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November 26, 2002

Mrs. Blanca S. Bayó
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 020507-TL (FCCA Complaint)

Dear Ms. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Direct Testimony of John A. Ruscilli, Eric Fogle, Bill Smith and W. Keith Milner, which we ask that you file in the captioned docket.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

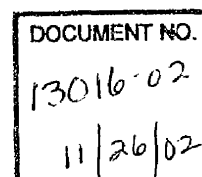
Sincerely,

Meredith E. Mays
Meredith E. Mays

SYG

Enclosure

cc: All Parties of Record
Marshall M. Criser III
R. Douglas Lackey
Nancy B. White



**CERTIFICATE OF SERVICE
DOCKET NO. 020507-TL**

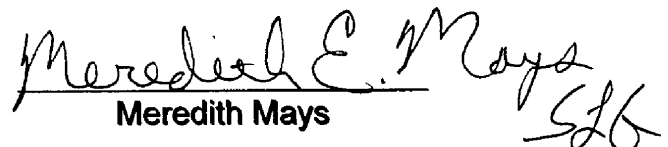
I HEREBY CERTIFY that a true and correct copy of the foregoing was served via Electronic Mail, (*) Facsimile and FedEx this 26th day of November 2002 to the following:

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Meredith Mays

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BELLSOUTH TELECOMMUNICATIONS, INC.
DIRECT TESTIMONY OF JOHN A. RUSCILLI
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 020507-TL
NOVEMBER 26, 2002

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is John A. Ruscilli. I am employed by BellSouth as Senior Director – Policy Implementation and Regulatory Compliance for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR BACKGROUND AND EXPERIENCE.

A. I attended the University of Alabama in Birmingham where I earned a Bachelor of Science Degree in 1979 and a Master of Business Administration in 1982. After graduation I began employment with South Central Bell as an Account Executive in Marketing, transferring to AT&T in 1983. I joined BellSouth in late 1984 as an analyst in Market Research, and in late 1985 moved into the Pricing and Economics organization with various responsibilities for business case analysis, tariffing, demand analysis and price regulation. I served as a subject matter expert on Integrated Services Digital Network ("ISDN") tariffing in various public service commission staff meetings in

1 Tennessee, Florida, Alabama and Georgia. I later moved into the State Regulatory and
2 External Affairs organization with responsibility for implementing both state price
3 regulation requirements and the provisions of the Telecommunications Act of 1996 (“the
4 Act”), through arbitration and 271 hearing support. In July 1997, I became Director of
5 Regulatory and Legislative Affairs for BellSouth Long Distance, Inc., with
6 responsibilities that included obtaining the necessary certificates of public convenience
7 and necessity, testifying, Federal Communications Commission (“FCC”) and commission
8 support, federal and state compliance reporting and tariffing for all 50 states and the FCC.
9 I assumed my current position in July 2000.

10

11 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

12

13 A. The purpose of my testimony in this proceeding is to respond to Issues 1, 2, and 3 from
14 the November 12, 2002 Order Establishing Procedure in this case.

15

16 *Issue 1: Does the Commission have jurisdiction to grant the relief requested in the*
17 *Complaint?*

18

19 Q. WHAT IS BELLSOUTH’S POSITION ON THIS ISSUE?

20

21 A. BellSouth’s position is that the Commission does not have jurisdiction to grant the relief
22 requested in the Complaint. In its Complaint at ¶24, FCCA is seeking an order from this
23 Commission requiring that BellSouth “cease and desist from its practice of refusing to
24 provide its FastAccess service to customers who select another provider for voice
25 service.” Moreover, Issue 6(a) and 6(b) relate to the rates, terms and conditions

1 applicable to BellSouth®FastAccess® (“FastAccess”) service. If the Commission were
2 to order BellSouth to “cease and desist” certain practices concerning FastAccess and also
3 set rates, terms, and conditions for BellSouth’s FastAccess service, it would effectively
4 be ordering BellSouth to either violate or alter the express terms of BellSouth’s federal
5 tariff. This Commission clearly has no authority over FCC tariffs and thus lacks the
6 jurisdiction to grant the relief the FCCA is seeking.

7
8 Because FastAccess is unregulated and wholesale DSL service is an interstate
9 telecommunications service over which the FCC, and not the Commission, has
10 jurisdiction, the inclusion of Issues 6(a) and (b) in this proceeding exceed this
11 Commission’s jurisdiction. In fact, in an order addressing GTE’s DSL-Solutions-ADSL
12 Service, the FCC found that “this offering, which permits Internet Service Providers
13 (ISPs) to provide their end user customers with high-speed access to the Internet, is *an*
14 *interstate service* and is *properly tariffed at the federal level.*”¹

15
16 Q. WHAT ABOUT SECTION 364.01(4) OF THE FLORIDA STATUTES?

17
18 A. Although I am not a lawyer, BellSouth’s DSL policy, as explained below, does not
19 violate any aspect of state law. Specifically, notwithstanding the Commission’s general
20 jurisdiction to enforce the requirements of the Florida Statutes, it is my understanding
21 that any obligation imposed under state law that is inconsistent with federal law is
22 expressly preempted.² Regarding the issues in this case, the FCC has squarely held that
23 BellSouth’s policy regarding the provision of DSL service is neither discriminatory nor
24

25 ¹ See Memorandum Opinion and Order, *In the Matter of GTE Telephone Operating Cos. GTOC Tariff No. 1*, 13
F.C.C. rcd 22,466 at ¶1 (October 30, 1998) (emphasis added).

² 47 U.S.C. § 251(d)(3)(B).

1 anticompetitive under federal law, and a contrary ruling under state law would be
2 expressly preempted.

3
4 The FCC recently addressed BellSouth's practice of not providing its federally tariffed
5 wholesale DSL service over a combined UNE loop and port (UNE-P) in its order
6 approving BellSouth's Louisiana/Georgia Section 271 application.³ Parties to that
7 proceeding raised complaints about BellSouth's DSL policy that are nearly identical to
8 those asserted by FCCA in this proceeding, which the FCC rejected:

9
10 BellSouth states that its policy "not to offer its wholesale DSL service to
11 an ISP or other network services provider [] on a line that is provided by a
12 competitor via the UNE-P" is not discriminatory nor contrary to the
13 Commission's rules. Commenters allege that BellSouth will not offer its
14 DSL service over a competitive LEC's UNE-P voice service on that same
15 line. *We reject these claims* because, under our rules, the incumbent LEC
16 has no obligation to provide DSL service over the competitive LEC's
17 leased facilities. Furthermore, a UNE-P carrier has the right to engage in
18 line splitting on its loop. As a result, a UNE-P carrier can compete with
19 BellSouth's combined voice and data offering on the same loop by
20 providing the customer with line splitting voice and data service over the
21 UNE-P loop in the same manner. *Accordingly, we cannot agree with*
22 *commenters that BellSouth's policy is discriminatory.*

23
24
25 *Id.* at ¶157 (emphasis added). The FCC, therefore, was squarely presented with the issue
of whether BellSouth's policy of not providing its federally tariffed, wholesale DSL
service over UNE-P violates federal law. The FCC found no such violation. On the
contrary, the FCC explicitly and unequivocally found that BellSouth's policy is not
discriminatory and does not violate federal law. A contrary ruling by this Commission

³ FCC Order No. 01-247, *In the Matter of Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and Bellsouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Georgia and Louisiana*, CC Docket No. 02-35, Rel. May 15, 2002. ("GA/LA 271 Order")

1 under state law would be inconsistent with the requirements of federal law, as interpreted
2 by the FCC, and thus would be preempted.

3

4 Q. HAS THE FCC ADDRESSED BELLSOUTH'S DSL POLICY IN MORE RECENT
5 DECISIONS?

6

7 A. Yes. The FCC again affirmed its conclusion reached in the Georgia/Louisiana Order
8 when it approved BellSouth's 271 Application for Alabama, Kentucky, Mississippi,
9 North Carolina and South Carolina. In paragraph 164 of its order,⁴ the FCC concluded:

10

11 Finally, we reject claims by KMC and NuVox that BellSouth's practice of
12 refusing to provide DSL service on the same line over which an end user
13 subscribes to a competitive LEC's voice service warrants a finding of
14 noncompliance. As we stated in the *BellSouth Georgia/Louisiana Order*,
15 an incumbent LEC has no obligation, under our rules, to provide DSL
16 service over the competitive LEC's leased facilities. Moreover, a UNE-P
17 carrier has the right to engage in line splitting on its loop. As a result, a
18 UNE-P carrier can compete with BellSouth's combined voice and data
19 offering on the same loop by providing the customer with line splitting
20 voice and data service over the UNE-P loop in the same manner.
21 Accordingly, we cannot agree with KMC and NuVox that BellSouth's
22 policies are discriminatory and warrant a finding of checklist
23 noncompliance. [Footnotes omitted.]

19

20 Again, it is clear that BellSouth's DSL policy is not anticompetitive or discriminatory.

20

21 Further, as the FCC noted, Competitive Local Exchange Carriers ("CLECs") (referred to
22 in Florida as Alternative Local Exchange Carriers -- "ALECs") have the option of
23 engaging in line splitting in order to provide DSL service to their voice customers -- an

24

25 ⁴ *In the Matter of Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Alabama, Kentucky, Mississippi, North Carolina, and South Carolina*, (CC Docket 02-150, Memorandum Opinion and Order, Released September 18, 2002 ("Five State Order").

1 option that ALECs have conveniently elected to forego, despite prior representations by
2 ALECs that line splitting is essential to competition.

3

4 Q. WHAT DOES FCCA POINT TO AS THE BASIS FOR THIS COMMISSION'S
5 PURPORTED JURISDICTION TO GRANT THE RELIEF THE FCCA IS SEEKING?

6

7 A. The FCCA's assertions regarding jurisdiction of the Commission are not valid. The
8 FCCA claims the Commission has jurisdiction over this Complaint pursuant to §364.01,
9 Florida Statutes, which gives the Commission authority to regulate telecommunications
10 companies, and §§364.10, 364.051 and 364.3381, Florida Statutes, which deal with the
11 Commission's authority to prevent anti-competitive behavior of telecommunications
12 services providers.

