BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Verizon Florida Inc. to Reform Its Intrastate Network Access and Basic Local Telecommunications Rates in Accordance with Florida Statutes, Section 364.164	)))))	Docket No. 030867-TL

DIRECT TESTIMONY OF

EVAN T. LEO

ON BEHALF OF

VERIZON FLORIDA INC.

August 27, 2003

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

A. My name is Evan T. Leo. I am a partner at Kellogg, Huber, Hansen, Todd & Evans, P.L.L.C. My business address is 1615 M Street, N.W., Suite 400, Washington, DC 20036.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND QUALIFICATIONS.

A. I have been practicing law for approximately 10 years, all at my current firm. I was an associate at the firm from 1993 until 2000, when I was elected partner. Throughout this period I have specialized in telecommunications law. I am the co-author of a casebook on telecommunications law (*The Law and Regulation of Telecommunications Carriers*) and of a chapter in the leading treatise on the subject (*Federal Telecommunications Law*). I am also the author or co-author of a number of factual reports that have been used in a variety of FCC proceedings to evaluate the state of competition in various telecommunications markets.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the state of local telephone competition in Verizon's service area in Florida.

Q. HAVE YOU PREPARED A REPORT DESCRIBING THE STATE OF LOCAL TELEPHONE COMPETITION IN VERIZON'S

SERVICE AREA IN FLORIDA?

A. Yes. I am the author of the report entitled *Local Competition in Florida* that is attached hereto as Exhibit ETL-1. I compiled this report, with the help of research assistants, using a combination of public sources (*e.g.*, trade press, industry reports, company Web sites) and internal data that I received from Verizon. I hereby affirm that, to the best of my knowledge and belief, these sources are accurate and truthful, as is the report itself.

Q. WHAT DOES THE REPORT DEMONSTRATE?

A. The report demonstrates that there is extensive facilities-based competition in Verizon's service territory in Florida. It further demonstrates that competition from traditional CLECs is focused more heavily on business customers than residential customers. It also shows that significant facilities-based competition for residential customers has emerged, though it has come mainly from intermodal sources, such as wireless, cable, and voice over Internet protocol networks.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes.

LOCAL COMPETITION IN FLORIDA

INTRODUCTION AND SUMMARY

1. This Report describes the state of local telephone competition in Verizon's service area in Florida.[1] It is based on a combination of public sources (*e.g.*, trade press, industry reports, company Web sites) and information that Verizon maintains in internal databases. Although these are the best sources available to Verizon, they do not necessarily portray the full extent to which competing local carriers are serving customers or have the ability to do so. Accordingly, the state of competition set out in this Report is conservative, and in fact competing carriers in Verizon's service area in Florida may be providing service on an even more widespread basis than this Report indicates.

2. Competition in Verizon's service area in Florida must be viewed in light of the fact that Verizon serves only a small portion of the state. Verizon's service area in Florida consists mainly of the southern part of the Tampa-St. Petersburg-Clearwater MSA, as well as most of the Sarasota-Bradenton MSA, both of which are located in the west-central part of the state. Verizon also serves the largely rural area situated between the Tampa-St. Petersburg-Clearwater and Orlando MSAs. Verizon provides service to approximately 2.3 million switched access lines in Florida – approximately 618,000 business lines and approximately 1.7 million residential lines. By comparison, BellSouth – the largest incumbent LEC in Florida – serves approximately 6 million lines throughout the state.[2] Sprint serves approximately 2 million switched access lines in Florida, which also are spread throughout the state.[3]

3. It is also important to recognize the role that rate regulation has played in shaping the development of competition in Florida. Regulators typically set retail rates for business customers above cost in order to subsidize the retail rates for residential customers that are typically set close to or below cost. Predictably, this subsidy scheme artificially enhances the competitive opportunities to serve business customers, but impedes the ability of competitors to serve residential customers. Indeed, as demonstrated below, facilities-based competition in Verizon's service territory in Florida has emerged more rapidly for business customers than for residential customers. At the same time, however, significant facilities-based competition for residential customers has emerged, though it has come mainly from intermodal sources – such as wireless, cable, and voice over IP networks – that have used their innovative new technologies to eviscerate the cost and rate structures of providing traditional telephone services. And, of course, these and other forms of local competition are likely only to increase should regulators eliminate the current subsidy system and rebalance retail rates.

---

[1] Unless otherwise noted, references to "Florida" throughout this report mean "Verizon's service area in Florida."

[2] FCC, *ARMIS Report 43-08: Table III*, http://www.fcc.gov/wcb/eafs (data as of December 2002).

[3] FCC, *ARMIS Report 43-08: Table III*, http://www.fcc.gov/wcb/eafs (data as of December 2002).

4. According to Verizon's internal data – in particular, the number of E911 subscriber listings for competitors – alternative local exchange carriers ("ALECs") in Verizon's service area in Florida are serving at least ***Redacted*** lines either wholly or partially over facilities they deployed themselves, including in all cases their own local switches. This figure includes approximately 29,000 lines that competitors in Florida are serving using unbundled analog loops[4] from Verizon and their own switches; the remainder appear to be served wholly over their own facilities. Verizon's data also show that unaffiliated ALECs in Florida are serving approximately 5,300 lines through unbundled network element platforms, and approximately 28,000 lines through resale.[5]

5. According to Verizon's internal data, competing carriers in Florida are providing service to approximately ***Redacted*** residential lines. Competitors are serving approximately ***Redacted*** residential lines provided either wholly or partially over facilities they have deployed themselves, approximately 1,500 residential lines provided through UNE platforms, and approximately 19,000 residential lines provided through resale. Florida competitors also are providing service to approximately ***Redacted*** business lines. Based on the number of E911 listings they have obtained, it is clear that competitors in Florida serve a minimum of ***Redacted*** business lines either wholly or partially over facilities they have deployed themselves, including in all cases their own local switches. Competitors are serving an additional 3,800 business lines using UNE platforms and are reselling another 8,200 business lines. *See* Table 1.

Table 1. Summary of Competitive Data in Verizon's Service Area in Florida as of February 2003

	Residential	Business	Total
Facilities-Based Lines*	***Redacted***	***Redacted***	***Redacted***
UNE-Platform Lines	1,500	3,800	5,300
Resale Lines	19,000	8,200	28,000
Total	***Redacted***	*** Redacted***	*** Redacted***

*Based on E911 listings; includes unbundled loops. E911 listings data are as of the end of April 2003.
Totals may not equal the sum of the parts due to rounding.

6. Competition also is increasing from alternative sources such as mobile wireless, IP telephony, e-mail, and instant messaging.[6] This extensive competition is not counted in the line counts or other competitive totals discussed above. Nonetheless, this competition is substituting for a large and increasing share of the local telephone services that Verizon provides.

[4] This figure includes xDSL and ISDN loops.

[5] Verizon's data appear to be consistent with earlier data reported by the Florida PSC. As of June 2002, according to the PSC, competitors provided service to approximately 186,000 lines in Verizon's service area in Florida – more than 167,000 business lines and more than 18,000 residential lines. Office of Market Monitoring and Strategic Analysis, Florida Public Service Commission, *Telecommunications Markets in Florida: Annual Report on Competition as of June 30, 2002* at Table 3 (Dec. 2002) ("*Florida PSC Competition Report*"). The slightly higher totals reported here are easily explained by the growth in competition that has occurred since June 2002.

[6] *See generally, Florida PSC Competition Report* at 12-15.

FACILITIES-BASED LOCAL EXCHANGE COMPETITION

A. ALEC Facilities in Florida

7. The Florida PSC reported that competitive providers have invested over $1 billion in their own facilities throughout the state.[7] According to public sources, competing carriers have deployed approximately 20 *known* local circuit switches that are physically located within Verizon's service area in Florida.[8] *See* Table 2. More than 15 competing carriers of all sizes have deployed local circuit switches in Verizon's service area in Florida. *See id.* Competing carriers also operate more than 70 additional circuit switches throughout the state that may be used – and, at least in some cases, already are being used – to serve customers in Verizon's service area.[9]

Table 2. ALECs That Have Deployed Circuit Switches in Verizon's Service Area in Florida

ALEC	Switch Total	Cities	ALEC	Switch Total	Cities
AT&T	2	Tampa (2)	ITC^DeltaCom	1	Tampa (1)
Florida Digital Network	2	Tampa (2)	NewSouth Communications	1	Winter Haven (1)
KMC	2	Clearwater (1); Sarasota (1)	SBC Telecom	1	Tampa (1)
WorldCom	2	Tampa (2)	Time Warner Telecom	1	Tampa (1)
Allegiance Telecom	1	Tampa (1)	US LEC	1	Tampa (1)
BTI	1	Tampa (1)	Winstar	1	Tampa (1)
Global Crossing	1	Tampa (1)	XO	1	Tampa (1)
Intermedia	1	Tampa (1)	Xspedius	1	Tampa (1)

Source: February 2003 LERG.

