

Federal Communications Commission 445 12th Street, S.W. Washington, D. C. 20554

News Media Information 202 / 418-0500 Internet: http://www.fcc.gov TTY: 1-888-835-5322

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC. 515 F 2d 385 (D.C. Circ 1974).

FOR IMMEDIATE RELEASE June 10, 2003

NEWS MEDIA CONTACT: Mike Balmoris at (202) 418-0253 Email: mbalmori@fcc.gov

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

High-Speed Connections to the Internet Increased 23% During the Second Half of 2002 for a Total of 19.9 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. Facilities-based service providers file data with the FCC on the amount of high-speed connections in service twice a year pursuant to the FCC's local competition and broadband data gathering program (FCC Form 477).

The FCC adopted the local competition and broadband data gathering program in March 2000 to assist the FCC in its efforts to monitor and further implement the pro-competitive, deregulatory provisions of the Telecommunications Act of 1996. The FCC uses data from this effort to evaluate the deployment of advanced telecommunications capability.

For reporting purposes, *high-speed lines* are defined as those that provide services at speeds exceeding 200 kilobits per second (kbps) in at least one direction, while *advanced services lines* are those that provide services at speeds exceeding 200 kbps in both directions. Reporting of state-level data is required for providers with at least 250 high-speed connections in service in a state. Statistics released today summarize FCC Form 477 filings due from qualifying providers on March 1, 2003, and reflect data as of December 31, 2002.

1) High-Speed Lines

- High-speed lines connecting homes and businesses to the Internet increased by 23% during the second half of 2002, from 16.2 million to 19.9 million lines, compared to a 27% increase, from 12.8 million to 16.2 million lines, during the first half of 2002. For the full year, high-speed lines increased by 55%.
- Of the 19.9 million high-speed lines in service, 17.4 million served residential and small business subscribers, a 24% increase from the 14.0 million residential and small business high-speed lines reported six months earlier. For the full year, high-speed lines for residential and small business subscribers increased by 58%.

2) Advanced Services Lines

- Of the 19.9 million high-speed lines, 13.0 million provided advanced services, i.e., services at speeds exceeding 200 kbps in both directions. Advanced services lines increased 24% during the second half of 2002, from 10.4 million to 13.0 million lines. For the full year, advanced services lines of all technology types increased by 75%.
- About 10.8 million of the 13.0 million advanced services lines served residential and small business subscribers.

3) <u>Technology Type</u>

- High-speed asymmetric digital subscriber lines (ADSL) technologies in service increased by 27% during the second half of 2002, from 5.1 million to 6.5 million lines, compared to a 29% increase, from over 3.9 million to 5.1 million lines, during the preceding six months. For the full year, high-speed ADSL increased by 64%.
- High-speed service over coaxial cable systems (cable modem service) increased by 24% during the last six months of 2002, from 9.2 million to 11.4 million lines, compared to a 30% increase, from 7.1 million to 9.2 million lines, during the first half of 2002. For the full year, high-speed cable modem connections increased by 61%.
- Among *advanced services lines*, ADSL lines increased by 52% during the last six months of 2002, compared to a 22% increase for cable modem service. During the preceding six-month period, the rate of growth of cable modem (55%) exceeded that of ADSL (35%). For the full year, advanced services lines service lines provided in excess of 200 kbps in both directions for ADSL increased by 105% and cable modem connections increased by 90%.

The summary statistics released today also includes state-by-state, population density, and household income information, ranked by zip codes. As additional information becomes available, it will be routinely posted on the Commission's Internet site.

The report is available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12thStreet, SW, Washington, DC. Copies may be purchased by calling Qualex International at (202) 863-2893. The report 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, 2002

Industry Analysis and Technology Division Wireline Competition Bureau June 2003



This report is available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12th Street, SW, Washington, DC. Copies may be purchased by contacting Qualex International, 445 12th Street, SW, 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: Status as of December 31, 2002

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. 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 seventh data collection, thereby presenting a snapshot of subscribership as of December 31, 2002.³ Subscribership to high-speed services for Internet access increased by 23% during the second half of 2002, to a total of 19.9 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 88% 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 in a given state reports to the Commission basic information about its service offerings and customers if the provider has at least 250 high-speed lines (or wireless channels) in service in that state.⁴ While providers not meeting the reporting threshold may

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. Previously, the Common Carrier Bureau collected 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, June 30, 2001, December 31, 2001, and June 30, 2002. 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: Subscribership as of June 30, 2000 (October 2000) and High-Speed Services for Internet Access: Subscribership as of December 31, 2000 (August 2001) available at www.fcc.gov/wcb/stats, 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, and Industry Analysis and Technology Division, Wireline Competition Bureau, High-Speed Services for Internet Access: Status as of December 31, 2001 (July 2002) and High-Speed Services for Internet Access: Status as of June 30, 2002 (December 2002), available at www.fcc.gov/wcb/stats.