13

14 Q. DO THE FLORIDA STATUTES CITED BY THE FCCA GIVE THIS COMMISSION
15 JURISDICTION OVER BELLSOUTH'S PROVISION OF DSL SERVICES?

16

17 A. No. When I review the policy behind the Florida Statutes cited by the FCCA, the clear
18 intent of the statutes is to grant the Commission general jurisdiction over telephone
19 companies. None of these provisions contains any reference to broadband services, and
20 all are subject to the preemption provisions of the Telecommunications Act of 1996.
21 Further, none of the statutes cited by the FCCA expressly grants the Commission any
22 jurisdiction over an enhanced, nonregulated, nontelecommunications service like
23 BellSouth's FastAccess service. As explained in BellSouth's Motion to Dismiss the
24 Complaint in this docket, Chapter 364, Florida Statutes, grants the Commission
25 jurisdiction over only telecommunications services that are offered by a

1 telecommunications company, not jurisdiction over any other activities of a
2 telecommunications company. As the Commission has agreed in its Order in the FDN
3 Arbitration case, BellSouth's FastAccess service is not a telecommunications service.
4 Instead, it is an "enhanced, nonregulated, nontelecommunications Internet access
5 service."⁵ In fact, in that same Order, the Commission stated, "[t]his decision should not
6 be construed as an attempt by this Commission to exercise jurisdiction over the
7 regulation of DSL service, but as an exercise of our jurisdiction to promote competition
8 in the local voice market."⁶

9
10 Further, the FCCA, in its Complaint at p. 3 (and the Commission in its *FDN Arbitration*
11 *Order* at p. 11), cites provisions of the Florida Statutes that, the FCCA claims, give the
12 Commission jurisdiction over anti-competitive behavior (FCCA Complaint, citing
13 Florida Statutes §§364.10, 364.051, and 364.3381, at p. 3.) Although I am not an
14 attorney, and details of the applicability of the statutes is more appropriately addressed in
15 the Post Hearing Brief, my understanding of the cited statute sections is as follows:

16
17 (1) Section 364 only grants the Commission jurisdiction over telecommunications
18 services. Thus, if BellSouth were to offer *voice lines* only to customers that
19 purchase its retail FastAccess service, that arguably would be a term of condition
20 under which BellSouth offers a telecommunications service, and the Commission
21 arguably would have jurisdiction to determine whether such a term or condition
22 violates Section 364.10(1). That, however, is not what the FCCA's Complaint
23 alleges. Instead, the FCCA's Complaint centers around the fact that BellSouth

24
25 ⁵ *In re: Petition by Florida Digital Network, Inc. for arbitration of certain terms and conditions of proposed interconnection and resale agreement with BellSouth Telecommunications, Inc. under the Telecommunications Act of 1996, Docket No. 010098-TP, FPSC Order No. PSC-02-0765-FOF-TP, p. 8 ("FDN Arbitration Order").*

⁶ *Id.*, at p. 11.

1 offers its *retail FastAccess service* only to customers that purchase voice service
2 from BellSouth. The FCCA's Complaint, therefore, addresses allegations
3 regarding what arguably is a term or condition under which BellSouth offers a
4 service *that is not a telecommunications service*. The Commission, therefore,
5 has no authority to determine whether this term or condition violates §364.10(1).
6

7 (2) Section 364.051 allows the Commission to hear allegations of anticompetitive
8 acts or practices with regard to a price-regulated company's telecommunications
9 offerings that are designed to meet offerings of its competitors. It does not give
10 the Commission jurisdiction to hear allegations of anticompetitive acts or
11 practices with regard to the offering of a nontelecommunications service by any
12 company.
13

14 (3) The only jurisdiction granted by §364.3381 is the jurisdiction to determine
15 whether the manner in which a company prices its telecommunications services
16 results in cross-subsidization or constitutes predatory pricing or other similar
17 anticompetitive behavior, none of which have been alleged in FCCA's
18 Complaint. This statute clearly does not grant the Commission jurisdiction to
19 consider the FCCA's allegations regarding the terms and conditions under which
20 BellSouth will provide a nontelecommunications service.
21

22 ***Issue 2: What are BellSouth's practices regarding the provisioning of its FastAccess Internet***
23 ***service to: (a) a FastAccess customer who migrates from BellSouth to a competitive voice***
24 ***service provider; and (b) to all other ALEC customers.***

25

1 Q. WHAT IS BELL SOUTH'S POLICY ON THIS ISSUE?

2

3 A. (a) BellSouth's policy is that it provides wholesale DSL and FastAccess DSL Internet
4 access on BellSouth provided exchange line facilities. BellSouth will continue to provide
5 wholesale DSL and BellSouth FastAccess DSL service to BellSouth voice customers
6 who migrate from BellSouth to an ALEC only if the ALEC provides service via resale.
7 If the ALEC provides voice service via UNE-P or via an individual UNE loop, BellSouth
8 does not continue to provide BellSouth FastAccess to that customer, except as ordered by
9 this Commission in the FDN and Supra cases. BellSouth respectfully disagrees with
10 these orders.

11

12 (b) BellSouth does not, and has not been required to, provide its FastAccess DSL
13 Internet service to customers of an ALEC who are not migrating their voice service from
14 BellSouth. For this Commission to require BellSouth to provide its FastAccess DSL
15 Internet service to end users who have never been BellSouth customers (or who had a
16 break in service between being a BellSouth customer and becoming a customer of the
17 requesting ALEC), goes even further beyond the bounds of the Commission's authority
18 by regulating provision of a BellSouth nonregulated, nontelecommunications service on a
19 stand-alone basis.

20

21 In order to understand BellSouth's DSL policy, it is first necessary to understand
22 BellSouth's provision of DSL service.

23

24 Q. PLEASE DESCRIBE BELL SOUTH'S DSL SERVICE.

25

1 A. BellSouth has both a federally tariffed, federally regulated wholesale DSL transport
2 service and an enhanced non-regulated high-speed Internet access service. BellSouth
3 offers the federally tariffed wholesale DSL transport service through BellSouth's Special
4 Access FCC Tariff No. 1. This tariffed DSL service is a regulated interstate
5 telecommunications service offering and is designed for use by Internet service providers
6 ("ISPs"), such as AOL, MSN, local ISPs and BellSouth's own ISP operations. This
7 interstate service is subject to the exclusive jurisdiction of the Federal Communications
8 Commission ("FCC").⁷

9
10 FastAccess is BellSouth's enhanced retail high-speed DSL-based Internet access service.
11 It uses the regulated wholesale DSL transport service as a component of the Internet
12 access offering just as AOL, MSN and other ISPs do. BellSouth's retail FastAccess
13 service is a non-regulated enhanced service that is not within the jurisdiction of the state
14 public service commissions.⁸ It consists of a DSL component (which can be thought of
15 as a pipe) and Internet services (which can be thought of as water flowing through the
16 pipe).

17
18 Q. PLEASE ELABORATE ON BELLSOUTH'S POLICY REGARDING PROVISION OF
19 DSL SERVICE.

20

21

22

23 ⁷ See Memorandum Opinion and Order, *In the Matter of GTE Telephone Operating Cos. GTOC Tariff No.*
1, 13 FCC Rcd 22,466 at ¶1 (October 30, 1998).

24 ⁸ See *In the Matter of Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local*
Exchange Company Safeguards, 6 FCC Rcd. 7571 (1991).

25

1 A. BellSouth's policy is that it provides wholesale DSL and FastAccess on BellSouth
2 provided exchange line facilities. This policy is embodied in BellSouth's FCC Tariff No.
3 1, which establishes DSL as an overlay service, and which requires the existence of an
4 "in-service, Telephone Company [i.e., BellSouth] provided exchange line facility." FCC
5 Tariff No. 1, Section 7.2.17(A).

6
7 It is not necessary for an end user customer to purchase voice service from BellSouth in
8 order to receive DSL service, whether FastAccess from BellSouth or another DSL service
9 from an ISP purchasing BellSouth's federally tariffed wholesale DSL transport service.
10 This is because BellSouth will provide DSL service over a line that is being resold by an
11 ALEC, since a resold line is a "BellSouth provided exchange line facility" within the
12 meaning of BellSouth's FCC Tariff No.1. Thus, if an ALEC wants to provide both voice
13 and DSL service to an end user over a single line, one option is for the ALEC to resell
14 BellSouth's voice service with BellSouth-provided DSL service over the same line.

15
16 When a BellSouth voice customer migrates to an ALEC for voice service via an
17 individual UNE loop or via UNE-P, BellSouth will not continue to provide DSL service
18 to that customer. To do so would violate BellSouth's FCC Tariff No. 1, since a UNE
19 loop leased to an ALEC, either on a stand-alone basis or as part of a UNE-P arrangement,
20 is not an "in-service, Telephone Company [i.e., BellSouth] provided exchange line
21 facility." F.C.C. Tariff No. 1, Section 7.2.17(A).

22
23 Q. WHY DOES BELLSOUTH DISCONTINUE DSL SERVICE TO A CUSTOMER WHO
24 MIGRATES TO AN ALEC UTILIZING UNE-P FOR VOICE SERVICE?

25

1 A. Although there are a number of reasons that justify BellSouth's DSL policy, as explained
2 in the Direct Testimony of Eric Fogle and Keith Milner, I will focus on two. First, as
3 explained above, discontinuing DSL service to a customer who migrates voice service to
4 an ALEC utilizing UNE-P is consistent with the terms and conditions of BellSouth DSL
5 service as set forth in BellSouth's FCC Tariff No. 1. Requiring BellSouth to provide
6 DSL service over the high-frequency portion of a UNE loop leased by an ALEC would
7 necessitate a change to BellSouth's FCC tariff.