8. Several competitors also have deployed packet switches in Florida. According to public sources, approximately 10 ALECs have deployed at least 15 packet switches in Verizon's service area in Florida.[10] *See* Table 3. It is now clear that packet-switched networks are capable of – and are – being used to provide voice service along with traditional data services.[11] Analysts have noted, for example, that "telephone networks are gradually migrating from circuit-switched to packet switched."[12] Many ALECs have indeed begun to migrate their *local* voice

[7] *Florida PSC Competition Report* at 49.

[8] *See* Telcordia, *Local Exchange Routing Guide* (Feb. 2003) ("*February 2003 LERG*").

[9] *See February 2003 LERG.*

[10] *See* New Paradigm Resources Group, Inc., *CLEC Report 2003*, Ch. 5 at 37-42 (17th ed. 2003) ("*NPRG CLEC Report 2003, 17th ed.*").

[11] Both AT&T and WorldCom, for example, have launched retail voice-over-IP (VoIP) services to business customers; this "marked the first instance of two major telecom companies visibly transitioning to all-data networking that supports voice services." M. Smetannikov, *AT&T Bets on Voice-Over-IP*, Interactive Week (Feb. 5, 2001), http://www.eweek.com/article2/0,3959,117341,00.asp.

[12] *See, e.g.*, T.K. Horan, *et al.*, CIBC Oppenheimer, Investext Rpt. No. 2749262, Telecom Services: Daily Teletimes – Industry Report at *1 (Mar. 9, 1999).

traffic onto ATM and Frame Relay networks.[13] And all of the major packet switch manufacturers have developed voice capabilities for their packet switches.[14] Analysts now agree that markets for both packet switches and voice-over-packet services will grow rapidly in the next few years.[15]

Table 3. ALECs That Have Deployed Packet Switches in Verizon's Service Area in Florida

ALEC	Switch Total	Cities	ALEC	Switch Total	Cities
Time Warner Telecom	4	Tampa (4)	Florida Digital Network	1	Tampa (1)
Winstar	2	Tampa (2)	Global Crossing	1	Tampa (1)
Allegiance Telecom	1	Tampa (1)	SBC Telecom	1	Tampa (1)
AT&T	1	Tampa (1)	US LEC	1	Tampa (1)
BTI	1	Tampa (1)	WorldCom	1	Tampa (1)
Eagle Communications	1	Tampa (1)			

Source: NPRG CLEC Report 2003, 17th ed, Ch. 5 at 37-42.

9. Competitors have deployed extensive local fiber networks in Verizon's service area in Florida. While specific route-mile data on these networks are not publicly available, more than 15 competitors have deployed fiber networks in the Tampa and Sarasota-Bradenton MSAs. According to public sources, four additional competitors currently have plans to deploy networks in Tampa or Sarasota. *See* Table 4.

[13] *See, e.g.*, AT&T Press Release, *AT&T Advances Voice Over Internet Services with Avaya IP Telephony Solution* (Mar. 31, 2003) ("AT&T's rich portfolio of VoIP services includes interconnection over managed ATM, frame relay, IP, and global on-net/off-net calling. These services will be delivered through a common infrastructure."); ThruPoint Press Release, *CTC Communications Teams with ThruPoint in Transition to Packet-Based Network* (Apr. 3, 2001) ("CTC has delivered on its promise to having customers utilizing local and long distance voice services on our Cisco Powered packet-based VoIP network by the end of 2000, and its goal of being one of the first carriers to do so."); US LEC Press Release, *US LEC Deploys ATM Network* (Nov. 1, 1999) (US LEC added high capacity ATM packet switches in all of its 23 existing switching centers in the U.S. as part of its "strategic plan to become an IP (Internet Protocol) based CLEC fully integrating voice and data services economically over high bandwidth networks.").

[14] *See, e.g.*, C. Stix, Morgan Stanley, Dean Witter, Investext Report No. 8092537, Cisco Systems – Company Report at *3 (July 20, 2001) ("Today over half of Cisco's product lines are voice-enabled."); Lucent Technologies, *Circuit to Packet: Extending the Value of Class 4 and 5 Network Infrastructure in Metro/Edge Networks* at 1, 2 (May 2001), http://www.lucent.com/businesspartners/clp/stories/circuit-to-packet.pdf ("The migration from circuit to packet is underway. . . . Voice traffic is beginning to move from circuit-switched networks to data networks, including the Internet.").

[15] *See, e.g., TIA Sees VoIP Nearly Doubling*, Telco Bus. Report (June 18, 2001) (The Telecommunications Industry Association has recently predicted that the voice-over-IP equipment market would nearly double this year to more than $3.3 billion); L. Cauley, *What's Ahead for . . . Phones; Internet Telephony Has Been Slow in Coming, But It's About to Get a Big Boost*, Wall St. J. at R9 (June 25, 2001) ("According to Cahners In-Stat Group . . . carriers looking to offer voice-over-IP services spent about $1.127 billion world-wide in 2000. By 2003, that figure is expected to more than double to $2.607 billion, and again double by 2005 to about $5.855 billion."); E.R. Jackson, U.S. Bancorp Piper Jaffray Inc., Investext Rpt. No. 2442005, Sonus Networks Inc. – Company Report at *5 (Jan. 19, 2001) ("We estimate the market for next-generation voice infrastructure solutions during 2000 to reach more than $1.5 billion. The market is expected to reach well in excess of $5 billion by 2003); L.M. Harris, Josephthal, Investext Rpt. No. 2454183, Sonus Networks Inc.: Initiating Coverage – Company Report at *1 (Jan. 30, 2001) ("While the voice-over-packet switching market in 2000 was probably less than $100 million, we project that it will grow to $250 million in 2001, and to close to $6.5 billion dollars by 2005. At that point, voice-over-packet switching sales could account for 20% or more of total voice switching sales.").

Table 4. ALECs and Competitive Fiber Providers in the Tampa and Sarasota-Bradenton MSAs	
ALEC/Fiber Provider	**Tampa/Sarasota-Bradenton Networks**
Allegiance Telecom	Tampa: Operational Voice and Data Networks
AT&T	Tampa: Operational Voice and Data Networks
BTI Telecom	Tampa: Operational Voice and Data Networks
Eagle Communications	Tampa: On-Net Voice Network and Operational Data Network
EPIK Communications	Tampa: Metropolitan Network
Florida Digital Network	Tampa: Operational Voice and Data Networks
Global Crossing	Tampa: Operational Voice and Data Networks
ITC^DeltaCom	Tampa: On-Net Voice and Data Networks Sarasota: On-Net Data Network
KMC Telecom.	Sarasota: Operational Voice and Data Networks
Level 3 Communications	Tampa: Metropolitan Network
NewSouth Communications	Tampa: On-Net Voice and Data Networks
Progress Telecom	Tampa: Metropolitan Network
SBC Telecom	Tampa: Operational Voice and Data Networks
Time Warner Telecom	Tampa: Metropolitan Network
US LEC Corp.	Tampa: Operational Voice and Data Networks
WinStar	Tampa: Operational Voice and Data Networks
WorldCom	Tampa: Operational Voice and Data Networks
XO Communications	Tampa: Operational Voice and Data Networks
Xspedius Fiber Group	Tampa: Metropolitan Network
Planned Networks	
American Fiber Systems	Tampa: Metropolitan Network Sarasota: Metropolitan Network
Dominion Telecom	Tampa: Metropolitan Network
ITC^DeltaCom	Sarasota: Voice Network
NuVox Communications	Tampa: Voice and Data Networks
PacTec	Tampa: Voice and Data Networks