⁴ The reporting threshold of 250 high-speed lines (or wireless channels) is calculated based collectively on all commonly-owned and commonly-controlled affiliates operating in a given state, with a 10% equity interest as indicia of ownership. For reporting purposes, an entity is a facilities-based provider of high-speed service if it provides the service over its own "local loop" facilities connecting to end users, or over unbundled network elements (UNEs), (continued....)

provide information on a voluntary basis, as some have done, it is likely that not all such providers have reported data. In particular, we do not know how comprehensively small providers, many of which serve rural 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 23% during the second half of 2002, to a total of 19.9 million lines (or wireless channels) in service. The rate of growth during the first half of 2002 was 27%. See Table 1.
- High-speed ADSL lines in service increased by 27% during the second half of 2002, to 6.5 million lines. High-speed lines in service over coaxial cable systems (cable modem service) increased by 24%, to 11.4 million lines.⁶ See Table 1.
- Reported high-speed connections to end-user customers by means of satellite or fixed wireless technologies increased by 25% during the second half of 2002, and reported fiber optic connections to end-user customer premises increased by 5%. These technologies, together, accounted for about 0.8 million high-speed connections at the end of 2002. See Table 1.

special access lines, and other leased lines and wireless channels that it obtains from other entities and equips to provide high-speed service. Non-facilities-based Internet Service Providers (ISPs), as such, have no reporting obligation. End-user lines equipped as high-speed service by, for example, an incumbent LEC must be reported by the incumbent LEC or an affiliate (assuming the LEC and its affiliates collectively have at least 250 such lines in service in a given state) irrespective of whether the end user of the retail high-speed Internet-access service is billed by the incumbent LEC, its ISP affiliate, another affiliate, or its billing agent, or by an unaffiliated ISP that has incorporated the incumbent LEC's high-speed service into a premium Internet-access service marketed under the ISP's own name.

⁵ High-speed lines reported in recent voluntary submissions represent less than 0.05% of total high-speed lines reported.

⁶ 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.

- 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 24% during the second half of 2002, to a total of 13.0 million lines (or wireless channels) in service. Advanced services lines provided by means of ADSL technology increased by 52%, and advanced services lines provided over coaxial cable systems increased by 22%. See Table 2.
- As of December 31, 2002, there were about 17.4 million high-speed lines serving residential and small business subscribers. By contrast, there were about 14.0 million such lines six months earlier, and about 11.0 million a year earlier. See Table 3.
- Of the 17.4 million high-speed lines in service to residential and small business subscribers at the end of December 2002, we estimate that about 10.8 million lines provide advanced services. See Table 4.
- Among entities that reported facilities-based ADSL high-speed lines in service as of December 31, 2002, about 95% of such lines were reported by incumbent local exchange carriers (ILECs). ILECs claimed a smaller share, about 74%, of high-speed lines delivered over other traditional wireline facilities.⁹ When all technologies are considered, ILECs provided about 36% of high-speed connections to end-user customers. See Table 5.
- Providers of high-speed services over coaxial cable systems report serving subscribers in all 50 states, the District of Columbia, and Puerto Rico. Providers of high-speed ADSL services report serving subscribers in all 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.¹⁰ 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

⁷ Providers also estimate the percentage of high-speed connections that are faster than 2 mbps in both directions. About 0.4 million such connections were reported as of December 31, 2002. About 52% of these connections were reported in the other traditional wireline category and about 43% were reported in the optical carrier category.

⁸ 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.

⁹ Symmetric forms of DSL services, which are typically purchased by business customers, are included in this category.

¹⁰ 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.

associated with the more populous states. As of December 31, 2002, 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 and, for historical data, see Tables 8-10.

- 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). These percentages allow us to derive approximate numbers of residential and small-business high-speed lines in service by state. See Table 11.
- 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 service subscriber. As of December 31, 2002, subscribers to high-speed services were reported in 88% of the nation's zip codes. Multiple providers reported having subscribers in 71% of the nation's zip codes. ¹² See Table 12.
- Our analysis indicates that 99% of the country's population lives in the 88% 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 12.
- 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 13.
- 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, 2002, high-speed subscribers are reported to be present in 99% of the most densely populated zip codes and in 60% of zip codes with the lowest population densities. However, the comparable figure for the lowest-density zip codes was 43% a year earlier. See Table 14.
- High median household 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 household income, high-speed subscribers are reported in 98% of zip codes. By contrast, high-speed subscribers are reported in 74% of zip codes with the lowest median household income, compared to 63% a year earlier. See Table 15.

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.

¹¹ Reporting entities are instructed to consider a high-speed 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.

¹³ 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).

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.

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

								Percent Change		
Types of Technology ²	Dec	Jun	Dec	Jun 2001	Dec	Jun	Dec	Dec 2001 -	0 un 2002	
	1999	2000	2000	2001	2001	2002	2002	Jun 2002	Dec 2002	
ADSL	369,792	951,583	1,977,101	2,693,834	3,947,808	5,101,493	6,471,716	29 %	27 %	
Other Wireline	609,909	758,594	1,021,291	1,088,066	1,078,597	1,186,680	1,216,208	10	2	
Coaxial Cable	1,411,977	2,284,491	3,582,874	5,184,141	7,059,598	9,172,895	11,369,087	30	24	
Fiber	312,204	307,151	376,203	455,593	494,199	520,884	548,471	5	5	
Satellite or Fixed Wireless	50,404	65,615	112,405	194,707	212,610	220,588	276,067	4	25	
Total Lines	2,754,286	4,367,434	7,069,874	9,616,341	12,792,812	16,202,540	19,881,549	27 %	23 %	

Table 2
Advanced Services Lines

(Over 200 kbps in Both Directions)

								Percent Change		
Types of Technology ²	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001	Jun 2002	Dec 2002	Dec 2001 - Jun 2002	Jun 2002 - Dec 2002	
ADSL	185,950	326,816	675,366	998,883	1,369,143	1,852,879	2,813,384	35 %	52 %	
Other Wireline	609,909	758,594	1,021,291	1,088,066	1,078,597	1,186,680	1,216,208	10	2	
Coaxial Cable	877,465	1,469,130	2,193,609	3,329,976	4,394,778	6,819,395	8,342,234	55	22	
Fiber	307,315	301,143	376,197	455,549	486,483	518,908	548,123	7	6	
Satellite or Fixed Wireless	7,816	3,649	26,906	73,476	75,341	66,073	65,929	-12	0	
Total Lines	1,988,455	2,859,332	4,293,369	5,945,950	7,404,343	10,443,935	12,985,878	41 %	24 %	

