionally, because existing data networks are designed for delivery of data traffic, not time-sensitive voice traffic, emphasis continues to be on improving ways to ensure optimal voice traffic delivery through enhanced routing protocols[99] and bandwidth management applications that shape, prioritize, compress and accelerate traffic to give real-time voice traffic higher quality and reliability than other types of traffic.[100]

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[97] Statement by FCC Chairman Michael K. Powell, IP-Enabled Services, WC Docket No. 04-36 (rel. March 10, 2004).

[98] Taaffe, Quida. "AT&T Aims to Get an Edge with Network Upgrade." September 2003. Accessed Sept 15, 2003.

[99] Lancaster, Tom. "Routing and Switching: OSPF Configuration." May 2004. Accessed May 11, 2004.

[100] Rendon, Jim. "Engineering VoIP Savings with Bandwidth Management." April 2004. Accessed April 26, 2004.

2. Wireless

Demand for wireless telephone service continues to grow, and some of this growth appears to be occurring at the expense of local exchange company access lines. According to the FCC, the number of mobile wireless subscribers nationwide has grown 5% since 2002, with subscribership at 54%[101] of the U.S. population as of December 31, 2003. In contrast, local exchange companies saw another 6.1 million drop in access lines nationwide in 2003, a 3.3% decline from the previous year.[102] While it is unknown what share of wireline losses are attributable to wireless, a growing number of wireless subscribers either see wireline service as unnecessary, or consider their wireless telephone to be their primary telephone. The FCC concluded in a recent study while evaluating the merger between Cingular and AT&T Wireless that while the switch from wireless to wireline is a fairly recent occurrence and is not widespread, it has the potential to become a "substantial source of facilities-based competition in the future."[103]

It is yet to be seen whether there will be widespread acceptance of wireless as a substitute for wireline. The FCC has found that, "…Consumers tend to use wireless and wireline services in a complementary manner and view the services as distinct because of differences in functionality."[104] Currently, about 7.5 million Americans use wireless telephones as their only telephones.[105] According to a report issued by In-Stat/MDR, 14.4% of U.S. consumers currently use a wireless telephone as their primary telephone.[106] Of the remaining 85.6% still using landline as their primary telephone, 26.4% of those would consider replacing it with wireless. This signifies considerable potential for wireline displacement over the next few years.[107] In-Stat/MDR predicts that by 2008, nearly a third of all U.S. wireless subscribers will no longer have a landline in their homes.[108] This trend seems to be confirmed by Florida consumer surveys conducted for this Commission by the University of Florida Bureau of Economic and Business Research (BEBR). These surveys reveal that a growing number of Florida's residential subscribers are considering dropping traditional wireline service in favor of wireless. Currently, 32% are considering the switch (Figure 14).

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[101] FCC Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, *Ninth Report*. FCC 04-216. Released September 28, 2004.

[102] FCC Report on Local Telephone Competition: Status as of December 31, 2003. Released June 2004.

[103] FCC Memorandum Opinion & Order. FCC 04-255. Paragraph 242. Released October 26, 2004.

[104] FCC Memorandum Opinion & Order. FCC 04-255. Paragraph 239. Released October 26, 2004.

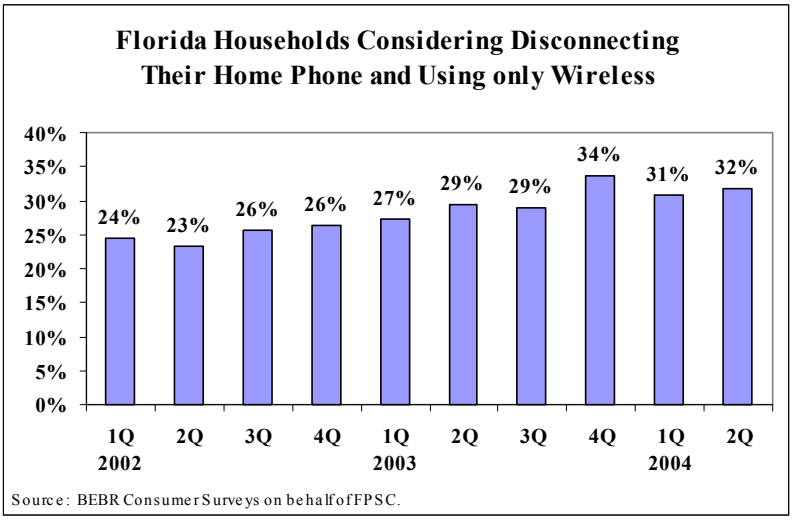
[105] <http://www.myrateplan.com/wireless/knowledge/totally.php>. CTIA cited as source.

[106] This statistic only shows those that use wireless telephones as their primary telephones. This does not necessarily mean that they have disconnected their landline connection.

[107] Skedd, Kirsten. "Landline Displacement to Increase as More Wireless Subscribers Cut the Cord." InStat/MDR Press Room. February 25, 2004. <http://www.instat.com/press.asp?Sku=IN0401644MCM&ID=895>. Accessed May 3, 2004.

[108] Ibid.

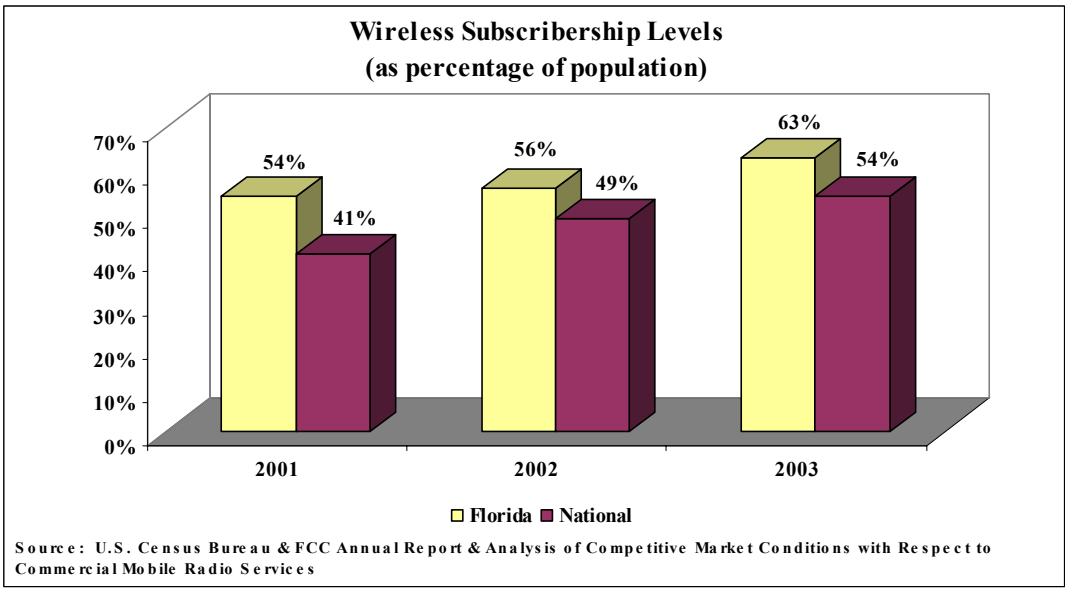
Figure 14



Following the national trend, Florida wireless subscribership grew from 56% in 2002 to 63%[109] in 2003. Subscribership levels in Florida remain higher than the national average, which may indicate that Florida local exchange companies are more vulnerable to wireless substitution. Figure 15 reflects FCC and census data comparing Florida subscribership to national subscribership levels for the years 2001, 2002, and 2003.

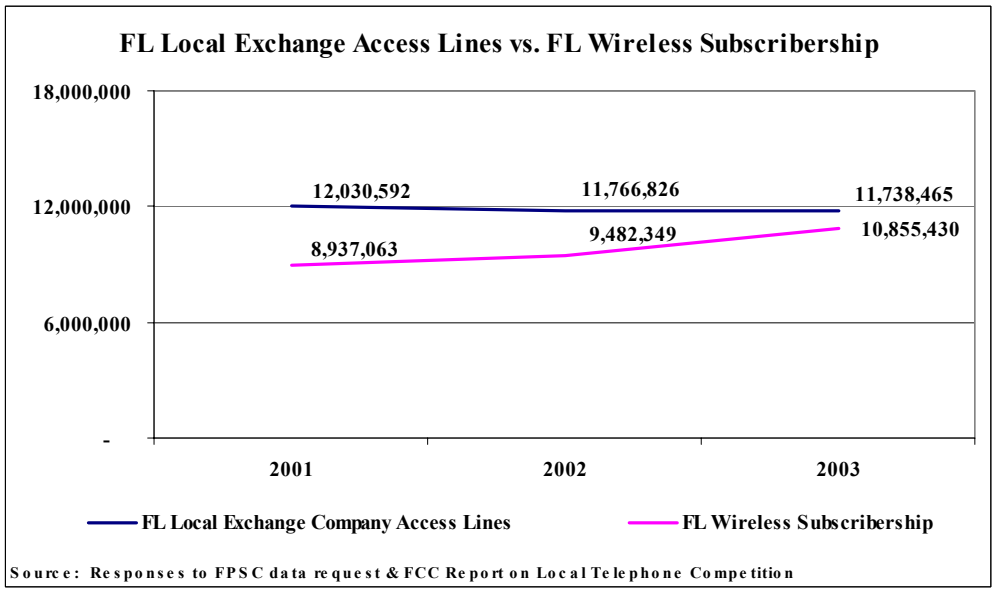
[109]Calculation based on Total Population from the February 2004 FL Demographic Estimating Conference as reported by the Florida Legislature, Office of Economic and Demographic Research and Mobile Wireless Subscribership as reported in the FCC Report on Local Telephone Competition: Status as of December 31, 2003. Released June 2004.

Figure 15



While the number of wireless subscribers has grown to 10,855,430, an increase of almost 1.4 million, local exchange company access lines in Florida have slowly declined since 2001.[110] However, it is unknown exactly how much of the wireline displacement is attributable to wireless substitution. (Figure 16)

Figure 16



[110]FCC Report on Local Telephone Competition: Status as of December 31, 2003. Released June 2004.

The wireless industry's significant growth in revenues and displacement of wireline minutes of use (MOU) also testifies to its impact on the telecommunications landscape. Wireless revenues nationwide have increased from approximately $482 million in 1985[111] to over $88 billion in 2003.[112] Wireless MOU showed similar dramatic increases over the same period. According to research by the Yankee Group, U.S. wireless subscribers used on average 490 minutes per month in 2002, surpassing the 480 minutes per person each month for wireline service.[113] According to the FCC's 9th Annual Report on wireless competition, wireless usage had further increased to 500 MOU per month by the end of 2003.[114] The FCC's 9th Annual Commercial Mobile Radio Service report estimated that 23% of voice minutes in 2003 were wireless. This is an increase of 16% since 2000.[115] The displacement of wireline MOU with wireless usage is seen most dramatically when comparing long distance calls. Users reported that they now use their wireless telephones to make 43% of long distance calls.[116]

Wireless service is becoming more desirable due to attractive pricing plans and a broad array of services made possible by technological innovation in wireless handsets and wireless networks. Wireless now provides most of the same options as wireline service with the added benefits of mobility and new technologies such as e-mail, Internet access and text messaging that are exclusive to wireless service. Technological innovation has further stimulated consumer demand through introduction of wireless handsets that also can be used as a camera, a computer and to watch TV or videos. The industry is also moving to integrate wireless with wireline service. AT&T is working with Sprint on trials of VoIP-enabled Wi-Fi handsets that would run over AT&T's new CallAdvantage VoIP service. Results of the trials are at least 18 months out, however.[117] Deployment of third generation (3G) high-speed wireless networks have made these features and services possible. Furthermore, deployment of next generation networks with much higher bandwidth are not far off. The speed of these networks should further stimulate demand by greatly enhancing the consumer's experience when using bandwidth intensive services.

The benefits of the flourishing wireless competition appear evident as wireless carriers battle to gain and keep customers through a steady stream of unique service plans and lower

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[111] FCC Report on Local Telephone Competition: Status as of December 31, 2003. Released June 2004.

[112] FCC Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, *Ninth Report*. FCC 04-216. Released September 28, 2004.

[113] Rosenbluth, Todd. "Time to Hang Up on SBC." BusinessWeek Online. June 27, 2003.

[114] FCC Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, *Ninth Report.* FCC 04-216. Released September 28, 2004.

[115] Ibid.

[116] Griffin, Katie. "U.S. Consumers Long Distance Calling Is Increasingly Wireless, Says Yankee Group." Yankee Group News Releases. March 23, 2004. <http://www.yankeegroup.com/public/news_releases/news_release_detail.jsp?ID=PressReleases/News_03232004_cts_2.htm>. Accessed June 21, 2004.

[117] "AT&T to Offer Wireless Services to Consumers and Businesses Nationwide Through Agreement with Sprint." AT&T News Release. May 18, 2004.

prices. For example, AT&T Wireless[118] is marketing a plan that includes 1,000 anytime minutes and unlimited nights and weekends for $40. Similar plans had cost $10 to $20 more, and AT&T now begins nighttime minutes at 7 p.m., 2 hours earlier than in previous plans.[119] Sprint PCS recently announced its new Fair & Flexible Plan, which eliminates overage charges by automatically adjusting a consumer's monthly rate plan based on their usage patterns.[120] Other companies offer their own unique features such as push-to-talk and free mobile-to-mobile calls. These examples of price cutting and greater flexibility show little signs of abating as competition further heats up.

Wireless service is becoming indispensable to consumers, and its popularity is not being ignored by wireline providers. Many ILECs now offer wireless as part of their bundled packages. Combining wireless with local/long distance, broadband, and satellite TV services gives local exchanges companies a "home run" package to counter the triple play offerings of cable companies. In response, some cable companies are attempting to counter telephone company entry into their core video market by adding wireless to their vaunted triple play set of video, broadband and voice services.[121] Some in the CLEC community also consider wireless to be a strategic addition to their portfolio of services. AT&T Wireless is now looking to re-enter the game by reselling wireless service through Sprint Corp.

Consumers now find it easier and more appealing to switch from one wireless carrier to another, or to wireless-only service thanks to local number portability. The FCC ordered wireless carriers to implement local number portability in the 100 largest MSAs effective November 24, 2003. This enables customers to keep their wireless telephone numbers when switching from one wireless carrier to another. The local number portability requirement for all other areas went into effect May 24, 2004. According to the FCC's rules, wireline telephone companies, including both ILEC and CLEC providers, also had to implement wireline to wireless number portability. Currently, the most porting activity is taking place between customers wanting to switch from one wireless provider to another. However, according to Neustar, a number portability administrator, up to 10% of the nine or ten million numbers ported in 2004 will be from landline carriers to wireless carriers.[122] Porting volume from wireline to

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[118] AT&T Wireless recently merged with Cingular.

[119] Bialik, Carl & Jesse Drucker. "AT&T Wireless Lowers Prices on Plans, Wireless Telephones." The Wall Street Journal Online. April 1, 2004.<http://online.wsj.com/article_print/0,,SB108078083153471029,00.html>. Accessed April 5, 2004.

[120] Sprint PCS Service Plans.
http://www1.sprintpcs.com/explore/servicePlansOptionsV2/PlansOptions.jsp?FOLDER%3C%3Efolder_id=1477207&CURRENT_USER%3C%3EATR_SCID=ECOMM&CURRENT_USER%3C%3EATR_PCode=None&CURRENT_USER%3C%3EATR_cartState=group&bmForm=SFPSprintZipCodeToCSA&bmFormID=1099497473589&bmUID=1099497473589&bmHash=04a51dc4b72704c228a0ec9c4817abc6950e0171>. Accessed November 3, 2004.

[121] Drucker, Jesse. "How AT&T Got Back in the Wireless Game." The Wall Street Journal Online. May 30, 2004. <http://online.wsj.com/article/0,,SB108587513619824627,00.html>. Accessed June 3, 2004.

[122] Engebretson, Joan. "ANALYSIS: Number Portability Trends Underscore Line Loss Concerns." America's Network Enews. June 14, 2004.
<http://www.americasnetwork.com/americasnetwork/article/articleDetail.jsp?id=98835>. Accessed June 15, 2004..

wireless reached a peak of 79,080 telephone numbers in March of 2004.[123] When asked, consumers stated convenience as the number one reason for considering dropping their landline and going wireless only.[124]

Enhanced 911 (E911) service is a factor that consumers must consider when deciding to disconnect a landline. E911 service provides a dispatcher with additional location specific information on wireless 911 calls. The FCC considers this an imperative service for public safety and has implemented a two-phase process, to be completed by December 31, 2005, for developing and implementing this new technology. Phase I requires carriers to report the wireless telephone number and the location of the antenna that received the call. Phase II requires carriers to provide specific location data of the wireless telephone, in most cases within 50 to 100 meters of the actual telephone's location.[125] According to a report issued by the General Accounting Office (GAO), only 24 states will have Phase II implemented by the 2005 deadline. The cost of deployment is estimated to be more than $8 billion, which must be funded by wireless carriers, states, and localities.[126] While this is a difficult process, providing E911 capability may bring wireless one step closer as a viable replacement for wireline service. Florida is working hard to meet these obligations. As stated in the 2004 Annual Report issued by Florida's Wireless 911 Board, 47 counties have deployed Phase I with one or more providers and 26 counties have deployed Phase II with one or more providers.[127]

3. Cable

In 2003, there was no clear indication of exactly when the cable industry would launch its much-anticipated wide-scale rollout of voice service. A few cable companies have been in the voice business since 2000 and have gained subscribers fairly rapidly. At the end of 2003, 2.5 million customers nationwide received voice service from cable MSOs. As of the end of the first quarter 2004, the number of subscribers served by MSOs had grown to approximately 2.7 million across the country.[128] The vast majority of those subscribers, however, are served by just two companies, Comcast and Cox, using legacy circuit-switched technology. However, these

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[123] FCC Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, *Ninth Report*. FCC 04-216. Released September 28, 2004.

[124] InStat/MDR. "Into Thin Air: Residential Wireline Erosion from Wireless and Other Access Alternatives." June 25, 2004. <http://www.instat.com/catalog/pcatalogue.asp?ID=94>. Accessed June 25, 2004.

[125] Federal Communications Commission. 911 Services page. March 10, 2004. <http://www.fcc.gov/911/enhanced/. May 10, 2004.

[126] United States General Accounting Office. *Telecommunications Uneven Implementation of Wireless Enhanced 911 Raises Prospect of Piecemeal Availability for Years to Come*. Report to the Chairman, Subcommittee on Communications, Committee on Commerce, Science, and Transportation, U.S. Senate. November 2003.

[127] Florida Wireless 911 Board Report. February 28, 2004.

[128] National Cable and Telecommunications Association website. <http://www.ncta.com/?PageID=326>.

circuit-switched offerings may have plateaued because cable companies have banked their future telephony plans on the nascent technology known as VoIP.

Many of the major MSOs were in various stages of VoIP trials in 2003, but few had launched commercial service. This past year, however, the momentum of cable telephony has shifted and the industry is in an accelerated stage of rollout. After spending nearly $85 billion since 1996 upgrading their networks from analog to digital capability, cable operators are finally beginning full-scale offerings of the much heralded "triple play" services (voice, data and video) over a single cable connection.[129] Whereas there were only a few VoIP launches planned a year ago, most major MSOs are now conducting multiple trials, and plan to stage launches of commercial service around the nation over the next three years. A few of the major MSO rollout plans follow.

- Cablevision has led the pack in VoIP deployment by making telephone service available across its entire footprint of more than 4 million homes in November 2003.[130] The company has averaged 3,200 new subscribers per week and now has more than 100,000 VoIP subscribers.[131]

- Time Warner had launched VoIP service in 16 of its markets by June 2004, and the company plans to rollout VoIP in nearly all of its 31 divisions by year-end.[132]

- Charter Communications plans to make its VoIP service available to one million homes by year-end 2004.[133]

- Cox made its first commercial rollout of VoIP service in Roanoke, Va. last December, and has plans to launch service in several more markets this year.[134]

- Comcast, the nation's largest cable provider with over 21 million cable TV subscribers,[135] plans to offer VoIP to half of its footprint by the end of 2005 and to 95% of its footprint in 2006.[136]

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[129] "Too Late to Party?" New Paradigm Resource Group, Inc. Chicago Business Wire. May 17, 2004.

[130] Maiella, Jim. "Cablevision Announces First Widescale Digital Voice-Over-Cable Deployment." Cablevision Website, Corporate Information. November 11, 2003.

[131] Breznick, Alan. "MSOs Step Up VoIP Pace, Shrug Off Vonage As Rival." Cable Datacom News. June 1, 2004.

[132] Ibid.

[133] Fitchard, Kevin. "Charter Signals VoIP Expansion with Termination Deals." TelephonyOnline.com. August 31, 2004.

[134] "WHITEPAPER: Voice over Internet Protocol: Ready for Prime Time." Cox Communications Website. May 2004.

[135] Comcast Website. Investor Fact Sheet. November 2004.

By adding voice to their portfolio of services, cable companies may expect to stem losses of customers to satellite TV and broadband Internet access competitors. Experience seems to show that bundled service offerings, especially those that include voice, significantly reduces customer defections, or churn. Cox Communications, for example, reports a 50% reduction in churn when a residential customer subscribes to all three services: cable, broadband and telephony.[137] Research also has shown that customers want a single bill for all services.[138] Data from this Commission's surveys show that 52% of respondents prefer to have all communications services provided by one company.

Many cable companies and industry analysts expect cable VoIP offerings to present a formidable challenge to telephone company dominance of the residential local voice market. Time Warner captured 10% of telephone households just 10 months after rollout in Portland, Maine,[139] and aims to capture a third of the local telephone market in its Charlotte, North Carolina region within the next few years. [140] Charter is targeting a 10% penetration of telephone households within 60 days of its market launch and 30% penetration within five years, while Mediacom believes that 15% to 20% penetration can be achieved in the early stages of market launch.[141] As to industry analysts, MRG, a digital media research firm, projects that cable companies could penetrate 10% of the residential telephone market by 2007, if they act fast enough.[142] The investment firm, Goldman Sachs, estimates that telephone companies could lose 7% of residential lines to cable by 2006, and nearly 20% in the next 10 years.[143] John Hodulik, of the investment firm UBS, states "the Bells likely will lose 30% of their telephone market to cable companies over 10 years. However, losses may be limited to 15% if telecom companies can provide video, because consumers are more likely to remain with a carrier when they purchase a bundle of services."[144] According to Yankee Group estimates, there will be in excess of 12 million cable VoIP subscribers in 2008. (Figure 17)

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[136] Fitchard, Kevin. "Comcast Puts Numbers on VoIP Rollout." Primedia Publication, Telephony Online. May 31, 2004.

[137] Smiles, Elaine. Cable Telephony Today. <TMCNet.com/it/0504/specialfocus.htm>.

[138] "Comcast Pushes into Phone Service." Wall Street Journal. May 26, 2004.

[139] Nowlin, Sanford. "Time Warner Launches First Battle in San Antonio Phone Wars." San Antonio Express-News. July 16, 2004.

[140] Mildenberg, David. "Time Warner Readies Telephone Push." BizJournals. June 4, 2004.

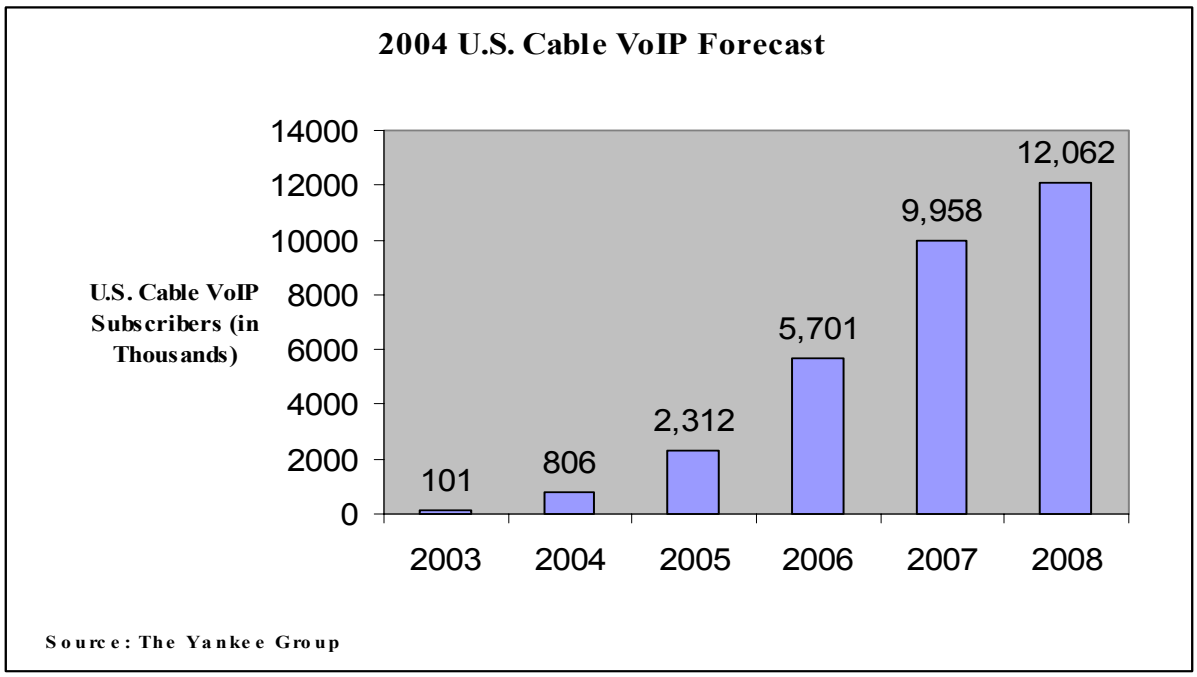
[141] Breznick, Alan. "More Major MSOs Unveil VoIP Rollout Plans." Cable Datacom News. March 1, 2004.

[142] Stroud, Michael. "Cable Guy Whupping Phone Guy." Wired News. March 11, 2004.

[143] Brown, Ken. "Cablevision to Offer Internet Phone-Call Bundle." The Wall Street Journal. June 21, 2004.

[144] Rosenbush, Steve. "Verizon: Take that Cable." BusinessWeek Online. May 14, 2004.