American Fiber Systems. American Fiber Systems, *Targeted Cities*, http://www.americanfibersystems.com/html/cityserv/cityserv_main.html. **Dominion Telecom.** Dominion Telecom, *Network Map*, http://www.dominiontel.com/popmap.jsp. **EPIK Communications.** EPIK Communications, *EPIK Network*, http://www.epik.net/5_97 htm. **Level 3 Communications.** Level 3 Communications, *Network Maps*, http://www.level3.com/577.html; Level 3 Communications Press Release, *Level 3 Completes Two Advanced Metropolitan Fiber Optic Networks in Florida* (July 19, 2000). **Progress Telecom.** Progress Telecom, *Tampa Metro*, http://www.progresstelecom.com/our_network/tampa_metro.html. **Time Warner Telecom.** Time Warner Telecom, *Nationwide Network*, http://www.twtelecom.com/Default.aspx?pageId=31. **Xspedius Fiber Group.** Xspedius Fiber Group, *Cities Served*, http://www.xspedius.com/images/int_network_map.pdf. **All Others.** New Paradigm Resources Group, Inc., *CLEC Report 2003*, Ch. 5 at 37-42 (17th ed. 2003).

B. Customer Lines Served by Competitive Facilities

10. Through April 2003, competitors were serving more than ***Redacted*** lines – including approximately ***Redacted*** residential lines – in Florida either wholly or partially over facilities they have deployed themselves, including in all cases their own local switches.

11. The figure of ***Redacted*** facilities-based lines in Florida is conservatively based on the number of E911 listings that competitors have in Verizon's service area. ALECs that serve customers using their own switch are responsible for entering information about those customers in the E911 database. Each E911 listing that a competing carrier places in this database therefore represents at least one customer line served by that ALEC's own switch. The number of competitive E911 listings is a conservative estimate of the number of facilities-based lines that ALECs serve because, while each E911 subscriber listing represents at least one customer access line, it may represent more than a single line. In the case of business customers, for example, a single E911 listing may represent many individual lines.[16] In addition, there are likely no E911 listings for competitors' DSL lines that are used exclusively to provide data services. The total number of E911 listings that competitors have obtained therefore understates the number of facilities-based lines that competitors serve. At the same time, however, a competitor may obtain an E911 listing for customers that it serves using unbundled loops obtained from an ILEC. In Florida, ALECs have obtained approximately 29,000 unbundled analog loops through April 2003.[17]

12. With the facilities they have already deployed, ALECs have the *ability* to serve a far greater number of customers than they are currently serving. In point of fact, competing carriers have already begun using their switches to compete for customers in wire centers within Verizon's service area in Florida that contain virtually all of Verizon's access lines in the state. Verizon maintains internal data of the wire centers in which ALECs have ported telephone numbers from Verizon's switches to the ALECs' own switches.[18] Each number ported from Verizon's switch to a ALEC's switch represents a telephone served by that competitor's own switch. Each wire center in which an ALEC has obtained a ported number therefore represents a geographic area where an ALEC is actually competing for local customers today using switches that it has deployed itself. As of the end of February 2003, Verizon has ported more than 154,000 numbers to competitors in Florida. One or more ALECs had ported a telephone number

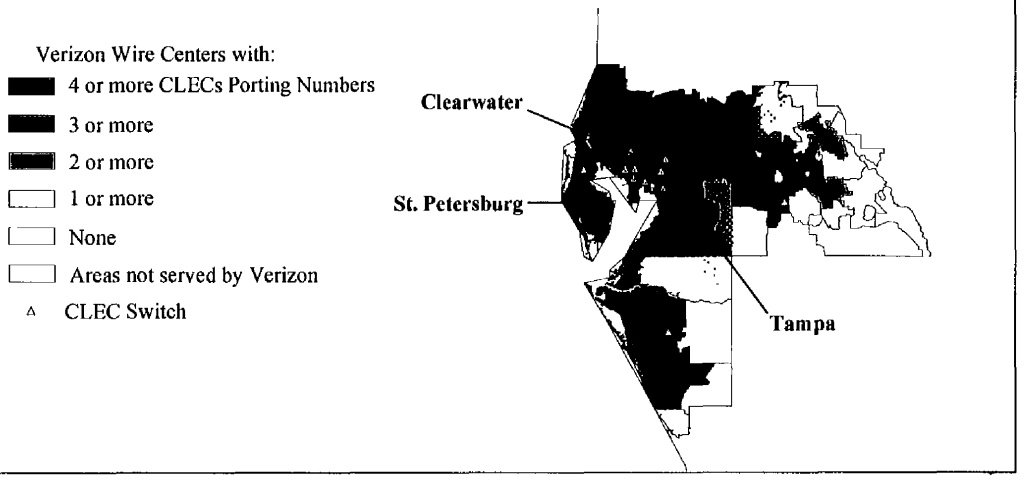
[16] ALECs are providing a much higher number of circuits to business customers using their switches, because many of the lines they serve are high-capacity lines. For example, ALECs publicly report serving much higher totals of voice-grade equivalent lines than the number of listings these ALECs maintain in E911 databases. For example, nine ALECs – WorldCom, XO, Time Warner Telecom, Adelphia Business Solutions, KMC Telecom, CTC, CoreComm, Pac-West, and PaeTec – publicly report serving 124 million voice-grade equivalent lines, but have obtained only 4.5 million listings in the E911 database. *See* UNE Rebuttal Report 2002 at 9 & Table 4, *attached to* Ex Parte Letter from Dee May, Verizon, to Marlene Dortch, FCC, CC Docket No. 01-338 (Oct. 23, 2002).

[17] This figure includes xDSL and ISDN loops.

[18] A wire center is "the location of a local switching facility containing one or more central offices." 47 C.F.R. § 54.5; *see id.* ("wire center boundaries define the area in which all customers served by a given wire center are located."); *see also Policy and Rules Concerning Rates for Dominant Carriers and Amendment of Part 61 of the Commission's Rules to Require Quality of Service Standards in Local Exchange Carrier Tariffs*, Memorandum Opinion and Order, 12 FCC Rcd 8115, ¶ 7, n.14 (1997) (A wire center "might have one or several class 5 central offices, also called public exchanges or simply switches.").

to its own switch in 91 percent of Verizon's wire centers in Florida, which contain approximately 98 percent of all Verizon's switched access lines in the state, including approximately 99 percent of all *business* lines and approximately 98 percent of all *residential* lines. *See* Figure 1.

Figure 1. CLEC Circuit Switches Serving Customers in Verizon Wire Centers in Florida



USE OF THE UNE-PLATFORM AND RESALE

13. ALECs are providing service to business and residential customers in Florida using both UNE platforms and resale. As of February 2003, Verizon's data show that ALECs in Florida are serving approximately 28,000 lines through resale, including approximately 19,000 residential lines and 8,200 business lines. As of that same date, ALECs are serving approximately 5,300 lines through UNE platforms obtained from Verizon, including approximately 3,800 business lines and approximately 1,500 residential lines. According to public sources, Sprint – an incumbent LEC elsewhere in Florida – has partnered with Z-Tel in a three-year agreement to provide bundled local and long-distance service to compete in Tampa using UNE platforms. While Sprint does not currently advertise the new service, according to news reports, customer service representatives will pitch the local and long-distance package to customers who call.[19]

OTHER SOURCES OF LOCAL COMPETITION

14. Verizon increasingly faces competition from alternative sources such as cable, mobile wireless, IP telephony, e-mail, and instant messaging.[20] Most of this extensive competition is not reflected in the line counts or other competitive totals discussed above.

---

[19] *See Sprint To Sell Local, Long-Distance Services as Packages in Florida*, Knight Ridder Trib./Bus. News (Feb. 6, 2003).

[20] *See generally, Florida PSC Competition Report* at 12-15.

Nonetheless, this competition is substituting for a large and increasing share of the local telephone services that Verizon provides. These intermodal sources are competing against traditional wireline networks in two significant respects – by taking customer lines, and, even where they do not necessarily take a line, by taking traffic minutes.