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
(Over 200 kbps in at Least One Direction)

								Percent	Change
Types of Technology ²	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001	Jun 2002	Dec 2002	Dec 2001 - Jun 2002	Jun 2002 - Dec 2002
ADSL	291,757	772,272	1,594,879	2,490,740	3,615,989	4,395,033	5,529,241	22 %	26 %
Other Wireline	46,856	111,490	176,520	138,307	139,660	223,599	213,489	60	-5
Coaxial Cable	1,402,394	2,215,259	3,294,546	4,998,540	7,050,709	9,157,285	11,342,512	30	24
Fiber	1,023	325	1,994	2,623	4,139	6,120	14,692	NM	NM
Satellite or Fixed Wireless	50,189	64,320	102,432	182,165	194,897	202,251	256,978	4	27
Total Lines	1,792,219	3,163,666	5,170,371	7,812,375	11,005,396	13,984,287	17,356,911	27 %	24 %

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

								Percent Change	
Types of Technology ²	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Dec 2001 -	Jun 2002 -
	1999	2000	2000	2001	2001	2002	2002	Jun 2002	Dec 2002
ADSL	116,994	195,324	393,246	916,364	1,243,996	1,580,575	2,197,665	27 %	39 %
Other Wireline	46,856	111,490	176,520	138,307	139,660	223,599	213,489	60	-5
Coaxial Cable	872,024	1,401,434	2,177,328	3,146,953	4,388,967	6,809,170	8,322,157	55	22
Fiber	138	325	1,992	2,617	3,523	5,118	14,408	NM	NM
Satellite or Fixed Wireless	7,682	2,916	17,043	60,988	58,113	47,787	47,903	-18	0
Total Lines	1,043,694	1,711,488	2,766,130	4,265,229	5,834,258	8,666,249	10,795,624	49 %	25 %

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

NM - Not meaningful due to small number of lines.

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, 2002
(Over 200 kbps in at Least One Direction)

		Liı	nes	Percent of Lines			
Types of Technology ¹	RBOC ²	Other ILEC	Non- ILEC ³	Total	RBOC ²	Other ILEC	Non- ILEC ³
ADSL	5,584,776	572,078	314,862	6,471,716	86.3 %	8.8 %	4.9 %
Other Wireline	756,120	144,108	315,980	1,216,208	62.2	11.8	26.0
Coaxial Cable	*	*	11,349,035	11,369,087	*	*	99.8
Other	*	*	761,434	824,538	*	*	92.3
Total Lines	6,401,996	738,242	12,741,311	19,881,549	32.2 %	3.7 %	64.1 %

^{*} 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, SBC, and Verizon, and all high-speed lines reported by Qwest in states in which Qwest has ILEC operations.

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 for any such lines that are included in "RBOC" lines.

Table 6
Providers of High-Speed Lines by Technology as of December 31, 2002
(Over 200 kbps in at Least One Direction)

	ADSL	Coaxial Cable	Other ¹	Total (Unduplicated)
Alabama	7	9	11	19
Alaska	4	*	6	7
Arizona	6	5	13	19
Arkansas	4	*	7	10
California	17	10	28	41
Colorado	6	*	12	16
Connecticut	4	4	11	14
Delaware	*	*	4	7
District of Columbia	4	*	6	7
Florida	11	9	24	31
Georgia	14	10	25	34
Hawaii	*	*	*	*
Idaho	5	*	6	10
Illinois	17	5	21	31
Indiana	10	8	14	23
Iowa	13	10	16	24
Kansas	10	11	17	26
Kentucky	8	5	11	18
Louisiana	7	*	10	15
Maine	4	*	6	11
Maryland	6	9	10	20
Massachusetts	5	6	13	19
Michigan	12	7	17	28
Minnesota	17	11	20	35
Mississippi	*	5	6	13
Missouri	10	8	13	23
Montana	8	*	5	13
Nebraska	4	7	8	13
Nevada	7	*	12	16
New Hampshire	6	*	9	13
New Jersey	6	4	13	16
New Mexico	6		8	11
New York	15	8	20	28
North Carolina	14	7 *	16	26
North Dakota	10		10	15
Ohio Oklahoma	14 8	11	22 15	31 19
	11	4	15	21
Oregon	11	10	15 19	32
Pennsylvania Puerto Rico	*	*	*	4
Rhode Island	*	*	7	7
South Carolina	13	7	12	20
South Dakota	9	4	7	17
Tennessee	12	7	16	27
Texas	22	10	31	43
Utah	5	*	12	15
Vermont	4	*	7	8
Virgin Islands	*	0	*	*
Virginia	9	5	13	18
Washington	11	5	15	22
West Virginia	*	5	5	11
Wisconsin	9	4	13	20
Wyoming	*	*	4	6
Nationwide (Unduplicated) Dec 2002	178	87	169	299
Nationwide (Unduplicated) Jun 2002	142	68	138	237
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 as of December 31, 2002
(Over 200 kbps in at Least One Direction)