Figure 17



In order to stem losses of subscribers to both cable and wireless competitors, the major telephone companies, Verizon, SBC, BellSouth and Qwest, have alliances with satellite TV providers to provide their own "Triple Play" offerings. Verizon, the nation's largest telecom provider, is also pursuing cable-TV franchises in nine states, its Florida territory included. Verizon intends to supply cable TV service over fiber-optic lines directly connected to homes and offices. Their plans include digital TV, videoconferencing, and movies-on-demand by the end of 2005. SBC says it will spend $4 to $6 billion over the next five years replacing the slower copper connections in its networks with high speed fiber. This will allow SBC to market an IP-based television service being co-developed with Microsoft.[145]

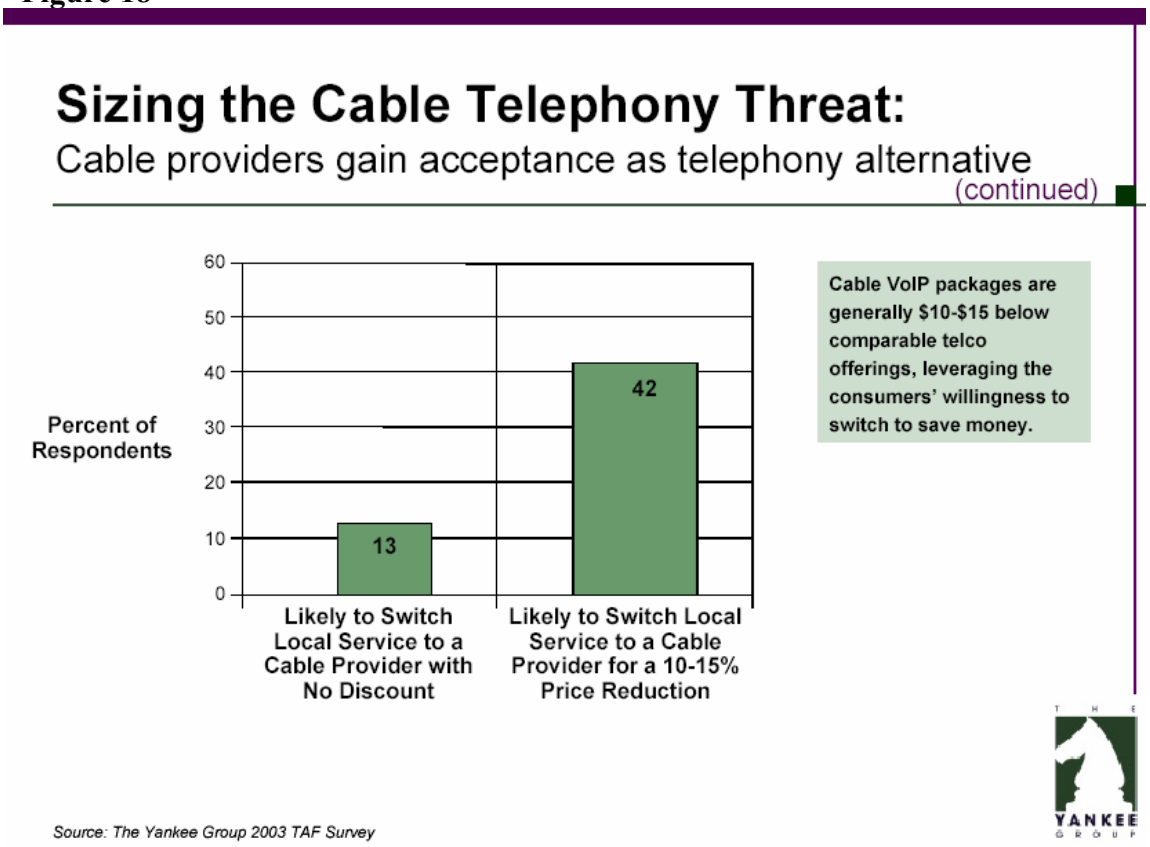
In a market where most consumers can choose between only one cable company and two satellite providers, the entry of telecom companies into cable television could be a powerful source of competition; however, many are skeptical that there will be widespread fiber-to-the-home deployment except in the distant future, because of its high rollout cost. Qwest is one Bell company that is not deploying fiber to homes in its territory, but is banking instead on other technologies, such as wireless, to deliver high-bandwidth connections at lower cost. Meanwhile, telephone company alliances with satellite TV providers may offer the best interim hope of competing with cable's triple-play offerings. SBC reported signing up 40,000 customers just one month after offering satellite TV service via its alliance with EchoStar.[146]

[145] Ewalt, David M. "New Services Stir Up Telecom Market." InformationWeek. June 28, 2004.

[146] Latour, Almar. "Bells Join Race to Offer TV." The Wall Street Journal. April 29, 2004.

Telephone companies, however, could find it painful trying to match cable's pricing for voice services. Cable company trials are confirming that VoIP-based service is less costly to deploy than circuit-switched. By offering VoIP instead of circuit-switched services, Cox has found that expenditures can be cut by 40% to 75% per customer depending on whether Cox or the customer installs necessary equipment.[147] These economies appear to be impacting the competitive landscape, enabling cable companies to attract customers by undercutting telephone company prices. As an indication of cable telephony's potential, Figure 18 shows that 42% of respondents would switch local service to a cable provider for a 10-15% price reduction.

Figure 18



One aggressive pricing strategy to date has been by Cablevision when it announced in June that it will offer unlimited local and long-distance service, along with digital cable television and high-speed Internet access for $90 a month for one year. The company's main telephone competitor in its region, Verizon, was offering a comparable package for $123.89 a month.[148] However, Verizon has countered not only Cablevision's move, but other cable firms' triple-play offerings by launching a nation-wide VoIP service for $39.95 per month, $20 cheaper than its current bundle of unlimited U.S. calling. Verizon gives further discounts if the customer

[147] Hibbard, Justin. Senior Editor. "Cox Declares VOIP Ready for Prime Time." Light Reading. May 17, 2004.

[148] Brown, Ken. "Cablevision to Offer Internet Phone-Call Bundle." The Wall Street Journal. June 21, 2004.

takes other Verizon services. As Verizon will be encroaching into the territories of the other Baby Bells, they are expected to follow suit eventually.[149]

More economies for cable may yet be seen as demand for VoIP equipment grows. Brahm Eiley, president of Toronto-based Convergence Consulting Group, a company which studies the North American cable and telecom market said, "Comcast is by far the largest cable company in North America with over 21 million customers in 35 American markets, and when a company such as this makes such a major, accelerated commitment to VoIP, that can only mean good things." Comcast's participation should drive down the cost of the equipment MSOs must obtain to provide phone service via VoIP.[150] In addition to driving down manufacturing costs, it will intensify competition by increasing customer awareness and encouraging vendors to develop superior products containing new features.[151]

Telephone companies have at least two additional reasons to be concerned about cable telephony. First, while cable's VoIP service may initially be targeted to cable broadband customers, cable giants Time Warner, Charter and Mediacom have indicated they intend to offer voice to the mass market. This means that these companies may not require VoIP subscribers also to subscribe to broadband. Other companies should follow suit, because over time there may be no reason to limit the VoIP offering to just their broadband customers. "It's a whole new reason to talk to non-subscribers or even satellite TV customers. We see the combined bundle as a real good reason to come back and consider cable as a competitor," says John Pascarelli, executive vice president of operations for Mediacom.[152]

The second cause of concern is that with the emergence of VoIP-based cable telephony, many U.S. cable companies have indicated they are considering forming a consortium to jointly offer VoIP service, organizing the way calls are carried over the IP networks, and how they connect with the PSTN. "This is more a consortium to organize the way they are going to talk to each other. It's not the creation of an enterprise that's actually going to own these calls," says Chris Risley, CEO of Nomium Inc., a potential supplier of infrastructure for a cable ENUM (Electronic Number Mapping) system.[153] Comcast, Cox, and Time Warner are among the Florida-based cable companies that have talked with Neustar, regarding the creation of a telephone-number lookup system based on the ENUM. This system would allow, for example, a call that originated on Comcast's network to connect to a telephone number on Cox's network without ever using the PSTN.[154] Cable companies may believe the creation of this system will help them to avoid the fees local exchange carriers charge to use their networks. Currently,

[149] "Verizon Dangles Cheap VoIP for US Land Grab." The Register. July 27, 2004.

[150] "Comcast commitments will speed N.A. VoIP Deployment." Cablecaster Magazine. <http://www.cablecastermagazine.com/common_scripts/dailynews/print_version.asp?id=29959>.

[151] "Comcast Pushes into Phone Service." Wall Street Journal. May 26, 2004.

[152] Breznick, Alan. Editor. "More Major MSOs Unveil VoIP Rollout Plans." Cable Datacom News. March 1 2004.

[153] Hibbard, Justin. Senior Editor. "Cable Cadre talks VoIP." Light Reading. April 13, 2004.

[154] Ibid.

under FCC rules, any calls which pass over a CLEC's network and terminate at an Internet service provider are subject to reciprocal compensation, a cost cable companies would like to avoid.[155]

Finally, Florida consumers also should benefit soon from cable's rollout of VoIP. Bright House Networks, which assumed managerial control of Time Warner's local cable operations stretching across Central Florida two years ago, is the first large cable operator in Florida to roll out VoIP service. Bright House provides cable television entertainment and high-speed Internet access to more than 750,000 customers in a nine-county area of Central Florida.[156] In July, 2004, the company announced rollout of VoIP service in Pinellas County to a limited number of customers in preparation of an eventual larger-scale rollout of IP-based service. This limited rollout was offered to several hundred customers for a 60-day trial in order for Bright House to evaluate its readiness from an operational and customer service standpoint. On August 30, 2004, Bright House announced the launch of VoIP service throughout Pinellas and Hillsborough counties and the company plans to offer service in Pasco County in September and in Hernando and Citrus counties by the end of December.[157]

The area served by Bright House could turn into one of the more hotly contested telephone markets in Florida, if not the nation. Knology, a cable TV competitor with its own network in Pinellas County, launched VoIP service in July 2004. Thus, including Verizon, three facilities-based carriers are now competing for telephone customers in Pinellas County. Verizon, in the meantime, has been researching the legal requirements for a possible launch of its own pay-TV service in Hillsborough, one of the counties served by Bright House.[158]

Other MSOs with cable networks in Florida include Cox, Comcast, Time Warner and Mediacom. Cox has indicated it will launch VoIP service in its Pensacola, Gainesville and Ocala markets sometime in 2004 and 2005. Mediacom is currently conducting a marketing and technical trial in Des Moines, Iowa, and is planning on a late 2004 launch in Iowa and possibly other markets later this year. "We're very excited with what we're seeing in the whole VoIP space," said John Pascarelli, executive vice president of operations for Mediacom.[159] While the location of those markets is unknown at this writing, Mediacom is in the process of filing for certification as a telecom provider in their six largest states, including Florida.[160]

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[155] Ibid.

[156] Bright House Networks website.

[157] Hau, Louis. "Hello, it's Bright House Calling." St. Petersburg Times. August 31, 2004.

[158] Hau, Louis. "Hello, it's Bright House Calling." St. Petersburg Times Online. June 15, 2004.

[159] Breznick, Alan. Editor. "More Major MSOs Unveil VoIP Rollout Plans." Cable Datacom News. March 1 2004. <http://www.cabledatacomnews.com/mar04/mar04-2.html>.

[160] Ibid.

B. BROADBAND

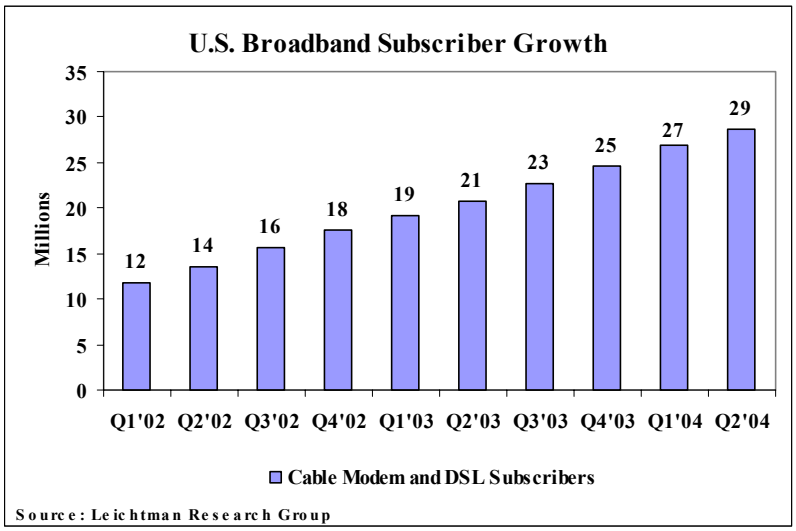
Experts agree that the future of the nation's communications networks is broadband. Whether broadband networks are wireline, wireless, or a combination of the two, they will provide the end user a single connection over which to send and receive voice, data and video communications. The previous sections discussing wireless, cable and VoIP services illustrate the importance of broadband to today's competitive market. The following section looks at today's broadband market nationally and in Florida, and provides an overview of emerging technologies that will make the future telecommunications market more dynamic and competitive.

1. Nationwide Trends in the Broadband Market

As the broadband market has progressed beyond early adopters to mass market customers, growth in Florida and throughout the United States remains strong. With this progression, focus is shifting from early concerns regarding availability and sustainability of growth to a greater interest in competitive choice, pricing, speed of service, and content. In addition, concerns remain for those (mainly rural) areas still without ubiquitous broadband availability.

As seen in Figure 19, the number of broadband subscribers in the United States continues a steady upward trajectory growing from 12 million subscribers in the first quarter of 2002 to 29 million by the end of the second quarter of 2004.

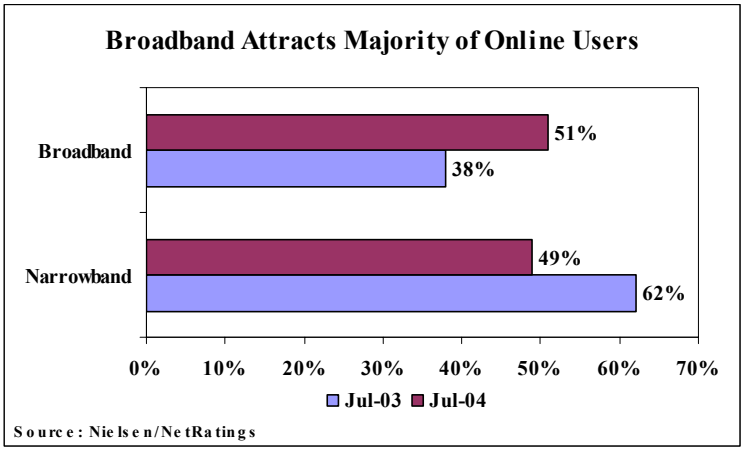
Figure 19



Nearly 25% of U.S. homes subscribe to broadband services, according to a January 2004 survey by Arbitron/Edison Media Research.[161] This is a jump from only 7% of homes in the 2001 Arbitron/Edison survey, showing considerable market development in only three years.

The swift growth and rising penetration level leads to a continuing shift in the broadband spotlight. Earlier stages of market development were characterized by concerns regarding availability on the supply side and slow growth on the demand side. Now that cable modem availability exceeds 90% of households passed and DSL coverage is expanding, the concerns regarding availability are now concentrated more specifically on the rural areas which still lack access. However, even rural areas are making headway in broadband deployment. In a survey of its rural members, OPASTCO[162] found that 99% of responding rural telephone companies were providing advanced services of at least 200 kbps. These companies were providing such service to 88% of their coverage area.[163] As to the demand side of the equation, broadband now represents more than half of U.S. Internet connections (Figure 20). According to Nielsen/NetRatings, 51% of Internet homes had broadband connections in July 2004. In comparison, 38% of Internet households had broadband connections in July 2003.[164]

Figure 20



The ongoing consumer shift to broadband is illustrated by several trends stemming from the evolving broadband competition. As cable modem and DSL providers expand, they are increasingly competing for the same customers in overlapping coverage areas. With broadband penetration levels growing, competition for the supply of new customers, generally those

[161] "Internet and Multimedia 12: The Value of Internet Broadcast Advertising." Arbitron/Edison Media Research. January 2004. <http://www.arbitron.com/home/content.stm>.

[162] Organization for the Promotion and Advancement of Small Telecommunications Companies.

[163] "New Survey Shows OPASTCO Rural Telcos Make Advanced Services Widely Available." May 10, 2004. <http://www.opastco.org/docs/051004AdvancedServices.pdf>.

[164] Vara, Vauhini. "High-Speed Surpasses Dial-Up As Top Home Web Access in U.S." The Wall Street Journal. August 18, 2004.

converting from dial-up service, is becoming more intense. DSL suppliers have typically trailed cable by a 2:1 ratio in market share. For the first time, however, DSL providers matched their cable counterparts in new subscribers added in the first quarter of 2004.[165] Growth rates for the DSL providers during the quarter outpaced cable across the board. In the second quarter of 2004, DSL providers surpassed cable in new broadband subscribers for the first time.[166] Overall, cable still leads in total subscribers with the leading cable MSOs claiming approximately 17.5 million subscribers. The top DSL providers report over 11 million broadband subscribers.[167]

The FCC's bi-annual report on high-speed services provides market share data for broadband lines as recently as December 31, 2003.[168] Nationally, 63% of broadband lines were based on cable modem service versus 34% DSL. In Florida, the report showed a closer race between the two technologies as cable made up 52% of all high-speed lines and DSL accounted for 40%. However, according to more recent survey data collected by this Commission, broadband market share in Florida is even closer.[169] Figure 21 shows a consistent trend toward market share parity between cable modem and DSL service.[170]

[165] "A Record 2.3 Million Add Broadband in First Quarter of 2004." Leichtman Research Group, Inc. May 11, 2004. <http://www.leichtmannresearch.com/>.

[166] "Broadband Internet Grows to 29 Million in the U.S." Leichtman Research Group, Inc. August 17, 2004. <http://www.leichtmannresearch.com/>.

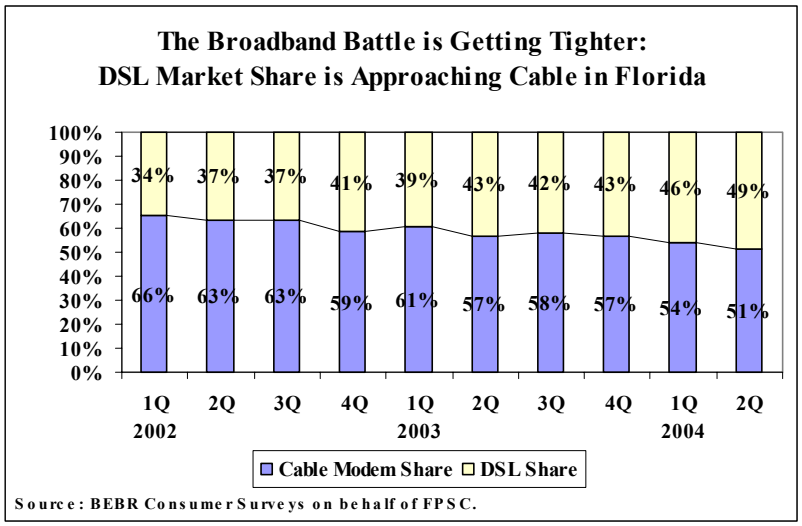
[167] Ibid. Top cable and DSL providers reported by Leichtman represent approximately 95% of all subscribers.

[168] "High-Speed Services for Internet Access: Status as of December 31, 2003." Federal Communications Commission. Released June 8, 2004. <http://www.fcc.gov/wcb/iatd/comp.html>. The FCC refers to "high-speed lines" as those that provide service at speeds over 200 kilobits per second, in either the upstream or downstream direction. "Advanced services lines" are those that provide services at speeds exceeding 200 kbps in both directions.

[169] Bureau of Economic and Business Research (BEBR) consumer surveys conducted on behalf of the Florida PSC.

[170] This figure examines only cable modem and DSL responses to calculate relative market share. Satellite, fixed wireless and other broadband access methods are not included here.

Figure 21



Pricing may be seen as a major factor in narrowing the market share gap between DSL and cable providers. "Over the past few quarters DSL providers have increased their focus on broadband with an emphasis on lower pricing," said Bruce Leichtman, president of the Leichtman Research Group.[171] Verizon and SBC, the two largest DSL providers have each offered DSL service for less than $30 per month, while many of the largest cable operators continue to charge $40 to $50 per month. Forrester Research points out that early broadband adopters were more acceptable to paying for higher-speed access, while today's more mainstream consumers are more price sensitive.[172] Forrester found that 43% of today's new broadband subscribers were motivated by the offer of a discounted package of broadband along with other telecommunications services.

As a competitive strategy, the major cable modem providers appear to have chosen to focus more on providing higher bandwidth rather than lower pricing. Comcast, Time Warner Cable, Cox Communications and RCN Corp. all increased data transmission rates in the summer of 2004. This followed an earlier round of speed boosts in fall 2003 which some saw as a response to DSL price cuts by the regional phone companies.[173]

Another interesting development in broadband is a rising concern by consumers that limited upstream broadband capacity is no longer sufficient. Upstream information transfer rates are becoming increasingly important as broadband users are creating and sharing larger

[171] "A Record 2.3 Million Add Broadband in First Quarter of 2004." Leichtman Research Group, Inc. May 11, 2004. <http://www.leichtmannresearch.com/>.

[172] Kolko, Jed. "In Broadband Game, Price Beats Speed." Forrester Research Special to CNET News.com. March 1, 2004.<http://www.news.com/>.

[173] Breznick, Alan. "MSOs Boost Data Speeds Again, Add Low-Priced Options." Cable Datacom News. September 1, 2004. <http://www.cabledatacomnews.com/>.

quantities of data and multimedia. This is a significant shift from the early dial-up Internet that was characterized by end users mainly downloading web pages or media to their computer.

Today, there is considerably more content creation in the home or small business. Content such as digital photos, digital video, music collections, peer to peer interactions, file transfers and VoIP applications all demand significant upstream capacity. Likewise, the increasing numbers of telecommuters, home offices, and small businesses depending on two-way bandwidth further highlights the importance of upstream bandwidth. As end user demands for increased upstream bandwidth are increasing, there are already signs this may be an important competitive battleground for service providers. In a May 4, 2004 press release, Verizon stated that it would increase the upload speed for its basic DSL plan to 384 kilobits per second (kbps) from the current 128 kbps. Cox Communications raised its "Preferred" cable modem service to 512 kbps upstream while maintaining the same price.[174] In a May 6, 2004 speech to investors, Qwest CEO Dick Notebart stressed the importance of upload speeds in the market today and went on to say he believed DSL had an advantage going forward in the ability to increase upstream bandwidth. Qwest's DSL Deluxe service currently offers upload capacity of 896 kbps, one of the highest available in the marketplace.[175] While cable providers may make similar claims, it is important to note the emerging contest in the area of upstream capacity.

2. The Florida Broadband Market

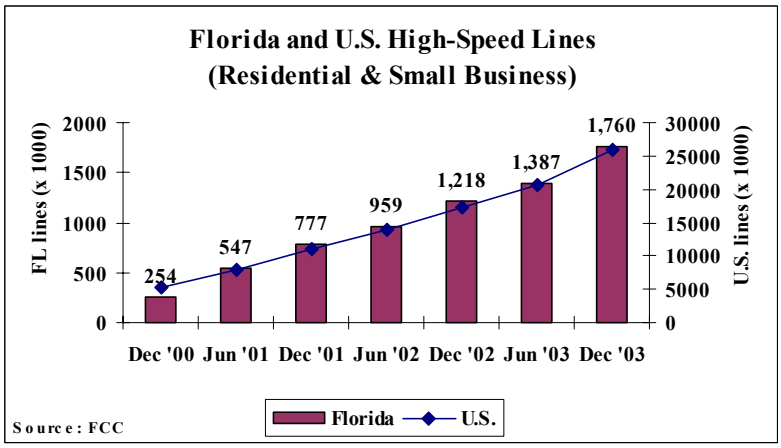
Florida's migration from dial-up to broadband Internet continues at a rapid pace. Figure 22 shows the rise in high-speed lines for Florida and the nation. By December 2003, Florida had over 1.76 million high speed lines in service to residences and small businesses. This was up from only 254,000 such lines three years earlier. This places Florida fourth nationally, behind California, New York and Texas. When looking at total high-speed lines, rather than residential and small business, Florida is third with 2 million such lines, behind only California and New York.[176]

[174] Ibid.

[175] <http://www.qwest.com/internet/>. Accessed July 21, 2004.

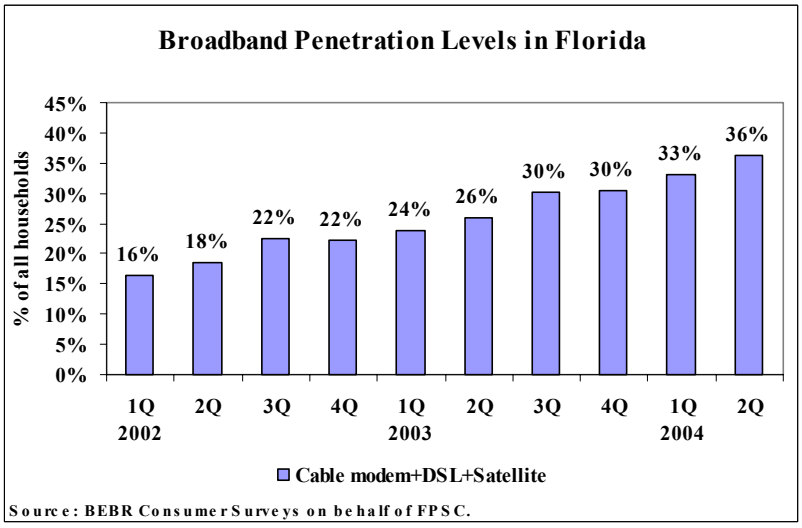
[176] FCC report on "High-Speed Services for Internet Access: Status as of December 31, 2003." Table 7.

Figure 22



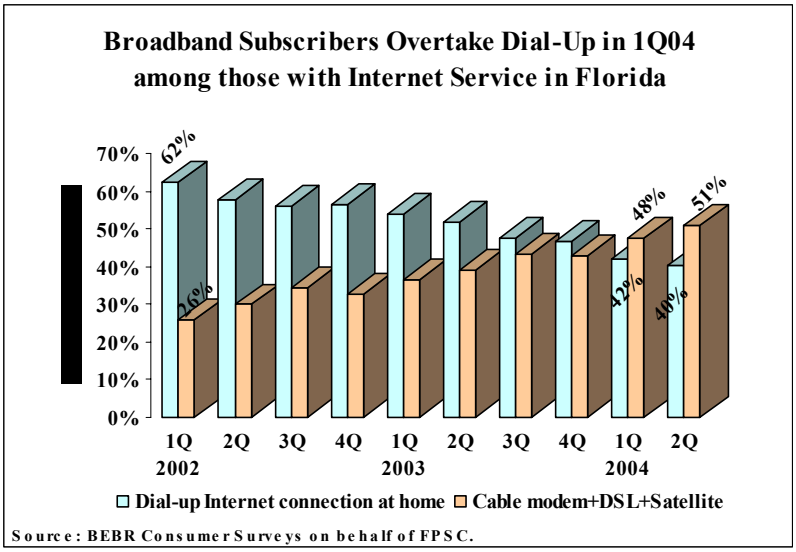
The FCC's biannual report on high-speed lines in service provides the most detailed broadband data in terms of state-specific and technology-specific information. However, the consumer surveys conducted by the University of Florida's Bureau of Business and Economic Research on behalf of this Commission provide additional information on Florida broadband penetration. Figure 23 shows that by the end of the second quarter of 2004, approximately 36% of Florida respondents reported having a high-speed Internet connection in the home.