8
9 Second, once an ALEC purchases a UNE loop (or the UNE-P) from BellSouth, the
10 ALEC has control over the entire loop, including the high-frequency portion of the loop.
11 BellSouth has no right to use that loop for any purpose. Ordering BellSouth to provide a
12 service over a facility controlled by an ALEC in order to provide a competitive service to
13 that ALEC's customers that the ALEC could offer itself would be the imposition of a
14 very unusual affirmative obligation on BellSouth to assist a competitor. While the
15 Telecommunications Act of 1996 ("1996 Act") imposes certain affirmative obligations
16 on BellSouth to assist competitors, this simply is not one of them. Furthermore, to the
17 extent BellSouth were required to provide DSL service over the high-frequency portion
18 of a UNE loop leased by an ALEC, BellSouth would have to negotiate rates, terms and
19 conditions for provisioning this service with each ALEC. This would be no small task,
20 given that there are 104 ALECs currently operating in Florida, which only adds to the
21 complexity (not to mention time and expense) of the relief the FCCA is seeking.

22
23 Q. IN PARAGRAPH 13 OF ITS COMPLAINT, FCCA CLAIMS THAT "IT IS
24 BELLSOUTH'S PRACTICE TO REFUSE TO PROVIDE ITS FASTACCESS

25

1 SERVICE TO END USERS WHO DESIRE TO RECEIVE VOICE SERVICE FROM A
2 CARRIER OTHER THAN BELLSOUTH.” IS FCCA CORRECT?

3

4 A. No. While it is true that BellSouth does not provide FastAccess over a UNE loop or
5 UNE-P, BellSouth will provide its FastAccess service over a line on which an ALEC is
6 reselling BellSouth’s voice service. As explained above, a resold line is a BellSouth
7 provided exchange access line facility that would allow a customer to receive voice
8 service from an ALEC reseller and BellSouth-provided DSL service over the same line.


9


10 If an ALEC were serious about serving a residential customer that wished to retain
11 BellSouth’s DSL service, the ALEC could provide local voice service to that customer
12 over a resold line. By utilizing the resale alternative, the ALEC could further expand its
13 local customer base. If, at some later point, the ALEC served a significant number of
14 voice customers over resold lines out of a particular central office or remote terminal, the
15 ALEC could elect to collocate a small DSLAM at that central office or remote terminal,
16 convert the resold lines to UNE-P arrangements, and use the collocated DSLAM to
17 provide DSL service to those customers.

18 

19 Q. HAVE ALECS BEEN SUCCESSFUL IN FLORIDA IN PROVIDING VOICE
20 SERVICE ON A RESALE BASIS, WITH BELLSOUTH CONTINUING TO PROVIDE
21 ITS DSL SERVICE ON THE SAME LINES?

22

23 A. Yes. As of the end of October 2002, ALECs were providing voice service to
24 *PROPRIETARY  PROPRIETARY* of their end user customers over resold
25 lines within the state of Florida that were also carrying BellSouth’s wholesale DSL

1 transport service. Included in that total were *PROPRIETARY 
2 PROPRIETARY* resold lines also carrying BellSouth FastAccess.

3

4 *Issue 3: Do any of the practices identified in Issue 2 violate state or federal law?*

5

6 Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

7

8 A. None of the practices identified in Issue 2 violates state or federal law. As discussed
9 under Issue 2, the FCC has found that BellSouth's DSL practices are not discriminatory
10 or anticompetitive. Further, the Florida statutes do not confer upon the Commission the
11 authority to regulate BellSouth's nonregulated, nontelecommunications services, which
12 includes BellSouth's FastAccess DSL service. However, in addition to asking this
13 Commission to unduly expand its jurisdiction by requiring that BellSouth change the
14 terms and conditions of its FCC tariff or by regulating the terms and conditions of an
15 unregulated service, the FCCA does not stop there. For the Commission to make a
16 determination of the competitive or anticompetitive nature of BellSouth's DSL policy, it
17 would have to address whether BellSouth has a monopoly in the provision of its DSL
18 service. As we will discuss below, since BellSouth does not have such a monopoly, such
19 a determination would amount to extending the Commission's jurisdiction to regulation
20 of the provision of all broadband services, including cable modem service.

21

22 Q. ON PAGE 3, AND PAGES 6-9 OF ITS PETITION, THE FCCA ALLEGES THAT
23 BELLSOUTH'S DSL PRACTICE "IS A BARRIER TO COMPETITION AND
24 INTERFERES WITH CONSUMERS' ABILITY TO SELECT THE PROVIDER OF
25 CHOICE." DO YOU AGREE?

1

2 A. No. FCCA's allegation is that BellSouth's DSL policy interferes with the consumers'
3 selection for local voice telecommunications service. Although I am neither a lawyer nor
4 an economist, extensive competition exists in the local voice market in Florida, which
5 contradicts the FCCA's assertion as cited above. The fact is that local voice competition
6 is flourishing in Florida, notwithstanding the FCCA's claim to the contrary.

7

8 Q. WHAT IS THE CURRENT STATE OF COMPETITION IN THE LOCAL VOICE
9 MARKET IN FLORIDA?

10

11 A. Competition in the local Florida voice market is strong and is continuing to increase.
12 When BellSouth filed its application for interLATA authority with this Commission,
13 BellSouth estimated that ALECs in Florida served 714,535 access lines as of February
14 2001. When BellSouth filed its Reply Affidavits in the Florida/Tennessee 271
15 Application with the FCC, BellSouth estimated that, as of September 2002, ALECs in
16 Florida were serving 1,324,819 access lines. A further breakdown of these estimates is
17 set forth in the following chart.

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FLORIDA – February 2001

ALEC PROVIDERS	NUMBER OF ALECS	RESIDENTIAL LINES	BUSINESS LINES	TOTAL LINES
FACILITIES-BASED (*)	45	128,629	397,589	526,218
FACILITIES-BASED/RESALE		19,322	79,442	98,764
RESALE-ONLY	67	72,731	16,822	89,553
ALEC TOTAL	112	220,682	493,853	714,535
TOTAL LINES		4,942,021	2,670,936	7,612,957
ALEC % OF TOTAL LINES		4.5%	18.5%	9.4%
BELLSOUTH LINES		4,721,339	2,177,083	6,898,422

FLORIDA – September 2002

ALEC PROVIDERS	NUMBER OF ALECS	RESIDENTIAL LINES	BUSINESS LINES	TOTAL LINES
FACILITIES-BASED (*)	53	480,449	737,307	1,217,756
FACILITIES-BASED/RESALE		57,478	5,407	62,885
RESALE-ONLY	51	43,370	808	44,178
ALEC TOTAL	104	581,297	743,522	1,324,819
TOTAL LINES		4,694,647	2,500,649	7,195,296
ALEC % OF TOTAL LINES		12.4%	29.7%	18.4%
BELLSOUTH LINES		4,113,350	1,757,127	5,870,477

NOTE: BellSouth estimates Facilities-Based lines using ALEC reported 911 listings plus UNE-P lines. This is "Method Two" in BellSouth's FPSC and FCC filings and includes ALECs serving 10 lines or more. The February 2001 line counts are as revised in Rebuttal Testimony of Cynthia Cox filed August 20, 2001 in FPSC Docket No. 960786-TL. The September 2002 line counts are from the Reply Affidavit of Elizabeth Stockdale filed November 1, 2002 in FCC WC Docket No. 02-307.

1 As is shown above, in the nineteen-month period from February 2001 to September 2002,
2 the ALECs' number of lines and market share (for both residence and business) increased
3 significantly. At the same time, the number of lines served by BellSouth and BellSouth's
4 market share decreased, which hardly suggests that BellSouth's DSL policy is a "barrier
5 to competition" in the local voice market, as the FCCA claims. This Commission has
6 found that the Florida local telecommunications market is open to competition, and none
7 of the intervenors in BellSouth's Florida/Tennessee 271 Application before the FCC have
8 asserted otherwise. Nevertheless, the FCCA invites this Commission to overlook these
9 facts by giving all ALECs a regulatory helping hand in order to compete against
10 BellSouth. The Commission should decline this invitation.

11

12 Q. WHY DOES THE FCCA CLAIM THAT BELLSOUTH'S DSL POLICY KEEPS
13 ALECS FROM WINNING NEW VOICE CUSTOMERS?

14

15 A. The FCCA, in ¶14 of its Petition, claims that "Consumers are reluctant to change voice
16 carriers, when, as a consequence of exercising their right to choose a particular voice
17 provider, they lose the ability to receive DSL service." Telling prospective customers
18 that they cannot keep their DSL service if they switch to the ALEC for local voice service
19 is a business decision on the part of the ALEC. They actually have other options for
20 serving these potential customers, but they have chosen not to pursue them.

21

22 Q. WHAT OTHER CHOICES DO ALECS HAVE FOR PROVIDING DSL SERVICE TO
23 VOICE CUSTOMERS MIGRATING FROM BELLSOUTH?

24

25

1 A. As discussed above, ALECS can resell BellSouth's voice service in order to serve those
2 BellSouth customers with FastAccess; however ALECs have made business decisions not
3 to do so. Likewise, an ALEC could invest in its own facilities in order to provide a
4 competing DSL service. Another option, which the FCCA conveniently overlooks, is the
5 ability to engage in line splitting by which an ALEC would provide voice service using
6 the UNE-P and another carrier would provide the DSL service. In short, ALECs have a
7 number of options at their disposal to provide voice service to customers with FastAccess
8 from BellSouth.

9
10 Q. WOULD GRANTING THE RELIEF THE FCCA SEEKS PROMOTE LOCAL VOICE
11 COMPETITION IN RURAL FLORIDA?

12
13 A. No. Even assuming the Commission had the jurisdiction and the basis to grant the relief
14 the FCCA is seeking (which is not the case), requiring BellSouth to provide FastAccess
15 to customers migrating their voice service to ALECs via the UNE-P or an individual
16 UNE loop would do little to promote voice service in rural Florida. This is because
17 ALECs provide voice service predominantly to the most profitable customers in the most
18 lucrative areas of the State and have little interest in serving customers in rural Florida.

19
20 BellSouth's records reflect that, as of October 1, 2002, 64% of ALECs' UNE-P
21 arrangements in Florida are in Zone 1, 34% in Zone 2, and only 2% in Zone 3.
22 Accordingly, granting the FCCA the relief it is seeking will only allow ALECs to
23 continue to concentrate their efforts in urban areas, while continuing to ignore the more
24 rural areas of Florida.