15. The Florida PSC itself has noted that "cable and wireless providers appear to be posing . . . significant facilities-based challenge to ILEC dominance of the residential market."[21] According to the PSC, "alternative technologies [*e.g.*, wireless, cable telephony, and VoIP] are expected to displace an increasing number of ILEC lines."[22] AT&T has likewise told investors that "[i]nexorably, cable and wireless are going to eat into [the ILECs'] share [of the local market]."[23] And independent analysts have reached similar conclusions.[24] The PSC's own data show that, in 2002, there were 260,000 fewer access lines reported statewide compared to the previous year, a decline which "can be explained, in part, by customers dropping either primary or secondary lines in favor of wireless or broadband service."[25]

16. As the PSC further recognized, the telecommunications industry "is undergoing dramatic structural and technological changes," which will accelerate all of these trends in the future.[26] Indeed, when Congress enacted the Telecommunications Act of 1996, ordinary wireline voice calls still generated 90 percent of the telecom industry's total revenues, with wireless and data splitting the rest. Data traffic surpassed voice traffic in 1998, and now exceeds voice traffic by an eleven-to-one margin worldwide.[27] Wireless voice revenues will surpass wireline voice revenues this year,[28] and wireless and data services combined now account for well over half of the industry's revenues. Wireline local voice revenues are expected to grow little, if at all, over the next five years,[29] and are expected to generate only 26 percent of all local

[21] *Florida PSC Competition Report* at 6.

[22] *Florida PSC Competition Report* at 14.

[23] S. Woolley, *Bad Connection*, Forbes (Aug. 12, 2002) (quoting AT&T president David Dorman); *see also AT&T UNE Overview* at 37 (noting that a "key issue[] that the RBOCs face" is "how to improve their efficiency so they can compete effectively with complete facilities-based carriers (*e.g.*, CATV) for telephony and DSL.").

[24] *See, e.g., New Telecompetition Study Reveals Mobile Carrier Threat to Wireline*, Bus. Wire (May 29, 2002) ("In the next five years, mobile and cable telephony service providers will steal 30 million access lines and bill 40% more minutes than wireline carriers."); M. Morin, *et al.*, Merrill Lynch Capital Markets, Investext Rpt No. 8559720, What's Up With Telecoms? – Substitution Effects Take Their Toll – Industry Report at *1 (May 21, 2002) ("[W]e believe that Broadband, Cable Telephony, Wireless, and VoIP are accelerating the migration of voice traffic from traditional fixed line networks towards more competitive although often less profitable networks."); S. Flannery, *et al.*, Morgan Stanley, Dean Witter, Investext Rpt. No. 8648493, Wireline Telecom Services – 2Q02 Preview: Lowering The Bar – Industry Report at *10 (July 18, 2002) ("We expect continued weakness in access lines, as substitution to wireless, cable telephony, and broadband remains an issue.").

[25] *Florida PSC Competition Report* at 14-15.

[26] *Florida PSC Competition Report* at 12.

[27] *See* P. Andrews, *A Tech Rebirth?*, U.S. News and World Report at 28 (Jan. 13, 2003); William E. Kennard, Chairman, FCC, The Telecom Act at Three: Seeing the Face of the Future, address at the Comptel 1999 Annual Meeting and Trade Exposition, Atlanta, GA (Feb. 8, 1999). *See also Florida PSC Competition Report* at 12.

[28] *See* T.A. Jacobs, *et al.*, JP Morgan H&Q, *Telecom Services 2001* at 1 (Nov. 2, 2001) ("*JP Morgan Telecom Services 2001 Report*").

[29] *See JP Morgan Telecom Services 2001 Report* at Table 1.

revenues by 2006.[30] By contrast, wireless usage is growing at over 60 percent per year,[31] and local data revenues alone are expected to generate 46 percent of all local revenues by 2006.[32]

A. Competition from Cable and Broadband Networks

17. Cable operators now compete against ILECs in two significant respects. First, they provide high-speed Internet access services, which compete directly with ILEC DSL services. In Verizon's service area in Florida, cable modem service is offered throughout Tampa by the incumbent cable operator.[33] While data are not available for Verizon's service area in Florida, cable operators serve more than two out of three broadband subscribers nationwide.[34]

18. Second, as the Florida PSC has recognized, cable operators also are "now expanding [their] competitive offerings to include business and residential telephone services delivered over [their] fiber optic infrastructure."[35] Most of the cable telephony that has been commercially deployed to date relies on the same type of circuit-switches that ILECs and ALECs use. Two cable operators – Comcast and Cox – have deployed commercial circuit switched cable telephony throughout much of their service areas,[36] and several others have deployed it on a more limited basis.[37] Nationwide, cable telephony is now available to more than 15 million

---

[30] *See JP Morgan Telecom Services 2001 Report* at Table 1.

[31] *See 3g Rollouts Inch Along, But Kagan Research Indicates Wireless Minutes Roaring Ahead, Set to Dominate Telecom Landscape by 2005 Leading Executives to Debate Market Demand, Technology and Financing at Kagan's Wireless Telecom Summit May 2-3 in New York*, Bus. Wire (Apr. 27, 2001).

[32] *JP Morgan Telecom Services 2001 Report* at Table 1.

[33] Brighthouse Networks, *High Speed Online*, http://tampabay.mybrighthouse.com/bh/index.cfm?pageID=EC9B55BD-61BC-11D6-9C97E1D565AB0642. The incumbent cable company in the Tampa area is a partnership between Time Warner and Advance/Newhouse which does business as Brighthouse Networks. Time Warner Tampa, now dba Brighthouse, provides service to 900,000 customers in Hillsborough, Pinellas, Polk, Manatee, Citrus, Hernando and Pasco Counties as of October 2001.

[34] G. Campbell, *et al.*, Merrill Lynch, *Broadband Handbook* at App. C, Table 6 (Feb. 21, 2003).

[35] *Florida PSC Competition Report* at 9.

[36] *See* Cox Communications, *The Case For Cable Telephony* at 1 (Apr. 2002) http://www.cox.com/PressRoom/Case%20for%20Cable%20Telephony.pdf ("The company installed switches and other necessary telecom equipment and delivers calls over its own broadband network, becoming one of the first companies to offer consumers a competitive choice for telecom services. Along with AT&T Broadband, Cox is one of only two U.S. broadband cable companies widely offering competitive circuit-switched, facilities-based phone service."); Brian L. Roberts, President, Comcast Corporation, *Opening Statement Before the Senate Subcommittee on Antitrust, Competition and Business, and Consumer Rights* (Apr. 23, 2002) ("We can take advantage of AT&T Broadband's considerable expertise and experience in providing circuit-switched phone over cable. That will let us give millions more customers a true choice between facilities-based telephone providers.").

[37] *See* M. Stump and K. Brown, *Comcast Plunges into Telephony*, Multichannel News at 5 (Dec. 24, 2001); R. Moore, *Cabling Home*, Nashville Bus. J. (Feb. 4, 2002); *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Ninth Annual Report, 17 FCC Rcd 26901, ¶¶ 49-52 (2002); T. Kerver, *Operator of the Year*, Cablevision (Oct. 22, 2001). There currently are two major cable operators – Comcast and Cox – and a third smaller one, Insight, that are actively deploying circuit-switched cable telephony to new areas. *See AT&T and Comcast Remain On Watch Neg*, Bus. Wire (Dec. 20, 2001); K. Darce, *Local Phone Arena Gets New Players*, Times-Picayune at 1 (Feb. 8, 2002); Insight Communications, *Services*, http://www.insight-com.com/services/.