Figure 23



The rise in broadband is more pronounced when looking exclusively at those with Internet service in the home. For the first time in Florida, the percentage using broadband eclipsed the percentage using dial-up in the first quarter of 2004. This event occurred rather dramatically, as the market share lead for dial-up was quite substantial only two years ago. During this time frame the broadband share of Florida Internet households rose from 26% to 51%, while the share for dial-up dropped from 62% to 40% (Figure 24).

Figure 24



3. Overview of Existing and Emerging Broadband Technologies

Emerging broadband technologies continue to make advances in the drive to capture a segment of the broadband market. While cable modem and DSL still account for the vast majority of broadband subscribers, advancements in the fields of wireless, fiber optics and broadband over powerline continue to offer hope for deployment of these emerging broadband technologies. The following is an overview of recent developments in these technologies.

a. Wireless Broadband

In 2004, wireless broadband made important strides toward becoming the third provider of high-speed Internet service to the home. While cable modem and DSL providers continue to rack up large subscriber gains, wireless innovation continues to push down prices and increase coverage areas. An overview of four such wireless technologies follows.

i. 3G Wireless

In the third generation mobile, or 3G, market, several companies have announced bold plans to provide nationwide mobile data service. Verizon Wireless and Sprint PCS are implementing CDMA networks based on a standard referred to as CDMA-EVDO, or "data-optimized" wireless. Typical downstream bandwidth is in the range of 300 to 500 kbps while upstream bandwidth is limited to approximately 40 to 60 kbps. Verizon Wireless intends to

spend $1 billion on the network over the next two years.[177] The service will be available on EVDO-based wireless telephones and laptop computers equipped with the Verizon Wireless network card. The service was originally available in San Diego and Washington D.C., but has since expanded to an additional twelve cities nationwide. In Florida, Verizon announced initial availability for the metropolitan area covering from North Palm Beach south through Miami, as well as the Tampa Bay region and Key West.[178] Expansion to further cities in Florida and nationwide is expected in 2004 and 2005. Sprint PCS will also deploy in select markets in the second half of 2004 and in the majority of top metropolitan markets in 2005.[179]

Cingular Wireless announced that it was also seeking to push up its timetable for providing high-speed wireless Internet service. Cingular is seeking to catch early market leaders in the race to provide 3G services. The company's mobile network, built on the GSM wireless standard rather than CDMA, faces a different migration path to 3G services. Cingular plans to use the UMTS (Universal Mobile Telecommunications System) technology to provide wireless Internet applications to customer wireless telephones at rates of up to 384 kbps, possibly beginning in 2005.[180] UMTS is compatible with the GSM networks used by Cingular and most European carriers. AT&T Wireless already has 3G service available to customers in six U.S. cities utilizing UMTS technology.[181]

Nextel Wireless has not yet announced its 3G strategy but the company is conducting an extensive field trial with an exciting mobile data technology from Flarion Technologies. The wireless service, known as Flash OFDM, has shown typical download speeds of 1.5 Mbps and upload speeds of 375 kbps, both significantly faster than competing mobile wireless broadband services. The trial is taking place in the Raleigh-Durham region of North Carolina and has been expanded to cover 1300 square miles.[182]

ii. Wi-Fi

The number of Wi-Fi hotspots in Florida has risen considerably over the past year. Florida had 937 hotspots listed as of September 2004 versus 385 in September 2003.[183] This

[177] "Verizon Wireless Announces Roll Out of National 3G Network." Verizon Wireless press release. January 8, 2004. <http://news.vzw.com/>.

[178] "Verizon Wireless Launches High-Speed Broadband Service." News Release. Verizon Wireless. September 22, 2004.

[179] "Sprint Announces Plans to Extend its Wireless Data Leadership with Launch of High-Speed Wireless Data Technology." Sprint Press Release. June 22, 2004. <http://www.sprint.com>.

[180] "Cingular to Deliver 3G Wireless." Cingular news release. June 22, 2004. <http://www.prnewswire.com/micro/cingul1>.

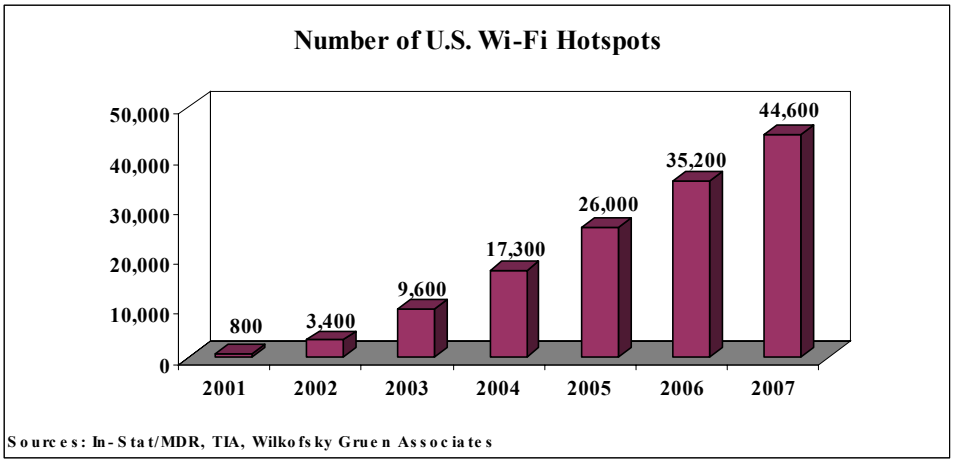
[181] "AT&T Wireless Extends 3G UMTS Service to Dallas and San Diego." AT&T Wireless press release. September 1, 2004. <http://www.attwireless.com/press/>.

[182] Nextel Communications, Inc. <http://www.nextelbroadband.com/>.

[183] Jiwire Guide to Wi-Fi. <http://www.jiwire.com>. Accessed September 2, 2004.

places Florida fourth nationally behind California, Texas and New York. Some research firms expect the number of U.S. hotspots to continue a rapid growth pace well into 2007 (Figure 25).[184]

Figure 25



The increasing use of Wi-Fi in homes and businesses has been tempered by difficulties for service providers in establishing a successful business model. The consumer Wi-Fi experience seems to be characterized by high demand from early adopters, but low willingness to pay for a wireless broadband service when many already subscribe to broadband at home. Low equipment costs, unlicensed spectrum, and a well established Wi-Fi standard result in intense competition and small to negative profit margins for equipment manufacturers and operators.

A high-profile example of these challenges is the termination of the Cometa Networks effort not long after its initiation. The company set out to become a nationwide wholesaler of Wi-Fi connectivity, with a goal of 20,000 hotspots. The project was initially backed by IBM, AT&T, Intel and venture capital firms, but never made it past initial deployments in Seattle, New York and Connecticut.[185] Investor support and enthusiasm never developed to support the nationwide model. Cometa's vice president of marketing, Kent Hellebust, noted that potential investors did not believe the return on capital would be sufficient to justify expansion.[186] Another major blow occurred when McDonald's decided to go with competitor Wayport for a rollout of over 8,000 hotspots in the next 12 months.[187]

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[184] TIA's Tech Trends, Volume I No. 1. May 2004. <http://www.tiaonline.org/media/may04_tech_trends.pdf>.

[185] O'Shea, Dan. "Industry Surprised by Cometa Shut Down." TelephonyOnline. May 19, 2004. <http://www.telephonyonline.com/>.

[186] Konrad, Rachel. AP Business Writer. "Cometa Closes as Investors Shy from Wireless Internet Access." The Detroit News. May 20, 2004. <http://www.detnews.com/2004/technology/0405/20/technology-158156.htm>.

[187] Shim, Richard. "Wayport, McDonald's Cook up Hotspot Deal." CNET News.com. May 24, 2004. <http://www.news.com/>.

Just as many are struggling with the Wi-Fi business model, there is considerable interest in further expanding the technology into mainstream usage. The development of hybrid mobile telephones, capable of roaming from wireless telephone networks to Wi-Fi networks, has the potential to significantly expand the presence of both wireless methods. Proponents even suggest such a combination would provide a strong alternative to traditional wired telephone service.[188] The hybrid telephones would combine high-speed data capabilities and lower cost VoIP service while in the Wi-Fi domain, along with the increased range and coverage of today's mobile telephone networks. If early problems with seamless call transfers between networks and hefty battery requirements can be overcome, the convergence promises the best of both worlds for voice and data customers. However, early telephones and service plans are generally dedicated to business users and are expected to be priced at a premium. Wireless broadband would cost between $40 to $80 a month and fees for Wi-Fi hotspots another $20 to $40 per month.[189]

iii. Fixed Wireless

Fixed wireless broadband solutions are typically based on a centralized tower antenna which transmits signals to and from window or roof mounted antennas located at the customer premises. The fixed wireless category includes a variety of technical standards, configurations and bandwidth alternatives.

The fixed wireless broadband market continues to adopt more productive technology solutions. Companies are seeking to develop business models which will allow them to provide service to customers left behind by traditional wireline broadband. Many are even looking to compete for wireline customers by offering wireless service at comparable price points.

WiMAX is a set of emerging fixed wireless broadband standards which have gained much attention recently. Technically related to Wi-Fi, but designed for long range, high bandwidth transmissions, WiMAX has the potential to compete with landline broadband solutions. Initial applications have been directed towards corporate users, but supporters of the technology believe it will eventually be an alternative for residential consumers as well. WiMAX provides up to 31 miles of service area range and allows users to get broadband connectivity without needing direct line of sight with the base station. Each base station can supply a sufficient amount of bandwidth to simultaneously support hundreds of businesses with T1/E1-type connectivity and thousands of homes with DSL-type connectivity.[190]

While the technology is praised by many, there are also a great number who doubt that benefits or successful business models will develop for quite some time. For starters, there are worries that WiMAX production will never scale to the level of Wi-Fi, and therefore will remain

[188] Charny, Ben. "Wi-Fi Phones Make a Splash." CNET News.com. August 5, 2004. <http://www.news.com/>.

[189] Ibid.

[190] "About the WiMAX Forum." WiMAX Forum. <http://www.wimaxforum.org/about>.

an expensive method of broadband deployment. As an end-user product, Wi-Fi has permeated not just home networking for computers but numerous other consumer products as well. WiMAX meanwhile is positioned as a wide area technology and may have more difficulty in achieving economies of scale in the production of base stations and other needed equipment.[191] It is also difficult at this early stage of development to determine which business models incorporating WiMAX gear will be most effective. Intel Corporation, a major backer of WiMAX, notes that service providers will need to sustain a mix of high-revenue business customers and high-volume residential subscribers to support a profitable business model.[192] Intel stressed that the inherent flexibility of WiMAX is an advantage in deploying such a model.

Last year, one of the nation's earliest wireless broadband services was provided by Clearwire in Jacksonville, Florida. Since that time the company has been acquired by wireless veteran Craig McCaw and announced a re-launch of new wireless broadband services in August 2004. Clearwire is providing a new fixed wireless broadband service, based on an early version of the WiMAX standard, to customers in Jacksonville, Florida. Clearwire introduced the new service first in Jacksonville with other cities throughout the nation to follow, including Daytona Beach.[193] The Clearwire tower transmits radio signals from a base site to a small, wireless modem, the size of a paperback book which connects the users' computer to the Internet.[194] The service also focuses on ease of use for the customer. With plug and play capability, the home installation process is meant to be extremely simple. Customers purchase the wireless modem and plug it into their home computer to receive wireless broadband service at rates ranging from 1.5 Mbps for $34.99 monthly down to 512 kbps for $24.99 a month.

BellSouth announced in March that it was expanding its fixed wireless broadband trials to Palatka, Florida.[195] The company said earlier trials in Daytona Beach were positive and that the Palatka trials would incorporate tests of features and capabilities, such as the introduction of Wi-Fi components. The new trials will also examine the feasibility of fixed wireless broadband technology in rural areas.

iv. Satellite

Broadband service providers desiring to supply Internet service via satellite continue to have a difficult struggle. The high cost and complexity of such service, combined with

[191] Jarich, Peter. "The 'Why' of WiMAX." Current Analysis, Inc. May 10, 2004. <http://www.supercomm2004.com/ind_news/>.

[192] "IEEE 802.16 and WiMAX: Broadband Wireless for Everyone." Intel Corporation white paper. <http://www.intel.com/netcomms/technologies/wimax/>.

[193] Gibbons, Timothy J. "Jacksonville First Market for Clearwire Venture." The Florida Times Union. August 26, 2004. <http://jacksonville.com/>.

[194] "Clearwire Launches Wireless Broadband Internet Service." Clearwire press release. August 26, 2004. <http://www.clearwire.com/>.

[195] "BellSouth Announces Fixed Wireless Broadband Trial in Palatka, Florida." BellSouth Press Release. March 23, 2004. <http://www.bellsouth.com>.

download and upload speeds slower than those of landline broadband providers, may create a difficult business model for satellite broadband providers. DirecWay is the nation's largest provider of satellite broadband service, with 180,000 residential customers as of year-end 2003.[196] However, News Corp. Ltd, which took over DirecWay and its parent companies in 2004, has deemphasized the satellite broadband business, citing doubts in the projections of market demand and profitability. The Spaceway project, which was promoted as a next generation broadband satellite offering will be scrapped, with the only satellite to be launched dedicated to HDTV instead of Internet service.[197] In fact, News Corp. Ltd. has put the DirecWay division up for sale in order to fund its core DirecTV assets.[198]

For many consumers in rural areas, satellite is the only means of obtaining broadband Internet service. According to recent surveys by Northern Sky Research (NSR), as many as 2.5 million rural households and small office/home office users in North America would be receptive to using the latest satellite technology to gain high-speed access to the Internet.[199] The National Rural Telecommunications Cooperative, which lends support to broadband satellite initiatives for its members, states that, "only about 5% of rural towns with populations less than 10,000 have access to broadband."[200] However, this does not create an easy market for satellite providers, as noted by NSR senior analyst Patrick French. "The fallacy has been that potential customers in unserved and underserved areas would be willing to pay more for a broadband-satellite connection. But the reality is that many users are simply electing to stick with a standard dial-up connection."[201]

b. Fiber-to-the-Home

Significant announcements in the fiber-to-the-home (FTTH) market this year provide continued optimism for the future of this powerful medium. Smaller operators and municipalities are already leading the charge in fiber deployment. In fact, the Fiber-to-the-Home Council noted that, "FTTH deployments continue to be driven by municipalities, competitive

[196] The DirectTV Group, Inc. Form 10-K, page 12. For the fiscal year ended December 31, 2003. United States Securities and Exchange Commission. <http://www.sec.gov/edgar/searchedgar/webusers.htm>.

[197] Pasztor, Andy. "Ambition to use Spaceway to Offer Broadband Service Fades Amid Profit Doubts." The Wall Street Journal, May 28, 2004; page A3.

[198] Hamilton, Dane. "Bidders for DirecTV Satellite Unit Shrink – Sources." Reuters. June 24, 2004.

[199] Long, Mark. "Broadband Via Satellite: Looking Down?" NewsFactor Network. June 28, 2004. <http://wireless.newsfactor.com>.

[200] National Rural Telecommunications Cooperative. <http://www.nrtc.coop/sub/wildblue/index.html>. Accessed July 6, 2004.

[201] Long, Mark. "Broadband Via Satellite: Looking Down?" NewsFactor Network. June 28, 2004. <http://wireless.newsfactor.com/>.

local exchange carriers (CLECs) and new residential developments."[202] The FTTH Council lists 128 communities in 32 states with FTTH deployments, up from 94 communities in 26 states as of September 2003. This year's list includes six communities in Florida.

While the number of subscribers, or even deployments, remains a small percentage of American households, momentum seems to be building with two of the RBOCs announcing large fiber build-outs. Both Verizon and SBC made recent announcements regarding their fiber plans. Verizon announced that the company was on track to reach one million homes in 2004 with fiber to the premises (FTTP), as the company refers to its chosen technology. In 2005, Verizon plans on deployment to two million more homes. Verizon initiated its first fiber deployment in Texas and has plans to expand through eight other states in its local service territory, including its Tampa, Florida region. The new service will provide broadband download speeds beginning at five Mbps and ranging as high as 30 Mbps, according to Bob Ingalls, president of Verizon's Retail Marketing Group.[203] SBC also announced the possibility of a $4 billion to $6 billion investment in fiber optic deployment for broadband, video and communications services over the next five years. The company noted that investments were still subject to pending regulatory matters and field trials of the technology in the summer of 2004.

In the Triennial Review Order and subsequent clarifications, the FCC ordered that ILECs will not have to unbundle "broadband elements" (specifically fiber-to-the-home loops (FTTH), fiber-to-the-curb loops (FTTC), the packetized functionality of hybrid loops, and packet switching) under Section 251 of the 1996 Act.[204] Following that order, uncertainty remained as to whether Section 271 of the 1996 Act[205] might still require unbundling of these deployments by Regional Bell Operating Companies (RBOCs). Specifically, some CLECs and state commissions had suggested that although certain unbundling obligations under Section 251 had been lifted by the TRO, Section 271 might still allow an avenue for enforcing unbundling of broadband investment by the RBOCs. Each of the four RBOCs, including BellSouth and Verizon, petitioned the FCC for forbearance from the unbundling obligations in Section 271 to the extent they may have applied to broadband deployment. On October 22, 2004, the FCC granted these petitions for forbearance, ordering that the four RBOCs will not be forced to unbundle broadband elements under Section 271. In the order, released on October 27, 2004, the FCC states, "we forbear from enforcing the requirements of section 271, for all four petitioners (the Bell Operating Companies (BOCs)), with regard to the broadband elements that the Commission, on a national basis, relieved from unbundling in the *Triennial Review Order* and subsequent reconsideration orders (collectively, the "*Triennial Review* proceeding"). These

[202] "U.S. Optical Fiber Communities-2004." Fiber-to-the-Home Council and the Telecommunications Industry Association. May 19, 2004. <http://www.ftthcouncil.org>.

[203] "Verizon, in Historic First, Begins Large-Scale Rollout of Advanced Fiber-Optic Technology." Verizon News Release. May 19, 2004. <http://newscenter.verizon.com>.

[204] There are some narrow limits to this exemption from unbundling requirements.

[205] Section 271 of the 1996 Act, among other things, addresses RBOC obligations for unbundling in order to receive approval to provide long distance service.

elements are fiber-to-the-home loops (FTTH loops), fiber-to-the-curb loops (FTTC loops), the packetized functionality of hybrid loops, and packet switching (collectively, broadband elements).[206]

The FCC noted that "the relief included in this decision will benefit consumers by making the RBOCs more vigorous competitors to cable modem service, which plays a significant role in the current broadband market."[207] In addition, the FCC reiterated conclusions from the Triennial Review "that relieving incumbent carriers from the unbundling rules for these particular broadband elements could spark a race to build next-generation networks that will benefit consumers by providing new services and more competition."[208]

c. Broadband over Power Line (BPL)

Broadband over power line (BPL), which is also referred to as power line communications (PLC), is an emerging technology that delivers broadband Internet connectivity over electric power lines. BPL is a last mile technology that takes advantage of medium and low voltage line capacities. Electricity travels at a lower frequency than an Internet signal, so the two can share a power line.[209] Internet data traffic can be transmitted through this medium for approximately one mile, or longer with the use of repeaters. For the backhaul of traffic to Internet backbones, traditional fiber optic or other landlines are required. The technology has promise due to the existence of a network that already completes an electrical connection to virtually every home and business. By enabling power lines with the ability to provide broadband Internet, proponents hope this third network to the home will rival those established by telephone and cable companies.

The FCC issued a Notice of Inquiry (NOI) on April 23, 2003, requesting public comment on the use of electrical power lines to provide Internet and broadband services to residential and business consumers. The NOI was issued as part of the FCC's "effort to promote spectrum flexibility and access to broadband services for all Americans, and to encourage multiple platforms for broadband, especially new facilities-based platforms."[210] The NOI was also issued to request comments to assist the FCC in reviewing their Part 15 rules, which provided specific emission limits for carrier current systems operating below 30 MHz.[211] BPL is one of the

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[206] FCC Releases Order Granting BOC Petitions for Forbearance From Section 271 Requirements for "Broadband Elements". October 27, 2004. <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-254A1.doc>.

[207] "Federal Communications Commission Further Spurs Advanced Fiber Network Deployment." October 22, 2004. <http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-253492A1.doc>.

[208] Ibid.

[209] Glanz, William. "Electric Companies Begin Offering Broadband Service." The Washington Times. April 5, 2004. <http://washingtontimes.com/business/20040404-100425-2213r.htm>. Accessed May 6, 2004.

[210] FCC News Release. FCC Begins Inquiry Regarding Broadband Over Power Line (BPL). April 23, 2003. <http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-233537A1.pdf>.

[211] FCC Notice of Proposed Rulemaking. February 23, 2004. Docket Nos. 03-104 & 04-37. FCC 04-29.

systems to which Part 15 rules apply. Of particular interest to the FCC were comments on the current state of high speed BPL technology, potential interference effects, and test results from BPL experimental sites. The FCC has issued at least eight experimental licenses to offer the service since April 2003. The companies issued licenses include Progress Energy for Raleigh, North Carolina, and Southern Telecom for unspecified areas in Alabama, Florida, Georgia, and Mississippi.[212]

On February 12, 2004, after receiving over five thousand comments and replies to the NOI, the FCC released a Notice of Proposed Rulemaking (NPRM) proposing rules for BPL that were intended to increase the availability of broadband service to underserved areas and enhance competition while protecting existing services against interference. The NPRM provided interference mitigation requirements, as well as procedures for measuring radio frequency energy emitted from BPL equipment.[213] The NPRM also proposed facilitating access to BPL to increase the availability of broadband in rural and underserved areas, where power lines are already in place and there is no access to broadband in many cases.

One group that has voiced opposition to the deployment of BPL is amateur radio operators who are concerned that BPL may affect their shortwave radio communications signals. This group believes BPL may also affect the high-frequency transmissions used for national security, emergency response and an array of other applications.[214] In May 2004, the Institute of Electrical and Electronics Engineers-USA (IEEE) filed comments regarding the FCC's NPRM. The IEEE said the FCC has not yet resolved interference concerns, including concerns that BPL technologies may cause serious and harmful interference to national security, homeland defense, and emergency and disaster communications. The IEEE also commented that Access BPL systems may be subject to interference from licensed users of the high frequency spectrum that they use, causing the quality of service to decrease.[215] The FCC believes interference problems can be resolved by technical solutions.[216]

A number of BPL trials have been conducted across the nation, but there have been few commercial rollouts thus far. Current Communications Group and Cinergy Broadband, LLC, announced in March 2004 the first large-scale rollout of BPL technology and services in the U.S. The service is available only in the Cincinnati, Ohio area, but plans include deployment to other Cinergy customers in Kentucky, Ohio, and Indiana, potentially reaching 24 million customers.

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[212] Schoolar, Daryl. "Has the Time Come for Broadband Power Line?" In-Stat/MDR Information Alert Newsletter. March 24, 2004. Vol. 49. <http://www.instat.com/infoalert.asp?Volname=Vol.%20%23%2049#item3>.

[213] FCC Press Release. FCC Proposes Rules For Broadband Over Power Lines To Promote Broadband Service To Underserved Areas And Increase Competition. February 12, 2004. <http://www.fcc.gov/headlines.html>.

[214] American Radio Relay League Web site. Broadband over Power Line: Why Amateur Radio Is Concerned About Its Deployment. <http://www.arrl.org/tis/info/HTML/plc/BPL-leave-behind.pdf>.

[215] Comments of IEEE-USA. FCC Docket Nos. 03-104 & 04-37. May 3, 2004. <http://www.ieeeusa.org/policy/POLICY/2004/050304a.pdf>.

[216] FCC Notice of Proposed Rulemaking. Docket Nos. 03-104 & 04-37. February 23, 2004. FCC 04-29.

The initial deployment followed 14 months of trials. One feature of the service is VoIP telephone service capability.[217]

While BPL seems to hold promise as a third wired broadband network to the home, it is unproven in the marketplace. BPL is entering a market where intense competition already exists between cable modem and DSL providers.

[217] Current Communications Press Release. Current Communications and Cinergy Launch Broadband Access Over Power Lines. March 2, 2004.
<http://www.currentgroup.com/OurCompany/PressReleases/PressReleasesDetails/4.htm>.

CHAPTER V: DISCUSSION OF ITEMS REQUIRED BY CHAPTER 364, F.S.

A. INTRODUCTION

Section 364.386(1), Florida Statutes, requires the Commission to address six points in its evaluation of the status of local wireline telecommunications in Florida. With those issues in mind, staff drafted data requests and sent them to all certificated CLECs and ILECs. The CLEC data request consisted of questions designed to obtain information regarding the types of local telecommunications services being offered, the range of rates and bundles for services offered, the status of agreement negotiations with ILECs, and the geographic areas where customers are able to obtain such services. Along with questions regarding the amounts invested in networks serving Florida and other service offerings such as cable television and cellular service in Florida, CLECs were asked to describe any barriers experienced in entering Florida's local exchange market. Comments as to any major obstacles believed to be impeding the growth of local competition and suggestions as to how to remove such obstacles were also solicited. This chapter addresses the statutory questions and summarizes some of the feedback provided by CLECs in response to the additional questions.

A 1997 amendment to Section 364.161(4), Florida Statutes, mandates that the Commission maintain a file of all CLEC complaints against ILECs regarding timeliness and adequacy of service in the provisioning of unbundled network elements, services for resale, requested repairs, and necessary support services. This information, including how and when each complaint was resolved, is included in Appendix D.

The Commission is required to address the following points in analyzing the status of competition in Florida:

(1) The overall impact of local exchange telecommunications competition on the continued availability of universal service.

(2) The ability of competitive providers to make functionally equivalent local exchange services available to both residential and business customers at competitive rates, terms, and conditions.

(3) The ability of customers to obtain functionally equivalent services at comparable rates, terms, and conditions.

(4) The overall impact of price regulation on the maintenance of reasonably affordable and reliable high-quality telecommunications services.

(5) What additional services, if any, should be included in the definition of basic local telecommunications services, taking into account advances in technology and market demand.

(6) Any other information and recommendations which may be in the public interest.

B. DISCUSSION OF SIX STATUTORY ISSUES

1. The Overall Impact of Local Exchange Telecommunications Competition on the Continued Availability of Universal Service.