25

1 Q. WOULD GRANTING THE FCCA'S REQUESTED RELIEF PROMOTE
2 COMPETITION IN THE BROADBAND MARKET?

3

4 A. No. Requiring that BellSouth continue to provide its FastAccess service to voice
5 customers migrating to ALECs via the UNE-P would do nothing to promote competition
6 in the broadband market. In fact, granting such relief would have the opposite effect by:
7 (i) saddling economic burdens on BellSouth that could adversely impact BellSouth's
8 DSL deployment; (ii) providing no incentive for ALECs to continue to expand in their
9 own DSL network in Florida; and (iii) providing no opportunity for competing DSL
10 providers to offer DSL service to ALEC voice customers through line splitting.

11

12 Q. WHAT IS THE CURRENT STATE OF COMPETITION IN THE BROADBAND
13 MARKET?

14

15 A. The highly competitive nature of the broadband market was recently confirmed by the
16 Court of Appeals for the District of Columbia in its order vacating the FCC's Line
17 Sharing Order.⁹ The Line Sharing Order required incumbents to unbundle the high
18 frequency spectrum of copper loops to enable ALECs to provide DSL services. The D.C.
19 Circuit vacated the FCC's order because the FCC had failed to take into account the
20 substantial competition for broadband services today. (290 F.2d at 428-29).
21 Significantly, the Court noted that "[the FCC's] own findings (in a series of reports under
22 §706 of the 1996 Act) repeatedly confirm both the robust competition, and the dominance
23 of cable, in the broadband market." (*Id.* at 428). The D.C. Circuit was appropriately
24 concerned that unbundling requirements "come[] at a cost, including disincentives to
25 research and development by both ILECs and ALECs and the tangled management

⁹ See *United States Telecom Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002).

1 inherent in shared use of a common resource.” (*Id.* at 429). The D.C. Circuit concluded
2 that “[the FCC’s] naked disregard of the competitive context risks” inflicting costs on the
3 economy where the competitive conditions would not allow the FCC to conclude that
4 imposing those costs “would bring on a significant enhancement of competition.” (*Id.*)

5

6 Q. IS BELLSOUTH THE DOMINANT PROVIDER IN THE BROADBAND MARKET?

7

8 A. No. Not only is BellSouth not the dominant provider of broadband services, cable
9 modem service, not DSL, is the prevalent technology in the broadband market. Attached
10 to my affidavit as Exhibit JAR-1 is the FCC’s July 2002 Report on High-Speed Services
11 for Internet Access. Table 5 shows that, as of December 31, 2001, cable represented 55%
12 of total high-speed lines nationally, DSL represents 31%, and other categories represent
13 14%. Table 6 reflects that, in Florida as of December 31, 2001, there were a total of
14 twenty-six (26) (unduplicated) providers of high-speed Internet access, including eight
15 (8) ADSL providers, ten (10) cable providers, and nineteen (19) providers using a
16 technology other than ADSL. Table 7 reflects that there were 911,261 high-speed lines
17 in Florida as of December 31, 2001, only 306,015 of which were ADSL lines (34%).

18

19 Statistics published on the website for the National Cable & Telecommunications
20 Association (NCTA)¹⁰ show that 96.7% of TV Households have cable available, with
21 69.4% cable penetration of TV Households, which numbered 105 million as of February
22 2002. The same report shows that 66.4% of TV Households have cable modem
23 available, with 6.8% subscribing to cable modem as of December 2001.

24

25 As the above evidence demonstrates, BellSouth is not the dominant provider of

¹⁰ www.ncta.com/industry_overview

1 broadband services in Florida, although BellSouth has been successful in providing DSL
2 service in the State. However, focusing on the DSL market, as the FCCA attempts to do,
3 misstates and, in fact, side steps the real issue, which is competition in the broadband
4 market as a whole.

5

6 Q. DOES BELLSOUTH SERVE THE HIGH SPEED INTERNET ACCESS MARKET IN
7 FLORIDA UBIQUITOUSLY?

8

9 A. No. BellSouth does not provide DSL services throughout Florida ubiquitously. There
10 are eight central offices in Florida in which BellSouth has not yet deployed DSL
11 capability. These central offices are located in Florida's most rural areas. There also are
12 numerous remote terminals located throughout the State that BellSouth has yet to fit with
13 DSL functionality in order to overcome the distance limitations inherent in DSL
14 technology so that those end users that are located the greatest distances away from
15 BellSouth's central offices also have a competitive choice for broadband services.

16

17 Q. WOULD GRANTING THE RELIEF THE FCCA SEEKS PROMOTE BROADBAND
18 COMPETITION BY OTHER DSL PROVIDERS?

19

20 A. No. In fact, it would have precisely the opposite effect. As long as ALECs are permitted
21 to rely upon BellSouth to assume the risk and expend the capital necessary to provide
22 DSL services to the ALECs' voice customers, DSL competition would be hampered
23 because the ALECs would have no incentive to use another DSL provider to meet their
24 customers' DSL needs. Florida is likely to experience enhanced DSL competition only if
25 ALECs are forced to make their own arrangements for a competing DSL service –

1 whether through their own facilities from another DSL provider engaged in line splitting
2 with the ALEC.

3

4Q. DOES THIS CONCLUDE YOUR TESTIMONY?

5

6 A. Yes.

7

8 #469965

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FPSC
Docket No. 020507-TL
BellSouth Direct Testimony
Exhibit No. JAR-1

0



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See MCI v. FCC, 515 F 2d 385 (D.C. Circ 1974).

FOR IMMEDIATE RELEASE
July 23, 2002

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FEDERAL COMMUNICATIONS COMMISSION RELEASES DATA ON HIGH-SPEED SERVICES FOR INTERNET ACCESS

High-Speed Connections to the Internet Increased 33% During the Second Half of 2001 for a Total of 12.8 Million Lines in Service

Washington, D.C. – The Federal Communications Commission (FCC) today released summary statistics of its latest data on the deployment of high-speed connections to the Internet in the United States. The information being released today was filed by qualifying service providers on March 1, 2002, and includes data as of December 31, 2001. Qualifying providers file such data twice a year under the Commission's local competition and broadband data gathering program (FCC Form 477).

The local competition and broadband data gathering program was adopted by the Commission in March 2000 to assist the Commission in its efforts to monitor and further implement the pro-competitive, deregulatory provisions of the Telecommunications Act of 1996. Specifically, the data from this effort are used by the Commission for its evaluation of the deployment of advanced telecommunications capability.

Summary Statistics

- High-speed lines connecting homes and businesses to the Internet increased by 33% during the second half of 2001, from 9.6 million to 12.8 million lines, compared to a 36% increase, from nearly 7.1 million to 9.6 million lines, during the first half of 2001.
- Of the 12.8 million high-speed lines in service at the end of 2001, 11 million served residential and small business subscribers, a 41% increase from the 7.8 million residential and small business high-speed lines reported six months earlier.
- About 7.4 million of the 12.8 million high-speed lines were advanced services lines that provide services at speeds exceeding 200 kilobits per second (kbps) in both directions, an increase of 25% during the second half of 2001. About 5.8 million of the 7.4 million advanced services lines served residential and small business subscribers.

- At the end of 2001, the presence of high-speed service subscribers was reported in all fifty states, the District of Columbia, Puerto Rico, and the Virgin Islands, and in 79% of the nation's zip codes, compared to 78% six months earlier and 73% at the end of 2000.
- High-speed asymmetric DSL (ADSL) lines in service increased by 47% during the second half of 2001, from nearly 2.7 million to over 3.9 million lines, compared to a 36% increase, from nearly 2 million to 2.7 million lines, during the preceding six months.
- High-speed Internet connections over coaxial cable systems (cable modem service) increased by 36% during the final six months of 2001, from 5.2 million to 7.1 million lines. By comparison, cable modem service increased by 45%, from nearly 3.6 million to 5.2 million lines, during the first half of 2001.
- High-speed service subscribers were reported present in 98% of the most densely populated decile of zip codes at the end of 2001, the same percentage as a year earlier, and in 43% of the least densely populated decile, compared to 28% a year earlier.
- For zip codes ranked by median family income, high-speed subscribers were reported present in 97% of the top one-tenth of zip codes and in 63% of the bottom one-tenth of zip codes at the end of 2001. The comparable figures a year earlier were 96% and 55%.

As additional information becomes available, it will be routinely posted on the Commission's Internet site.

The statistical summary is available in the FCC's Reference Information Center, Courtyard Level, 445 12th Street, S.W. Copies may be purchased from the Commission's duplicating contractor, Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., telephone (202) 863-2893, facsimile (202) 863-2898, or via e-mail qualexint@aol.com. The statistical summary can also be downloaded from the **FCC-State Link** Internet site at www.fcc.gov/wcb/stats.

- FCC -

Wireline Competition Bureau contacts: Industry Analysis and Technology Division at (202) 418-0940, TTY (202) 418-0484.

High-Speed Services for Internet Access: Status as of December 31, 2001

Industry Analysis and Technology Division
Wireline Competition Bureau
July 2002



This report is available for reference in the FCC's Information Center at 445 12th Street, S.W., Courtyard Level. Copies may be purchased by calling Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, DC 20554, telephone 202-863-2893, facsimile 202-863-2898, or via e-mail qualexint@aol.com. The report can also be downloaded from the **FCC-State Link** Internet site at www.fcc.gov/wcb/stats.

High-Speed Services for Internet Access: Subscribership as of December 31, 2001

Congress directed the Commission and the states, in section 706 of the Telecommunications Act of 1996, to encourage deployment of advanced telecommunications capability in the United States on a reasonable and timely basis.¹ To assist in its evaluation of such deployment, the Commission instituted a formal data collection program to gather standardized information about subscribership to high-speed services, including advanced services, from wireline telephone companies, cable providers, terrestrial wireless providers, satellite providers, and any other facilities-based providers of advanced telecommunications capability.²

We summarize here information from the fifth data collection, thereby presenting a snapshot of subscribership as of December 31, 2001.³ Subscribership to high-speed services for Internet access increased by 33% during the second half of 2001, to a total of 12.8 million lines in service. The presence of high-speed service subscribers was reported in all fifty states, the District of Columbia, Puerto Rico, and the Virgin Islands, and in 79% of the zip codes in the United States.