	ADSL	Coaxial Cable	Other ¹	Total
Alabama	56,860	144,259	26,769	227,888
Alaska	14,295	*	*	55,975
Arizona	72,324	251,373	47,242	370,939
Arkansas	35,594	*	*	100,280
California	1,485,309	1,179,204	371,243	3,035,756
Colorado	113,040	*	*	298,265
Connecticut	100,722	192,155	14,983	307,860
Delaware	*	*	*	51,100
District. of Columbia	35,466	*	*	64,310
Florida	521,623	741,426	142,927	1,405,976
Georgia	305,004	243,142	106,687	654,833
Hawaii	*	*	*	*
Idaho	17,930	*	*	54,963
Illinois	300,497	316,169	117,505	734,171
Indiana	63,463	114,237	28,246	205,946
Iowa	29,161	83,994	7,898	121,053
Kansas	39,315	142,563	11,690	193,568
Kentucky	55,254	22,113	21,898	99,265
Louisiana	86,359	*	*	262,093
Maine	8,432	*	*	73,061
Maryland	115,687	241,264	34,446	391,397
Massachusetts	181,426	453,473	44,185	679,084
Michigan	111,182	472,405	57,179	640,766
Minnesota	98,316	212,126	25,120	335,562
Mississippi	90,510 *	40,276	23,120	80,922
Missouri	114,861	117,403	28,488	260,752
Montana	6,549	*	20,400 *	·
Nebraska		92,261	8,841	20,090
Nevada	16,117	92,201	0,041 *	117,219
	36,662	*	*	159,179
New Hampshire	14,630			102,590
New Jersey	197,615	306,551	63,030	567,196
New Mexico	22,607			57,956
New York	391,686	1,457,019	148,490	1,997,195
North Carolina	124,031	406,024 *	63,984	594,039
North Dakota	8,826			20,024
Ohio	205,140	435,404	69,811	710,355
Oklahoma	65,378	*	*	196,556
Oregon	82,555	165,343	27,551	275,449
Pennsylvania	200,501	376,611	54,605	631,717
Puerto Rico	*	*	*	22,732
Rhode Island	*	*	3,997	89,821
South Carolina	38,293	159,944	24,743	222,980
South Dakota	6,308	7,916	3,836	18,060
Tennessee	74,034	252,596	42,740	369,370
Texas	486,833	740,469	122,326	1,349,628
Utah	57,025	*	*	121,744
Vermont	12,062	*	*	32,814
Virgin Islands	*	0	*	*
Virginia	96,805	320,154	46,496	463,455
Washington	200,189	246,627	38,247	485,063
West Virginia	*	65,542	*	78,980
Wisconsin	64,521	243,043	28,427	335,991
Wyoming	*	*	2,213	14,696
Nationwide	6,471,716	11,369,087	2,040,746	19,881,549

^{*} 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 State
(Over 200 kbps in at Least One Direction)

			•				
	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001	Jun 2002	Dec 2002
Alabama	19,796	32,756	63,334	86,234	138,979	172,365	227,888
Alaska	*	*	934	20,906	50,277	46,791	55,975
Arizona	58,825	111,678	153,500	158,122	251,709	308,621	370,939
Arkansas	8,155	15,539	28,968	40,803	66,537	84,235	100,280
California	547,179	910,006	1,386,625	1,705,814	2,041,276	2,598,491	3,035,756
Colorado	36,726	64,033	104,534	147,220	177,419	243,810	298,265
Connecticut	36,488	63,772	111,792	149,057	191,257	236,490	307,860
Delaware	1,558	3,660	7,492	12,771	26,601	36,619	51,100
District of Columbia	13,288	16,926	27,757	39,101	43,278	55,197	64,310
Florida	190,700	244,678	460,795	651,167	911,261	1,119,693	1,405,976
Georgia	75,870	130,292	203,855	302,598	420,206	512,135	654,833
Hawaii	*	*	*	*	*	*	*
Idaho	*	8,070	15,908	20,233	18,445	43,119	54,963
Illinois	77,672	166,933	242,239	350,241	422,706	553,442	734,171
Indiana	20,059	49,702	60,494	80,364	123,704	159,392	205,946
Iowa	19,258	49,159	58,199	72,583	82,024	102,932	121,053
Kansas	26,179	42,679	68,743	101,734	125,963	149,733	193,568
Kentucky	23,570	24,237	32,731	39,297	67,870	90,284	99,265
Louisiana	28,133	43,294	74,950	121,685	164,760	207,257	262,093
Maine	19,878	17,864	26,266	38,149	49,523	61,406	73,061
Maryland	52,749	71,005	124,465	181,021	260,634	316,666	391,397
Massachusetts	114,116	185,365	289,447	357,256	505,819	583,627	679,084
Michigan	81,223	135,318	198,230	395,583	433,858	538,416	640,766
Minnesota	38,268	65,272	117,283	148,012	199,856	273,907	335,562
Mississippi	*	6,514	12,305	21,517	35,586	57,595	80,922
Missouri	23,347	46,903	100,403	123,915	181,794	224,282	260,752
Montana	*	**	7,378	10,446	13,037	17,969	20,090
Nebraska	36,748	44,188	54,085	55,188	71,451	92,849	117,219
Nevada	23,514	40,582	59,879	78,535	109,850	138,042	159,179
New Hampshire	22,807	33,045	42,364	55,658	71,200	86,200	102,590
New Jersey	101,832	144,203	285,311	428,514	590,192	693,036	567,196
New Mexico	*	2,929	28,497	20,482	31,940	44,942	57,956
New York	186,504	342,743	603,487	893,032	1,199,159	1,460,894	1,997,195
North Carolina	57,881	81,998	136,703	205,616	357,906	461,736	594,039
North Dakota	*	2,437	4,227	6,277	6,082	14,164	20,024
Ohio	160,792	156,980	230,525	358,965	436,766	580,078	710,355
Oklahoma	96,730	163,703	95,138	92,947	114,931	151,213	196,556
Oregon	27,062	44,186	76,839	93,242	158,048	199,549	275,449
Pennsylvania Pennsylvania	71,926	79,892	176,670	263,236	376,439	516,488	631,717
Puerto Rico	* *	*	*	*	*	*	22,732
Rhode Island	*	20,628	30,919	49,215	64,293	72,553	89,821
South Carolina	25,229	32,824	63,914	96,839	135,165	175,088	222,980
South Dakota	*	3,516	2,839	5,448	9,585	12,555	18,060
Tennessee	66,307	87,317	122,391	152,510	237,401	294,573	369,370
Texas	152,518	276,087	522,538	646,839	840,665	1,050,511	1,349,628
Utah	11,635	19,612	35,970	55,103	72,977	93,928	121,744
Vermont	*	1,551	7,773	16,230	21,795	29,990	32,814
Virgin Islands	0	*	*	*	21,773	29,990	32,014
Virginia Virginia	51,305	72,436	139,915	212,808	292,772	360,722	463,455
Washington	71,930	118,723	195,628	212,808	335,667	422,348	485,063
Washington West Virginia	/1,930 *	1,835	6,498	16,697	32,848	58,209	78,980
Wisconsin	18,599	34,262	76,257	127,755	182,395	257,099	335,991
Wyoming	10,399	34,202	**	127,733	7,856	10,990	14,696
Nationwide	2,754,286	4,367,434	7,069,874	9,616,341	12,792,812	16,202,540	19,881,549