Universal Service is the longstanding concept that a specified set of telecommunications services be available to all customers at affordable rates.[218] Chapter 364.025, Florida Statutes, provides a number of guidelines designed to maintain universal service objectives with the introduction of competition in the local exchange market. Section 364.025(1), F.S., requires ILECs to furnish basic local exchange telecommunications service within a reasonable time period to any person requesting such service within a company's service territory until January 1, 2009. Section 364.025(4), F.S., mandates that prior to January 1, 2009, "the Legislature shall establish a permanent universal service mechanism upon the effective date of which any interim recovery mechanism for universal service objectives or carrier-of-last-resort obligations imposed on competitive local exchange telecommunications companies shall terminate." In compliance with this section, the Commission submitted its report, Universal Service in Florida, to the Governor and Legislature in December 1996. At the direction of the Legislature, universal service issues were revisited in the Universal Service and Lifeline Funding Issues report submitted in February 1999. In its report, the Commission stated that "although the potential for an ILEC to experience competitive erosion of its high-margin customers while retaining its high-cost (and perhaps below cost) customer base is a real concern, the Commission has not discerned any such major impact to date."

In 2003, 94.6% of Florida households subscribed to local telephone service, exceeding the national average of 94.2%.[219] This represents an increase in Florida households subscribed from 94.3% reported for 2002, and 93.2% reported in 2001.[220] Households with incomes below $14,000 annually increased telephone subscribership from 94.3% in 2002, to 94.4% in 2003.[221] Since 1997, the number of households receiving Lifeline Assistance, an assistance plan that allows for up to a $13.50 credit on monthly phone charges, has increased 5.4%.[222]

Local exchange wireline competition has had little discernable impact on the continued availability of universal service.

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[218] Exactly what should constitute that "specified set" of services is hotly debated in the national arena.

[219] Federal Communications Commission. Wireline Competition Bureau. *Telephone Subscribership Report.* Washington D.C., 2004.

[220] Ibid.

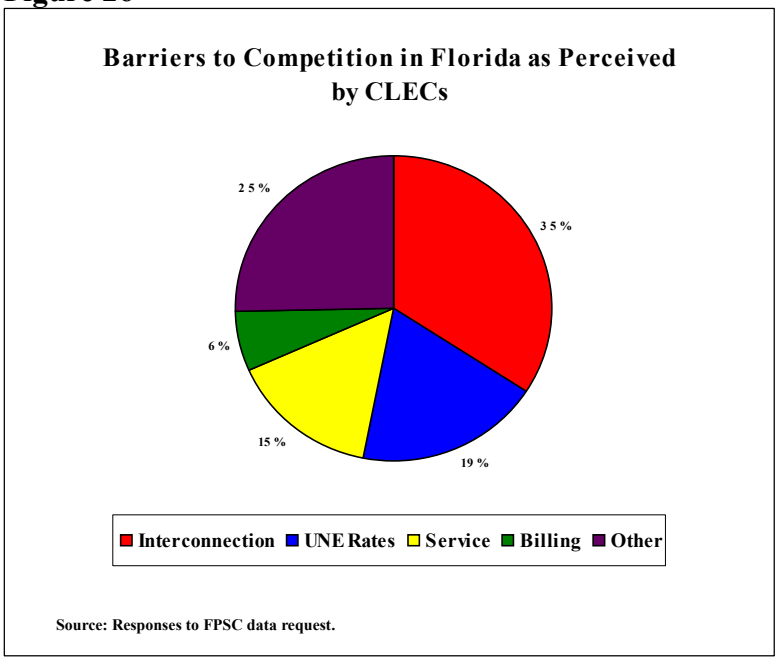
[221] Ibid.

[222] Ibid.

2. The Ability of Competitive Providers to Make Functionally Equivalent Local Exchange Service Available to Both Residential and Business Customers at Competitive Rates, Terms, and Conditions.

The Commission surveyed the 420 CLECs certified as of May 31, 2004. Of the 357 respondents, 175 indicated that they were currently providing service in Florida. CLECs were asked to discuss any perceived barriers to competition in Florida and to describe any significant obstacles that may be impeding the growth of local competition in the state. The primary issues identified by the respondents are shown in Figure 26.

Figure 26



Interconnection Agreements – The most frequently reported barrier to entry was issues relating to interconnection agreements. CLEC allegations included "take it or leave it" negotiations by ILECs, delays in the negotiation process, excessive costs, and unwillingness of ILECS to negotiate. Recent TRO developments, and the increased focus on negotiations, may have contributed to some CLECs reporting this as a perceived barrier. Last year, interconnection agreements was the second most frequently reported barrier to entry.

UNE Rates – UNE pricing was the second most commonly listed barrier to entry. Some CLECs stated that Commission-set UNE rates were too high and should be reduced. Other CLECs were troubled by the variation of UNE rates between Sprint, BellSouth, and Verizon. Last year, UNE rates was the most commonly identified barrier to entry.[223]

Service – CLECs stated that another barrier to entry was service problems. This category includes allegations about service from the ILEC to the CLEC and from the ILEC to the CLEC's

[223] It should be noted that facilities-based CLECs like Florida Digital Network have expressed concern that artificially low UNE-P rates place them at a competitive disadvantage vis-à-vis CLECs offering service via UNE-P.

customers. Some CLECs alleged that new customer installation was delayed by ILECs. Other service issues included problems with number portability, untimely correction of defects, and incorrectly rejected orders.

Billing – Another barrier to entry alleged by CLECs was billing problems. CLECs stated that they have to use their employees to correct billing issues that are the responsibility of the ILECs.

Other Issues – CLECs raised several other issues that did not necessarily fit into one of the major categories previously discussed. Those issues included regulatory uncertainty, winback activities, too much competition, and the belief that the elimination of UNE-P will eliminate competition. Some CLECs stated that another barrier to entry was DSL-related issues.

Pursuant to Section 364.161(4), Florida Statutes, the Commission handles CLEC complaints filed against ILECs. It is noteworthy that over the past three years, the number of complaints has been declining. There were 81 complaints filed from July 1, 2001 through June 30, 2002, 58 complaints filed from July 1, 2002 through June 30, 2003, and 41 complaints filed from July 1, 2003 through May 31, 2004 (note that the number of complaints for the month of June 2004 is not included in the last total).

The Commission received 254 negotiated agreements and 10 requests for arbitration between July 1, 2003 and May 31, 2004. Since June 1996, the Commission has reviewed and approved 2,871 negotiated interconnection agreements.

3. The Ability of Customers to Obtain Functionally Equivalent Services at Comparable Rates, Terms, and Conditions.

In an environment of emerging intermodal competition for voice service, analysis of this statutory factor is not simple. Customers may obtain what they consider functionally equivalent services – via wireline telephony, wireless, VoIP, or cable telephony. This factor, however, is only analyzed herein with respect to the provision of wireline telecommunications by ILECs and CLECs, the companies subject to Commission jurisdiction. As such, our analysis of this factor can be incomplete at best.

As of May 31, 2004, 175 CLECs reported they are currently providing some form of local telecommunications service in Florida. Appendix A lists the responding CLECs, the class of customers each serves, and the methods by which each provides service. Methods of offering service are through *resale* of an ILEC's, or wholesaler's products, *facilities-based* provisioning entirely through the competitor's own facilities, *unbundled network elements* (UNEs) leased from the ILEC, or a *mixed* combination of two or more methods.

Table 6 shows that CLECs appear to continue to target markets with large concentrations of customers. The table lists the state's ten Local Access and Transport Areas (LATAs), the

number of local exchange areas within the LATA served by a local telephone company, and the number of exchanges within the LATA without a competitive entrant.[224]

Table 6 CLEC Providers by Florida LATA						
LATA	Exchanges in LATA		Exchanges without competitive entrant		Area Codes Serving LATA	
	2003	2004	2003	2004	2003	2004
Daytona	10	10	0	0	386	386
Ft. Myers	31	31	0	0	863,941,941 to 239	863,941,941 to 239
Gainesville	49	49	1	2	352,850,904	352,850,904
Jacksonville	43	43	0	0	386,904	386,904
Mobile, AL	2	2	1	1	850	850
Orlando	23	23	0	1	321,386,407,407	321,386,407,407
Panama City	35	35	3	5	850	850
Pensacola	23	23	2	3	850	850
Southeast	25	25	1	1	305,561,561 to 772, 754,786,954	305,561,561 to 772, 754,786,954
Tallahassee Area	12	12	0	0	850	850
Tampa Area	24	24	0	0	727,813,863,941	727,813,863,941

Source: Responses to FPSC data requests; FPSC Internal Sources.

Customers must also be able to obtain functionally equivalent services at rates comparable to that of the ILEC in order for meaningful competition to take place.[225] As shown in Table 7, customers appear to have access to a wide variety of rates as competitors have developed a variety of pricing strategies to gain customers, including overall discounts and matching the incumbent's price.

Table 7 Local Rates for Selected Florida CLECs and ILECs As of May 31, 2004					
CLEC Rate			ILEC Rate		
CLEC	Residential	Business	ILEC	Residential	Business
Supra Telecommunications and Information Systems, Inc.	$10.95	$27.95	BellSouth	$7.57-$11.04	$20.55-$30.20
Tallahassee Telephone Exchange	$9.65	$19.99	Sprint	$7.63-$11.78	$16.57-$25.57
American Fiber Networks	$10.75-$12.00	$25.25-$30.00	Verizon	$10.12-$12.10	$24.47-$30.35
Orlando Telephone Company	$11.50	$25.00	BellSouth Sprint	$7.57-$11.04 $7.63-$11.78	$20.55-$30.20 $16.57-$25.57

Source: Company Tariffs and Price Lists.

Another pricing strategy offered by CLECs is prepaid telephone service, an option for, among others, consumers with poor credit histories or those disconnected due to repeated late

[224] The 2003 Report erroneously stated that there were two exchanges in Mobile and in Panama City, and one exchange in Tallahassee without a competitive entrant. The correct numbers were one, three, and zero, respectively.

[225] As noted, customers may obtain what they consider functionally equivalent services via other platforms. Our analysis is limited to wireline telecommunications issues.

payment or nonpayment. Customers of prepaid telephone companies typically agree to pay a monthly fee in advance for local calling and 911 access, but must agree to block long distance, 900-numbers, and directory assistance calls. Prices for such services are approximately $39.00 per month for residential service, and $69.00 per month for business service. Telephone companies providing only prepaid telephone services account for 31 of the 175 companies providing local service in Florida.

4. The Overall Impact of Price Regulation on the Maintenance of Reasonably Affordable and Reliable High-Quality Telecommunications Services.

In 2003, the Florida Legislature passed a comprehensive rewrite of the Florida statutes governing the regulation of telecommunications companies in Florida. The legislation entitled "The Tele-Competition Innovation and Infrastructure Enhancement Act of 2003" (the 2003 Act) was signed into law on May 23, 2003, by the Governor. The law is designed to provide further impetus for development of a more competitive telecommunications market in Florida. The law most notably impacts the regulation of ILECs and IXCs.

On August 27, 2003, BellSouth, Verizon and Sprint filed petitions with the Commission proposing to implement Section 364.164, Florida Statutes, by rebalancing rates in a revenue neutral manner, on a statewide basis, through decreases in intrastate switched access charges with offsetting rate adjustments for basic local services. The initial petitions were dismissed by the Commission as deficient based on a statutory criterion, but the companies subsequently amended their petitions to correct the deficiencies.[226] A related docket was opened by the Commission on October 2, 2003, to address the required flow-through of ILEC switched access charge reductions by IXCs, pursuant to Section 364.163(2), Florida Statutes.

Fourteen public hearings were held throughout the state to obtain customer input, and citizens filed written comments. The Commission took additional testimony and evidence on the petitions from December 10 through 12, 2003 and reached a decision at its December 16, 2003, Agenda Conference. Based on the evidence before it and having considered a detailed staff recommendation recommending that the rate rebalancing petitions be granted, the Commission found that intrastate access rates currently provide support for basic local telecommunications services and that the support prevents the creation of a more attractive competitive local exchange market by keeping local rates at artificially low levels, thereby raising an artificial barrier to entry into the market by efficient competitors. The Commission determined that the elimination of such support will induce enhanced market entry into the local exchange market by competitors, resulting in the creation of a more competitive local exchange market that will benefit residential consumers. Therefore, it granted the BellSouth, Verizon and Sprint petitions for rate rebalancing.

Although not mandated by Section 364.164 to consider the impact of the proposals on toll rates paid by residential consumers, the Commission concluded that many residential customers will benefit directly from the elimination of in-state connection fees and reductions in

[226] BellSouth filed its amended petition on September 30, 2003; Sprint on October 1, 2003; and Verizon on October 2, 2003.

per-minute intrastate toll rates. Notwithstanding arguments that it lacked the authority to do so, the Commission ordered that reductions in switched access charges paid by IXCs and ILECs be flowed through to consumers for a minimum period of two years. Further, noting that the amended Lifeline provisions in Section 364.10 will help to protect economically disadvantaged consumers from the effect of local rate increases, the Commission secured the commitment of each of the three large ILECs to expand its Lifeline eligibility criteria further than the 2003 Act requires by allowing customers with incomes at or below 135% of the federal poverty guidelines to participate in the program. The ILECs also committed not to increase rates to Lifeline customers before September 1, 2007, even if parity is reached prior to that date. The commitment to increase the eligibility criterion from 125% to 135% of the federal poverty level makes approximately 119,000 additional Floridians eligible for both the monthly Lifeline credit and the protection from the immediate effect of the approved local rate increases.

On January 7, 2004, Charles J. Crist, Attorney General, State of Florida, and Harold McLean, Public Counsel, State of Florida, filed an appeal of the Commission's Order to the Florida Supreme Court. On January 8, 2004, Attorney General Crist also filed a Motion for Reconsideration with the Commission, asking it to reconsider its decision for several reasons. At the May 3, 2004, Special Agenda Conference, the Commission denied the motions for reconsideration. The case is currently on appeal to the Florida Supreme Court. Rate rebalancing has been stayed, pending the outcome of the appeal.

On September 8, 2004, AARP filed with the Commission a motion for an evidentiary hearing because of significantly changed circumstances. AARP concurrently filed a motion with the Florida Supreme Court to relinquish its jurisdiction. In Order No. PSC-04-0893-PCO-TL, the Commission extended the time for filing responses, if the Supreme Court relinquishes jurisdiction, to 12 days from the date of the Supreme Court's decision.

Until the case is decided, the limitations in the previous law regarding local rate increases are in effect. Section 364.051, Florida Statutes, provides that an ILEC may adjust its basic service prices once in a 12-month period by an amount not to exceed the change in inflation less one percent. The following ILECs proposed changes for basic and non-basic services between July 1, 2003 and May 31, 2004, pursuant to the provisions of Section 364.051, Florida Statutes:

- ALLTEL increased basic residential and business service rates and non-basic business service rates by 0.34%.

- ITS Telecommunications Systems, Inc. increased its basic and non-basic service rates by 0.67%.

- Sprint increased residential basic services rates by 1%. It also increased residential non-basic exchange access rates by 2.06%, and increased business non-basic exchange access rates by 3.28%.

- Verizon increased residential and business basic exchange access rates by 1.04%. It also decreased business non-basic exchange access rates by 0.71%, and increased residential non-basic exchange access rates by 1.04%.

5. What Additional Services, If Any, Should be Included in the Definition of Basic Local Telecommunications Services, Taking into Account Advances in Technology and Market Demand.

For ILECs, Section 364.02(1), Florida Statutes, defines basic local service as follows:

> "Basic local telecommunications service" means voice-grade, flat-rate residential and flat-rate single line business local exchange services which provide dial tone, local usage necessary to place unlimited calls within a local exchange area, dual tone multi-frequency dialing, and access to the following: emergency services such as "911," all locally available interexchange companies, directory assistance, operator services, relay services, and an alphabetical directory listing. For a local exchange company, such terms shall include an extended area service routes, and extended calling service in existence or ordered by the commission on or before July 1, 1995.

According to Section 364.337(2), Florida Statutes, the basic local telecommunications service provided by a CLEC must include access to operator services, "911" services at a level equivalent to that of the ILEC serving that area, and relay services for the hearing impaired. CLECs must also provide a flat-rate pricing option for basic local telecommunications; the statute states that, "mandatory measured service for basic local telecommunications services shall not be imposed."

No evidence suggests a need to recommend additions or deletions to the definition of basic local service.

6. Any Other Information and Recommendations Which May be in the Public Interest.

There are no recommendations at this time.

CHAPTER VI: STATE ACTIVITIES

A. TELE-COMPETITION INNOVATION & INFRASTRUCTURE ENHANCEMENT ACT OF 2003

The 2003 Florida Legislature passed a comprehensive rewrite of the Florida Statutes governing the regulation of telecommunications companies in Florida. The legislation entitled "The Tele-Competition Innovation and Infrastructure Enhancement Act of 2003" (the 2003 Act) became law on May 23, 2003 by the signature of the Governor. The law is designed to provide further impetus for development of a more competitive telecommunications market in Florida. The law most notably impacts the regulation of ILECs and IXCs.

1. Long Distance Market

In recognition of the competitive long distance market, the 2003 Act reduces certain Commission authority and oversight over IXCs. A specific example is that the requirement to be certificated is reduced to registration with the Commission prior to beginning operation in Florida. IXCs will continue to be subject to consumer protection statutes related to slamming and cramming. These unscrupulous billing practices will continue to be addressed by the Commission's Division of Regulatory Compliance and Consumer Assistance. IXCs will also continue to file tariffs with the Commission and pay applicable regulatory assessment fees.

2. Expansion of Lifeline

Other aspects of the law include the expansion of Lifeline eligibility and associated benefits. The 2003 Act expanded Lifeline eligibility criteria by including an income-based test and providing for increased promotion of the Lifeline program. The statute provides that those consumers with income less than 125% of the Federal Poverty Guideline are eligible for Lifeline benefits. In addition, the law requires that each LEC subject to the law shall provide Lifeline applications, pamphlets, brochures and other educational materials to state and federal agencies that provide benefits to persons eligible for Lifeline services. Each state agency providing such benefits shall provide these materials to affected persons at the time such persons apply for benefits.

Further, the law requires that each state agency providing benefits to persons eligible for Lifeline service work cooperatively with the Department of Children and Families, the Commission, and telecommunications companies to develop processes for promoting Lifeline participation. That process has involved the Agency for Health Care Administration, Department of Elder Affairs, the Office of Public Counsel, the United Way, AARP, and other community groups working to disseminate information about Lifeline benefits. In an effort to disperse information as widely as possible, the Commission has made available to these agencies CD-Roms containing Lifeline brochures and posters.

Finally, the 2003 Act requires that by December 31 of each year, the Commission shall report to the President of the Senate, the Speaker of the House, and the Governor, on the number of customers subscribing to Lifeline service and the effectiveness of any promotional programs.

3. Promotion of VoIP as a Competitive Alternative

The 2003 Act excludes VoIP telephony from the definition of telecommunications "service" and provides that VoIP telephony should be free from unnecessary regulation. See Section C of Chapter VII below for a discussion of this provision. See Section A.1 of Chapter IV for a discussion of VoIP.

4. Basic Local Exchange Market

Please refer to Chapter V, Section B.4, for a discussion of the provision of the Tele-Competition Act that calls for rate rebalancing and an overview of the Commission's proceedings and rulings to implement the 2003 Act.

B. COLLOCATION DOCKETS NOS. 981834-TP/990321-TP

In September 1999, the Commission adopted procedures and guidelines for collocation (i.e., one carrier locating equipment at the premises of another carrier), focused largely on those situations in which an ILEC believes there is no space for physical collocation. The following guidelines were addressed: initial response times to requests for collocation space; application fees; central office tours; petitions for waiver from the collocation requirements; post-tour reports; disposition of the petitions for waiver; extensions of time; and collocation provisioning time frames.

An administrative hearing was held on January 12 and 13, 2000, to address collocation issues beyond those previously addressed in the collocation guidelines. The Commission rendered its post-hearing decision on these additional issues on May 11, 2000, by Order No. PSC-00-0941-FOF-TP. Therein, the Commission addressed twenty additional issues, including ILEC obligations regarding "off-premises" collocation; the conversion of virtual to physical collocation; and the division of responsibilities between ILECs and collocators for sharing and subleasing space between collocators and for cross-connects between collocators.

Following a Commission decision in November 2000, addressing various motions for reconsideration and/or clarification of the Order, the docket was left open to address pricing issues for collocation. Subsequently, the proceeding was divided to allow the Commission to address technical issues first, followed by costing and pricing issues.

Prior to the hearing on the technical issues, the parties were able to reach stipulations on several issues. The Commission rendered its decision on the technical issues on November 26, 2003, by Order No. PSC-03-1358-FOF-TP. Numerous Motions for Reconsideration and/or

Clarification of the Order were filed and subsequentlyaddressed by the Commission on March 2, 2004 (Order No. PSC-04-0228-FOF-TP).

The hearing on the remaining issues – to address the costs, appropriate definitions, and associated terms and conditions to provide certain collocation elements – took place on January 28 and 29, 2004. The Commission rendered its decision at the August 17, 2004, Agenda Conference by Final Order PSC-04-0895-FOF-TP.

C. IMPLEMENTING THE REQUIREMENTS OF THE FCC'S TRO IN COMMISSION DOCKET NOS. 030850/030851/030852-TP

On August 21, 2003, the FCC released the TRO. See Chapter III, Section B.2 for a discussion of the TRO.

The Commission opened three dockets on August 22, 2003, to ascertain whether a requesting carrier is impaired by lack of access to certain incumbent local exchange companies' network elements. Docket No. 030850-TP was initiated to address the FCC's presumption of no impairment absent access to unbundled local switching for business customers who obtain access via high-capacity loops (also referred to as enterprise customers). Pursuant to the TRO, the state commission had 90 days from the TRO's effective date, October 2, 2003, to rebut the national finding of no impairment for enterprise local switching. Docket No. 030851-TP was initiated to address impairment issues relating to local circuit switching for mass market customers; and Docket No. 030852-TP was initiated to address the location-specific review for DS1, DS3, and dark fiber loops and route-specific review for DS1, DS3, and dark fiber transport. The TRO required that a state commission complete proceedings regarding mass market switching and high capacity loops and transport within nine months from the TRO's effective date.

By Order No. PSC-03-0988-PAA-TP, issued September 3, 2003, in Docket No. 030850-TP, the Commission concluded that, based on the very limited demand existing in Florida for the combination of DS1 loops with unbundled local switching, CLECs are not impaired absent access to unbundled local switching for business customers served via high-capacity loops, as presumed by the FCC. Accordingly, the Commission did not initiate a proceeding to investigate whether to challenge the FCC's presumption of no impairment.

The hearing in Docket No. 030851-TP addressing the impairment of mass market switching was held February 24-27, 2004. Shortly thereafter, on March 2, 2004, the D.C. Circuit Court of Appeals released its decision which vacated and remanded certain provisions of the TRO. In particular, the D.C. Circuit held that the FCC's delegation of authority to state commissions to make impairment findings was unlawful. The D.C. Circuit further found that the national findings of impairment for mass market switching and high capacity transport were based upon an improper analysis and could not stand on their own. Accordingly, the Court vacated the FCC's delegation to the states for determining the existence of impairment with regards to mass market switching and high-capacity loops. The D.C. Circuit also vacated and remanded back to the FCC the TRO's national impairment finding regarding mass market switching and dedicated transport (below the Optical Carrier Number (OCn) level).

In light of the D.C. Circuit Court decision, on March 18, 2004, the prehearing officer issued an order in Docket No. 030851-TP holding this docket in abeyance indefinitely until further action is deemed appropriate.[227]

Upon commencement of the hearing in Docket No. 030852-TP on March 3, 2004, the parties agreed to hold the hearing in abeyance indefinitely pending the outcome of litigation regarding the D.C. Circuit Court of Appeals' decision. All pre-filed testimony and exhibits were moved into the record without objection. However, all parties reserved the right to conduct cross-examination of witnesses if further proceedings were convened in the docket. The parties agreed to participate in informal conference calls to discuss any new developments affecting this docket. These calls were held April 5, May 11, June 8, and July 7, 2004, for Docket Nos. 030851-TP and 030852-TP.

On June 16, 2004, the D.C. Circuit issued its mandate vacating and remanding certain TRO provisions. As a result of the Court's mandate, the FCC released Interim Rules on August 20, 2004, requiring ILECs to continue providing unbundled access to mass market local circuit switching, high capacity loops, and dedicated transport until the earlier of the effective date of final FCC unbundling rules or six months after Federal Register publication of the Interim Rules. Additionally, the rates, terms, and conditions of these UNEs are required to be those that applied under ILEC/CLEC interconnection agreements as of June 15, 2004.[228] In the event that the interim six months expires without final FCC unbundling rules, the Interim Rules contemplate a second six-month period during which CLECs would retain access to these network elements for existing customers, at transitional rates. Beyond establishing interim measures, the FCC seeks comment on, among other things, alternative unbundling rules that will respond to *USTA II*. On August 23, 2004, certain ILECs filed a *Mandamus Petition*[229] with the D.C. Circuit Court of Appeals in response to the FCC's *Order and Notice*.

At the September 21, 2004, Agenda Conference, the Commission decided that, in light of the D.C. Circuit decision, no further action was needed in these dockets and, thus they should be closed. Additionally, the Commission decided that record summaries of Docket Nos. 030851-TP and 030852-TP would not be prepared and sent to the FCC in response to its August 20 Order and Notice of Proposed Rulemaking.

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[227] Additionally, the schedule for filing briefs on April 6, 2004, was suspended. The order also informed the parties that informal conference calls would be scheduled to discuss any new developments affecting this docket.

[228] Except to the extent the rates, terms, and conditions have been superseded by 1) voluntarily negotiated agreements, 2) an intervening FCC order affecting specific unbundling obligations (e.g., an order addressing a petition for reconsideration), or 3) a state commission order regarding rates.

[229] *United States Telcom Association v. FCC*, Petition for a Writ of Mandamus to Enforce the Mandate of the Court. August 23, 2004 (*Mandamus Petition*).

D. WHOLESALE PERFORMANCE MEASUREMENT PLANS

Through Docket No. 000121-TP, the Commission developed wholesale performance measurement plans for the ongoing evaluation of operations support systems (OSS) provided for CLECs' use by ILECS. The performance measurement plans provide a standard against which CLECs and the Commission can measure performance over time to detect and correct any degradation of service provided to CLECs. The Commission adopted performance measurements for BellSouth (Sub docket No. 000121A-TP) in August 2001, for Sprint (Sub docket No. 000121B-TP) in January 2003, and for Verizon (Sub docket No. 000121C-TP) in June 2003. Commission staff captures the performance measurement data monthly from each ILEC and applies trending analysis. Staff reviews each ILEC's performance measurement plan at recurring intervals.