Before presenting the most recent information in some detail, a brief description of the Commission's data collection program is in order to enable the reader to better understand how the nationwide information presented here may compare to similar information derived from other sources. First, a facilities-based provider of high-speed service lines (or wireless channels) in a given state reports to the Commission basic information about its service offerings and customers if the provider has at least 250 such lines in service in that state. While providers not meeting the reporting threshold may provide information on a voluntary basis, as some have done, it is likely that not all such providers have reported data.⁴ In particular, we do not know how comprehensively small providers, many of which serve rural

¹ See §706, Pub.L. 104-104, Title VII, Feb. 8, 1996, 110 Stat. 153, reproduced in the notes under 47 U.S.C. §157. We use the term "high-speed" to describe services that provide the subscriber with transmissions at a speed in excess of 200 kilobits per second (kbps) in at least one direction. "Advanced services," which provide the subscriber with transmission speeds in excess of 200 kbps in each direction, are a subset of high-speed services.

² *Local Competition and Broadband Reporting*, CC Docket No. 99-301, Report and Order, 15 FCC Rcd 7717 (2000) (*Data Gathering Order*). During this data gathering program, qualifying providers file FCC Form 477 each year on March 1 (reporting data for the preceding December 31) and September 1 (reporting data for June 30 of the same year). An updated FCC Form 477, and Instructions for that particular form, for each specific round of the data collection may be downloaded from the FCC Forms website at www.fcc.gov/formpage.html. The formal program followed several attempts by the Common Carrier Bureau to collect information on a voluntary basis. See *Local Competition and Broadband Reporting*, CC Docket No. 99-301, Notice of Proposed Rulemaking, 14 FCC Rcd 18106 (1999).

³ Earlier FCC Form 477 filings reported data as of December 31, 1999, June 30, 2000, December 31, 2000, and June 30, 2001. See *Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, CC Docket No. 98-146, Second Report, 15 FCC Rcd 20913 (2000) (*Second 706 Report*) available at www.fcc.gov/broadband/706.html, Industry Analysis Division, Common Carrier Bureau, *High-Speed Services for Internet Access: Status as of June 30, 2000* (October 2000), and *High-Speed Services for Internet Access: Status as of December 31, 2000* (August 2001) available at www.fcc.gov/wcb/stats, and *Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, CC Docket No. 98-146, Third Report, 17 FCC Rcd 2844 (2002) available at www.fcc.gov/broadband/706.html.

⁴ High-speed lines reported in recent voluntary submissions represent less than 0.1% of total high-speed lines reported.

areas with relatively small populations, are represented in the data summarized here. Second, lines (or wireless channels) that are not “high-speed” (i.e., delivering transmissions to the subscriber at a speed in excess of 200 kbps in at least one direction) are not reported. Some asymmetric digital subscriber line (ADSL) services and Integrated Services Digital Network (ISDN) services provided by telephone companies and some services that connect subscribers to the Internet over cable systems do not meet this criterion, but may nevertheless meet the needs of the subscribers who select them.

Based on the latest information now available, readers can draw the following broad conclusions:

- Subscribership to high-speed services increased by 33% during the second half of 2001, to a total of 12.8 million lines (or wireless channels) in service. The rate of growth during the first half of 2001 was 36%. See Table 1.
- High-speed lines in service over coaxial cable systems (cable modem service) increased 36% during the second half of 2001, to about 7.1 million lines. High-speed ADSL lines in service increased 47%, to about 3.9 million lines.⁵ See Table 1.
- Reported high-speed connections to end-user customers by means of satellite or fixed wireless technologies increased by 9% during the second half of 2001, and reported fiber optic connections to end-user customer premises increased by 8%. These technologies, together, accounted for about 0.7 million high-speed connections at the end of 2001. See Table 1.
- Subscribership to the subset of high-speed services that are described as advanced services (i.e., delivering to subscribers transmission speeds in excess of 200 kbps in each direction) increased by 25% during the second half of 2001, to a total of 7.4 million lines (or wireless channels) in service. Advanced services lines provided by means of ADSL technology increased by 37%, and advanced services lines provided over coaxial cable systems increased by 32%.⁶ See Table 2.
- As of December 31, 2001, there were about 11 million residential and small business subscribers to high-speed services. By contrast, there were approximately 7.8 million such subscribers six months earlier, and about 5.2 million a year earlier. See Table 3.

⁵ Providers are instructed to report a high-speed subscriber in the (mutually exclusive) technology category that characterizes the last few feet of distribution plant to the subscriber’s premises, e.g., coaxial cable in the case of the hybrid fiber-coax (HFC) architecture of upgraded cable systems. As noted above, ADSL services that do not deliver over 200 kbps in at least one direction are not included in the data reported here. Symmetric DSL services at speeds exceeding 200 kbps are included in the “other wireline” category because they are typically used to provide data services that are functionally equivalent to the T-1 and other data services that wireline telephone companies have offered to business customers for some time.

⁶ Providers also estimate the percentage of high-speed connections that are faster than 2 mbps in both directions. About 0.3 million such connections were reported as of December 31, 2001. Over 50% of these connections were reported in the other traditional wireline category and nearly 40% were reported in the optical carrier category.

- Of the 11 million high-speed lines in service to residential and small business subscribers at the end of December 2001, we estimate that about 5.8 million lines provide advanced services.⁷ See Table 4.
- Among entities that reported facilities-based ADSL high-speed lines in service as of December 31, 2001, about 97% of such lines were reported by incumbent local exchange carriers (ILECs). ILECs claimed a smaller share, about 83%, of high-speed lines delivered over other traditional wireline facilities.⁸ When all technologies are considered, ILECs provided about 38% of high-speed connections to end-user customers. See Table 5.
- Providers of high-speed services over coaxial cable systems report serving subscribers in 49 states and the District of Columbia. Providers of high-speed ADSL services report serving subscribers in 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands, as do providers who use wireline technologies other than ADSL, or who use optical carrier (i.e., fiber), satellite, or fixed wireless technologies in the last few feet to the subscriber's premises.⁹ See Table 6.
- The Commission's data collection program gathers from providers information about the number of high-speed lines in service in individual states, in total and by technology deployed in the last few feet to the subscriber's premises. Relatively large numbers of total high-speed lines in service are associated with the more populous states. The most populous state, California, has the largest reported number of high-speed lines. The second, third, and fourth largest numbers of high-speed lines are reported for New York, Florida, and Texas, which are the third, fourth, and second most populous states, respectively. See Table 7.
- Reporting entities estimate the percentage of their high-speed lines in service that connect to residential and small business end-user customers (as opposed to connecting to medium and large business, institutional, or government end-user customers).¹⁰ These percentages allow us to derive approximate numbers of residential and small-business high-speed lines in service by state. See Table 8.

⁷ Filers of FCC Form 477 do not directly report the number of advanced services lines provided to residential and small business end users, as opposed to other end users. In estimating the number of advanced services lines serving residential and small business end users, we assume that reported advanced service lines were more likely to be delivered to large business users first and to residential and small business users second. See also *Second 706 Report*, 15 FCC Rcd 20943.

⁸ Symmetric forms of DSL services, which are typically purchased by business customers, are included in this category.

⁹ Information about providers of high-speed services other than ADSL and cable modem is reported in a single category, for the individual states, to honor requests for nondisclosure of information that reporting entities assert is competitively sensitive. In the *Data Gathering Order*, the Commission stated it would publish high-speed data only once it has been aggregated in a manner that does not reveal individual company data. See *Data Gathering Order*, 15 FCC Rcd 7760.

¹⁰ End-user customers use the high-speed services for their own purposes and do not resell them to other entities. For purposes of the FCC Form 477 data collection, Internet Service Providers (ISPs) are not end-user customers. Reporting entities are directed to consider a line as being provided to an end-user customer in the "residential and small business" category if that customer orders high-speed service of a type that is normally associated with residential customers.

- The Commission's data collection program also requires service providers to identify each zip code in which the provider has at least one high-speed subscriber. As of December 31, 2001, subscribers to high-speed services were reported in 79% of the nation's zip codes. Multiple providers reported having subscribers in 60% of the nation's zip codes.¹¹ See Table 9.
- Our analysis indicates that nearly 98% of the country's population lives in the 79% of zip codes where a provider reports having at least one high-speed service subscriber. Moreover, numerous competing providers report serving high-speed subscribers in the major population centers of the country. See the map that follows Table 9.
- States vary widely with respect to the percentage of zip codes in the state in which no high-speed lines are reported to be in service. See Table 10.
- High population density has a positive association with reports that high-speed subscribers are present, and low population density has an inverse association. For example, as of December 31, 2001, high-speed subscribers are reported to be present in 98% of the most densely populated zip codes and in 43% of zip codes with the lowest population densities.¹² However, the comparable figure for the least dense zip codes was 28% a year earlier. See Table 11.
- High median family income also has a positive association with reports that high-speed subscribers are present. In the top one-tenth of zip codes ranked by median family income, high-speed subscribers are reported in 97% of zip codes. By contrast, high-speed subscribers are reported in 63% of zip codes with the lowest median family income, compared to 55% a year earlier. See Table 12.

As other information from the Commission's data collection program (FCC Form 477) becomes available, it will be included in future reports on the deployment of advanced telecommunications capability and in publications such as this one.

We invite users of this information to provide suggestions for improved data collection and analysis by:

- Using the attached customer response form,
- E-mailing comments to jeisner@fcc.gov,
- Calling the Industry Analysis and Technology Division of the Wireline Competition Bureau at (202) 418-0940, or
- Participating in any formal proceedings undertaken by the Commission to solicit comments for improvement of FCC Form 477.

¹¹ Lists of zip codes with number of service providers as reported in the FCC Form 477 filings are made available at www.fcc.gov/wcb/stats in a format that honors requests for nondisclosure of information the reporting entities assert is competitively sensitive.