U.S. homes – approximately 15 percent of the mass market.[38] Approximately three million homes currently subscribe.[39] And cable operators are adding tens of thousands of new subscribers each month.[40] In Florida, Comcast (formerly AT&T Broadband) deployed circuit switched cable telephony in Jacksonville/Pompano in July 1998.[41]

19. Facilities-based competition has also come from a number of carriers – including RCN, Knology, and WideOpenWest – that have deployed their own broadband pipe (generally either hybrid fiber coax or pure fiber) to provision high-speed bundled service offerings to individual neighborhoods or the approximately 30-35 percent of the population that live in multi-dwelling units.[42] These carriers now serve at least 353,000 subscribers and offer service to at least 1.7 million homes.[43] In Florida, Knology provides competitive local telephone service in Panama City, Panama City Beach, and Lynn Haven.[44]

---

[38] Comcast Press Release, *Comcast Full Year and Fourth Quarter Results Meet or Exceed All Operating and Financial Goals* (Feb. 27, 2003); Cox Communications Press Release, *Cox Communications Announces Fourth Quarter Financial Results for 2002; Strong Demand for Cox's Digital Services Builds Solid Foundation for Continued Growth in 2003* (Feb. 12, 2003); Cablevision Systems Press Release, *Cablevision Systems Corporation Reports Fourth Quarter 2002 Financial Results* (Feb. 11, 2003); RCN Press Release, *RCN Announces Fourth Quarter and Year-End 2002 Results* (Mar. 13, 2003); Charter Press Release, *Charter Announces 2002 Operating Results and Restated Financial Results for 2001 and 2000; Company Will Extend Filing of Form 10-K* (Apr. 1, 2003); Insight Communications Press Release, *Insight Communications Announces Fourth Quarter and Year-End 2002 Results* (Feb. 25, 2003); Knology, Inc., Form 10-K (SEC filed Mar. 31, 2003).

[39] Ind. Anal. Div., FCC, *Local Competition: Status as of December 31, 2002* at Table 5 (June 2003) ("*2002 Local Competition Report*").

[40] Reply to Comments and Petitions to Deny Applications for Consent to Transfer Control at 11, *Applications for Consent to the Transfer of Control of Licenses Comcast Corp. and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee*, MB Docket No. 02-70 (FCC filed May 21, 2002) ("AT&T Broadband is capable of serving approximately seven million households, has enrolled over 1.15 million cable telephony customers, and is adding approximately 40,000 customers per month.").

[41] CED/InDepth, *Convergence Emergence: The Advanced Services Deployment Handbook* at 18 (Oct. 2002).

[42] *See, e.g.*, Robert Currey, Vice Chairman, RCN Corporation, Prepared Testimony before the Senate Subcommittee on Antitrust, Business Rights, and Competition, Committee on the Judiciary, *Cable and Video: Competitive Choices*, Federal News Service (Apr. 4, 2001) ("About 30-35 percent of the population lives in multiple dwelling units (MDUs), such as apartments, cooperatives or condominiums.").

[43] *See* Knology, Inc. Press Release, *Knology Reports Strong Operating Results in First Quarter of 2003* (May 13, 2003) (Knology, Inc. on-net telephone connections and marketable homes passed); RCN Corp. Press Release, *RCN Announces First Quarter 2003 Results* (May 14, 2003) (Total RCN connections: voice and Total RCN marketable homes); D. Hayes, *Are Overbuilders Keeping Pace?*, CED (Apr. 2002); A. Bryer, *Wide Open West Finds It's Tough to Beat the Incumbent*, Denver Bus. J. (Apr. 5, 2002).

[44] *See* CED/InDepth, *Convergence Emergence: The Advanced Service Deployment Handbook* at 19 (Oct. 2002).

Table 5. Examples of Cable Telephony Offerings in Florida		
	Comcast Digital Phone	**Knology First Line Digital Telephone**
Service Area	Jacksonville, Pompano	Panama City, Panama City Beach, Lynn Haven
Price per Month	$10.25	$9.95
Additional Features	180-1,000 minute packages of local toll and long-distance service ($11.95-$49.95/mo.) Two-Feature or Multi-Feature packages ($9.75 or $14.75/mo.) or $1.75-$4.50 per vertical feature	Seven-Sense long distance plan (7 cents/min. for $4.95/mo.) Smart Choice (18 calling features for $20.95/mo.) 5% discount for subscribers of other services

20. Cable telephony is already ubiquitous in some states, such as Rhode Island, where Cox has the "capability to provide cable telephony service to 75 to 95 percent of Rhode Island customers."[45] Comcast offers cable telephony services to large fractions of the nearly three million homes its cable network passes in the Boston Area,[46] the 3.5 million homes it passes in the Chicago area,[47] and the 2.7 million homes it passes in the Bay Area.[48] Cox and Comcast boast that they have achieved penetration rates of as high as *40 percent* in the most mature markets, and 20 percent or more in even the less mature ones.[49] Cox reportedly earned margins of 35 percent from the provision of cable telephony in 2002 (and as high as 38 percent in the fourth quarter), up from between 25 to 28 percent in 2001.[50]

21. Cable operators, who have been offering cable telephony on their own circuit switches for several years, are now migrating to packet-switched alternatives as well. The upgrades that allow cable companies to offer cable modem services also make it possible for

[45] *See, e.g., Application by Verizon New England Inc., et al., for Authorization To Provide In-Region, InterLATA Services in Rhode Island*, Memorandum Opinion and Order, 17 FCC Rcd 3300, ¶ 105 (2002).

[46] *See* Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation at 16 (July 2001) (stating that AT&T's network in Boston has "2.9 million homes passed," that "plant upgrades [are] nearly complete, [to be] able to offer complete bundle," and that there is already "11% telephony penetration" and ">100k customers.").

[47] *See* Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation at 17 (July 2001) (stating that AT&T's network in Chicago has "3.5 million homes passed," a "strong telephony roll-out" with "backbone and headend segments of rebuilds nearly complete," "18% telephony penetration" and "some suburbs have 40% penetration.").

[48] *See id.* at 18 (stating that AT&T's network in the Bay Area has "2.7 million homes passed," "backbone and headend segments of rebuilds nearly complete," "19% telephony penetration" and "many communities in high 20s").

[49] *See, e.g., id.* at 17-18 ("Some [Chicago] suburbs have 40 percent penetration."); Cox Communications, *Whitepaper: Preparing for the Promise of Voice-over Internet Protocol (VoIP)* at 1 (Feb. 2003), http://www.cox.com/PressRoom/supportdocuments/VOIDwhitepaper.pdf ("in areas where the service has been available the longest, penetration is . . . up to 40 percent."); J. Granelli, *Expanding Cable Telephony Is New Kid on SBC's Block*, L.A. Times (Jan. 21, 2003) ("As of the end of September, Cox provided telephone service for 30% of the 304,000 households it has wired in 14 south Orange County cities, where nearly all the homes are hooked up. It has a similar share in the San Diego County communities it serves."); AT&T News Release, *AT&T Broadband-Comcast Merger Will Create More Competitive Marketplace* (Apr. 23, 2002) (Then AT&T chairman C. Michael Armstrong said "AT&T Broadband has already gained 25 percent or higher cable telephony penetration in 55 communities").

[50] S. Rosenbush, *Broadband Telephony*, Business Week Online (Spring 2003).

cable to provide high-quality digital telephone service with only a small incremental investment.[51] Uniform industry standards for providing IP telephony over cable are now in place.[52] Upgrading existing cable plant to provide IP telephony costs about $600 per line, at least 15 percent less than circuit-switched telephony.[53] As cable IP technology continues to develop, analysts predict that costs will decline significantly over time.[54] IP telephony also has lower operating costs (by at least 5 percent) than circuit-switched telephony, owing largely to the fact that it can "leverage [the] existing IP infrastructure."[55] The Florida PSC has noted that "IP telephony promises to provide far more economies than circuit-switched technology, thus providing impetus for achieving a key goal of the Act – lower prices for consumers."[56]

22. Recently, a number of major cable operators have begun deploying IP-based cable telephony service commercially. And every other major cable operator is conducting trials of IP telephony and has announced plans to deploy the service commercially in the future. This

---

[51] *See, e.g.*, McKinsey & Co. and J.P. Morgan H&Q, *Broadband 2001* at 39 (Apr. 2, 2001) (IP telephony "requires no additional outside plant investment, draws heavily on the core data service infrastructure, and only requires modest incremental equipment investments."); J. Yoshida, *Modem Issues Put Cable Voice-Over-IP Service on Hold*, EE Times (June 15, 2001), http://www.eetimes.com/story/OEG20010615S016 ("cable VoIP service can share the same infrastructure already established for high-speed data services."); NCTA, *Cable Telephony: Offering Consumers Competitive Choice* at 5 (July 2001) ("VoIP is not only an incremental expense, it utilizes the data path the industry has already built, and should allow for easy software changes and additions to service packages, and innovative combinations of voice, data, and fax services.").