For BellSouth, the Commission established 90 wholesale performance measurements as well as a system of remedy payments called the Self-Effectuating Enforcement Mechanism (SEEM) plan. Remedy payments are applied if BellSouth fails to meet performance standards for key measurements as set by the Commission. From July 2003 to May 2004, BellSouth paid over $28 million in SEEM remedies to CLECs and the state of Florida. BellSouth's May 2004 aggregate performance measurement results indicate that BellSouth met 84% of the Commission mandated performance standards.

For Sprint, the Commission established 38 wholesale performance measurements. In September 2003, staff conducted the initial six-month review of Sprint's performance measures to address proposed revisions to Sprint's performance measurement plan. The revisions were adopted by the Commission in January 2004. Sprint's May 2004 aggregate performance measurement results indicate that Sprint met 86% of the Commission mandated performance standards. Sprint performs a root cause analysis of any measurement not meeting established standards for three consecutive months. These reports are provided monthly to the Commission. Sprint has not been ordered by the Commission to implement a remedy plan for noncompliant service.

For Verizon, the Commission established 44 wholesale performance measurements. Verizon's May 2004 aggregate performance measurement results indicate that Verizon met 89% of the Commission mandated performance standards. Verizon has not been ordered by the Commission to implement a remedy plan for noncompliant service.

E. SERVICE QUALITY DOCKETS AND INCUMBENT LOCAL EXCHANGE COMPANIES

ILECs are required by rule to consistently meet standards established to ensure their customers receive a high quality of service. Commission standards, for example, require a company to restore interrupted service within 24 hours in 95% of the instances reported. Commission standards also require an ILEC to install service 90% of the time in three working days from receipt of an application. The Commission conducts field evaluations of ILECs to verify compliance with the Commission's service standards. Each ILEC is required by rule to

submit quarterly reports to the Commission detailing its compliance with the established service standards. In September 1999, the Commission opened dockets to initiate show cause proceedings against the large ILECs for violation of Commission service standards.

It should be noted that these dockets were not opened based on complaints from consumers, but were predicated on data supplied by the ILECs in the Commission's "self-reporting" process.

1. Sprint

Sprint and the Office of Public Counsel (OPC) stipulated to an agreement in July 2000 that results in the company providing credits to its customers when it fails to meet the Commission's standards for out of service repair and primary service installations. The amount credited increases the longer it takes the company to repair or install the service. The agreement was approved by the Commission on November 7, 2000.

On July 15, 2003, the Commission (Docket No. 030430-TL) approved modifications and a two-year extension of the Service Guarantee Program. The modifications made Sprint's program comparable to BellSouth's Service Guarantee Program.

From July 2003, through May 2004, Sprint has paid its customers $1,454,575 for missing service installations and $474,444 for the out of service repair. In addition, it has posted, in the Community Service Fund, $95,000 for missing the business office answer time and the repair answer time. The Community Fund is for promoting Sprint's Lifeline service.

2. BellSouth

BellSouth has also signed an agreement with OPC that is similar to the Sprint settlement which the Commission approved on July 24, 2001. The settlement established automatic fixed credits to customers for missed commitments for service installation and an increased credit to customers for missed out of service repairs. On January 22, 2002, BellSouth filed a letter clarifying the starting and ending dates of its Service Guarantee Plan. This was approved by the Commission on February 22, 2002, (Docket No. 010097-TL) making the starting date March 1, 2002 and the end date March 1, 2005.

For the period from July 2003 through May 2004, BellSouth has paid its customers $571,000 for missed installations and $1,981,408 for missed out of service repairs.

F. FLORIDA TELECOMMUNICATIONS COMPETITIVE INTERESTS FORUM

In an effort to facilitate further development of a competitive local telephone market in Florida, the Commission, in 2001, initiated a collaborative forum for the purpose of addressing operational and logistical issues that arise between CLECs and ILECs. The Florida

Telecommunications Competitive Interest Forum (Forum) is an opportunity for any Florida local telecommunications provider to raise issues or topics related to facilitating a better functioning competitive market in Florida. The Forum provides a venue for parties to engage in dialogue in an effort to resolve issues in an informal setting rather than a formal, more litigious one. Since the inception in August, 2001 the Forum has convened monthly and has considered a host of issues related to billing and ordering functions. The primary focus during the later part of 2003 and thus far in 2004 has been the development of customer migration draft rules. The draft rules address the process and required information exchange necessary to facilitate CLEC-to-CLEC, CLEC-to-ILEC, and ILEC-to-CLEC customer transfers of service. A working subgroup of the Forum presented draft rules to the Forum in mid-2003 and noted that several areas of disagreement remained. The Forum is continuing to explore resolutions to these areas and is also considering the most efficient process to put the draft rules before the Commission.

G. LIFELINE AND LINK-UP PROGRAMS

Since the inception of the Lifeline and Link-Up programs in Florida, the participation rate for eligible subscribers has been low despite consistent efforts to increase consumer awareness about the programs' benefits. Over the past year, the Commission has spearheaded several important initiatives to increase Lifeline and Link-Up visibility and participation by eligible telephone subscribers.

In July 2003, the Commission initiated a joint Lifeline project with other state and federal agencies that resulted in the dissemination of Lifeline educational materials to all of Florida's nursing homes through the Agency for Health Care Administration's Long Term Care Monitoring Program and to more than 200 One-Stop Career Centers through Workforce Florida, Inc.'s 24 regional workforce boards. During 2004, the Commission formed additional partnerships with a number of organizations to provide Lifeline information to the public. These partners include county libraries, city and county consumer affairs offices, churches, senior centers and a university social work program. The Commission continues to evaluate and promote methods to increase Lifeline and Link-Up awareness and participation.

On April 29, 2004, the FCC released its Report and Order (Order), and Further Notice of Proposed Rulemaking regarding the Lifeline and Link-Up Programs. To improve these programs and to increase subscribership, the FCC's Order, in part: 1) added Temporary Assistance to Needy Families program (TANF) and National School Lunch free lunch program (NSL) to the program-based eligibility criteria; and, 2) added an income-based eligibility criterion of 135% of the Federal Poverty Guidelines (FPG).

On August 10, 2004, the Commission issued Order No. PSC-04-0781-PAA-TL, in Docket No. 040604-TL, adopting the NSL and an income-based criterion of 135% of the FPG for purposes of determining eligibility in the Lifeline and Link-Up programs in Florida. The Commission had previously adopted TANF as an eligibility criteria. In addition to the adoption of new eligibility criteria, the Commission ordered that Florida consumers who qualify for Lifeline assistance be allowed the option of electing a self-certification process by which the amount of Lifeline assistance provided would be based on the type of certification chosen by the consumer. Election to use the self-certification process provides a maximum monthly credit of

$8.25. On August 31, 2004, the Office of Public Counsel, BellSouth, Verizon, Sprint and, jointly, TDS Telecom, GT COM, and ALLTEL Florida filed petitions protesting the Commission's Order and requesting a formal evidentiary hearing.

In a separate but related docket, in May 2004, the Office of Public Counsel petitioned the Commission (Docket No. 040451-TP) to initiate rulemaking requiring local exchange telecommunications companies to provide Lifeline service within 30 days of customer certification. A staff workshop was held on August 19, 2004, to discuss the implications of rulemaking and to gain a better understanding of how Lifeline promotions could more effectively reach Florida's Lifeline eligible population.

CHAPTER VII: FEDERAL ACTIVITIES

A. THE FCC'S TRIENNIAL REVIEW ORDER ON UNE RULES

Under federal law, an ILEC is required to offer UNEs to CLECs at cost-based rates if such UNEs are "necessary" to the CLECs' provision of local service and if the CLECs would be "impaired" without access to such network elements. See Chapter I, Section A.2 above for a discussion of UNEs.

On February 20, 2003, the FCC adopted new rules pertaining to ILEC obligations to unbundle certain elements of their networks and to make these UNEs available to CLECs at cost-based (TELRIC) rates. The FCC released the text of its Order on August 21, 2003; the Order became effective on October 2, 2003. See Chapter III, Section B.2 above.

On March 2, 2004, while the Commission was in the midst of proceedings to implement these FCC rules for Florida, the U.S. Circuit Court of Appeals for the District of Columbia Circuit reversed major portions of the FCC's Triennial Review Order. Among other holdings, the D.C. Circuit held that:

- The FCC cannot delegate its authority to the states, except for fact-finding and other limited circumstances.
- The states cannot be granted the authority to make the impairment findings that the law requires the FCC to make.
- The FCC used an improper analysis in concluding that mass market switching was impaired nationally.
- The FCC used an improper analysis in concluding that certain dedicated transport was impaired.
- The Court's order vacating the offending rules was stayed until the later of 60 days from the date of the opinion (or May 1, 2004),[230] or the Court's denial of any petition for rehearing.

The FCC did not appeal the D.C. Circuit decision to the U.S. Supreme Court. In addition, the Solicitor General of the United States did not appeal the decision. Certain parties to the proceeding did appeal. The United States Supreme Court, however, declined to hear the appeal. As such, the decision of the D.C. Circuit became final on June 15, 2004. As a consequence, certain rules relating to pricing of UNEs ceased to exist. On August 20, 2004, the FCC released its Order and Notice of Proposed Rulemaking (NPRM) on unbundled access to

[230] The FCC and others then petitioned for a 45-day extension of the May 1, 2004 stay date. The request for extension to June 15, 2004 was granted.

network elements. In this Order, the FCC sets forth a 12-month plan with two phases to stabilize the market. First, on an interim basis, the FCC requires ILECs to continue providing unbundled access to switching, enterprise market loops, and dedicated transport under the same rates, term and conditions that applied under their interconnection agreements as of June 15, 2004. Second, the FCC has established measures for the next six months, if final unbundling rules have not been released. In the NPRM, the FCC seeks comment on how to respond to the D.C. Circuit's decisions.

B. REGULATORY FRAMEWORK FOR BROADBAND WIRELINE ACCESS TO THE INTERNET

The Commission filed comments in April 2002, to address the FCC's proposed regulatory framework. Most significant among the FCC's tentative conclusions was that wireline broadband Internet access be considered an Information Service and thus subject only to Title I regulation.[231] Depending on one's vantage, this would expressly remove DSL services from the unbundling requirements of the 1996 Act or recognize that DSL (i.e., broadband) is not subject to the 1996 Act in the first instance.

The FCC has not yet ruled in this proceeding. However, in August 2003, the FCC issued its long awaited Triennial Review Order that specifically exempted fiber technology to the home (i.e., technology to deliver broadband into the home) from future unbundling requirements.

In October 2003 the Ninth Circuit Federal Court of Appeals (Ninth Circuit) ruled that cable modem service is a combination of telecommunications service and information service. If upheld, this ruling would bring cable modem service under Title II as well as Title I of the Telecom Act. The decision vacated the FCC's Declaratory Ruling that cable modem service is an information service only and remanded the matter to the FCC for further consideration. The Ninth Circuit denied a request by the FCC to rehear the case but granted a stay of its decision until June 30, 2004. Both the FCC and the U.S. Solicitor General have appealed the case to the U.S. Supreme Court, which stays the Ninth Circuit decision until the case is resolved.

It is not expected that the FCC will issue a decision in the wireline broadband proceeding until the cable modem case has been decided.

C. IP-ENABLED SERVICES (VOICE OVER INTERNET PROTOCOL)

In July 2004, the Commission submitted reply comments to the FCC that endorsed an approach pursuant to which the FCC (from its national perspective) would apply a light regulatory touch to certain IP-enabled services. Florida legislation provides that voice-over-Internet protocol (VoIP) shall be free of "unnecessary regulation" regardless of the provider.

[231] Title II regulation applies to telecommunications carriers and includes rate-setting authority. Title I is a more flexible, less prescriptive classification that does not include rate-setting authority.

In recognition of the potential benefits of emerging VoIP technologies for Florida's consumers, the Florida Legislature has taken proactive steps to prevent unnecessary regulation of VoIP at the state level. Specifically, subsection 364.01(3), Florida Statutes, contains the following guidance to the Commission as it relates to the regulatory oversight of VoIP:

> The Legislature further finds that the provision of voice-over-Internet protocol (VoIP) free of unnecessary regulation, regardless of the provider, is in the public interest.

Under subsection 364.02(12), Florida Statutes, the 2003 Legislature further specified that:

> "Service" is to be construed in its broadest and most inclusive sense. The term *"service" does not include voice-over-Internet protocol service for purposes of regulation by the commission.* Nothing herein shall affect the rights and obligations of any entity related to the payment of switched network access rates or other intercarrier compensation, if any, related to voice-over-Internet protocol service. (emphasis added)

By exempting VoIP from all regulation, except for the neutral reservation regarding access charges, the Legislature has spoken as to what is "unnecessary." However, the Commission distinguished between economic and social regulation in its reply comments to the FCC.

The Commission proposed an approach that would not embrace economic regulation and that would focus on addressing any social policy issues that are determined too critical to be left to the market – such as 911, universal service, access for those with disabilities. Such an approach would ensure that consumers are protected while encouraging VoIP providers to invest.

In determining the optimal approach for the regulatory treatment to be afforded VoIP, the Commission suggested that the FCC respect the following principles:

- *Borderless Technology.* Because IP-enabled technologies like VoIP are borderless in nature, such technologies are interstate in nature and, therefore, are more appropriately addressed at the federal level than at the state level.

- *Economic Regulation – To Constrain Monopolies.* The provision of voice telecommunications was historically regulated heavily because it was a service provided by government-created monopolies. VoIP providers have no such monopoly.

- *Emerging Markets.* As reflected in Florida law, new technologies should *not* be subject to old rules designed to forge competition in monopoly markets.

- *Limited "Necessary" Regulation; Otherwise, Let the Market Work.* The full panoply of telecommunications regulation is not necessary to address public safety and

welfare issues (e.g., E911 and USF). Policymakers must distinguish between necessary and unnecessary regulation and allow the market to address issues that do not justify a regulatory solution.

Specifically, the Commission requested that the FCC:

(a) conclude IP-enabled services to be interstate in nature;

(b) assert its exclusive jurisdiction over interstate communications;

(c) establish a national policy, deregulatory in nature, to govern those IP-enabled services within the Commission's jurisdiction;

(d) not subject IP-enabled services to economic regulation; and

(e) only subject IP-enabled services within its jurisdiction to public policy regulation deemed important after affording the industry a sufficient period of time in which to develop solutions and standards for meeting public policy objectives.

D. DEVELOPMENT OF A UNIFIED INTERCARRIER COMPENSATION REGIME

Access and intercarrier compensation reform have the potential to affect carrier-to-carrier intrastate rates, universal service, cost allocation issues, infrastructure development, network structures, and various state policies. In August 2001, the Commission filed comments to oppose a federal bill-and-keep system to replace access and reciprocal compensation arrangements. The consequences of adopting a bill-and-keep system may directly impact and change the amounts of payments between carriers for completing each other's calls and hence alter each carrier's ability to compete. In 2001, based on the record before it, the Commission opposed moving to such an approach and recommended these issues be referred to a Joint Board or comparable state/federal negotiation process. The Commission further believes that issues related to universal service and jurisdictional separations should also be referred to the Universal Service and Separations Joint Boards, as appropriate.

The nation's intercarrier compensation regime is in dire need of reform. Virtually all stakeholders agree with this basic proposition. Stakeholders, however, do not agree on how to reform the regime.

The FCC has not yet issued a ruling in this proceeding and it is believed to have been anticipating an industry task force recommendation relating to intercarrier compensation. However, in June 2004 several members of the industry task force, including BellSouth, Verizon and a group of rural ILECs, discontinued their participation, significantly reducing the odds that a consensus could be achieved. On August 13, 2004, the task force made an ex parte filing of its proposal, and then on October 5 made a much more detailed filing in a brief. Other proposals exist as well. The FCC is expected to continue to move forward with reform plans but timing is uncertain.

E. UNIVERSAL SERVICE

1. Review of the Definitions of Universal Service

On July 14, 2003, the FCC issued an order supporting the recommendation of the Federal-State Joint Board on Universal Service (Joint Board) to maintain the existing list of supported services without modification. These services include:

- single-party service;
- voice grade access to the public switched telephone network;
- Dual Tone Multifrequency signaling or its functional equivalent;
- access to emergency services;
- access to operator services;
- access to interexchange service;
- access to directory assistance; and
- toll limitation services for qualifying low-income consumers.

This order was consistent with comments the Commission filed with the FCC to maintain the current list of supported services. The Commission has long been concerned about the size of this federal program and its impact on customer bills. In addition, the Commission stated that expanding the definition to include advanced services or high-speed Internet access is not warranted, in part because support is conditioned on the ability of a carrier to provide all of the supported services. As such, any proposal to expand the definition to include advanced services would not be technologically neutral. Furthermore, expanding the definition would, in most instances, increase the size of the fund. Given that more support is distributed outside Florida and that Florida is a net contributor to the fund, the Commission also expressed concern about the effects on Florida ratepayers.

2. Lifeline and Link-up Service for Low-Income Consumers

The Commission continues to be actively engaged with the Universal Service Joint Board and the FCC regarding Lifeline and Link-up programs. The Commission continues to support the original intent of the Lifeline program, which is to increase subscribership for low-income households that want, but cannot afford, telephone service. The Commission filed comments on August 18, 2003 encouraging the FCC to:

- Adopt an income-based eligibility standard;
- Collect additional data and conduct further analysis before specifying standards beyond that which is set forth in Florida state statute;
- Add the Temporary Assistance to Needy Families (TANF) program to the program based eligibility criteria;

- Add the National School Lunch (NSL) free lunch program to the program based eligibility criteria;
- Take caution in adopting self-certification due to the increased risk of waste, fraud, and abuse and adopt more rigid verification procedures;
- Adopt automatic enrollment as a means of certifying eligibility and increasing enrollment; and
- Advocate more vigorous outreach efforts.

The FCC issued its Order addressing these issues on April 29, 2004. The Order:

- Supports placing greater emphasis on accountability to enhance program integrity;
- Generally supports state flexibility in establishing their own Lifeline and Link-Up programs;
- Adds an income-based eligibility criterion at or below 135% of the of the Federal Poverty Guidelines (FPG);
- Adds the Temporary Assistance to Needy Families program (TANF) and the National School Lunch program (NSL) to the program-based eligibility criteria;
- Continues self-certification, under penalty of perjury, as the federal default rule;
- Encourages states to adopt automatic enrollment; and
- Adopts outreach guidelines to target low-income consumers more effectively.

In addition to the Order, the FCC sought further comment on whether the income-based criterion in the federal default eligibility criteria should be increased to at or below 150% of the FPG. In addition the FCC asked whether adoption of rules governing the advertisement of Lifeline and Link-Up would strengthen the operation of the programs.

3. Schools and Libraries Program

In April 2003, the FCC sought comment on certain rules governing the Schools and Libraries Universal Service support mechanism. The rules of interest will have an impact on the ability to control the size of the fund and the methodology for distribution of the funds. The Commission filed comments July 21, 2003, which urged the FCC to consider suggestions which would improve the safeguards and accountability of the E-rate program. Specifically, the Commission suggested that the Universal Service Administration Corporation (USAC) make available additional data about recipients of support and how the funds are used to increase confidence in the effectiveness and fairness of the program. The program has been heavily criticized for fraud and waste. In addition, the Commission made the following suggestions:

- Establish a comprehensive audit program for the E-rate fund;
- Establish a state-by-state E-rate cap on funds received;
- Establish more comprehensive rules governing how and when E-rate subsidized equipment may be transferred;
- Refine rules for the governing E-rate consultants and the competitive bidding process to minimize waste, fraud, and abuse; and

- Bolster outreach efforts through USAC initiated training opportunities on best practices for applying for funds and achieving program goals to target support more effectively.

The FCC released an order addressing these issues on August 13, 2004. In its order, the FCC adopted several of the Commission's suggestions, such as establishing a more comprehensive audit program, placing new requirements on the transfer of equipment purchased with E-rate funding, and enforcing the requirements for competitive bidding.

4. High-Cost Portability and ETC Designation

On February 27, 2004, the Joint Board released its Recommended Decision addressing universal service high-cost support portability and the process for designating eligible telecommunications carriers (ETC). A carrier must be designated as an ETC in order to receive high-cost or low-income support from the federal universal service program. These issues were referred to the Joint Board on November 8, 2002, by the FCC. In particular, the FCC asked the Joint Board to review the FCC's rules relating to high-cost universal service support in study areas in which a competitive ETC is providing services, as well as the FCC's rules regarding support for second lines.

In general, the Joint Board recommended that the FCC adopt permissive federal guidelines for states (and the FCC) to use when determining whether applicants are qualified to be designated as ETCs. Regarding the scope of support, a majority of the Joint Board members recommended that the FCC limit the scope of high-cost support to a single connection that provides access to the public telephone network (i.e., restate support based on primary lines). The Joint Board's recommendation to restate support based on primary lines is conditioned on the FCC's ability to develop competitively neutral rules and procedures that do not create undue administrative burdens. The Joint Board also offered three proposals designed to avoid or mitigate reductions in the amount of high-cost support flowing to rural carriers as a result of implementing a primary-line restriction.

5. Referral of High-Cost Support Methodology for Rural Telecommunications Carriers

The FCC asked the Joint Board to review its rules relating to the high-cost universal service support mechanisms for rural carriers and to determine the appropriate rural mechanism to succeed the five-year plan adopted in the Rural Task Force Order. The FCC specified that the Joint Board should consider how support can be effectively targeted to rural telephone companies serving the highest cost areas, while protecting against excessive fund growth. The outcome of this proceeding will likely affect future growth in the federal high-cost fund and Florida ratepayer contributions. In 1998, the high-cost support for rural and non-rural carriers in total was $1.69 billion. By comparison in 2003, the high-cost support for rural carriers was $2.41 billion and $856 million for non-rural carriers. The Commission will monitor the proceeding and file comments if appropriate.

F. REPORTING REQUIREMENTS FOR INCUMBENT LOCAL EXCHANGE COMPANIES

Previously, the Commission filed comments expressing concern with eliminating some existing accounting rules and not providing accounting for new technologies that are essential for monitoring and implementing the competitive mandates and safeguards of the 1996 Telecommunications Act.

The FCC's accounting rules provide essential information to Florida in evaluating possible cross-subsidization and promoting competition. The Uniform System of Accounts (USOA) serves as the basis for accounting data that are used to protect ratepayers from improper cross-subsidies, to determine interstate/intrastate cost and revenue splits, to determine the cost of universal service supported services, and to serve as the basis of many of the inputs to the cost proxy models used in determining universal service cost levels and appropriate UNE prices.

On September 5, 2002, the FCC voted to convene a Joint Conference in order to evaluate the accounting requirements that state and federal regulators need to carry out their responsibilities. Commissioner J. Terry Deason was appointed by the FCC to the Joint Conference.

On December 12, 2002, the FCC, on behalf of the Joint Conference, sought public comment with respect to its comprehensive review of regulatory accounting and related reporting requirements. On October 9, 2003, the Joint Conference on Accounting Issues submitted a report to the FCC detailing a series of proposed recommendations to its accounting and reporting rules. Specifically, the Joint Conference sought comment on a number of the issues that were addressed in the FCC's Phase II Accounting Order. In addition, the Joint Conference requested comment on broader questions, including whether there are additional accounting requirements that should be adopted in order to ensure that federal and state regulators have sufficient information to protect consumers, monitor the market place, and promote investment and competition.

The Commission filed comments that recommended that all new accounts identified in the request for comments be adopted so long as the benefits outweigh the costs. The comments also noted the limited availability of financial data in a uniform and standard format outside of the Automated Reporting Management Information System (ARMIS) reports. This information is critical to states for establishing UNE prices, interconnection rates, universal service support, and assessing service quality trends and network functionality, capabilities and reliability.

The FCC released its order on June 24, 2004, responding to the Joint Conference recommendations. The FCC adopted seven of the seventeen Joint Conference recommendations. Among the accepted recommendations was the decision to reinstate certain accounts previously eliminated including accounts for Directory Revenue, Operator Services, Directory Assistance and Customer Services. While recommendations for new separate accounts for several UNE related items were denied as overly burdensome or premature, the FCC did establish subsidiary

categories for the identification of these revenues. Finally, some ARMIS reporting items will no longer be required for carriers deemed to be non-dominant in the markets they serve.

In general, the FCC decision is reflective of a general trend toward reduced reporting requirements for ILECs.

G. REVIEW OF TELRIC PRICING RULES FOR UNBUNDLED NETWORK ELEMENTS

In September of 2003, the FCC issued a Notice of Proposed Rulemaking regarding its rules for the pricing of Unbundled Network Elements and the resale of service by the incumbent local exchange carriers. The methodology embodied in the current rules is referred to as Total Element Long-Run Incremental Cost or TELRIC. The TELRIC methodology has been very controversial since its adoption because it is based largely on hypothetical networks employing the latest available technologies. Incumbent local exchange companies have argued that the methodology leads to UNE rates that are not reflective of real world networks and existing technologies and are substantially below real world costs to provide services. State commissions have pricing authority over UNEs and many have conducted resource intensive, time intensive evidentiary proceedings to implement the TELRIC pricing rules. As set forth below, the Commission remains concerned that pricing rules be grounded in reality, as opposed to purely hypothetical regulatory constructs.

The NPRM tentatively concludes that TELRIC rules should more accurately account for real world attributes of an incumbent local exchange company's network in the deployment of forward-looking costs. The Commission agrees. The scope of the TELRIC review is broad and will address such key factors as cost-of-capital, depreciation expense, rate structure, rate deaveraging, how UNE price setting should relate to Universal Service funding and many other factors. In addition, procedural and implementation matters have been identified that may create the need for state commissions to conduct additional evidentiary proceedings to implement the new pricing rules. The potential impacts of changes to the UNE pricing rules are impossible to predict; however, given the scope of the proceeding, the impacts could be significant.

The Commission filed comments (January 4, 2004) supporting the FCC's tentative conclusion that the "TELRIC rules should more closely account for the real-world attributes of the routing and topography of an incumbent's network in the development of forward-looking costs." The Commission further commented that it believes it is appropriate to determine costs for UNEs that reflect the real-world characteristics of ILECs' networks because UNEs are provided by the ILEC using such a network, not a hypothetical network. Finally, the Commission noted that TELRIC rules should not result in UNE prices that are artificially low such that CLECs would be disincented from using a facilities-based entry strategy.

The FCC has not yet issued an order in this proceeding.