^{*} Data withheld to maintain firm confidentiality.

Table 9
ADSL High-Speed Lines by State
(Over 200 kbps in at Least One Direction)

					ı		
	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001	Jun 2002	Dec 2002
Alabama	*	*	12,320	*	34,785	45,350	56,860
Alaska	0	0	0	*	7,975	11,337	14,295
Arizona	*	*	32,395	39,828	53,489	68,280	72,324
Arkansas	*	*	*	*	22,240	28,477	35,594
California	122,855	373,574	622,894	735,677	928,345	1,214,543	1,485,309
Colorado	*	*	42,810	52,617	70,615	100,197	113,040
Connecticut	*	*	22,348	30,142	41,261	61,093	100,722
Delaware	*	*	*	*	*	*	*
District of Columbia	*	*	*	16,313	*	28,723	35,466
Florida	*	37,806	115,133	170,702	306,015	391,188	521,623
Georgia	*	*	56,588	106,649	172,556	237,922	305,004
Hawaii	*	*	*	*	*	*	303,004
Idaho	*	*	*	*	13,643	16,108	17,930
Illinois		12,812		89,080	110,448	195,560	300,497
	3,150	12,812	48,278				
Indiana	*	*	6,442	2,375	22,385	36,685	63,463
Iowa		*		9,532	13,193	18,751	29,161
Kansas	0		14,281	*	23,564	28,713	39,315
Kentucky	5,690	*	16,327	20,256	43,191	55,454	55,254
Louisiana	*	*	22,788	37,444	58,019	73,120	86,359
Maine	0	*	*	6,877	*	*	8,432
Maryland	*	*	*	51,051	79,997	95,439	115,687
Massachusetts	*	15,802	53,700	82,699	125,630	147,139	181,426
Michigan	786	*	25,482	41,428	52,505	80,588	111,182
Minnesota	*	25,975	40,870	51,640	67,527	86,184	98,316
Mississippi	*	*	*	*	*	*	*
Missouri	*	*	38,759	53,250	68,186	84,642	114,861
Montana	*	*	1,760	2,842	4,272	7,108	6,549
Nebraska	*	*	*	9,293	13,637	11,547	16,117
Nevada	*	*	10,023	*	17,598	24,073	36,662
New Hampshire	*	*	3,339	5,651	9,618	11,781	14,630
New Jersey	*	*	59,332	102,430	151,829	172,472	197,615
New Mexico	*	*	*	7,578	*	18,224	22,607
New York	9,307	41,656	124,146	197,135	285,814	338,229	391,686
North Carolina	*	8,662	23,815	41,332	65,582	89,680	124,031
North Dakota	*	*	*	*	4,849	6,575	8,826
Ohio	*	33,603	55,046	87,567	112,527	151,612	205,140
Oklahoma	*	*	*	31,321	39,978	50,617	65,378
	*	19,989	31,644	25,877	57,899	68,747	82,555
Oregon		· ·					· ·
Pennsylvania	7,377	18,313	60,083	89,595 *	136,829	162,258	200,501
Puerto Rico	0	0	0	*	*	*	*
Rhode Island	0	*	•		•	·	20.202
South Carolina	*		5,168	9,704	18,686	26,184	38,293
South Dakota		*	*	1,652	2,869	4,389	6,308
Tennessee	*	*	13,705	22,902	42,571	57,984	74,034
Texas	*	73,117	158,513	197,668	300,752	368,796	486,833
Utah	*	*	17,352	23,476	33,306	47,637	57,025
Vermont	0	*	*	*	*	9,409	12,062
Virgin Islands	0	0	0	*	*	*	*
Virginia	7,425	9,510	26,750	39,114	65,298	75,524	96,805
Washington	*	52,345	79,130	64,812	140,273	172,652	200,189
West Virginia	0	*	*	*	*	*	*
Wisconsin	*	1,063	8,623	17,800	28,233	42,052	64,521
Wyoming	*	*	*	*	*	*	*
Nationwide	369,792	951,583	1,977,101	2,693,834	3,947,808	5,101,493	6,471,716

^{*} Data withheld to maintain firm confidentiality.