[52] CableLabs approved a new standard, known as DOCSIS 2.0, which improves upon the IP telephony-compatible DOCSIS 1.1 standard, in early 2002 and equipment from numerous vendors recently received certification on this standard. *See* CableLabs Press Release, *CableLab Achieves Industry 'First' with Certification for DOCSIS 2.0* (Dec. 19, 2002). DOCSIS 2.0 also recently received standardization from the International Telecommunications Union, which "is remarkable due to the fact that work on the specification began less than 18 months ago." CableLabs Press Release, *DOCSIS 2.0 Approved as International Standard* (Dec. 19, 2002).

[53] *See, e.g.*, J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act I* at 193 (Nov. 20, 2002) ("VOIP capital costs start at about $400-$600 per customer for an all-IP telephony service."); J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act II* at 241 (Nov. 20, 2002) ("Comcast is convinced that DOCSIS 1.1 is carrier-class at a cost structure several hundred dollars less expensive than switched telephony."); *see also See* Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation at 37 (July 2001) (AT&T estimates that providing primary line VoIP telephony would involve costs totaling $530-$620 per customer, including $230-$270 for switching and other outside equipment and $300-$350 for customer equipment, while circuit switched primary line telephony would cost $675).

[54] *See, e.g.*, J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act I* at 193 (Nov. 20, 2002) ("VOIP economics should improve dramatically over time.").

[55] J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act I* at 192 (Nov. 20, 2002). *See also id.* ("The per-customer cost of IP voice is expected to be $350- $450, the cost of using class-5 telephone switches is $200-$300 higher, according to industry estimates."); N. Gupta, *et al.*, Salomon Smith Barney, Investext Rpt. No. 7277788, Cable – Cable Weekly – Industry Report at *3 (Mar. 17, 2003) ("[T]he cost of providing telephony service [via cable pipe] could be reduced by as much as 75% using VoIP."); J. Bazinet & D. Pinsker, J.P. Morgan H&Q, *The Cable Industry* at 46 (Nov. 2, 2001) ("*JP Morgan Cable Industry Report*") ("IP's operating costs will probably run 5% less than those for circuit voice."); Cox Communications, *White Paper: Preparing for the Promise of Voice-over Internet Protocol* at i (Feb. 2003), http://www.cox.com/PressRoom/supportdocuments/VOIDwhitepaper.pdf ("Cox estimates about an 8-to-10 percent cost improvement when VoIP services are compared apples-to-apples with primary-line, circuit-switched, network-powered phone services.").

[56] *Florida PSC Competition Report* at 13.

suggests that this form of competition will soon become widespread in Florida. The following is a description of the recent commercial offerings and trials of IP cable telephony.

- Time Warner Cable has recently introduced the company's first commercial application of IP telephony service throughout its Maine service area, which it refers to as its "Digital Phone" service.[57] The new service "is being sold as a primary line replacement," and includes "all the requirements for lifeline service including call signaling, dynamic quality over service, 911 support and CALEA support through adjunct servers."[58] The company plans to introduce the service in at least two other markets this year.[59]

- Cablevision announced recently that it also "has started to offer [IP telephony] to select customers in the New York suburbs."[60] Cablevision plans to conduct an expanded field trial of its "OptimumVoice" primary-line VoIP service in Long Island, N.Y. this summer, which is expected to lead to a broader commercial rollout by January 2004.[61] Cablevision recently signed a contract with Siemens AG for VoIP equipment and software. According to Siemens voice-over-cable solutions manager Mike Clement, "We're definitely providing [Cablevision] with large-scale deployment capability."[62] The basic system offered by Siemens can support more than 100,000 subscribers.[63]

- Charter currently provides a primary-line digital phone service using voice-over-IP technology in parts of Wausau, Wis.[64] It also has recently completed a trial of primary-line voice-over-IP telephony in St. Louis.[65] Charter is currently

---

[57] E. Murphy, *Cable Company Expands Phone Service*, Portland Press Herald (Apr. 8, 2003) http://business.mainetoday.com/pulse/030408cablefone.shtml ("The new service replaces Line Runner, which was Time Warner's test phone service and was intended as a second phone line, said Melinda Poore, the company's director of government and public affairs. Some initial bugs were worked out, and Digital Phone is intended to be used as a primary phone service.").

[58] *See* V. Vittore, *Time Warner Cable Launches VoIP Service*, TelephonyOnline.com (May 22, 2003).

[59] A. Breznick, *Big MSOs Gear Up for First Cable IP Telephony Rollouts*, Communications Daily (June 9, 2003) (quoting Time Warner senior vice president-voice Gerry Campbell).

[60] S. Rosenbush, *Broadband Telephony*, Business Week Online (Mar. 25, 2003).

[61] A. Breznick, *Big MSOs Gear Up for First Cable IP Telephony Rollouts*, Communications Daily (June 9, 2003).

[62] *Id.*

[63] *Id.*

[64] Charter Communications, *Wisconsin Telephone Features and Services*, http://www.charter.com/pdf/wisconsin_telephone_services.pdf; Charter Communications, *Telephone FAQs*, http://www.charter.com/products/telephone/faqs.asp.

[65] *Sorting It All Out; The Advanced Services Deployment Handbook*, CED (Apr. 1, 2003); Charter Communications, *Telephone FAQs*, http://www.charter.com/products/telephone/faqs.asp.

"experimenting with different price points" in this system, and reports that it has quickly reached 10 percent penetration in its market area.[66]

- In Verizon's service territory in Florida, Time Warner completed a trial in Tampa of cable telephony that relies on IP-based packet switching, rather than conventional circuit switching.[67] Time Warner has since sold its Tampa cable system to its partnership with Advance/Newhouse (which does business as Bright House Networks).[68]

- Comcast began a field trial of primary-line VoIP service in Coatesville, Pa., approximately 40 miles northwest of Philadelphia. This trial encompasses five headends in an area where Comcast passes more than 180,000 homes.[69]

- Cox recently initiated a six-month field trial of VoIP service in an undisclosed cable market after testing a hybrid IP-circuit switched service in Oklahoma City. Cox states that it is "prudently bullish on VoIP."[70]

- Adelphia is conducting a trial of IP telephony in Buffalo in which VoIP equipment manufacturer "Arris has done voice over IP get ready work."[71]

B. Competition from Wireless Providers

23. The Florida PSC has recognized that "wireless service providers have emerged as competitors to incumbents in providing customers with their entire telephone service needs."[72] The PSC has also explained that, as a state with the third highest number of wireless subscribers in the U.S., "Florida ILECs are perhaps more vulnerable to wireless competition than most other states. . . . There are indications of a trend among seasonal residents, whether retirees or those maintaining vacation homes in the state, of discontinuing their landline connections in favor of wireless. For those customers, it makes little sense to continue paying for telephone service that sits idle much of the year when wireless enables them to stay connected wherever they are."[73]

---

[66] V. Vittore, *Cable Players Tap Vendors for VOIP Service Rollouts*, Telephony (June 2, 2003).

[67] *Sorting It All Out; The Advanced Services Deployment Handbook*, CED (Apr. 1, 2003).

[68] The Florida PSC had noted that Time Warner Cable's Tampa Bay system was the company's second largest cluster of cable TV subscribers. *Florida PSC Competition Report* at 11.

[69] A. Breznick, *Big MSOs Gear Up for First Cable IP Telephony Rollouts*, Communications Daily (June 9, 2003) (quoting a Comcast spokeswoman).

[70] *Id.* (quoting a Cox spokesperson).

[71] *Q1 2003 Arris Group Inc. Earnings Conference Call - Final*, FD (Fair Disclosure) Wire, Transcript 042403ay.730 (Apr. 24, 2003).

[72] *Florida PSC Competition Report* at 7.

[73] *Florida PSC Competition Report* at 8-9.