H. LOCAL NUMBER PORTABILITY: WIRELESS TO WIRELESS & WIRELESS TO WIRELINE

In 1996, the FCC adopted the *First Report and Order and Further Notice of Proposed Rulemaking (First Report and Order)* in its Telephone Number Portability docket. This order implemented Section 251(b) of the 1996 Telecommunications Act (the 1996 Act) which requires local exchange carriers (LECs) to provide local number portability, (LNP), to the extent technically feasible, in accordance with requirements prescribed by the FCC. Although the 1996 Act excludes Commercial Mobile Radio Service (CMRS) providers from the definition of local exchange carrier, and therefore from the Section 251(b) obligation to provide number portability, the FCC extended this obligation to CMRS providers. The FCC determined that such an obligation, which would enable wireless subscribers to keep their telephone numbers when changing carriers, would enhance competition between wireless carriers as well as promote competition between wireless and wireline carriers.

After extending the wireless LNP deadline several times, the FCC established November 24, 2003, as the date by which wireless carriers in the top 100 MSAs must be capable of wireless-to-wireless and wireless-to-wireline porting and wireline carriers must be capable of wireline-to-wireless porting. The deadline was extended to May 24, 2004, for all other affected carriers.

As expected, the transition in November 2003 resulted in some complaints. The majority of complaints lodged were related to a particular carrier and most of those were eventually resolved. In May 2004 LNP was implemented for the remainder of carriers and again there was relatively minor disruption to most customers. A mitigating factor in suppressing the volume of customers choosing to switch carriers may have been the fact that typical wireless subscription requires a minimum duration contract with early termination fees. Many customers may have opted to remain with their current carrier until their existing contract expires in order to avoid termination fees.

I. NASUCA TRUTH IN BILLING PETITION TO THE FCC

The National Association of State Utility Consumer Advocates (NASUCA) sought a ruling from the FCC prohibiting the carriers from imposing monthly line-item charges, surcharges, or other fees on customers' bills unless such charges have been expressly mandated by a regulatory agency. In comments to the FCC on August 5, 2004, the Commission expressed that over the past several years, the clear policy choice has been for more specificity, not less, on customer bills. Further, the NASUCA approach could turn out to be burdensome to the companies (in terms of increased administrative burden, another shift in billing practices, increased costs) and, at the same time, not beneficial to consumers (possible increased costs associated with changes in billing practices and less specificity on bills).

As a general principle, companies in a competitive marketplace should have the discretion and the flexibility to recover certain costs from their customers, provided they do not

violate any applicable rules or regulations. Without question, government mandates and regulatory activities impose costs – often substantial costs – on telecommunications carriers. Some wireline and wireless telecommunications carriers impose separate monthly surcharges and fees that are not mandated by government but that may result, directly or indirectly, from government mandates and regulatory activities. These carriers have opted to specifically identify such charges.

Disclosure of such compliance costs to consumers through line items or surcharges would appear to provide consumers more information – not only about what they are being billed for – but also about the actions of their government in promoting certain social policies. As the telecommunications industry continues to become increasingly competitive, consumers should have access to more detailed information in order to make more informed choices about the services for which they are paying – a principle that supports breaking down costs on a consumer's bill and disclosing the nature of those costs.

Numerous avenues currently exist for consumer complaints regarding carrier billing. Whether enforcement of existing federal and state legal requirements, as opposed to new legal requirements, could adequately address alleged improper billing practices, is an important determination to be made prior to wholesale reform of billing requirements. The extent to which current consumer protection laws do not address such behavior should be assessed prior to the articulation of a new regulatory paradigm, stated the Commission.

The Commission suggested an alternative rational approach to a declaratory ruling, an approach that would examine and document the claims presented in the NASUCA petition in a systematic, collaborative manner. This approach would permit the FCC to examine the nature and extent of billing problems and determine what, if any, remedy is appropriate and whether it would be best handled through a generally applicable rulemaking or on a case-by-case basis at the state or federal level. This approach would determine whether the problems identified by NASUCA are widespread or merely the result of a few "bad apples."

The Commission urged that an evidentiary record should be developed prior to consideration of any additional mandated billing requirements for carriers. The Petitioner should show that the approach is good for the consumer. Such a proceeding would create a record on which the FCC could base any conclusions and potential remedies. The FCC should explore:

- what specific charges are at issue;
- how many complaints on this topic have been filed at the FCC, individual state commissions, other state and federal agencies that receive and account for telecommunications billing complaints, and with carriers;
- which specific carriers, if any, are engaging in misleading or deceptive practices and surcharges;
- what costs would be incurred by carriers if the petition were granted;
- could there be an industry solution that does not include a mandate by the FCC – something similar to the voluntary Code of Conduct by the wireless industry;
- should options that include customer education on how to understand charges for telephone service be pursued prior to additional rulemaking;

- what additional cost would be imposed on the companies to restructure the bills to consumers and would the marketplace provide a better approach.

The Commission urged the FCC to take time to review the underlying problems that the NASUCA petition proposes to remedy. The review should address the nature and scope of any alleged improper billing, whether existing laws can address the issue, whether alternatives exist to NASUCA's proposal, and the monetary and other costs and benefits of the NASUCA proposal and of alternatives to that proposal.

To the extent the FCC determines that certain carriers violate federal laws, rules, or orders of the FCC pertaining to telecommunications billing and/or consumer protection, the FCC should take the appropriate enforcement action against those individual carriers. Absent such a review, policymakers cannot be sure that the solution proposed in the petition will not create a whole new host of issues, without providing a commensurate benefit to consumers.

APPENDIX A: CLECS PROVIDING SERVICE

CLEC	Resale	UNE-P	Switch-Based
AA Tele Com	Residential / Business	Residential / Business	
Access Communications, LLC.		Residential / Business	
Access Integrated Networks, Inc.	Residential / Business	Residential / Business	
Access Point, Inc.	Residential / Business	Residential / Business	
ACN Communication Services, Inc.		Residential	
Actel Wireless, Inc.	Residential		
Adelphia	Business		
Advantage Group of Florida Communications, L.L.C.	Residential	Residential / Business	
Allegiance Telecom of Florida, Inc.	Business	Business	Business
ALLTEL Communications, Inc.	Business		Residential / Business
Alternative Phone, Inc.	Residential / Business	Residential / Business	
American Dial Tone	Residential / Business	Residential	
American Fiber Network, Inc.	Residential / Business		
America's Wireless Choice, Inc.	Residential		
AmeriMex Communications Corp.	Residential / Business	Residential / Business	
ANEW Broadband, Inc.	Residential / Business	Residential / Business	
Anns Communication	Residential		
AT&T Communications of the Southern States, LLC	Residential / Business	Residential / Business	Business
Atlantic Phone	Residential / Business	Residential / Business	
Atlantic.Net Broadband, Inc.	Residential / Business	Residential	
Auglink Communications, Inc.	Residential / Business	Residential / Business	
Baldwin County Internet/DSSI Service, L.L.C.			Residential
Basic Phone, Inc.	Residential		
BCN Telecom, Inc.	Residential / Business	Residential / Business	
Bellerud Communications, LLC	Residential		
BellSouth Telecommunications, Inc. CLEC	Residential / Business		Business
Birch	Business	Business	
BTI	Residential / Business	Residential / Business	Business
Budget Phone, Inc.	Residential	Residential	
BudgeTel Systems, Inc.	Residential		
BullsEye Telecom, Inc.		Residential / Business	
Buy Tel Communications, Inc.	Residential		
CariLink International, Inc.	Residential	Residential / Business	
CAT Communications International, Inc.	Residential / Business	Residential	
CHOICE ONE Telecom	Residential / Business		
CI2, Inc.	Business		
Cinergy Communications Company		Residential / Business	
City of Daytona Beach			Business
Citywide Tel	Residential / Business	Residential / Business	
Coastal Telephone Connections, Inc. d/b/a Coastal Connections	Residential		

APPENDIX A: CLECS PROVIDING SERVICE

CLEC	Resale	UNE-P	Switch-Based
Comcast Phone of Florida, LLC d/b/a Comcast Digital Phone			Residential / Business
Covad Communications Company	Residential		
Curbside Communications		Residential / Business	
Cypress Communications Operating Company, Inc.		Business	
DayStar Communications	Business		Business
Deland Actel, Inc.	Residential / Business	Residential / Business	
Delta Phones, Inc.	Residential / Business		
Dialtone Telecom, LLC	Residential / Business		
Double Link Communications, Inc.	Residential		
DPI Teleconnect, L.L.C.	Residential	Residential	
DSL Telecom, Inc.	Residential / Business	Residential / Business	
DSLi	Residential / Business	Residential / Business	Residential / Business
Eagle Telecommunications, Inc.	Residential / Business	Residential / Business	
Easy Telephone Services Company	Residential / Business	Residential / Business	
EPICUS, Inc.	Residential / Business	Residential / Business	
Ernest Communications, Inc.	Business	Residential / Business	
EveryCall Communications, Inc.		Residential / Business	
Excel Telecommunications, Inc.		Residential	
Express Phone Service	Residential	Residential / Business	
EZ Talk Communications, L.L.C.	Residential / Business		
FDN Communications	Residential / Business	Residential / Business	Residential / Business
FLATEL, Inc.	Residential / Business	Residential / Business	
Florida Comm South	Residential	Residential / Business	
Florida Multi Media	Business		Residential
Florida Phone Service, Inc.	Residential	Residential / Business	
Florida Telephone Services, LLC	Residential / Business	Residential / Business	
Focal Communications Corporation of Florida	Business		Business
FPL FiberNet, LLC		Business	
Georgia Telephone Services, Inc.	Residential		
Global Crossing	Residential / Business	Business	
Global NAPS, Inc.		Residential / Business	
Globcom, Inc.	Residential		
Granite Telecommunications, LLC	Business	Business	
Gulf Coast Telecom, Inc.	Residential		
Harbor Communications, LLC		Business	Business
High Tech Communications	Residential / Business		
HOLMES COUNTY E-911	Business		
ICG Telecom Group, Inc.	Business		
IDS Telcom LLC	Residential / Business	Residential / Business	Business
IDT		Residential / Business	
Instatone	Residential / Business		
Intermedia Communications, Inc.	Residential / Business		

APPENDIX A: CLECS PROVIDING SERVICE

CLEC	Resale	UNE-P	Switch-Based
ISN Communications	Residential / Business	Residential / Business	
ITC^DeltaCom	Residential / Business	Residential / Business	Business
KMC	Residential / Business	Business	Business
Knology of Florida, Inc.	Residential / Business		Residential / Business
LecStar Telecom, Inc.	Residential / Business	Residential / Business	
Level 3 Communications, LLC			Business
Lightyear Communications, Inc.		Residential / Business	
Local Line America, Inc.	Residential		
Lone Star State Telephone Co.	Residential		
M.T.G.	Residential / Business		
MCI Worldcom	Residential / Business	Residential / Business	Business
MET Communications, Inc.	Residential		
Metro Teleconnect Companies, Inc.	Residential	Residential	
Metropolitan Fiber Systems of Florida, Inc.	Residential / Business	Residential / Business	
MetTel	Business	Business	
Midstate Telecommunications	Residential		
Momentum Business Solutions, Inc.	Business	Residential / Business	
MY TEL INC.	Residential / Business		
Myatel Corporation	Residential / Business		
National Telecom & Broadband Services, LLC	Residential / Business	Residential / Business	
Navigator Telecommunications, LLC	Residential / Business	Residential / Business	
Network Telephone Corporation	Residential / Business	Residential / Business	Business
NewPhone	Residential	Residential	
NewSouth Communications Corp.	Residential / Business	Business	Business
North American Telecommunications Corporation	Residential / Business	Residential / Business	
NOW Communications, Inc.	Residential / Business	Residential / Business	
NuVox Communications, Inc.		Business	Business
OneStar Long Distance, Inc.	Residential	Residential / Business	
Orlando Telephone Company	Residential / Business		Residential / Business
PaeTec Communications, Inc.	Residential / Business	Business	Business
Phone Club Corporation	Residential / Business		
Phone Link, Inc.	Residential	Residential	
Phone Out/Phone On	Residential		
Phones For All	Residential	Residential	
PowerNet Global Communications		Residential	
Quality Telephone Inc.	Residential	Residential	
QuantumShift Communications, Inc.	Business		
Qwest Communications Corporation	Business		
Re Connection Connection	Residential / Business		
ReTel Communications, Inc.	Residential / Business	Residential / Business	
Rightlink USA, Inc.	Residential / Business	Residential / Business	
Ring Connection, Inc.	Residential / Business		
Saluda Networks Incorporated		Residential / Business	

APPENDIX A: CLECS PROVIDING SERVICE

CLEC	Resale	UNE-P	Switch-Based
SanTel Communications	Residential / Business	Residential / Business	
SBC Telecom, Inc.	Residential / Business		Residential / Business
Second Chance Phone	Residential / Business		
ServiSense.com, Inc.	Residential / Business		
Smart City Solutions, LLC			Business
SNC Communications, LLC		Residential / Business	
Source One Communications, Inc. d/b/a Quick Connects	Residential / Business		
Southeastern Services, Inc.	Residential / Business		
Southern ReConnect, Inc.	Residential		
Spectrotel, Inc.		Residential / Business	
Speedy Reconnect, Inc.	Residential		
Sprint Communications Company Limited Partnership	Residential	Residential / Business	Business
STS	Residential / Business	Residential / Business	
Sun Tel USA, Inc.	Residential / Business		
Suntel Metro, Inc.		Residential / Business	
Supra Telecommunications and Information Systems, Inc.	Residential / Business	Residential / Business	Residential
Symtelco, LLC	Business	Business	
T3 Communications, LLC	Residential	Residential / Business	Business
Talk America Inc.	Residential / Business	Residential / Business	
Tallahassee Telephone Exchange, Inc.	Residential / Business	Residential / Business	
Tel West Communications, LLC	Residential		
TelCove Investment			Business
TelCove of Jacksonville			Business
TeleConex	Residential	Residential	
TELECUBA, INC.	Residential / Business	Residential	
Telefyne Incorporated	Residential		
Telepak Networks, Inc.	Business		
Telephone One Inc.	Residential / Business	Residential / Business	
THC Internet Solutions	Residential / Business		
The Gulas Group, L.L.C.		Business	
The Sunshine State Telephone Company, L.L.P.		Residential / Business	
TIBURON TELECOM INC	Business		
Tiburon Telecom, Inc.	Residential / Business		
Time Warner Telecom of Florida, L.P.	Business		Business
Trans National Communications International, Inc.		Residential	
Tristar Communications Corp.	Residential / Business	Residential / Business	
Unicom Communications, LLC	Residential / Business		
Unitel	Residential / Business	Residential / Business	
Universal Telecom, Inc.	Residential		
Unknown	Residential / Business	Residential / Business	

APPENDIX A: CLECS PROVIDING SERVICE			
CLEC	**Resale**	**UNE-P**	**Switch-Based**
US LEC of Florida Inc.	Business		Business
USA Telecom, Inc.	Residential / Business	Residential / Business	
USTEL	Residential	Residential / Business	
Utilities Commission, New Smyrna Beach	Residential / Business	Residential / Business	
VarTec Telecom, Inc.		Residential / Business	
Verizon Avenue	Residential		
Winstar Communications, LLC	Business		
XO Florida, Inc.	Business		Business
Xspedius	Residential / Business	Residential / Business	Business
Z Tel Communications, Inc.	Business	Residential / Business	Business

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER

Exchange	Total CLEC Residential Providers (2003)	Total CLEC Residential Providers (2004)	Total CLEC Business Providers (2003)	Total CLEC Business Providers (2004)
Alachua	6	6	0	0
Alford	12	15	1	2
Alligator Point	0	0	0	0
Altha	2	2	0	0
Apalachicola	1	1	0	0
Apopka	30	36	17	21
Arcadia	20	24	6	9
Archer	21	25	6	12
Astor	13	13	3	3
Avon Park	23	20	8	9
Baker	16	13	4	4
Baldwin	17	15	14	19
Bartow	18	19	10	13
Belleglade	30	36	15	25
Belleview	25	24	14	19
Beverly Hills	19	26	4	7
Blountstown	2	2	0	0
Boca Grande	2	0	1	1
Boca Raton	51	57	43	53
Bonifay	16	17	3	6
Bonita Springs	22	24	7	13
Bowling Green	11	11	1	1
Boynton Beach	46	52	39	51
Bradenton	28	24	18	19
Branford	7	9	0	0
Bristol	1	1	0	0
Bronson	25	25	9	13
Brooker	4	3	0	0
Brooksville	33	37	22	26
Bunnell	25	26	16	21
Bushnell	24	22	7	8
Callahan	4	6	0	2
Cantonment	0	26	1	19
Cape Coral	22	28	8	16
Cape Haze	16	16	5	5
Carrabelle	1	1	0	0
Cedar Key	6	4	11	13
Celebration	0	0	2	3
Century[232]	15	17	5	7
Chattahoochee	2	1	0	0

[232] Updated data for Century.

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER

Exchange	Total CLEC Residential Providers (2003)	Total CLEC Residential Providers (2004)	Total CLEC Business Providers (2003)	Total CLEC Business Providers (2004)
Cherry Lake	9	23	0	14
Chiefland	25	26	18	24
Chipley	35	22	21	23
Citra	4	4	0	0
Clearwater	34	31	28	27
Clermont	25	25	14	15
Clewiston	20	21	6	9
Cocoa	45	50	34	46
Cocoa Beach	23	36	18	32
Coral Springs	53	77	35	61
Cottondale	8	10	4	5
Crawfordville	12	12	3	5
Crescent City	5	6	0	0
Crestview	23	23	11	10
Cross City	17	16	10	14
Crystal River	19	21	8	11
Dade City	18	20	10	11
Daytona Beach	54	56	41	52
DeBary	36	43	23	28
Deerfield Beach	43	53	37	47
DeFuniak Springs	21	23	8	9
Deland	36	39	22	32
DeLeon Springs	16	23	10	11
Delray Beach	47	56	34	52
Destin	15	18	9	12
Dowling Park	4	1	0	0
Dunnellon	26	30	14	21
East Orange	26	32	16	20
East Point	1	1	0	0
Eau Gallie	44	47	33	44
Englewood	13	12	9	13
Eustis	29	29	10	11
Everglades	3	4	1	2
Fernadina Beach	38	40	23	31
Flagler Beach	15	19	17	22
Florahome	2	4	0	1
Florida Sheriffs' Boys Ranch	2	3	0	0
Forest	15	15	5	5
Freeport	11	11	4	5
Frostproof	11	12	3	6
Ft. Lauderdale	73	82	54	70

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER

Exchange	Total CLEC Residential Providers (2003)	Total CLEC Residential Providers (2004)	Total CLEC Business Providers (2003)	Total CLEC Business Providers (2004)
Ft. Meade	13	10	1	2
Ft. Myers	37	34	20	25
Ft. Myers Beach	11	9	6	5
Ft. Pierce	44	50	28	43
Ft. Walton Beach	28	26	12	16
Ft. White	6	6	0	0
Gainesville	54	54	30	37
Geneva	15	0	9	0
Glendale	6	6	0	0
Graceville	19	22	8	15
Grand Ridge	14	15	1	2
Green Cove Springs	33	36	19	23
Greensboro	1	1	1	0
Greenville	10	14	1	2
Greenwood	10	8	0	1
Gretna	1	3	0	0
Groveland	20	18	7	8
Gulf Breeze	29	31	21	30
Haines City	27	23	13	16
Hastings	2	5	0	0
Havana	30	31	10	13
Hawthorne	22	24	9	15
High Springs	6	5	0	0
Hilliard	6	4	0	0
Hobe Sound	24	29	14	25
Holley-Navarre	24	29	14	22
Hollywood	69	77	45	59
Homestead	50	58	36	47
Homosassa	23	22	6	7
Hosford	1	0	0	0
Howey-in-the-Hills	6	9	1	3
Hudson	21	20	15	17
Immokalee	21	20	6	8
Indian Lake	3	3	2	2
Indiantown	0	0	0	0
Interlachen	6	8	0	0
Inverness	18	26	11	14
Jacksonville	67	76	28	64
Jacksonville Beach	67	2	49	12
Jasper	3	6	0	0
Jay	0	18	1	9

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER

Exchange	Total CLEC Residential Providers (2003)	Total CLEC Residential Providers (2004)	Total CLEC Business Providers (2003)	Total CLEC Business Providers (2004)
Jennings	3	6	0	0
Jensen Beach	24	30	13	22
Julington	17	1	16	3
Jupiter	33	37	21	37
Keaton Beach	1	1	0	0
Kenansville	4	5	3	3
Keys	44	45	28	42
Keystone Heights	30	27	11	14
Kingsley Lake	1	3	1	0
Kissimmee	34	42	18	27
La Belle	20	19	6	8
Lady Lake	20	23	7	12
Lake Buena Vista	0	1	4	4
Lake Butler	5	6	0	0
Lake City	38	40	24	31
Lake Placid	19	16	4	8
Lake Wales	23	19	9	14
Lakeland	31	27	15	19
Laurel Hill	1	0	0	0
Lawtey	14	15	1	2
Lee	10	8	1	2
Leesburg	27	30	17	19
Lehigh Acres	25	25	9	12
Live Oak	7	8	0	1
Luraville	3	5	0	0
Lynn Haven	25	24	12	20
Macclenny	2	2	3	2
Madison	13	16	9	9
Malone	12	13	0	0
Marco Island	9	7	8	10
Marianna	18	22	10	12
Maxville	12	15	8	12
Mayo	4	4	0	0
McIntosh	6	7	0	0
Melbourne	52	50	35	51
Melrose	4	5	0	0
Miami	78	85	65	81
Micanopy	13	0	4	0
Middleburg	36	37	16	24
Milton	28	32	18	25
Molino	0	0	0	0

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER				
	Total CLEC Residential Providers		Total CLEC Business Providers	
Exchange	(2003)	(2004)	(2003)	(2004)
Monticello	18	22	6	7
Montverde	11	14	1	2
Moore Haven	11	11	2	3
Mount Dora	24	26	9	12
Mulberry	16	15	9	7
Munson	8	0	1	0
Myakka	5	6	1	2
Naples	29	29	14	20
New Port Richey	26	20	19	19
New Smyrna Beach	30	35	27	38
Newberry	27	28	9	12
North Cape Coral	25	0	10	3
North Dade	64	71	47	57
North Ft Myers	29	27	10	17
North Naples	22	21	12	17
North Port	14	15	7	9
Oak Hill	15	19	7	14
Ocala	32	35	16	22
Ocklawaha	15	15	3	3
Okeechobee	21	22	9	10
Old Town	19	21	4	10
Orange City	27	24	15	17
Orange Park	41	46	30	38
Orange Springs	4	5	0	0
Orlando	67	76	53	62
Oviedo	34	36	31	38
Pace	27	30	16	19
Pahokee	27	31	10	20
Palatka	42	41	25	27
Palm Coast	26	34	21	30
Palmetto	18	16	11	14
Panacea	4	2	1	2
Panama City	43	45	28	37
Panama City Beach	36	32	23	27
Paxton	0	1	0	0
Pensacola	46	52	34	41
Perrine	55	66	42	52
Perry	1	1	0	0
Pierson	22	23	9	14
Pine Island	11	14	2	3
Plant City	18	16	12	16

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER

Exchange	Total CLEC Residential Providers (2003)	Total CLEC Residential Providers (2004)	Total CLEC Business Providers (2003)	Total CLEC Business Providers (2004)
Polk City	12	11	6	7
Pomona Park	21	23	5	10
Pompano Beach	62	3	49	14
Ponce de Leon	12	10	5	6
Ponte Verde Beach	20	28	26	27
Port Charlotte	30	26	11	16
Port St Joe	2	1	0	0
Port St. Lucie	40	50	26	35
Punta Gorda	20	19	8	12
Quincy	1	5	0	0
Raiford	1	3	0	0
Reedy Creek	25	10	20	5
Reynolds Hill	11	0	0	0
Salt Springs	7	7	1	1
San Antonio	11	11	4	4
Sanderson	1	2	1	1
Sanford	53	56	41	41
Sanibel-Captiva Island	2	4	5	6
Santa Rosa Beach	8	10	7	9
Sarasota	32	23	20	23
Seagrove Beach	8	8	4	7
Sebastian	34	35	20	31
Sebring	17	20	8	12
Shalimar	18	18	6	8
Silver Springs Shores	19	21	6	7
Sneads	12	9	2	3
Sopchoppy	5	4	0	1
Spring Lake Hills	12	13	6	5
St. Augustine	42	46	29	39
St. Cloud	26	31	12	16
St. Johns	12	0	11	4
St. Marks	4	3	2	2
St. Petersburg	43	35	24	29
Starke	19	24	9	10
Stuart	37	42	33	46
Sunny Hills	14	16	4	6
Tallahassee	38	39	19	24
Tampa	48	40	27	29
Tarpon Springs	26	25	18	20
Tavares	18	22	11	12
The Beaches	2	0	0	0

APPENDIX B: EXCHANGES WITH A CLEC PROVIDER

Exchange	Total CLEC Residential Providers (2003)	Total CLEC Residential Providers (2004)	Total CLEC Business Providers (2003)	Total CLEC Business Providers (2004)
Titusville	34	41	28	37
Trenton	22	25	13	16
Trilacoochee	15	15	3	3
Tyndall AFB	0	0	0	0
Umatilla	26	22	4	5
Valparaiso	23	21	9	14
Venice	20	17	15	19
Vernon	15	15	6	11
Vero Beach	41	50	28	40
Waldo	4	7	0	0
Walnut Hill	0	0	0	0
Wauchula	18	16	4	6
Weekiwachee Springs	0	40	2	27
Weirsdale	0	0	0	0
Welaka	22	19	7	9
Wellborn	3	7	0	0
West Kissimmee	1	1	6	11
West Palm Beach	68	82	53	67
Westville	10	10	0	0
Wewahitchka	31	1	23	0
White Springs	4	5	0	0
Wildwood	26	25	9	12
Williston	18	23	5	6
Windermere	7	13	9	8
Winter Garden	29	31	17	22
Winter Haven	28	25	17	19
Winter Park	39	46	21	27
Yankeetown	21	17	8	12
Youngstown-Fountain	22	27	8	10
Yulee	26	25	15	18
Zephyr Hills	19	20	15	15
Zolfo Springs	9	9	2	3

APPENDIX C: PERCENTAGE OF CLEC ACCESS LINES BY EXCHANGE

Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
Alachua	> 0 to 1%	> 0 to 1%	0	0
Alford	1% to 5%	1% to 5%	1% to 5%	25% to 30%
Alligator Point	0	0	0	0
Altha	> 0 to 1%	> 0 to 1%	0	0
Apalachicola	> 0 to 1%	> 0 to 1%	0	0
Apopka	1% to 5%	1% to 5%	15% to 20%	10% to 15%
Arcadia	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Archer	1% to 5%	1% to 5%	20% to 25%	25% to 30%
Astor	1% to 5%	1% to 5%	5% to 10%	5% to 10%
Avon Park	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Baker	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Baldwin	5% to 10%	5% to 10%	15% to 20%	30% to 35%
Bartow	1% to 5%	1% to 5%	1% to 5%	20% to 25%
Belleglade	25% to 30%	30% to 35%	15% to 20%	25% to 30%
Belleview	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Beverly Hills	> 0 to 1%	> 0 to 1%	1% to 5%	5% to 10%
Blountstown	1% to 5%	1% to 5%	0	0
Boca Grande	> 0 to 1%	0	> 0 to 1%	5% to 10%
Boca Raton	10% to 15%	10% to 15%	35% to 40%	35% to 40%
Bonifay	1% to 5%	1% to 5%	> 0 to 1%	1% to 5%
Bonita Springs	> 0 to 1%	> 0 to 1%	10% to 15%	10% to 15%
Bowling Green	1% to 5%	1% to 5%	> 0 to 1%	1% to 5%
Boynton Beach	10% to 15%	10% to 15%	30% to 35%	35% to 40%
Bradenton	1% to 5%	1% to 5%	15% to 20%	15% to 20%
Branford	1% to 5%	1% to 5%	0	0
Bristol	1% to 5%	> 0 to 1%	0	0
Bronson	1% to 5%	1% to 5%	1% to 5%	5% to 10%
Brooker	> 0 to 1%	> 0 to 1%	0	0
Brooksville	10% to 15%	5% to 10%	15% to 20%	15% to 20%
Bunnell	5% to 10%	1% to 5%	10% to 15%	15% to 20%
Bushnell	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Callahan	> 0 to 1%	> 0 to 1%	0	35% to 40%
Cantonment	0	5% to 10%	5% to 10%	25% to 30%
Cape Coral	> 0 to 1%	1% to 5%	1% to 5%	10% to 15%
Cape Haze	> 0 to 1%	> 0 to 1%	1% to 5%	1% to 5%
Carrabelle	> 0 to 1%	> 0 to 1%	0	0
Cedar Key	1% to 5%	> 0 to 1%	15% to 20%	75% to 80%
Celebration	0	0	25% to 30%	35% to 40%
Century[233]	5% to 10%	5% to 10%	5% to 10%	15% to 20%

[233] Updated data for Century.