Table 10 Coaxial Cable High-Speed Lines by State (Over 200 kbps in at Least One Direction)

			ps III at LC			T 2002	D 2002
	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001	June 2002	Dec 2002
Alabama	8,415	17,164	36,432	47,325	83,933	104,990	144,259
Alaska	0	0	0	0	*	*	*
Arizona	*	*	*	*	151,916	194,431	251,373
Arkansas	*	*	*	*	*	*	*
California	221,472	297,415	476,544	609,174	786,789	1,013,503	1,179,204
Colorado	*	*	*	*	*	*	*
Connecticut	28,702	47,127	78,234	106,019	137,003	160,913	192,155
Delaware	*	*	*	*	*	*	*
District of Columbia	*	*	*	*	*	*	*
Florida	110,000	129,830	255,978	372,190	486,977	595,806	741,426
Georgia	18,114	48,947	75,474	109,922	156,142	183,886	243,142
Hawaii	*	*	*	*	0	*	*
Idaho	0	*	*	*	*	*	*
Illinois	*	83,737	126,490	144,872	204,202	242,394	316,169
Indiana	7,412	33,431	37,052	56,441	78,837	98,414	114,237
Iowa	14,027	42,081	48,008	59,253	63,788	77,592	83,994
Kansas	*	*	48,541	74,337	94,047	111,615	142,563
Kentucky	*	*	*	*	*	12,867	22,113
Louisiana	*	*	*	64,219	88,851	115,198	*
Maine	*	*	*	*	*	*	*
Maryland	*	42,412	65,668	97,466	143,174	181,864	241,264
Massachusetts	*	148,233	210,019	243,670	339,244	391,391	453,473
Michigan	51,111	94,586	130,296	301,842	329,697	402,642	472,405
Minnesota	14,346	30,485	64,215	80,259	113,900	166,323	212,126
Mississippi	*	*	*	*	12,998	27,872	40,276
Missouri	*	16,482	42,255	51,733	89,370	110,026	117,403
Montana	0	*	**	*	*	*	*
Nebraska	*	*	*	37,168	49,939	73,306	92,261
Nevada	*	*	*	*	*	*	<i>72,201</i> *
New Hampshire	*	*	*	*	*	*	*
New Jersey	*	*	*	*	375,362	454,750	306,551
New Mexico	0	0	*	*	*	**	*
New York	110,382	*	377,521	564,423	780,473	967,949	1,457,019
North Carolina	24,200	42,713	73,092	115,949	239,107	313,884	406,024
North Dakota	24,200	**	*	*	237,107	*	**
Ohio	*	*	127,692	213,606	264,031	363,675	435,404
Oklahoma	*	*	127,092	213,000 *	204,031	303,073	*
	*	*	*	*	*	*	165,343
Oregon Pennsylvania	34,878	38,340	85,104	131,119	190,915	300,840	376,611
Puerto Rico	0	36,340					370,011
Rhode Island	*	*	0	0	0	0	*
South Carolina						126,598	159,944
	15,176	20,190	44,812	68,487 *	96,559 *	120,398	
South Dakota	0	*					7,916
Tennessee			77,760	96,119	158,120	199,121	252,596
Texas	76,520	137,670	227,070	328,900	427,324	577,233	740,469
Utah				*	*		
Vermont	*	*	*			*	*
Virgin Islands	0	0	70.505	121.552	0	0	0
Virginia	23,140	40,337	78,585 *	131,553	182,591	238,300	320,154
Washington						217,644	246,627
West Virginia	*	*	*	*	*	48,858	65,542
Wisconsin	*	*	*	*	*	189,585	243,043
Wyoming	0	0	*	*	*	*	*
Nationwide	1,411,977	2,284,491	3,582,874	5,184,141	7,059,598	9,172,895	11,369,087

^{*} Data withheld to maintain firm confidentiality.

Table 11
High-Speed Lines by Type of User as of December 31, 2002
(Over 200 kbps in at Least One Direction)

	Residential & Small Business	Other ¹	Total
Alabama	204,297	23,591	227,888
Alaska	51,332	4,643	55,975
Arizona	347,296	23,643	370,939
Arkansas	95,124	5,156	100,280
California	2,557,288	478,468	3,035,756
Colorado	265,593	32,672	298,265
Connecticut	291,253	16,607	307,860
Delaware	45,333	5,767	51,100
District of Columbia	39,537	24,773	64,310
Florida	1,218,313	187,663	1,405,976
Georgia	549,160	105,673	654,833
Hawaii	*	*	*
Idaho	48,909	6,054	54,963
Illinois	623,027	111,144	734,171
Indiana	170,346	35,600	205,946
Iowa	113,029	8,024	121,053
Kansas	185,343	8,225	193,568
Kentucky	78,890	20,375	99,265
Louisiana	240,605	21,488	262,093
Maine	66,319	6,742	73,061
Maryland	332,580	58,817	391,397
Massachusetts	580,325	98,759	679,084
Michigan	586,946	53,820	640,766
Minnesota	310,948	24,614	335,562
Mississippi	71,910	9,012	80,922
Missouri	237,124	23,628	260,752
Montana	18,107	1,983	20,090
Nebraska	113,839	3,380	117,219
Nevada	136,708	22,471	159,179
New Hampshire	92,694	9,896	102,590
New Jersey	450,493	116,703	567,196
New Mexico	51,205	6,751	57,956
New York	1,755,637	241,558	1,997,195
North Carolina		68,371	
North Dakota	525,668 18,839	1,185	594,039 20,024
Ohio	· · · · · · · · · · · · · · · · · · ·	*	·
	630,503	79,852	710,355
Oklahoma	183,421	13,135	196,556
Oregon	242,996	32,453	275,449
Pennsylvania	531,761	99,956	631,717
Puerto Rico Rhode Island	11,937		22,732
	81,480	8,341	89,821
South Carolina	200,788 16,710	22,192	222,980
South Dakota	· ·	1,350	18,060
Tennessee	327,643	41,728	369,370
Texas	1,204,532	145,096	1,349,628
Utah	108,772	12,972	121,744
Vermont	29,118	3,696	32,814
Virgin Islands			*
Virginia	399,681	63,774	463,455
Washington	412,586	72,477	485,063
West Virginia	73,294	5,686	78,980
Wisconsin	309,915	26,076	335,991
Wyoming	13,383	1,313	14,696
Nationwide	17,356,911	2,524,638	19,881,549

^{*} Data witheld to maintain firm confidentiality.