24. Today, there are more than 135 million wireless subscribers in the United States, including more than 8.6 million throughout the state of Florida.[74] Two in five Americans – with all adults and children included in that count – have a mobile phone.[75] Some twenty million new subscribers are being added annually.[76] Wireless carriers are adding subscribers much faster than their wireline counterparts – in percentage terms, and in absolute terms, too.[77]

25. Today, a large and growing number of customers are abandoning their wireline phone service for a wireless phone, and an even larger share of traffic minutes are migrating to wireless networks.[78] As Chairman Powell recently found, "much of the most significant competition in voice . . . has come from wireless phone service."[79] The FCC itself has recognized that wireless is now competitive with primary line wireline services for a large and growing segment of the population.[80] While data on wireless-wireline substitution are not available for Verizon's service area in Florida, a January 2002 *USA Today*/CNN/Gallup poll found that 18 percent of cell phone users "use cell phones as their primary phones."[81] A study by wireless provider Leap Wireless "indicated that 32% of its subscriber base has completely cut their home phones, up from approximately 7% about a year-and-a-half ago."[82] Another by Merrill Lynch found that "the percentage of wireless subscribers that have completely cut their home phones could be as high as 10% to 15% in some markets."[83] A survey by the University of Florida's Bureau of Economic and Business Research survey found that 25 percent of

---

[74] *2002 Local Competition Report* at Table 13. *See also Florida PSC Competition Report* at 8 (there were 8.5 million wireless subscribers in Florida in 2002, representing over 50 percent of the state's population).

[75] *See* Michael Powell, Chairman, FCC, *Consumer Policy in Competitive Markets*, remarks before the Federal Communications Bar Association, Washington, D.C. (June 21, 2001).

[76] *See* CTIA, *CTIA's Semi-Annual Wireless Industry Survey Results, June 2001 to December 2002*, http://www.wow-com.com/pdf/CTIA_Survey_Yearend_2002.pdf ("*CTIA's Semi-Annual Wireless Industry Survey Results*").

[77] *Compare FCC Statistics of Common Carriers, 2000/2001 ed.* at Table 4.10 (total switched access lines and residential switched access line growth, 1995-2000) *with CTIA's Semi-Annual Wireless Industry Survey Results* (estimated wireless subscribers, 1995-2000).

[78] *See, e.g.*, C. Govlin, *et al.*, Forrester Research, *Sizing US Consumer Telecom* at 6 (Jan. 2002) ("Lower costs for wireless service, widespread broadband availability, and an absence of fixed-line innovation will flatline the POTS business. A second wave of displacement – pushing voice to broadband networks and making wireless the preferred data channel – will further erode dependence on the original Bell network.").

[79] Michael K. Powell, Chairman, FCC, *Competition Issues in the Telecommunications Industry*, Written Statement before the Committee on Commerce, Science, and Transportation, United States Senate (Jan. 14, 2003).

[80] *See Application by SBC Communications Inc., et al., for Authorization to Provide In-Region, InterLATA Services in Nevada*, Memorandum Opinion and Order, 18 FCC Rcd 7196, ¶ 15 (2003) (finding that broadband PCS "represents an actual commercial alternative to [a BOC] for residential telephone exchange services.").

[81] M. Kessler, *18% See Cell Phones as Their Main Phones*, USA Today (Jan. 31, 2002).

[82] *See* L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution: Becoming More Meaningful – Industry Report at *3 (Apr. 22, 2002); *see also* Leap Wireless Press Release, *Leaping over Landline: Leap Leads Wireline Displacement Trend* (June 24, 2002) (according to a company survey, "more than 26 percent of [] Cricket customers say they do not have a traditional phone at home.").

[83] L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution: Becoming More Meaningful – Industry Report at *2 (Apr. 22, 2002).

respondents in Florida have considered disconnecting their landline telephones to use only wireless service.[84]

26. Wireless is directly price competitive with wireline services, particularly when the comparison is made between equivalent bundles of service. The typical wireline customer purchases not only basic local service, but also long-distance service and some number of value-added features like call waiting, voice mail, or caller ID.[85] Wireless carriers typically provide all of these add-on services, and often for no extra charge.[86] Taking into account the whole package of service most typically sold, a Gartner Dataquest study concludes that wireless calling prices are already "competitive with, and in some case better than, wireline calling rates."[87] And wireless prices continue to decline rapidly – by as much as 10 to 20 percent a year in recent years.[88] Wireless service also provides added convenience by virtue of the fact that the wireless phone is mobile. Mobility is, self evidently, a very valuable feature, and one that has historically commanded a high price premium in the market. The attractiveness of wireless bundles has become such a threat to wireline providers that they offer competing bundles of their own.[89] *See* Table 6.

[84] *Florida PSC Competition Report* at 7.

[85] *See, e.g., JP Morgan Cable Industry Report* at 50 (the average voice customer generates approximately $58 in monthly revenues, only $18 of which is for basic local service; the average revenue generated for vertical features is nearly $5, and the average revenue generated in access charges is about $5.50).

[86] *See, e.g.*, Sprint PCS, *Sprint PCS Wireless Service Plans*, http://www1.sprintpcs.com/explore/exploreHome.jsp (all Sprint PCS service plans include voicemail, call waiting, caller ID, numeric paging, and three way calling.); T-Mobile, *Plans*, http://www.t-mobile.com/plans/default.asp (all T-Mobile plans include voicemail, call waiting, caller ID, built-in paging, and conference calling).

[87] P. Schoener & A. Sabia, Gartner, *U.S. Consumer Telecommunications and Online Market, 2001* at 33 (Nov. 8, 2001).

[88] *See, e.g., Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Sixth Report at 6, FCC 01-192 (rel. July 17, 2001).

[89] *See, e.g.*, Verizon Press Release, *Verizon Revolutionizes Communications Service for Consumers with One Package, One Call, One Bill for Local, Long-Distance, DSL and Wireless* (Aug. 6, 2002) (Verizon's "Veriations" offering); SBC Communications Press Release, *SBC Connections Strategy "Rewards" Consumers With Comprehensive, Next-generation Bundles Featuring More Savings, Convenience, Choices* (Nov. 18, 2002) (SBC's "Total Connections" offering); BellSouth, *Residential Services, BellSouth Answers*, http://www.bellsouth.com/consumer/answers/index.html?EC; BellSouth Press Release, *Customers Enjoy More Choice and Savings from One Provider, with New BellSouth® Answers Packages* (July 29, 2002) (BellSouth's "Answers" offering).

Table 6. Examples of Bundled Service Offerings in Florida						
	Verizon Freedom	**BellSouth Unlimited Answers**	**Cingular Preferred Nation 500 w/ Rollover**	**AT&T mLife National Next Generation**	**Sprint PCS Free and Clear**	**T-Mobile Get More (National)**
Price per Month	$49.95	$54.99	$55.00 for 500 anytime, and 5,000 night/weekend minutes	$49.99 for 700 anytime minutes	$45.00 for 500 anytime, and unlimited night/weekend minutes	$39.99 for 600 anytime, and unlimited night/weekend minutes
Local	Yes – Unlimited	Yes – Unlimited	Yes	Yes	Yes	Yes
Local Toll	Yes – Unlimited	Yes – Unlimited	Yes	Yes	Yes	Yes
Long Distance	Yes – Unlimited	Yes – Unlimited	Yes	Yes	Yes	Yes
Vertical Services	Yes (4 plus voicemail)	Yes (more than 4)	Yes (4 plus voicemail)	Yes (6 plus voicemail)	Yes (3 plus voicemail and numeric paging)	Yes (4 plus voicemail and 50 incoming text messages)

27. Wireless substitution is even greater in terms of the amount of traffic that is migrating from wireline to wireless networks. Analysts have estimated that wireless traffic has displaced 30 percent of total wireline minutes.[90] This trend is accelerating as wireless minutes of traffic are growing much faster than wireline minutes.[91] Lehman Brothers estimates that wireless accounted for 30 percent of total telecom sector revenue in 2002, up from 5 percent in 1996.[92] By 2006, a Yankee Group study predicts, U.S. mobile subscribers will increase by 50 percent and will "dominate personal calling and severely cannibalize landline minutes of use."[93]

C. Competition from Packet-Switched Providers

28. Cable operators are not the only companies pursuing IP telephony. Vonage – which bills itself as "the broadband phone company" – launched its DigitalVoice service using VoIP technology in the Miami area in June 2002, Orlando in December 2002, and Tampa in

[90] *See FCC Reports Wireless Sub Growth is Leveling, Mobile is on Rise*, Communications Daily (June 27, 2003).