APPENDIX C: PERCENTAGE OF CLEC ACCESS LINES BY EXCHANGE

Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
Chattahoochee	> 0 to 1%	> 0 to 1%	0	0
Cherry Lake	1% to 5%	10% to 15%	0	75% to 80%
Chiefland	1% to 5%	1% to 5%	25% to 30%	30% to 35%
Chipley	15% to 20%	5% to 10%	35% to 40%	35% to 40%
Citra	> 0 to 1%	1% to 5%	0	0
Clearwater	> 0 to 1%	> 0 to 1%	30% to 35%	35% to 40%
Clermont	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Clewiston	1% to 5%	5% to 10%	1% to 5%	1% to 5%
Cocoa	5% to 10%	5% to 10%	35% to 40%	25% to 30%
Cocoa Beach	1% to 5%	5% to 10%	20% to 25%	50% to 55%
Coral Springs	15% to 20%	35% to 40%	30% to 35%	50% to 55%
Cottondale	5% to 10%	5% to 10%	5% to 10%	5% to 10%
Crawfordville	1% to 5%	1% to 5%	1% to 5%	30% to 35%
Crescent City	> 0 to 1%	1% to 5%	0	0
Crestview	1% to 5%	1% to 5%	1% to 5%	5% to 10%
Cross City	1% to 5%	1% to 5%	10% to 15%	10% to 15%
Crystal River	1% to 5%	1% to 5%	5% to 10%	5% to 10%
Dade City	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Daytona Beach	5% to 10%	10% to 15%	40% to 45%	35% to 40%
DeBary	10% to 15%	10% to 15%	15% to 20%	20% to 25%
Deerfield Beach	15% to 20%	15% to 20%	35% to 40%	35% to 40%
DeFuniak Springs	5% to 10%	5% to 10%	1% to 5%	1% to 5%
Deland	10% to 15%	10% to 15%	20% to 25%	15% to 20%
DeLeon Springs	10% to 15%	5% to 10%	25% to 30%	20% to 25%
Delray Beach	10% to 15%	10% to 15%	30% to 35%	35% to 40%
Destin	1% to 5%	1% to 5%	20% to 25%	30% to 35%
Dowling Park	> 0 to 1%	> 0 to 1%	0	0
Dunnellon	1% to 5%	1% to 5%	10% to 15%	15% to 20%
East Orange	1% to 5%	1% to 5%	10% to 15%	25% to 30%
East Point	> 0 to 1%	> 0 to 1%	0	0
Eau Gallie	1% to 5%	5% to 10%	15% to 20%	15% to 20%
Englewood	> 0 to 1%	> 0 to 1%	5% to 10%	5% to 10%
Eustis	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Everglades	> 0 to 1%	> 0 to 1%	> 0 to 1%	> 0 to 1%
Fernadina Beach	10% to 15%	5% to 10%	35% to 40%	20% to 25%
Flagler Beach	5% to 10%	5% to 10%	30% to 35%	30% to 35%
Florahome	> 0 to 1%	> 0 to 1%	0	1% to 5%
Florida Sheriffs' Boys Ranch	1% to 5%	1% to 5%	0	0
Forest	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Freeport	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Frostproof	1% to 5%	1% to 5%	1% to 5%	1% to 5%

APPENDIX C: PERCENTAGE OF CLEC ACCESS LINES BY EXCHANGE

Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
Ft. Lauderdale	20% to 25%	20% to 25%	35% to 40%	35% to 40%
Ft Meade	1% to 5%	1% to 5%	> 0 to 1%	1% to 5%
Ft Myers	1% to 5%	25% to 30%	25% to 30%	25% to 30%
Ft. Myers Beach	> 0 to 1%	> 0 to 1%	5% to 10%	15% to 20%
Ft Pierce	10% to 15%	5% to 10%	15% to 20%	15% to 20%
Ft. Walton Beach	1% to 5%	1% to 5%	10% to 15%	20% to 25%
Ft. White	1% to 5%	> 0 to 1%	0	0
Gainesville	10% to 15%	5% to 10%	20% to 25%	15% to 20%
Geneva	1% to 5%	0	15% to 20%	0
Glendale	1% to 5%	1% to 5%	0	0
Graceville	1% to 5%	5% to 10%	1% to 5%	10% to 15%
Grand Ridge	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Green Cove Springs	5% to 10%	5% to 10%	20% to 25%	20% to 25%
Greensboro	20% to 25%	1% to 5%	1% to 5%	0
Greenville	5% to 10%	1% to 5%	1% to 5%	1% to 5%
Greenwood	5% to 10%	5% to 10%	0	1% to 5%
Gretna	> 0 to 1%	5% to 10%	0	0
Groveland	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Gulf Breeze	5% to 10%	5% to 10%	25% to 30%	30% to 35%
Haines City	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Hastings	> 0 to 1%	1% to 5%	0	0
Havana	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Hawthorne	1% to 5%	1% to 5%	5% to 10%	10% to 15%
High Springs	> 0 to 1%	> 0 to 1%	0	0
Hilliard	> 0 to 1%	1% to 5%	0	0
Hobe Sound	5% to 10%	5% to 10%	15% to 20%	25% to 30%
Holley-Navarre	5% to 10%	5% to 10%	10% to 15%	20% to 25%
Hollywood	20% to 25%	20% to 25%	35% to 40%	35% to 40%
Homestead	15% to 20%	15% to 20%	10% to 15%	10% to 15%
Homosassa	1% to 5%	1% to 5%	1% to 5%	10% to 15%
Hosford	> 0 to 1%	0	0	0
Howey-in-the-Hills	> 0 to 1%	1% to 5%	1% to 5%	1% to 5%
Hudson	> 0 to 1%	> 0 to 1%	15% to 20%	20% to 25%
Immokalee	5% to 10%	10% to 15%	1% to 5%	1% to 5%
Indian Lake	> 0 to 1%	> 0 to 1%	1% to 5%	1% to 5%
Indiantown	0	0	0	0
Interlachen	> 0 to 1%	1% to 5%	0	0
Inverness	1% to 5%	1% to 5%	1% to 5%	10% to 15%
Jacksonville	15% to 20%	15% to 20%	40% to 45%	35% to 40%
Jacksonville Beach	10% to 15%	5% to 10%	35% to 40%	25% to 30%
Jasper	1% to 5%	1% to 5%	0	0

APPENDIX C: PERCENTAGE OF CLEC ACCESS LINES BY EXCHANGE

Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
Jay	0	1% to 5%	1% to 5%	5% to 10%
Jennings	1% to 5%	1% to 5%	0	0
Jensen Beach	5% to 10%	5% to 10%	20% to 25%	20% to 25%
Julington	10% to 15%	1% to 5%	15% to 20%	25% to 30%
Jupiter	5% to 10%	5% to 10%	30% to 35%	30% to 35%
Keaton Beach	> 0 to 1%	> 0 to 1%	0	0
Kenansville	> 0 to 1%	> 0 to 1%	5% to 10%	5% to 10%
Keys	5% to 10%	5% to 10%	10% to 15%	15% to 20%
Keystone Heights	1% to 5%	1% to 5%	10% to 15%	15% to 20%
Kingsley Lake	> 0 to 1%	1% to 5%	30% to 35%	0
Kissimmee	1% to 5%	5% to 10%	25% to 30%	35% to 40%
La Belle	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Lady Lake	> 0 to 1%	> 0 to 1%	5% to 10%	5% to 10%
Lake Buena Vista	0	10% to 15%	10% to 15%	10% to 15%
Lake Butler	> 0 to 1%	1% to 5%	0	0
Lake City	1% to 5%	1% to 5%	15% to 20%	15% to 20%
Lake Placid	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Lake Wales	1% to 5%	1% to 5%	1% to 5%	5% to 10%
Lakeland	1% to 5%	1% to 5%	10% to 15%	15% to 20%
Laurel Hill	> 0 to 1%	0	0	0
Lawtey	5% to 10%	5% to 10%	1% to 5%	1% to 5%
Lee	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Leesburg	1% to 5%	1% to 5%	5% to 10%	5% to 10%
Lehigh Acres	1% to 5%	1% to 5%	1% to 5%	5% to 10%
Live Oak	1% to 5%	1% to 5%	0	> 0 to 1%
Luraville	> 0 to 1%	1% to 5%	0	0
Lynn Haven	5% to 10%	1% to 5%	5% to 10%	10% to 15%
Macclenny	10% to 15%	10% to 15%	10% to 15%	15% to 20%
Madison	5% to 10%	5% to 10%	1% to 5%	1% to 5%
Malone	5% to 10%	5% to 10%	0	0
Marco Island	> 0 to 1%	> 0 to 1%	1% to 5%	1% to 5%
Marianna	5% to 10%	5% to 10%	1% to 5%	1% to 5%
Maxville	5% to 10%	5% to 10%	15% to 20%	20% to 25%
Mayo	1% to 5%	1% to 5%	0	0
McIntosh	> 0 to 1%	1% to 5%	0	0
Melbourne	1% to 5%	5% to 10%	50% to 55%	40% to 45%
Melrose	> 0 to 1%	> 0 to 1%	0	0
Miami	15% to 20%	15% to 20%	30% to 35%	30% to 35%
Micanopy	1% to 5%	0	1% to 5%	0
Middleburg	5% to 10%	5% to 10%	10% to 15%	35% to 40%
Milton	1% to 5%	1% to 5%	10% to 15%	10% to 15%

APPENDIX C: PERCENTAGE OF CLEC ACCESS LINES BY EXCHANGE

Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
Molino	0	0	0	0
Monticello	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Montverde	1% to 5%	1% to 5%	5% to 10%	30% to 35%
Moore Haven	1% to 5%	5% to 10%	> 0 to 1%	1% to 5%
Mount Dora	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Mulberry	1% to 5%	1% to 5%	5% to 10%	5% to 10%
Munson	1% to 5%	0	1% to 5%	0
Myakka	> 0 to 1%	> 0 to 1%	> 0 to 1%	5% to 10%
Naples	> 0 to 1%	1% to 5%	5% to 10%	5% to 10%
New Port Richey	> 0 to 1%	> 0 to 1%	10% to 15%	30% to 35%
New Smyrna Beach	15% to 20%	20% to 25%	25% to 30%	25% to 30%
Newberry	1% to 5%	1% to 5%	15% to 20%	30% to 35%
North Cape Coral	> 0 to 1%	0	5% to 10%	5% to 10%
North Dade	20% to 25%	20% to 25%	35% to 40%	45% to 50%
North Ft Myers	1% to 5%	1% to 5%	1% to 5%	5% to 10%
North Naples	> 0 to 1%	> 0 to 1%	5% to 10%	10% to 15%
North Port	> 0 to 1%	> 0 to 1%	1% to 5%	5% to 10%
Oak Hill	5% to 10%	5% to 10%	20% to 25%	20% to 25%
Ocala	1% to 5%	1% to 5%	20% to 25%	15% to 20%
Ocklawaha	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Okeechobee	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Old Town	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Orange City	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Orange Park	15% to 20%	10% to 15%	25% to 30%	30% to 35%
Orange Springs	> 0 to 1%	> 0 to 1%	0	0
Orlando	10% to 15%	15% to 20%	45% to 50%	40% to 45%
Oviedo	5% to 10%	5% to 10%	25% to 30%	30% to 35%
Pace	5% to 10%	5% to 10%	15% to 20%	20% to 25%
Pahokee	25% to 30%	30% to 35%	30% to 35%	40% to 45%
Palatka	5% to 10%	5% to 10%	20% to 25%	15% to 20%
Palm Coast	5% to 10%	5% to 10%	30% to 35%	15% to 20%
Palmetto	> 0 to 1%	> 0 to 1%	10% to 15%	15% to 20%
Panacea	1% to 5%	1% to 5%	> 0 to 1%	1% to 5%
Panama City	35% to 40%	35% to 40%	30% to 35%	30% to 35%
Panama City Beach	5% to 10%	5% to 10%	10% to 15%	15% to 20%
Paxton	0	> 0 to 1%	0	0
Pensacola	10% to 15%	10% to 15%	35% to 40%	35% to 40%
Perrine	15% to 20%	15% to 20%	30% to 35%	30% to 35%
Perry	> 0 to 1%	> 0 to 1%	0	0
Pierson	1% to 5%	1% to 5%	10% to 15%	15% to 20%
Pine Island	> 0 to 1%	> 0 to 1%	> 0 to 1%	1% to 5%

APPENDIX C: PERCENTAGE OF CLEC ACCESS LINES BY EXCHANGE

Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
Plant City	1% to 5%	1% to 5%	5% to 10%	15% to 20%
Polk City	1% to 5%	1% to 5%	1% to 5%	5% to 10%
Pomona Park	1% to 5%	1% to 5%	5% to 10%	15% to 20%
Pompano Beach	15% to 20%	1% to 5%	40% to 45%	35% to 40%
Ponce de Leon	1% to 5%	1% to 5%	10% to 15%	10% to 15%
Ponte Vedra Beach	5% to 10%	5% to 10%	20% to 25%	20% to 25%
Port Charlotte	> 0 to 1%	> 0 to 1%	5% to 10%	15% to 20%
Port St Joe	> 0 to 1%	> 0 to 1%	0	0
Port St. Lucie	5% to 10%	5% to 10%	20% to 25%	15% to 20%
Punta Gorda	> 0 to 1%	> 0 to 1%	5% to 10%	10% to 15%
Quincy	> 0 to 1%	1% to 5%	0	0
Raiford	> 0 to 1%	> 0 to 1%	0	0
Reedy Creek	5% to 10%	> 0 to 1%	30% to 35%	30% to 35%
Reynolds Hill	1% to 5%	0	0	0
Salt Springs	1% to 5%	1% to 5%	> 0 to 1%	> 0 to 1%
San Antonio	> 0 to 1%	> 0 to 1%	1% to 5%	1% to 5%
Sanderson	10% to 15%	10% to 15%	1% to 5%	1% to 5%
Sanford	10% to 15%	15% to 20%	25% to 30%	40% to 45%
Sanibel-Captiva Island	> 0 to 1%	> 0 to 1%	1% to 5%	5% to 10%
Santa Rosa Beach	1% to 5%	1% to 5%	10% to 15%	10% to 15%
Sarasota	> 0 to 1%	1% to 5%	15% to 20%	20% to 25%
Seagrove Beach	5% to 10%	5% to 10%	5% to 10%	5% to 10%
Sebastian	5% to 10%	5% to 10%	10% to 15%	15% to 20%
Sebring	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Shalimar	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Silver Springs Shores	1% to 5%	1% to 5%	5% to 10%	5% to 10%
Sneads	1% to 5%	1% to 5%	> 0 to 1%	> 0 to 1%
Sopchoppy	1% to 5%	1% to 5%	0	> 0 to 1%
Spring Lake	> 0 to 1%	1% to 5%	1% to 5%	5% to 10%
St. Augustine	5% to 10%	5% to 10%	25% to 30%	30% to 35%
St. Cloud	1% to 5%	1% to 5%	1% to 5%	15% to 20%
St. Johns	1% to 5%	0	35% to 40%	25% to 30%
St. Marks	1% to 5%	1% to 5%	1% to 5%	1% to 5%
St. Petersburg	1% to 5%	1% to 5%	15% to 20%	20% to 25%
Starke	1% to 5%	5% to 10%	5% to 10%	10% to 15%
Stuart	5% to 10%	10% to 15%	25% to 30%	25% to 30%
Sunny Hills	1% to 5%	1% to 5%	1% to 5%	5% to 10%
Tallahassee	1% to 5%	1% to 5%	15% to 20%	15% to 20%
Tampa	1% to 5%	1% to 5%	35% to 40%	30% to 35%
Tarpon Springs	> 0 to 1%	> 0 to 1%	10% to 15%	20% to 25%
Tavares	1% to 5%	1% to 5%	1% to 5%	1% to 5%

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Exchange	% of Residential Access Lines CLEC Providers (2003)	% of Residential Access Lines CLEC Providers (2004)	% of Business Access Lines CLEC Providers (2003)	% of Business Access Lines CLEC Providers (2004)
The Beaches	> 0 to 1%	0	0	0
Titusville	1% to 5%	5% to 10%	15% to 20%	20% to 25%
Trenton	1% to 5%	1% to 5%	10% to 15%	10% to 15%
Trilacoochee	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Tyndall AFB	0	0	0	0
Umatilla	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Valparaiso	1% to 5%	1% to 5%	10% to 15%	10% to 15%
Venice	> 0 to 1%	> 0 to 1%	10% to 15%	15% to 20%
Vernon	1% to 5%	1% to 5%	15% to 20%	50% to 55%
Vero Beach	5% to 10%	5% to 10%	15% to 20%	20% to 25%
Waldo	> 0 to 1%	> 0 to 1%	0	0
Walnut Hill	0	0	0	0
Wauchula	1% to 5%	1% to 5%	1% to 5%	1% to 5%
Weekiwachee Springs	5% to 10%	5% to 10%	20% to 25%	20% to 25%
Weirsdale	0	0	0	0
Welaka	1% to 5%	1% to 5%	10% to 15%	20% to 25%
Wellborn	> 0 to 1%	1% to 5%	0	0
West Kissimmee	1% to 5%	1% to 5%	40% to 45%	50% to 55%
West Palm Beach	10% to 15%	10% to 15%	30% to 35%	30% to 35%
Westville	1% to 5%	1% to 5%	0	0
Wewahitchka	> 0 to 1%	> 0 to 1%	1% to 5%	0
White Springs	1% to 5%	1% to 5%	0	0
Wildwood	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Williston	1% to 5%	5% to 10%	5% to 10%	5% to 10%
Windermere	1% to 5%	5% to 10%	5% to 10%	5% to 10%
Winter Garden	1% to 5%	1% to 5%	5% to 10%	10% to 15%
Winter Haven	1% to 5%	1% to 5%	15% to 20%	30% to 35%
Winter Park	1% to 5%	1% to 5%	20% to 25%	30% to 35%
Yankeetown	1% to 5%	1% to 5%	15% to 20%	20% to 25%
Youngstown-Fountain	1% to 5%	1% to 5%	5% to 10%	60% to 65%
Yulee	1% to 5%	1% to 5%	10% to 15%	20% to 25%
Zephyr Hills	> 0 to 1%	> 0 to 1%	1% to 5%	5% to 10%
Zolfo Springs	1% to 5%	1% to 5%	1% to 5%	1% to 5%

APPENDIX D: SUMMARY OF COMPLAINTS FILED BY CLECS

CLEC	ILEC	Date Opened	Docket No. or CATS No.	Description of Complaint	Date Closed	Resolution
Access Integrated Networks	BellSouth	05/30/03	535975T	Problems with lines not working properly. BellSouth reportedly trying to get customers to switch back to them.	07/02/03	Problems resolved. Delays caused by both companies.
Access Integrated Networks	BellSouth	06/25/03	540841T	Customer wants to move DSL (BellSouth) to its Fax line.	08/21/03	Line was moved. Miscommunications with the customer and its contractor.
Allegiance Telecom of Florida, Inc. and XO Florida, Inc. (Joint CLECs)	BellSouth & Verizon	05/21/04	040489-TP	Emergency Complaint of Joint CLECs seeking an order to require BellSouth and Verizon to continue to honor existing interconnection obligations	Pending	Pending
AT&T	BellSouth	11/12/03	031046-TP	Petition and Complaint of AT&T against BellSouth for alleged anti-competitive pricing of long distance service	07/23/04	Order No. PSC-04-0718-FOF-TP, issued on July 23, 2004 grants AT&T's request for voluntary withdrawal of Petition.
Auglink Commun.	BellSouth	03/04/04	586790T	Problem with newly installed line	03/30/04	Problem with voice mail service
DIECA Comm.Inc. (Covad)	BellSouth	09/26/03	030945-TP	Complaint of DIECA Communi-cations, Inc. against BellSouth for breach of the parties' interconnection agreement	01/20/04	Covad filed a voluntary notice of dismissal on January 13, 2004.

APPENDIX D: SUMMARY OF COMPLAINTS FILED BY CLECS

CLEC	ILEC	Date Opened	Docket No. or CATS No.	Description of Complaint	Date Closed	Resolution
DSL Telecom	BellSouth	01/26/04	580160T	Incorrect billing by BellSouth	02/11/04	DSL Telecom is hiring an internal audit company to review its billing records.
DSL Telecom	BellSouth	04/06/04	592145T	Condo Association signed a CLEC Assumption, however BellSouth is preventing it from happening.	05/28/04	BellSouth has not received any order and is not preventing any assumption.
EXCEL	BellSouth	03/16/04	587603T	Excel customer was out of service for over 1 week.	04/07/04	Service has been restored.
EZ Talk	BellSouth	10/07/03	561436T	Billing problem with BellSouth-EZ	12/08/03	Customer withdrew the complaint.
FDN	BellSouth	08/18/03	030829-TP	Complaint by FDN for resolution of certain billing disputes, and enforcement of unbundled network element orders and interconnection agreements	Pending	Pending
FDN	BellSouth	07/25/03	546773T	Charged a disconnect fee for changing from BellSouth to FDN.	08/12/03	FDN is crediting the customer for the termination charge.
FDN	BellSouth	11/17/03	568766T	Problem porting numbers back from Florida Digital Network	12/10/03	Three customers have been ported, 1 chose to remain with FDN and two others were cancelled by BellSouth due to no clarification by DSLI.
Florida Multimedia	BellSouth	08/13/03	550500-T	Service Connection Difficulties	08/13/03	BellSouth escalated the service order in question.

APPENDIX D: SUMMARY OF COMPLAINTS FILED BY CLECS						
CLEC	**ILEC**	**Date Opened**	**Docket No. or CATS No.**	**Description of Complaint**	**Date Closed**	**Resolution**
Florida Phone Services	BellSouth	01/27/04	580707T	BellSouth requested additional deposit for increased usage.	02/12/04	FPS should pay an additional $30,000 deposit in order to honor contract.
FTS	BellSouth	10/23/03	564496T	BellSouth failed to provide service to its customer in a timely manner.	01/14/04	Service required new construction.
IDS Long Distance/ AT&T	BellSouth	10/16/03	557284T & 552585T	Customer's 6 lines has been out of service since 8/18/03.	01/12/04	Service has been restored. BellSouth to reimbursement company for vendor expenses as problem was with BellSouth.
IDS Telecom	BellSouth	12/23/03	031125-TP	Complaint of IDS Telecom LLC against BellSouth for alleged overbilling and discontinuance of service, and Petition for an emergency order restoring service	Pending	Pending
IDS Telecom	BellSouth	05/21/04	040488-TP	Complaint of BellSouth against IDS Telecom LLC to enforce deposit requirements of interconnection agreement	Pending	Pending
IDS Telecom	BellSouth	09/02/03	551589T	Repair problems with an IDS customer	09/18/03	Customer's service has been restored using a spare cable pair.
IDS Telecom	BellSouth	10/09/03	561736T	Trying to port to IDS. BellSouth has a freeze on the line.	12/03/03	BellSouth lifted the local freeze as requested by customer. All numbers are now working.

APPENDIX D: SUMMARY OF COMPLAINTS FILED BY CLECS						
CLEC	**ILEC**	**Date Opened**	**Docket No. or CATS No.**	**Description of Complaint**	**Date Closed**	**Resolution**
IDS Telecom	BellSouth	11/7/03	567409-T	Threatened termination of service for non-payment.	12/16/03	Close-out letter to complainant that complex billing matters should be evaluated in a formal proceeding.
IDS Telecom	BellSouth	10/13/03	561895T	Problems regarding the provisioning of customer's fax line for DSL.	01/20/04	Non-regulated service and FPSC could not get the repair charge waived. Problem, however, was caused by IDS/United.
IDS Telecom	BellSouth	03/03/04	586528T	Customer trying to obtain DSL service.	03/11/04	BellSouth incorrectly identified the line as not qualifying for DSL. This has been corrected.
KMC Telecom	BellSouth	02/03/04	581789T	9-1-1 service not available on campus	03/29/04	Service is now working. Will investigate to determine the cause.
Sandhill Commun.	BellSouth	11/12/03	567910T	Billing problem with BellSouth	01/09/04	Response received, problems resolved.
STS	BellSouth	04/02/04	591695T	STS unable to use the BellSouth's LCSC automated system to remove call waiting.	04/21/04	STS advised to use the process outlined in agreement with BellSouth for resolving billing problems.
STS Telecom	BellSouth	10/01/03	560189T	Company is incorrectly listed, also dropped from some directories by BellSouth.	10/16/03	Problem has been resolved
STS Telecom	BellSouth	10/01/03	560300T	BellSouth caused delays in changing LD Company.	10/17/03	Customer successfully changed LD Company
STS Telecom	BellSouth	10/14/03	562697T	Out of Service	11/07/03	Service disconnected by BellSouth in error. It has been restored.