 $^{^{\}rm 1}\,$ Other includes medium and large business, institutional, and government customers.

Table 12
Percentage of Zip Codes with High-Speed Lines in Service

Number of Providers	Dec 1999	Jun 2000	Dec 2000	Jun 2001	Dec 2001	Jun 2002	Dec 2002
Zero	40.3 %	33.0 %	26.8 %	22.2 %	20.6 %	16.1 %	12.0 %
One	26.0	25.9	22.7	20.3	19.3	18.4	17.3
Two	15.5	17.8	18.4	16.7	15.7	16.2	16.8
Three	8.2	9.2	10.9	13.2	13.1	13.3	14.4
Four	4.3	4.9	6.1	8.2	9.1	9.6	10.3
Five	2.7	3.4	4.0	4.9	6.1	6.9	7.3
Six	1.7	2.5	3.0	3.6	4.2	4.6	5.0
Seven	0.8	1.7	2.3	2.8	3.2	3.2	3.9
Eight	0.3	0.8	2.0	2.2	2.5	2.8	2.7
Nine	0.2	0.4	1.6	1.9	2.0	2.4	2.2
Ten or More	0.0	0.4	2.4	3.9	4.0	6.4	8.0

High-Speed Providers by Zip Code

(As of December 31, 2002)

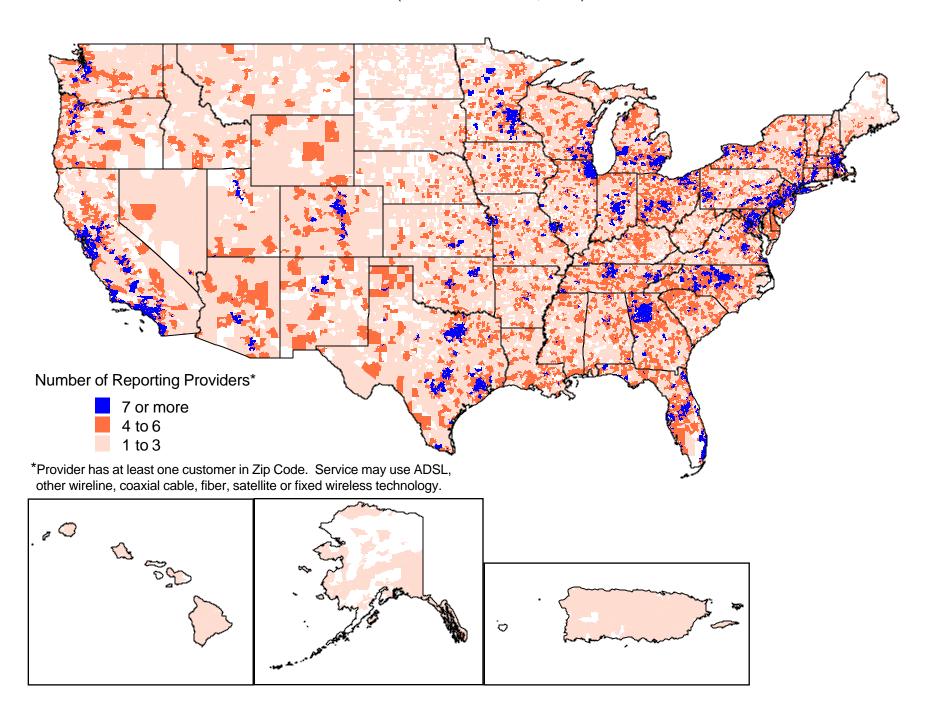


Table 13
Percentage of Zip Codes with High-Speed Lines in Service as of December 31, 2002
(Over 200 kbps in at Least One Direction)

	Number of Providers										
	Zero	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten or More
Alabama	12 %	16 %	18 %	22 %	17 %	9 %	3 %	2 %	1 %	0 %	0 %
Alaska	23	55	12	8	2	0	0	0	0	0	0
Arizona	3	6	14	18	9	9	8	3	6	6	18
Arkansas	26	27	22	11	7	4	2	1	1	0	0
California	3	8	11	12	8	6	5	5	5	4	33
Colorado	6	14	18	20	8	5	5	4	2	4	14
Connecticut	1	7	18	16	13	9	5	7	10	7	7
Delaware	0	2	4	12	40	25	18	0	0	0	0
District of Columbia	4	4	11	4	0	15	19	44	0	0	0
Florida	1	3	7	12	13	11	11	7	6	6	23
Georgia	6	12	12	17	15	11	6	4	1	1	15
Hawaii	13	38	16	32	0	0	0	0	0	0	0
Idaho	19	26	21	15	14	5	0	0	0	0	0
Illinois	12	20	18	13	7	5	4	3	1	2	15
Indiana	9	22	18	18	10	8	5	2	2	1	5
Iowa	29	27	16	11	8	6	3	1	0	0	0
Kansas	26	28	16	8	6	4	4	3	3	2	0
Kentucky	27	25	16	13	9	6	3	1	0	0	0
Louisiana	10	18	20		16	12	5	2	1	0	0
				16							
Maine	11	26	28	28 12	7	9	0	0	0	4	0
Maryland	2	7	13		13		10	5	5		20
Massachusetts	1	3	6	13	16	12	9	9	5	3	24
Michigan	4	14	17	17	11	9	7	4	4	3	9
Minnesota	23	18	15	11	9	5	3	3	3	5	5
Mississippi	12	24	21	16	14	8	4	1	1	0	0
Missouri	19	22	20	13	8	4	3	5	4	1	0
Montana	26	30	20	14	4	5	1	0	0	0	0
Nebraska	29	27	20	12	9	4	0	0	0	0	0
Nevada	8	25	19	7	11	16	5	7	2	0	0
New Hampshire	5	7	21	26	18	7	8	5	3	0	0
New Jersey	0	4	7	14	13	15	13	10	10	8	6
New Mexico	19	29	22	8	11	2	4	5	0	0	0
New York	4	13	17	16	12	9	7	6	5	4	9
North Carolina	3	12	13	20	17	13	6	6	5	2	3
North Dakota	46	38	11	3	1	1	0	0	0	0	0
Ohio	3	10	15	20	14	11	8	5	4	2	7
Oklahoma	15	26	22	9	6	5	4	6	4	1	0
Oregon	8	14	20	19	14	8	8	7	3	0	0
Pennsylvania	13	16	16	13	9	8	5	3	3	3	10
Puerto Rico	4	16	68	12	0	0	0	0	0	0	0
Rhode Island	3	6	10	18	14	21	17	13	0	0	0
South Carolina	8	13	17	19	18	13	10	2	0	0	0
South Dakota	34	30	20	11	3	2	0	0	0	0	0
Tennessee	6	14	17	17	12	11	7	5	2	2	5
Texas	10	15	17	11	9	7	5	4	3	2	17
Utah	18	16	15	12	9	2	4	2	3	8	11
Vermont	10	31	29	13	10	6	2	0	0	0	0
Virginia Virginia	13	15	19	19	9	4	5	3	3	3	7
Washington	6	13	17	19	9	9	6	5 5	5	5	8
Wasnington West Virginia											
	27	29	18	14	8	4	1	0	0	0	0
Wisconsin	8	16	24	17	14	6	5	7	2	2	0
Wyoming	16	29	28	16	10.0%	7.04	5 04	0	0 2 04	0	0
Nationwide	12 %	17 %	17 %	14 %	10 %	7 %	5 %	4 %	3 %	2 %	8 %