[91] P. Cusick, *et al.*, Bear, Stearns & Co., Inc., Investext Rpt. No. 7397790, Non-Public Operators Steal the Show . . . Again – Industry Report at *7 (May 20, 2003) ("For the next year we are looking for [wireless] minute-usage growth of 16% per user, and 26% overall as more customers are added and more telecom minutes are migrated to wireless."); *3g Rollouts Inch Along, But Kagan Research Indicates Wireless Minutes Roaring Ahead, Set to Dominate Telecom Landscape by 2005*, Bus. Wire (Apr. 27, 2001) (landline minutes growing in "low single digits"); *see also* P. Cusick, *et al.*, Bear, Stearns & Co., Inc., Investext Rpt. No. 7393872, Wireless Services – Searching for the Catalysts – Industry Report at *31 (May 13, 2003) (expecting "increasing minute usage as the wireline-wireless cannibalization continues.").

[92] *See FCC Reports Wireless Sub Growth is Leveling, Mobile is on Rise*, Communications Daily (June 27, 2003).

[93] Yankee Group News Release, *Consumers Abandon Landlines and Increase Mobile Call Volumes, Creating Strong Growth in the Wireless Market, Reports Yankee Group* (Sept. 16, 2002).

February 2003.[94] Vonage offers "better home phone service including unlimited calling, reduced International calling rates, all of the latest features and great service and sound quality – without the worry of being nickel-and-dimed for features."[95] Vonage states that it is "filling a need in the Tampa-St. Petersburg market for affordable, flat rate calling plans that include all of the features that customers install themselves – all things they cannot get from their current local carrier."[96] In one year, Vonage has gained over 30,000 subscribers nationwide, and transmits 1.5 million calls per week over its VoIP network,[97] and as of May 2003, the company's goal is to acquire 100,000 customers before the end of the year.[98] The company recently announced a partnership with Intrado to provide 911 emergency calling services to Vonage customers.[99] According to director of channel sales Michael Centrella, Vonage is also looking to partner with MSOs and large ISPs to "quickly sell [Vonage's] voice services to these businesses without subjecting them to major expenditures or operational impacts."[100] On June 10, 2003, Vonage announced that it partnered with Advanced Cable Communications "to deploy broadband telephony service to Advanced Cable's cable television passings in Coral Springs and Weston, Florida."[101]

29. While packet switches are used increasingly to provide voice service, they are still used primarily for data services. Data now make up the majority of traffic on the circuit-switched network, and a great deal of data traffic is carried on non-ILEC networks. The largest providers of both Frame Relay and ATM services are AT&T, WorldCom, and Sprint, which control more than two-thirds of the nationwide market for these services.[102] ALECs as a whole

---

[94] *See* Vonage Press Release, *Vonage DigitalVoice Launches Service in Southern Florida* (June 18, 2002); Vonage Press Release, *Vonage DigitalVoice Launches Service in Orlando* (Dec. 2, 2002); Vonage Press Release, *Vonage DigitalVoice Launches Service in Tampa, Florida* (Feb. 26, 2003). Vonage provides service in the following Florida area codes: 305, 321, 561, 727, 772, 786, 813, 863, 941 and 954. Vonage, *Available Area Codes*, http://www.vonage.com/area_codes.php.

[95] Vonage Press Release, *Vonage DigitalVoice Launches Service in Southern Florida* (June 18, 2002) (quoting Vonage chairman and CEO Jeffrey Citron).

[96] Vonage Press Release, *Vonage DigitalVoice Launches Service in Tampa, Florida* (Feb. 26, 2003) (quoting Vonage chairman and CEO Jeffrey Citron).

[97] Vonage Press Release, *Vonage Becomes First Broadband Telephony Provider To Activate 30,000 Lines* (June 16, 2003); Vonage Press Release, *Vonage Completes 25 Million Calls Over Its SIP Network* (May 30, 2003).

[98] *See* Vonage Press Release, *Vonage Calls the Gardner-Nelson Project* (May 6, 2003).

[99] Vonage Press Release, *Intrado and Vonage Digital Voice Partner To Provide Emergency Calling Solution* (Mar. 25, 2003).

[100] Vonage Press Release, *Vonage Shifts Its Channel Sales Toward Retail, E-Tail, ISPs and MSOs* (Mar. 21, 2003).

[101] Vonage Press Release, *Vonage Digital Voice Announces Private Label Partnership with Advanced Cable Communications* (June 10, 2003). Vonage announced a similar agreement with Armstrong Cable covering five states. Vonage Press Release, *Vonage Digital Voice Announces Private Label Partnership with Armstrong* (June 9, 2003).

[102] *See* R. Kaplan, IDC, *U.S. Packet/Cell-Based Services Market Forecast and Analysis, 2000-2005* at Figures 9, 31 (Mar. 2001) (AT&T, WorldCom, and Sprint together accounted for 65.8 percent of revenues for ATM, and 68.4 percent of revenues for frame relay in 2000); Stratecast Partners, *ATM and Frame Relay Market Assessment,* Data/Internet Services Growth Strategies, Vol. II, No. 10 at 10 (Sept. 2001) ("Tier 1 service providers continue to dominate the U.S. market, controlling over 70% of the market."); *id.* at 17 ("In 2000, AT&T held the largest share of ATM service revenues, with a 36% share of [the] market; WorldCom and Sprint held the second and third leading position in the market with shares of 26% and 22%, respectively. As in the frame relay market, the RBOCs collectively represent a small share of the ATM services market.").

earn almost half of all their revenues from data services – some $23 billion is the projection for 2003,[103] and data services have traditionally been the fastest growing source of ALEC revenue.[104]

30. Residential and business customers alike now use e-mail and instant messaging ("IM") as direct substitutes for many voice calls.[105] A large and growing fraction of e-mail and IM traffic originates and/or terminates on competitive networks. And even when carried over ILEC networks, such traffic displaces significant usage-sensitive (*e.g.*, per-minute or per-call) revenues that otherwise would be earned. There are now 900 million e-mail accounts in the U.S. and over 60 million IM users.[106] It is estimated that consumers in the U.S. are sending approximately 3.2 billion e-mail messages[107] and approximately 1 billion IM messages[108] *per day*. And while estimates vary, consumer surveys find that the actual rate of voice substitution is considerably higher.[109]

---

[103] *See NPRG CLEC Report 2003, 17th ed.*, Ch. 3 at Table 9.

[104] *See id.*, Ch. 3 at Table 9; Ch. 2 at Table 7; Ch. 3 at Table 8. This category includes "all data and data-related services (*e.g.*, frame relay, ATM, and Internet access)." *Id.*

[105] As the chairman of AOL's Internet division has stated, "People are not on the telephone anymore." *AOL Promises Open Instant Messenger*, ITworld.com (July 23, 2001), http://www.itworld.com/App/300/IDG010723openaol/.

[106] *See* D. Whelan, *The Instant Messaging Market*, American Demographics (Dec. 2001).

[107] *See* T. Shinkle, *Time for a New Look at Email Management*, Computer Technology Review (June 2001).

[108] *See* R. Gann, *Fast Talking Instant Messaging Software*, Internet Magazine (Jan. 1, 2001).

[109] *See, e.g., Welcome to InstantMessagingPlant.com*, InstantMessagingPlanet.com (Oct. 15, 2001) http://www.instantmessagingplanet.com/enterprise/print.php/10816_903101 (According to an InsightResearch survey "[f]orty-seven percent of consumers said they use instant messaging. And of those, 96 percent said they use IM at home and 20 percent use instant messaging at work. . . . [N]early half of all respondents, 49 percent, use instant messaging as a replacement for a telephone call while one third, 35 percent, use it in place of sending an e-mail."); M. Dano, *IBM Enters Wireless Instant Messaging Arena*, RCR Wireless (June 25, 2001) (According to the Gartner Group, 60 percent of all real-time online communication – voice or text – will be driven through instant messaging technology.); T. Chea, *Workplace Is Being Altered by E-Mail*, Wash. Post at E07 (June 29, 2000) (In a study by Vault.com, 45 percent of respondents said e-mail has replaced phone calls.).