APPENDIX D: SUMMARY OF COMPLAINTS FILED BY CLECS						
CLEC	**ILEC**	**Date Opened**	**Docket No. or CATS No.**	**Description of Complaint**	**Date Closed**	**Resolution**
STS Telecom	BellSouth	09/11/03	556202T	BellSouth disconnecting STS customers.	01/05/04	Accidental disconnection. Restored by BellSouth.
STS Telecom	BellSouth	09/17/03	557520T	Calls dropping off, BellSouth charging for premise visits if no trouble found.	01/22/04	Primary line moved from fiber to copper, no further problems. Problem caused by BellSouth.
STS Telecom	BellSouth	10/16/03	563066T	BellSouth removed freeze on customer's line without customer's approval.	02/06/04	STS & BellSouth are working out the notification problems.
Supra	BellSouth	06/13/03	538533T	Problem with DSL being disconnected due to switch	07/08/03	DSL is non-regulated service and Commission has no DSL rules.
Supra	BellSouth	05/23/03	534992T	Dangerous pole in yard that needs replacing	07/15/03	Pole has been removed.
USA Telephone	BellSouth	06/26/03	540974T	No dial tone. Unfair practice by BellSouth & billing problems.	08/07/03	BellSouth will issue credits of $120.
Vartec	BellSouth	07/03/03	542618T	Customer requested line to be moved. Contractor cut the line when move was not made.	08/06/03	Problem caused by Vartec. Credit of $37.88 will be issued.
CEMEX	Sprint	03/04/04	586724T	Customer of CEMEX out of service	04/05/04	Mr. Johnson has withdrawn the complaint.
FTS	Sprint	08/14/03	542444T	Can receive but cannot make calls.	11/10/03	Customer's service is now working with Sprint. LOA received to verify transfer of service.
Hosting Network	Sprint	07/03/03	542642T	Porting to Sprint-Hosting Network won't release the line.	07/08/03	Service has been ported. Customer had a freeze on the line.

APPENDIX D: SUMMARY OF COMPLAINTS FILED BY CLECS						
CLEC	**ILEC**	**Date Opened**	**Docket No. or CATS No.**	**Description of Complaint**	**Date Closed**	**Resolution**
Allegiance	Verizon	09/30/03	559974T	Customer trying to relocate to a new building. Problem with cables.	10/30/03	Customer has service with Verizon
CAT Comm.	Verizon	02/10/04	577918T	LD service is blocked.	04/05/04	Service has been installed.
Ganaco, Inc.	Verizon	08/8/03	549894-T	Billing problems with a specific Verizon product	09/16/03	Verizon issued the appropriate credits, and states that work on a mechanical fix is underway.
ITC^Delta-Com Comm.	Verizon	12/19/03	031116-TP	Complaint of ITC^ DeltaCom against Verizon for alleged violations of the Telecommunica-tions Act of 1996	2/10/04	ITC^Delta-Com Communications, Inc. filed a notice of voluntary dismissal on January 22, 2004.
TCG South Florida	Verizon	07/24/03	030677-TP	Petition and complaint by Verizon regarding customer transfer charges imposed by TCG South Florida	09/17/03	Verizon withdrew its Petition via letter dated September 12, 2003.
Xspedius Commun/ Espire	Verizon	08/29/03	550851T	Remote Call Forwarding problem as well as billing problems	10/16/03	In civil litigation

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 05/31/04

1 Com, Inc. d/b/a 1 Com South, Inc.
1-800-RECONEX, Inc. d/b/a USTEL
360networks (USA) inc.
A.R.C. Networks, Inc. d/b/a InfoHighway
AAA Reconnect, Inc.
AboveNet Communications, Inc.
Acceris Communications Corp. of Florida
Access Communications, LLC.
Access Integrated Networks, Inc.
Access Point, Inc.
AccuTel of Texas, Inc.
ACN Communication Services, Inc.
Actel Wireless, Inc.
Adelphia Telecommunications of Florida, Inc.
Advanced Tel, Inc. d/b/a EATEL
Advantage Group of Florida Communications, L.L.C.
Affordable Phone Services, Inc. d/b/a High Tech Communications
Airface Communications Inc.
AirTIME Technologies, Inc.
ALEC, Inc.
Allegiance Telecom of Florida, Inc.
ALLTEL Communications, Inc.
Alpha Fiber Inc.
Alpha Telecom, LLC
Alternative Access Telephone Communications Corp. d/b/a AA Tele-Com
Alternative Phone, Inc.
Alternative Telecommunication Services, Inc. d/b/a Second Chance Phone
Alticomm, Inc.
AMAFLA Telecom, Inc.
American Fiber Network, Inc.
American Fiber Systems, Inc.
American Phone Services Corp.
America's Wireless Choice, Inc.
Americatel Corporation
AmeriMex Communications Corp.
Andre Trajean Fidel d/b/a Andrex Telecom
ANEW Broadband, Inc.
Annox, Inc.
Armour E611 Incorporated
Arrow Communications, Inc. d/b/a ACI
Asset Channels-Telecom, Inc.
AT&T Communications of the Southern States, LLC d/b/a AT&T

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Atlantic Telecommunication Systems, Inc. d/b/a ATS
Atlantic.Net Broadband, Inc. d/b/a Dolfo.Net
Atlas Communications, Ltd.
ATN, Inc. d/b/a AMTEL NETWORK, INC.
Auglink Communications, Inc.
Available Telecom Services, Inc.
Azul Tel, Inc.
Backbone Communications Inc.
BAK Communications, LLC
Baldwin County Internet/DSSI Service, L.L.C.
Basic Phone, Inc.
BCN Telecom, Inc.
Beauty Town, Inc. d/b/a Anns Communication
Bellerud Communications, LLC
BellSouth Long Distance, Inc.
BellSouth Telecommunications, Inc.
Best Value Telecom, Inc.
Birch Telecom of the South, Inc. d/b/a Birch Telecom and d/b/a Birch
Bright House Networks Information Services (Florida), LLC
Broadband Communities of Florida, Inc.
Broadview Networks, Inc.
BT Communications Sales LLC
Budget Phone, Inc.
BudgeTel Systems, Inc.
BullsEye Telecom, Inc.
Burno, Inc. d/b/a Citywide-Tel
Business Communications, Inc.
Business Telecom, Inc. d/b/a BTI
Buy-Tel Communications, Inc.
BW Consulting, L.L.C.
C2C Fiber of Florida, Inc.
Calpoint (Florida), LLC
Camarato Distributing, Inc. d/b/a Nex-Phon
Campus Communications Group, Inc.
CariLink International, Inc.
CAT Communications International, Inc.
Cbeyond Communications, LLC
Centennial Florida Switch Corp.
CI2, Inc.
Ciera Network Systems, Inc.
Cinergy Communications Company
City of Daytona Beach
City of Gainesville, a municipal corporation d/b/a GRUCom

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City of Lakeland
City of Ocala
City of Quincy d/b/a netquincy d/b/a netquincy.com d/b/a www.netquincy.com
City of Tallahassee
Cleartel Telecommunications, Inc. d/b/a Now Communications, also d/b/a VeraNet Solutions
CM Tel (USA) LLC
Coastal Telephone Connections, Inc. d/b/a Coastal Connections
Cogent Communications of Florida LHC, Inc.
Colmena Corp. of Delaware
Columbia Telecommunications, Inc. d/b/a axessa
Comcast Business Communications, Inc.
Comcast Phone of Florida, LLC d/b/a Comcast Digital Phone
Comm South Companies, Inc. d/b/a Florida Comm South
Communications Xchange, LLC
Computer Network Technology Corporation
Comtech21, LLC
Conextel, Inc.
Coral Telecom, Inc. d/b/a TruComm Southeast
Cordia Communications Corp.
Covista, Inc.
Cox Florida Telcom, L.P. d/b/a Cox Communications
Credit Loans, Inc. d/b/a Lone Star State Telephone Co.
CTC Communications Corp.
Cypress Communications Operating Company, Inc.
David A. Chesson and Ted J. Moss d/b/a Phone-Out/Phone-On
Deland Actel, Inc.
Delta Phones, Inc.
DialEZ Inc.
DialTek, LLC d/b/a DTK Telecommunications, LLC
Dialtone Telecom, LLC
DIECA Communications, Inc. d/b/a Covad Communications Company
Direct Telephone Company, Inc.
Direct2Internet Corp.
Dominion Telecom, Inc.
Double Link Communications, Inc.
DPI-Teleconnect, L.L.C.
DSL Internet Corporation d/b/a DSLi
DSL Telecom, Inc.
DSLnet Communications, LLC
D-Tel, Inc.
DukeNet Communications, LLC
DV2, Inc.
E.Com Technologies, LLC d/b/a Firstmile Technologies, LLC

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Eagle Communications, Inc. d/b/a Eagle Telco, Inc.
Eagle Telecommunications, Inc.
Easy Telephone Services Company
ElectroNet Intermedia Consulting, Inc.
Electronic Technical Services (E.T.S.)
eMeritus Communications, Inc.
Enhanced Communications Network, Inc. d/b/a Asian American Association
EO Telecom of Florida, LLC
EPICUS, Inc. d/b/a EPICUS
Ernest Communications, Inc.
Esodus Communications, Inc. d/b/a Excelink Communications d/b/a Instatone
EveryCall Communications, Inc.
Excel Telecommunications, Inc.
Express Phone Service, Inc.
EZ Talk Communications, L.L.C.
Fair Financial LLC d/b/a Midstate Telecommunications
Fast Phones, Inc. of Alabama
Fiber Media, LLC
FLATEL, Inc. d/b/a Florida Telephone Company d/b/a Oscatel d/b/a Telephone USA
Florida City-Link Communications, Inc.
Florida Digital Network, Inc. d/b/a FDN Communications
Florida Multi-Media Services, Inc. d/b/a Florida Multi Media
Florida Municipal Power Agency
Florida Phone Service, Inc.
Florida Phone Systems, Inc.
Florida Public Telecommunications Association, Inc.
Florida Telephone Services, LLC
Focal Communications Corporation of Florida
Fort Pierce Utilities Authority d/b/a GigaBand Communications
Foxtel, Inc.
FPL FiberNet, LLC
France Telecom Corporate Solutions L.L.C.
Frontier Communications of America, Inc.
Ganoco, Inc. d/b/a American Dial Tone
Georgia Public Web, Inc.
Georgia Telephone Services, Inc.
Global Connection, Inc of America
Global Crossing Local Services, Inc.
Global Crossing Telemanagement, Inc.
Global Dialtone, Inc. d/b/a Atlantic Phone
Global Metro Networks Florida, LLC
Global NAPS, Inc.
Global Response Corporation

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Globalcom Inc. d/b/a GCI Globalcom Inc.
Globaltron Communications Corporation
Globcom, Inc.
GoBeam Services, Inc.
Grande Communications Networks, Inc.
Granite Telecommunications, LLC
GTC Telecom, Corp. d/b/a Curbside Communications
Gulf Coast Telecom, Inc.
Harbor Communications, LLC
Hayes E-Government Resources, Inc.
Home Town Telephone, LLC
Hotline, Inc. d/b/a Hotline Telephone Service, Inc.
ICG Telecom Group, Inc.
IDS Telcom LLC
IDT America, Corp. d/b/a IDT
I-Link Communications, Inc.
Image Access Communications, Inc. d/b/a NewPhone
Intellicall Operator Services, Inc. d/b/a ILD
Intelligence Network Online, Inc.
Intelogistics Corp.
Interactive Services Network, Inc. d/b/a ISN Communications
InterCept Communications Technologies, Inc.
Interlink Telephony, Inc.
Intermedia Communications, Inc.
International Exchange Communications, Inc. d/b/a IE Com
International Telcom, Ltd.
International Telnet, Inc.
Intrado Communications Inc.
ITC^DeltaCom Communications, Inc. d/b/a ITC^DeltaCom d/b/a Grapevine
ITS Telecommunications Systems, Inc.
Jax Telecom Inc.
Kenarl Inc. d/b/a Lake Wellington Professional Centre
Kernan Associates, Ltd. d/b/a St. Johns Estates
King Communications & Services, Inc.
KingTel, Inc.
Kissimmee Utility Authority
KMC Data LLC
KMC Telecom III LLC
KMC Telecom V, Inc.
Knology of Florida, Inc.
Laser Telecom, LLC
LecStar Telecom, Inc.
Level 3 Communications, LLC

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LightWave Communications, LLC
Lightyear Communications, Inc.
Lionhart of Miami, Inc. d/b/a Astral Communications
Litestream Technologies, LLC
Local Line America, Inc.
Local Telecom Systems, Inc.
Looking Glass Networks, Inc.
LPGA International Communications, LLC
Madison River Communications, LLC
Max-Tel Communications, Inc. d/b/a Florida's Max-Tel Communications, Inc.
McGraw Communications, Inc.
MCI WorldCom Communications, Inc.
MCI WorldCom Network Services, Inc.
MCImetro Access Transmission Services LLC
McLeodUSA Telecommunications Services, Inc.
Melbourne Venture Group, LLC d/b/a SwiftTel
Mercury Long Distance, Inc.
MET Communications, Inc.
Metric Systems Corporation
Metro Teleconnect Companies, Inc.
Metropolitan Fiber Systems of Florida, Inc.
Metropolitan Telecommunications of Florida, Inc. d/b/a MetTel
Microsun Telecommunications, Inc.
Midwestern Telecommunications, Incorporated
Momentum Telecom, Inc.
Movie, Television & Graphics Corp. d/b/a M.T.G.
Mpower Communications Corp.
Myatel Corporation
MY-TEL INC.
National Telecom & Broadband Services, LLC
Navigator Telecommunications, LLC
Net One International, Inc.
Network International Solutions, Inc.
Network Multi-Family Security Corporation d/b/a Priority Link
Network Operator Services, Inc.
Network PTS, Inc.
Network Telephone Corporation
NetworkIP, L.L.C.
New Access Communications LLC and d/b/a INCOMNET
New Edge Network, Inc. d/b/a New Edge Networks
NewSouth Communications Corp.
Nigerian-American Investment Corporation d/b/a NAIC Telecommunications
nii Communications, Ltd.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 05/31/04

North American Telecommunications Corporation
North American Telecommunications Corporation d/b/a Southeast Telephone Company
North County Communications Corporation
NOS Communications, Inc. d/b/a International Plus d/b/a O11 Communications d/b/a The Internet Business Association d/b/a I Vantage Network Solutions
Novus Communications, Inc.
NOW Communications, Inc.
NTERA, Inc.
NuStar Communications Corp.
NuVox Communications, Inc.
O1 Communications of Florida, Inc.
O1 Communications of Florida, LLC
Ocius Communications, Inc.
OCMC, Inc. d/b/a One Call Communications, Inc., OPTICOM, 1-800-MAX-SAVE, Advanttel, RegionTel, LiveTel, and SuperTel
Oltronics, Inc.
One Call Communications, Inc. d/b/a Opticom, a Division of One Call Communications, Inc.
OneStar Long Distance, Inc.
OnFiber Carrier Services, Inc.
ONS-Telecom, LLC
Orlando Telephone Company
Oronoco Networks, Inc.
Pacific Centrex Services, Inc.
PaeTec Communications, Inc.
Palm Beach Community College
Phone 1 Smart LLC
Phone Club Corporation
Phone-Link, Inc.
Pilgrim Telephone, Inc.
PNG Telecommunications, Inc. d/b/a PowerNet Global Communications
Preferred Carrier Services, Inc. d/b/a Telefonos Para Todos and d/b/a Phones For All
Premier Telecom, Inc.
Premiere Network Services, Inc.
Primus Telecommunications, Inc.
ProfitLab, Inc.
Progress Telecom, LLC
Protocall Communications, Inc.
Public Telephone Network, Inc.
Quality Telephone Inc.
QuantumShift Communications, Inc.
Quiet River Communications, LLC
Qwest Communications Corporation
Qwest Interprise America, Inc.

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Qwik.net ALEC, Inc.
RCN Telecom Services, Inc.
Rebound Enterprises, Inc. d/b/a REI Communications
Re-Connection Connection
Reliant Communications, Inc.
ReTel Communications, Inc.
RGT Utilities of Florida, Inc.
Rightlink USA, Inc.
Ring Connection, Inc.
Sago Broadband, LLC
Sail Telecom, Inc.
Saluda Networks Incorporated
Sandhills Telecommunications Group, Inc. d/b/a SanTel Communications
Saturn Telecommunication Services Inc. d/b/a STS
SBA Broadband Services, Inc.
SBC Telecom, Inc.
ServiSense.com, Inc.
Seven Bridges Communications, L.L.C.
Shands Teaching Hospital and Clinics, Inc.
Smart City Networks
Smart City Solutions, LLC
Smart Network Solutions Communications Corp
SNC Communications, LLC
Solution Telecom, Inc
Source One Communications, Inc. d/b/a Quick Connects
Southeastern Services, Inc.
Southern Light, LLC
Southern ReConnect, Inc.
Southern Telcom Network, Inc.
Southern Telecom, Inc. d/b/a Southern Telecom of America, Inc.
Southwestern Bell Communications Services Inc. d/b/a SBC Long Distance
Spectrotel, Inc.
Speedy Reconnect, Inc.
Sprint Communications Company Limited Partnership
Strategic Technologies, Inc.
STS Telecom, LLC
Suntel Metro, Inc.
Sun-Tel USA, Inc.
Super-Tel.Com, Inc.
Supra Telecommunications and Information Systems, Inc.
Symtelco, LLC
Synergy Networks, Inc.

APPENDIX E: LIST OF CERTIFICATED CLECS AS OF 05/31/04

T3 Communications, LLC d/b/a Tier 3 Communications d/b/a Naples Telephone and d/b/a Fort Myers Telephone
Talk America Inc.
Talk and Pay, Inc.
Talk Unlimited Now, Inc.
TalkingNets Holdings, LLC
Tallahassee Community College
Tallahassee Memorial Telephone Company
Tallahassee Telephone Exchange, Inc.
TCG South Florida
Tel West Communications, LLC
TelCove Investment, LLC
TelCove of Florida, Inc.
TelCove of Jacksonville, Inc.
Telecom Connection Corp.
TeleConex, Inc. d/b/a TeleConex
TELECUBA, INC.
Teledata Solutions, Inc. d/b/a TDSI, INC.
Telefyne Incorporated
Telepacket, Inc
Telepak Networks, Inc.
Telephone One Inc.
Telephone Systems of Georgia, Inc.
Teligent Services, Inc.
TelQuest Communications, Corp.
Telstar Communications, Inc. d/b/a Telstar Prepaid Services
Telsys, Inc.
Terra Telecommunications Corp.
THC Merger Corp. d/b/a THC Internet Solutions
The Boeing Company
The Gulas Group, L.L.C.
The Other Phone Company, Inc. d/b/a Access One Communications
The Phone Connection, Inc.
The Sunshine State Telephone Company, L.L.P.
The Ultimate Connection, L.C. d/b/a DayStar Communications
Think 12 Corporation d/b/a Hello Depot
Tiburon Telecom, Inc.
Time Warner Telecom of Florida, L.P.
T-Netix, Inc.
TotalCom America Corporation
Touch 1 Communications, Inc.
Trans National Communications International, Inc.
Transparent Technology Services Corporation d/b/a North Palm Beach Telephone Company

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Tristar Communications Corp.
U.S. TelePacific Corp. d/b/a TelePacific Communications
Unicom Communications, LLC
United Communications HUB, Inc.
Universal Access, Inc. d/b/a UAI of Florida, Inc.
Universal Beepers Express, Inc. d/b/a Universal Wireless d/b/a Universal Telephone d/b/a Ameri Phone d/b/a Unitel
Universal Telecom, Inc.
University Club Communications, LLC
US LEC of Florida Inc.
US South Communications, Inc.
US Telesis, Inc.
USA Telecom, Inc.
USA Telephone Inc. d/b/a CHOICE ONE Telecom
Utilities Commission, New Smyrna Beach d/b/a Sparks Communications
Utility Board of the City of Key West d/b/a Keys Energy Services
VarTec Telecom, Inc. d/b/a VarTec Telecom, Inc. and Clear Choice Communications
VBNet, Incorporated
Verizon Avenue Corp. d/b/a Verizon Avenue
Verizon Florida Inc.
Verizon Select Services Inc.
VGM International, Inc.
VIVO-FLA, LLC
Volo Communications of Florida, Inc. d/b/a Volo Communications Group of Florida, Inc.
Vortex Broadband Communications, Inc.
Vox2 Voice, L.C.
Vycera Communications, Inc.
Wholesale Carrier Services, Inc.
Wilted Local Network, LLC
Winstar Communications, LLC
Wireless One Network Management, L.P.
WS Telecom, Inc. d/b/a eXpeTel Communications
XO Florida, Inc.
Xspedius Management Co. of Jacksonville, LLC
Xspedius Management Co. Switched Services, LLC d/b/a Xspedius Communications
Yipes Enterprise Services, Inc.
Zone Telecom, Inc.
Z-Tel Communications, Inc.

GLOSSARY

Access Line	A telephone line extending from the telecommunications company's central office to a point of demarcation, usually on the customer's premises. (See also - "Local Loop")
Broadband	A descriptive term for evolving digital technologies offering consumers a single switched facility offering integrated access to voice, high-speed data services, video-demand services, and interactive information delivery services. Broadband is also used to define an analog transmission technique for data or video that provides multiple channels.
Central Office	CO. A telephone company facility housing the switching system and signaling equipment that provides telephone service for customers in the immediate geographical area.
CLEC	Competitive Local Exchange Company. Any company certificated by the Florida Public Service Commission to provide local exchange telecommunications service in the State of Florida on or after July 1, 1995. Pursuant to Law, the term ALEC was changed to CLEC on May 23, 2003.
Circuit	A fully operative two-way communications path.
Collocation	In a collocation arrangement, a competitor leases space at an incumbent local exchange carrier's (ILEC's) premises for its equipment.
Exchange	A central office or group of central offices, together with the subscriber's stations and lines connected thereto, forming a local system which furnishes means of telephonic intercommunication without toll charges between subscribers within a specified area, usually a single city, town, or village.
InterLATA	Telecommunications services that originate and terminate in different local access and transport areas (LATAs).
Intermodal	The use of more than one form of carrier to transport telecommunication services from origination to termination.
Internet Protocol	Refers to all the standards that keep the Internet running. Describes software that tracks the Internet address of nodes, routes outgoing messages, and recognizes incoming messages.
IntraLATA	Telecommunications services that originate and terminate in the same Local Access and Transport Area.

LATA	Local Access and Transport Areas. Geographic regions which present the post-divestiture service areas of the 22 Bell operating companies (BOCs). All telephone service within a LATA is defined as exchange service, while all telephone service between LATAs is defined as interexchange service. LATAs are loosely based on standard metropolitan statistical areas (SMSAs).
LEC	Local Exchange Company or Carrier, Local exchange telecommunications company. Means any company certificated by the Commission to provide local exchange telecommunications service in this state on or before June 30, 1995.
Local Loop	A circuit connecting telephone equipment to a switching facility or distribution point. (See also - "Access Line")
MSO	Multiple System Operator. A company that operates more than one cable television system.
OSS	Operations Support System. Methods and procedures (mechanized or not) which directly support the daily operation of the telecommunications infrastructure. The average local exchange company has hundreds of OSSs, including automated systems supporting order negotiation, order processing, line assignment, line testing and billing.
Packet Switching	A data transmission method whereby a channel is occupied only for the duration of transmission of "packets" of data. The packet switch sends the different packets from different data sources along the best route available, in no particular order. At the other end, the packets are reassembled to form the original message which is then sent to the receiving computer. Because packets need not be sent in a particular order, and because they can go by any route as long as they reach their destination, packet switching networks can choose the most efficient route and send the most efficient number of packets down that route, before switching to another route to send more packets.
PBX	Private Branch eXchange. A small version of a telephone company's larger central switching office that is owned by the customer.
POTS	Plain Old Telephone Service. The basic service supplying single line telephones, telephone lines and access to the public switched network.
PSTN	Public Switched Telephone Network. The telephone network that provides switching and transmission facilities to the general public.
RBOC	Regional Bell Operating Company. Originally, one of seven regional holding companies which were created in 1984 as part of the breakup of

	AT&T. After mergers and acquisitions, there are now 4 regional holding companies: BellSouth, SBC Communications, Verizon and Qwest.
Resale	Buying local and/or long distance phone lines in quantity at wholesale rates then selling them to someone else.
Section 271	Section of the Telecommunications Act of 1996 specifying the standards that must be met by a regional Bell Operating Company prior to in-region, interLATA entry. The standard seeks to measure whether the barriers to competition that Congress sought to eliminate with the 1996 Act have in fact been fully eliminated and whether there are objective criteria to ensure that competitive local exchange carriers will continue to have nondiscriminatory access to the facilities and services they will need from the Bell Operating Company in order to enter and compete in the local exchange market.
Switch	A mechanical, electrical or electronic device which opens or closes circuits, completes or breaks an electrical path, or selects paths or circuits.
Switched Access	Telephone company provided exchange access services that offer switched interconnections between local telephone subscribers and long distance or other companies. Long distance companies use switched access for origination and termination of ordinary user-dialed calls. Switched access is the single largest cost item for the long distance industry.
Tariff	A statement by a communications company that sets forth the services offered by that company, and established customer rates, terms, and conditions under which regulated services are provided, and states general obligations of the company and customer. Tariffs are subject to review by regulatory agencies and must be followed by the common carrier to ensure nondiscrimination between customers.
UWB	A wireless technology that operates over a wide range of spectrum by transmitting very short, low-power pulses that can be used to distribute services such as telephone, cable, and computer networking throughout a building or home.
UNE	Unbundled Network Element. The Telecommunications Act of 1996 requires that the incumbent local exchange companies unbundle their network elements and make them available to the competitive local exchange companies on the basis of incremental cost. UNEs are defined as physical and functional elements of the network, e.g., Network Interface Devices, local loops and subloops, circuit-switching and switch ports, interoffice transmission facilities, signaling and call-related

	databases, OSSs, operator services and directory assistance, and packet or data switching. (Newton)
UNE-L	Unbundled Network Element - Loop.
UNE-P	Unbundled Network Element - Platform. When combined into a complete set in order to provide an end-to-end circuit, the UNEs constitute a UNE-P.
Universal Service	This term describes the financial support mechanisms that constitute a universal fund which helps to compensate telephone companies or other communication entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular, high cost areas, and to public institutions.
VoIP	Voice over Internet Protocol. The technology used to transmit voice conversations over a data network using the Internet Protocol.
Wireline	A term used to describe the technology used by a company to provide telecommunications services; it is synonymous with "landline" or land based technology, which "refers to standard telephone and data communications systems that use in-ground and telephone pole cables in contrast to wireless cellular and satellite services." (Techweb.com)