¹² For this comparison, we consider the most densely populated zip codes to be those with more than 3,147 persons per square mile (the top decile of zip codes) and the least densely populated zip codes to be those with fewer than 6 persons per square mile (the bottom decile).

Table 1
High-Speed Lines 1/
(Over 200 kbps in at Least One Direction)

Types of Technology 2/	December 1999	June 2000	December 2000	June 2001	December 2001	Percent Change	
						Dec 2000 - June 2001	June 2001 - Dec 2001
ADSL	369,792	951,583	1,977,101	2,693,834	3,947,808	36 %	47 %
Other Wireline	609,909	758,594	1,021,291	1,088,066	1,078,597	7	-1
Coaxial Cable	1,411,977	2,284,491	3,582,874	5,184,141	7,059,598	45	36
Fiber	312,204	307,151	376,203	455,593	494,199	21	8
Satellite or Fixed Wireless	50,404	65,615	112,405	194,707	212,610	73	9
Total Lines	2,754,286	4,367,434	7,069,874	9,616,341	12,792,812	36 %	33 %

Table 2
Advanced Services Lines 1/
(Over 200 kbps in Both Directions)

Types of Technology 2/	December 1999	June 2000	December 2000	June 2001	December 2001	Percent Change	
						Dec 2000 - June 2001	June 2001 - Dec 2001
ADSL	185,950	326,816	675,366	998,883	1,369,143	48 %	37 %
Other Wireline	609,909	758,594	1,021,291	1,088,066	1,078,597	7	-1
Coaxial Cable	877,465	1,469,130	2,193,609	3,329,976	4,394,778	52	32
Fiber	307,315	301,143	376,197	455,549	486,483	21	7
Satellite or Fixed Wireless	7,816	3,649	26,906	73,476	75,341	173	3
Total Lines	1,988,455	2,859,332	4,293,369	5,945,950	7,404,343	38 %	25 %

1/ A high-speed line is a connection to an end-user customer that is faster than 200 kbps in at least one direction. Advanced services lines, which are a subset of high-speed lines, are connections to end-user customers that are faster than 200 kbps in both directions. The speed of the purchased service varies among end-user customers. For example, a high-speed service delivered to the end-user customer over other traditional wireline technology, such as DS1 or DS3 service, or over optical fiber to the end user's premises may be much faster than the ADSL or cable modem service purchased by a different, or by the same, end user. Numbers of lines reported here are not adjusted for the speed of the service delivered over the line or the number of end users able to utilize the lines.

2/ The mutually exclusive types of technology are, respectively: Asymmetric digital subscriber line (ADSL) technologies, which provide speeds in one direction greater than speeds in the other direction; wireline technologies "other" than ADSL, including traditional telephone company high-speed services and symmetric DSL services that provide equivalent functionality; coaxial cable, including the typical hybrid fiber-coax (HFC) architecture of upgraded cable TV systems; optical fiber to the subscriber's premises (e.g., Fiber-to-the-Home, or FTTH); and satellite and (terrestrial) fixed wireless systems, which use radio spectrum to communicate with a radio transmitter at the subscriber's premises.

Table 3
Residential and Small Business High-Speed Lines 1/
(Over 200 kbps in at Least One Direction)

Types of Technology 2/	December 1999	June 2000	December 2000	June 2001	December 2001	Percent Change	
						Dec 2000 - June 2001	June 2001 - Dec 2001
ADSL	291,757	772,272	1,594,879	2,490,740	3,615,989	56 %	45 %
Other Wireline	46,856	111,490	176,520	138,307	139,660	NM	1
Coaxial Cable	1,402,394	2,215,259	3,294,546	4,998,540	7,050,709	52	41
Fiber	1,023	325	1,994	2,623	4,139	NM	NM
Satellite or Fixed Wireless	50,189	64,320	102,432	182,165	194,897	78	7
Total Lines	1,792,219	3,163,666	5,170,371	7,812,375	11,005,396	51	41 %

Table 4
Residential and Small Business Advanced Services Lines 1/
(Over 200 kbps in Both Directions)

Types of Technology 2/	December 1999	June 2000	December 2000	June 2001	December 2001	Percent Change	
						Dec 2000 - June 2001	June 2001 - Dec 2001
ADSL	116,994	195,324	393,246	916,364	1,243,996	133 %	36 %
Other Wireline	46,856	111,490	176,520	138,307	139,660	NM	1
Coaxial Cable	872,024	1,401,434	2,177,328	3,146,953	4,388,967	45	39
Fiber	138	325	1,992	2,617	3,523	NM	NM
Satellite or Fixed Wireless	7,682	2,916	17,043	60,988	58,113	NM	-5
Total Lines	1,043,694	1,711,488	2,766,130	4,265,229	5,834,258	54 %	37 %

Note: Residential and small business advanced services lines are estimated based on data from FCC Form 477.

NM - Not meaningful due to inconsistencies in reported data.

1/ A high-speed line is a connection to an end-user customer that is faster than 200 kbps in at least one direction. Advanced services lines, which are a subset of high-speed lines, are connections to end-user customers that are faster than 200 kbps in both directions. The speed of the purchased service varies among end-user customers. For example, a high-speed service delivered to the end-user customer over other traditional wireline technology, such as DS1 or DS3 service, or over optical fiber to the end user's premises may be much faster than the ADSL or cable modem service purchased by a different, or by the same, end user. Numbers of lines reported here are not adjusted for the speed of the service delivered over the line or the number of end users able to utilize the lines.

2/ The mutually exclusive types of technology are, respectively: Asymmetric digital subscriber line (ADSL) technologies, which provide speeds in one direction greater than speeds in the other direction; wireline technologies "other" than ADSL, including traditional telephone company high-speed services and symmetric DSL services that provide equivalent functionality; coaxial cable, including the typical hybrid fiber-coax (HFC) architecture of upgraded cable TV systems; optical fiber to the subscriber's premises (e.g., Fiber-to-the-Home, or FTTH); and satellite and (terrestrial) fixed wireless systems, which use radio spectrum to communicate with a radio transmitter at the subscriber's premises.

Table 5
High-Speed Lines by Type of Provider
as of December 31, 2001
(Over 200 kbps in at Least One Direction)

Types of Technology 1/	Lines				Percent of Lines		
	RBOC 2/	Other ILEC	Non-ILEC 3/	Total	RBOC 2/	Other ILEC	Non-ILEC 3/
ADSL	3,566,594	273,072	108,142	3,947,808	90.3 %	6.9 %	2.7 %
Other Wireline	775,551	116,807	186,239	1,078,597	71.9	10.8	17.3
Coaxial Cable	*	*	7,034,490	7,059,598	*	*	99.6
Other	*	*	652,516	706,809	*	*	92.3
Total Lines	4,408,120	403,305	7,981,387	12,792,812	34.5 %	3.2 %	62.4 %

* Data withheld to maintain firm confidentiality.

1/ The mutually exclusive types of technology are, respectively: Asymmetric digital subscriber line (ADSL) technologies, which provide speeds in one direction greater than speeds in the other direction; wireline technologies "other" than ADSL, including traditional telephone company high-speed services and symmetric DSL services that provide equivalent functionality; coaxial cable, including the typical hybrid fiber-coax (HFC) architecture of upgraded cable TV systems; optical fiber to the subscriber's premises (e.g., Fiber-to-the-Home, or FTTH); and satellite and (terrestrial) fixed wireless systems, which use radio spectrum to communicate with a radio transmitter at the subscriber's premises.

2/ RBOC lines include all high-speed lines reported by BellSouth, Qwest, SBC, and Verizon.

3/ High-speed lines reported by competitive local exchange carrier (CLEC) or cable TV operations that are affiliated with a local exchange carrier are included in "Non-ILEC" lines, except that any such lines reported by an RBOC are included in "RBOC" lines.



Table 6
Providers of High-Speed Lines by Technology
as of December 31, 2001
(Over 200 kbps in at Least One Direction)

	ADSL	Coaxial Cable	Other 1/	Total (Unduplicated)
Alabama	5	8	12	19
Alaska	4	*	7	8
Arizona	5	4	8	13
Arkansas	4	*	6	10
California	10	9	22	28
Colorado	6	*	11	13
Connecticut	4	5	11	13
Delaware	*	*	*	5
District of Columbia	*	*	8	7
Florida	8	10	19	26
Georgia	9	10	19	25
Hawaii	*	0	*	*
Idaho	5	*	5	8
Illinois	11	5	19	24
Indiana	8	7	10	19
Iowa	5	4	10	13
Kansas	5	7	12	17
Kentucky	7	*	9	14
Louisiana	5	4	9	13
Maine	*	*	5	7
Maryland	6	7	13	19
Massachusetts	6	6	13	18
Michigan	11	5	13	21
Minnesota	12	8	14	22
Mississippi	*	4	4	9
Missouri	10	6	15	22
Montana	5	*	*	9
Nebraska	5	5	6	10
Nevada	5	*	12	15
New Hampshire	6	*	9	12
New Jersey	7	5	14	18
New Mexico	*	*	6	8
New York	13	5	17	22
North Carolina	11	7	14	24
North Dakota	4	*	4	7
Ohio	12	9	19	24
Oklahoma	6	*	12	16
Oregon	8	*	13	16
Pennsylvania	14	6	18	25
Puerto Rico	*	0	*	*
Rhode Island	*	*	6	7
South Carolina	11	7	12	18
South Dakota	6	*	5	10
Tennessee	10	5	9	20
Texas	20	6	24	34
Utah	5	*	10	13
Vermont	*	*	*	6
Virgin Islands	*	0	*	*
Virginia	8	5	14	19
Washington	10	*	14	18
West Virginia	*	*	5	9
Wisconsin	9	*	13	18
Wyoming	*	*	4	5
Nationwide (Unduplicated) Dec 2001	117	59	122	203
Nationwide (Unduplicated) Jun 2001	86	47	98	160
Nationwide (Unduplicated) Dec 2000	68	39	87	136
Nationwide (Unduplicated) Jun 2000	47	36	75	116
Nationwide (Unduplicated) Dec 1999	28	43	65	105

* Data withheld to maintain firm confidentiality. In this table, an asterisk also indicates 1-3 providers reporting.
1/ Other includes wireline technologies other than asymmetric digital subscriber line (ADSL), optical fiber to the subscriber's premises, satellite, and (terrestrial) fixed wireless systems.