Table 14
High-Speed Subscribership
Ranked by Population Density

(Over 200 kbps in at Least One Direction)

Deciles	Persons per Square Mile	Λ T	Codes in Decilo Iigh-Speed Subs		Percent of Population in Decile that Resides in Zip Codes with High-Speed Service			
(Blocks of Zip Codes Grouped by Density)	(In Each Decile of Zip Codes)	Dec 2000	Dec 2001	Dec 2002	Dec 2000	Dec 2001	Dec 2002	
90-100	More Than 3,147	98.2 %	98.1 %	98.7 %	99.9 %	99.8 %	100.0 %	
80-90	947-3,147	97.1	97.3	98.2	99.8	99.7	100.0	
70-80	268-947	95.7	95.8	97.9	99.3	99.5	99.9	
60-70	118-268	91.5	93.3	96.7	98.1	99.1	99.7	
50-60	67-118	85.9	89.3	95.0	95.0	97.1	99.1	
40-50	41-67	76.1	83.3	91.5	87.9	94.4	97.8	
30-40	25-41	65.0	73.1	87.6	80.0	87.6	95.6	
20-30	15-25	50.1	61.2	77.8	69.4	80.4	90.8	
10-20	6-15	38.5	52.1	69.4	61.9	76.2	86.4	
0-10	Fewer Than 6	27.5	43.3	59.7	49.9	67.9	80.9	

Table 15 High-Speed Subscribership Ranked by Household Income

(Over 200 kbps in at Least One Direction)

Deciles (Blocks of Zip Codes Grouped by	Median Household		o Codes in Decilo High-Speed Subs		Percent of Population in Decile that Resides in Zip Codes with High-Speed Service			
Median Household Income)	Income (In Each Decile of Zip Codes)	Dec 2000	Dec 2001	Dec 2002	Dec 2000	Dec 2001	Dec 2002	
90-100	\$53,494 to \$291,938	96.1 %	96.8 %	98.3 %	99.8 %	99.6 %	99.9 %	
80-90	\$43,617 to \$53,478	88.9	91.7	95.3	99.0	99.3	99.8	
70-80	\$38,396 to \$43,614	79.5	84.9	92.1	97.8	98.6	99.5	
60-70	\$34,744 to \$38,395	74.5	79.9	88.2	96.6	97.6	99.1	
50-60	\$32,122 to \$34,743	71.2	78.2	87.1	95.9	97.6	98.9	
40-50	\$29,893 to \$32,121	67.4	75.5	85.6	94.5	96.8	98.5	
30-40	\$27,542 to \$29,892	66.9	75.2	85.4	93.8	96.5	98.3	
20-30	\$24,855 to \$27,541	65.1	71.8	83.2	93.1	95.6	98.1	
10-20	\$21,645 to \$24,855	61.2	70.0	83.1	91.1	95.0	97.9	
0-10	\$0 to \$21,644	54.9	62.7	74.5	91.5	95.1	97.5	

Customer Response

Publication: High-Speed Services for Internet Access: Status as of December 31, 2002.

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 press current telecomy potential telecomy consultant, law from their business of academic/studeny residential customy FCC employee other federal go state or local go Other (please sp	munications cammunications der evaluating firm, lobbyist customer ant omer vernment empyernment empyer	arrier carrier vendors/ser					
2.	Please rate the report: Data accuracy Data presentation Timeliness of data Completeness of data Text clarity Completeness of text	Excellent (_) (_) (_) (_) (_) (_) (_)	Good (_) (_) (_) (_) (_) (_) (_)	Satisfactory (_) (_) (_) (_) (_) (_) (_)	Poor (_) (_) (_) (_) (_) (_)	No opinion (_) (_) (_) (_) (_) (_) (_)		
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 on Name: Telephone #:	discuss possib	le improve	ments?				
	To discuss	the information	on in this re	port, contact: 20	2-418-094	0		

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				