Table 7
High-Speed Lines by Technology
(Over 200 kbps in at Least One Direction)

	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001				Percentage Change	
	Total	Total	Total	Total	ADSL	Coaxial Cable	Other 1/	Total	Dec 2000 - Jun 2001	Jun 2001 - Dec 2001
Alabama	19,796	32,756	63,334	86,234	34,785	83,933	20,261	138,979	36 %	61 %
Alaska	*	*	934	20,906	7,975	*	*	50,277	2138	140
Arizona	58,825	111,678	153,500	158,122	53,489	151,916	46,304	251,709	3	59
Arkansas	8,155	15,539	28,968	40,803	22,240	*	*	66,537	41	63
California	547,179	910,006	1,386,625	1,705,814	928,345	786,789	326,142	2,041,276	23	20
Colorado	36,726	64,033	104,534	147,220	70,615	*	*	177,419	41	21
Connecticut	36,488	63,772	111,792	149,057	41,261	137,003	12,993	191,257	33	28
Delaware	1,558	3,660	7,492	12,771	*	*	*	26,601	70	108
District of Columbia	13,288	16,926	27,757	39,101	*	*	15,410	43,278	41	11
Florida	190,700	244,678	460,795	651,167	306,015	486,977	118,269	911,261	41	40
Georgia	75,870	130,292	203,855	302,598	172,556	156,142	91,508	420,206	48	39
Hawaii	*	*	*	*	*	0	*	*	NA	NA
Idaho	*	8,070	15,908	20,233	13,643	*	*	18,445	27	-9
Illinois	77,672	166,933	242,239	350,241	110,448	204,202	108,056	422,706	45	21
Indiana	20,059	49,702	60,494	80,364	22,385	78,837	22,482	123,704	33	54
Iowa	19,258	49,159	58,199	72,583	13,193	63,788	5,043	82,024	25	13
Kansas	26,179	42,679	68,743	101,734	23,564	94,047	8,352	125,963	48	24
Kentucky	23,570	24,237	32,731	39,297	43,191	*	*	67,870	20	73
Louisiana	28,133	43,294	74,950	121,685	58,019	88,851	17,890	164,760	62	35
Maine	19,878	17,864	26,266	38,149	*	*	2,372	49,523	45	30
Maryland	52,749	71,005	124,465	181,021	79,997	143,174	37,463	260,634	45	44
Massachusetts	114,116	185,365	289,447	357,256	125,630	339,244	40,945	505,819	23	42
Michigan	81,223	135,318	198,230	395,583	52,505	329,697	51,656	433,858	100	10
Minnesota	38,268	65,272	117,283	148,012	67,527	113,900	18,429	199,856	26	35
Mississippi	*	6,514	12,305	21,517	*	12,998	*	35,586	75	65
Missouri	23,347	46,903	100,403	123,915	68,186	89,370	24,238	181,794	23	47
Montana	*	7,378	10,446	10,446	4,272	*	*	13,037	42	25
Nebraska	36,748	44,188	54,085	55,188	13,637	49,939	7,875	71,451	2	29
Nevada	23,514	40,582	59,879	78,535	17,598	*	*	109,850	31	40
New Hampshire	22,807	33,045	42,364	55,658	9,618	*	*	71,200	31	28
New Jersey	101,832	144,203	285,311	428,514	151,829	375,362	63,001	590,192	48	38
New Mexico	*	2,929	28,497	20,482	*	*	4,625	31,940	-28	56
New York	186,504	342,743	603,487	893,032	285,814	780,473	132,872	1,199,159	48	34
North Carolina	57,881	81,998	136,703	205,616	65,582	239,107	53,217	357,906	50	74
North Dakota	*	2,437	4,227	6,277	4,849	*	*	6,082	48	-3
Ohio	160,792	156,980	230,525	358,965	112,527	264,031	60,208	436,766	56	22
Oklahoma	96,730	163,703	95,138	92,947	39,978	*	*	114,931	NM	24
Oregon	27,062	44,186	76,839	93,242	57,899	*	*	158,048	21	70
Pennsylvania	71,926	79,892	176,670	263,236	136,829	190,915	48,695	376,439	49	43
Puerto Rico	*	*	*	*	*	0	*	*	NA	NA
Rhode Island	*	20,628	30,919	49,215	*	*	3,383	64,293	59	31
South Carolina	25,229	32,824	63,914	96,839	18,686	96,559	19,920	135,165	52	40
South Dakota	*	3,516	2,839	5,448	2,869	*	*	9,585	92	76
Tennessee	66,307	87,317	122,391	152,510	42,571	158,120	36,710	237,401	25	56
Texas	152,518	276,087	522,538	646,839	300,752	427,324	112,589	840,665	24	30
Utah	11,635	19,612	35,970	55,103	33,306	*	*	72,977	53	32
Vermont	*	1,551	7,773	16,230	*	*	*	21,795	109	34
Virgin Islands	0	*	*	*	*	0	*	*	NA	NA
Virginia	51,305	72,436	139,915	212,808	65,298	182,591	44,883	292,772	52	38
Washington	71,930	118,723	195,628	227,066	140,273	*	*	335,667	16	48
West Virginia	*	1,835	6,498	16,697	*	*	2,530	32,848	157	97
Wisconsin	18,599	34,262	76,257	127,755	28,233	*	*	182,395	68	43
Wyoming	*	*	*	*	*	*	1,385	7,856	NA	NA
Reported Total	2,754,286	4,367,434	7,069,874	9,616,341	3,947,808	7,059,598	1,785,406	12,792,812	36 %	33 %

NA - Not available

NM - Not meaningful due to inconsistencies in reported data

* Data withheld to maintain firm confidentiality

1/ Other includes wireline technologies other than asymmetric digital subscriber line (ADSL), optical fiber to the subscriber's premises, satellite, and (terrestrial) fixed wireless systems

Table 8
High-Speed Lines by Type of User as of December 31, 2001
(Over 200 kbps in at Least One Direction)

	Residential & Small Business	Other 1/	Total
Alabama	121,074	17,905	138,979
Alaska	44,559	5,718	50,277
Arizona	233,214	18,495	251,709
Arkansas	62,900	3,637	66,537
California	1,685,476	355,800	2,041,276
Colorado	156,709	20,710	177,419
Connecticut	180,616	10,641	191,257
Delaware	24,197	2,404	26,601
District of Columbia	28,621	14,657	43,278
Florida	776,704	134,557	911,261
Georgia	335,428	84,778	420,206
Hawaii	*	*	*
Idaho	13,288	5,157	18,445
Illinois	329,721	92,985	422,706
Indiana	99,837	23,867	123,704
Iowa	77,859	4,165	82,024
Kansas	120,375	5,588	125,963
Kentucky	47,060	20,810	67,870
Louisiana	148,039	16,721	164,760
Maine	46,955	2,568	49,523
Maryland	227,097	33,537	260,634
Massachusetts	447,030	58,789	505,819
Michigan	387,308	46,550	433,858
Minnesota	180,371	19,485	199,856
Mississippi	28,559	7,027	35,586
Missouri	164,774	17,020	181,794
Montana	11,676	1,361	13,037
Nebraska	69,171	2,280	71,451
Nevada	92,525	17,325	109,850
New Hampshire	62,967	8,233	71,200
New Jersey	522,979	67,213	590,192
New Mexico	28,119	3,821	31,940
New York	1,029,106	170,053	1,199,159
North Carolina	310,439	47,467	357,906
North Dakota	5,116	966	6,082
Ohio	371,141	65,625	436,766
Oklahoma	104,835	10,096	114,931
Oregon	131,279	26,769	158,048
Pennsylvania	318,833	57,606	376,439
Puerto Rico	*	*	*
Rhode Island	60,202	4,091	64,293
South Carolina	115,343	19,822	135,165
South Dakota	8,361	1,224	9,585
Tennessee	202,393	35,008	237,401
Texas	748,785	91,880	840,665
Utah	64,354	8,623	72,977
Vermont	20,354	1,441	21,795
Virgin Islands	*	*	*
Virginia	256,813	35,959	292,772
Washington	294,078	41,589	335,667
West Virginia	31,160	1,688	32,848
Wisconsin	159,328	23,067	182,395
Wyoming	6,845	1,011	7,856
Reported Total	11,005,396	1,787,416	12,792,812

* Data withheld to maintain firm confidentiality.

1/ Other includes medium and large business, institutional, and government customers.

Table 9
Percentage of Zip Codes with High-Speed Lines in Service

Number of Providers	December 1999	June 2000	December 2000	June 2001	December 2001
Zero	40.3 %	33.0 %	26.8 %	22.2 %	20.6 %
One	26.0	25.9	22.7	20.3	19.3
Two	15.5	17.8	18.4	16.7	15.7
Three	8.2	9.2	10.9	13.2	13.1
Four	4.3	4.9	6.1	8.2	9.1
Five	2.7	3.4	4.0	4.9	6.1
Six	1.7	2.5	3.0	3.6	4.2
Seven	0.8	1.7	2.3	2.8	3.2
Eight	0.3	0.8	2.0	2.2	2.5
Nine	0.2	0.4	1.6	1.9	2.0
Ten or More	0.0	0.4	2.4	3.9	4.0

0

High-Speed Providers by Zip Code

(As of December 31, 2001)

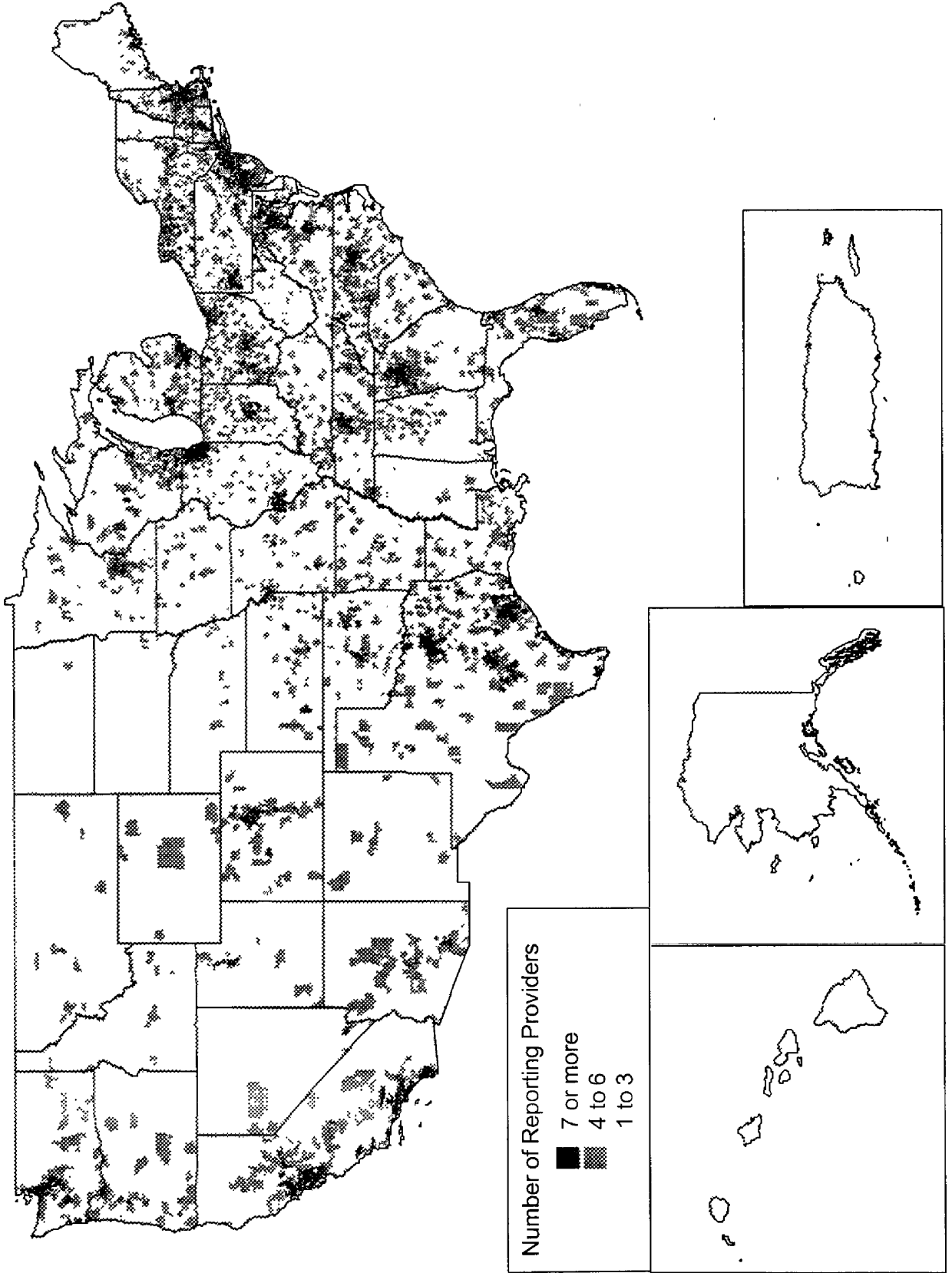


Table 10
Percentage of Zip Codes with High-Speed Lines in Service
as of December 31, 2001
(Over 200 kbps in at Least One Direction)

	Number of Providers					
	Zero	One - Three	Four	Five	Six	Seven or More
Alabama	18 %	64 %	11 %	5 %	2 %	0 %
Alaska	43	53	2	1	0	0
Arizona	6	41	12	14	18	9
Arkansas	32	55	8	3	1	1
California	7	34	10	7	6	37
Colorado	13	48	10	5	4	20
Connecticut	0	49	12	11	4	23
Delaware	2	70	28	0	0	0
District of Columbia	7	22	11	7	33	19
Florida	3	34	16	12	8	26
Georgia	13	49	12	9	4	13
Hawaii	60	40	0	0	0	0
Idaho	36	58	4	1	0	0
Illinois	24	47	5	4	2	18
Indiana	18	58	10	6	3	5
Iowa	52	39	4	4	1	0
Kansas	44	41	6	5	3	2
Kentucky	35	56	7	2	0	0
Louisiana	16	63	15	5	0	0
Maine	12	81	6	1	0	0
Maryland	10	38	12	6	6	27
Massachusetts	2	28	15	11	8	36
Michigan	10	52	11	7	4	15
Minnesota	35	45	7	5	4	5
Mississippi	25	68	5	2	0	0
Missouri	30	51	5	5	3	6
Montana	44	50	6	0	0	0
Nebraska	43	51	5	2	0	0
Nevada	14	40	6	9	15	16
New Hampshire	4	53	15	11	6	11
New Jersey	1	24	16	13	9	37
New Mexico	34	55	6	3	3	0
New York	7	44	14	10	8	17
North Carolina	8	58	14	8	5	7
North Dakota	60	40	0	0	0	0
Ohio	8	52	13	11	6	10
Oklahoma	26	52	7	4	7	4
Oregon	14	59	14	8	4	2
Pennsylvania	22	45	9	7	4	14
Puerto Rico	8	92	0	0	0	0
Rhode Island	3	33	19	14	24	7
South Carolina	12	66	14	5	3	0
South Dakota	57	41	1	0	0	0
Tennessee	17	51	12	10	4	6
Texas	15	41	8	6	6	24
Utah	26	44	3	7	6	14
Vermont	23	75	2	0	0	0
Virginia	24	48	9	3	4	13
Washington	11	47	9	8	6	19
West Virginia	48	46	5	1	0	0
Wisconsin	13	56	9	9	7	6
Wyoming	29	66	5	1	0	0
Nationwide	21 %	48 %	9 %	6 %	4 %	12 %

Table 11
High-Speed Subscribership
Ranked by Population Density
(Over 200 kbps in at Least One Direction)

Deciles (Blocks of Zip Codes Grouped by Density)	Persons per Square Mile (In Each Decile of Zip Codes)	Percent of Zip Codes in Decile with at Least One High-Speed Subscriber			Percent of Population in Decile that Resides in Zip Codes with High-Speed Service		
		Dec 1999	Dec 2000	Dec 2001	Dec 1999	Dec 2000	Dec 2001
90-100	More Than 3,147	96.1 %	98.2 %	98.1 %	98.9 %	99.9 %	99.8 %
80-90	947-3,147	93.2	97.1	97.3	98.5	99.8	99.7
70-80	268-947	87.5	95.7	95.8	96.2	99.3	99.5
60-70	118-268	77.7	91.5	93.3	91.4	98.1	99.1
50-60	67-118	66.9	85.9	89.3	83.3	95.0	97.1
40-50	41-67	53.7	76.1	83.3	72.3	87.9	94.4
30-40	25-41	40.9	65.0	73.1	60.0	80.0	87.6
20-30	15-25	29.8	50.1	61.2	50.9	69.4	80.4
10-20	6-15	26.7	38.5	52.1	50.2	61.9	76.2
0-10	Fewer Than 6	19.9	27.5	43.3	38.5	49.9	67.9

Table 12
High-Speed Subscribership
Ranked by Household Income
(Over 200 kbps in at Least One Direction)

Deciles (Blocks of Zip Codes Grouped by Median Household Income)	Median Household Income (In Each Decile of Zip Codes)	Percent of Zip Codes in Decile with at Least One High-Speed Subscriber			Percent of Population in Decile that Resides in Zip Codes with High-Speed Service		
		Dec 1999	Dec 2000	Dec 2001	Dec 1999	Dec 2000	Dec 2001
90-100	\$53,494 to \$291,938	90.8 %	96.1 %	96.8 %	98.4 %	99.8 %	99.6 %
80-90	\$43,617 to \$53,478	77.1	88.9	91.7	95.8	99.0	99.3
70-80	\$38,396 to \$43,614	67.0	79.5	84.9	94.3	97.8	98.6
60-70	\$34,744 to \$38,395	59.9	74.5	79.9	91.5	96.6	97.6
50-60	\$32,122 to \$34,743	55.3	71.2	78.2	90.0	95.9	97.6
40-50	\$29,893 to \$32,121	53.7	67.4	75.5	88.9	94.5	96.8
30-40	\$27,542 to \$29,892	50.4	66.9	75.2	86.1	93.8	96.5
20-30	\$24,855 to \$27,541	50.1	65.1	71.8	85.7	93.1	95.6
10-20	\$21,645 to \$24,855	46.3	61.2	70.0	83.0	91.1	95.0
0-10	\$0 to \$21,644	41.7	54.9	62.7	83.8	91.5	95.1

Customer Response

Publication: *High-Speed Services for Internet Access: Status as of December 31, 2001.*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis and Technology Division of the FCC's Wireline Competition Bureau.

1. Please check the category that best describes you:

- press
- current telecommunications carrier
- potential telecommunications carrier
- business customer evaluating vendors/service options
- consultant, law firm, lobbyist
- other business customer
- academic/student
- residential customer
- FCC employee
- other federal government employee
- state or local government employee
- Other (please specify)

2. Please rate the report:

	Excellent	Good	Satisfactory	Poor	No opinion
Data accuracy	()	()	()	()	()
Data presentation	()	()	()	()	()
Timeliness of data	()	()	()	()	()
Completeness of data	()	()	()	()	()
Text clarity	()	()	()	()	()
Completeness of text	()	()	()	()	()

3. Overall, how do you rate this report?

	Excellent	Good	Satisfactory	Poor	No opinion
	()	()	()	()	()

4. How can this report be improved?



5. May we contact you to discuss possible improvements?

Name:

Telephone #:

To discuss the information in this report, contact: 202-418-0940 or for users of TTY equipment, call 202-418-0484		
Fax this response to	or	Mail this response to
202-418-0520		FCC/WCB/IATD Mail Stop 1600 F Washington, DC 20554