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### High-Speed Services for Internet Access: Status as of December 31, 2007

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.<sup>1</sup> To assist in its evaluation of such deployment, the Commission instituted a formal data collection program (FCC Form 477) to gather standardized information about subscribership to high-speed services, including advanced services, from wireline telephone companies, cable system operators, terrestrial wireless service providers, satellite service providers, and any other facilities-based providers of advanced telecommunications capability.<sup>2</sup>

We summarize here information from the seventeenth semi-annual data collection, thereby presenting a snapshot of subscribership as of December 31, 2007.<sup>3</sup> High-speed lines connecting homes and businesses to the Internet increased by 20% during the second half of 2007, from 101.0 million to 121.2 million lines in service, following a 22% increase, from 82.8 million to 101.0 million lines, during the first half of 2007. For the full twelve-month period ending December 31, 2007, high-speed lines increased by 46% (or 38.4 million lines). The presence of high-speed service subscribers was reported in all 50 states, the District of Columbia, American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands, and in nearly 100% of the Zip Codes in the United States.

Twice a year, all facilities-based providers of high-speed connections to end users are required to report to the Commission basic information about their service offerings and types of customers.<sup>4</sup> Prior to June 2005, providers with fewer than 250 high-speed lines (or wireless

<sup>3</sup> Statistical summaries of the earlier Form 477 data collections appeared in *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 <u>www.fcc.gov/broadband/706.html</u>, and in previous releases of the *High-Speed Services for Internet Access* report, available at <u>www.fcc.gov/wcb/stats</u>.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Local Competition and Broadband Reporting, CC Docket No. 99-301, Report and Order, 15 FCC Rcd 7717 (2000); Local Telephone Competition and Broadband Reporting, WC Docket No. 04-141, Report and Order, 19 FCC Rcd 22340 (2004). During this data gathering program, qualifying entities 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). The first data collected by Form 477 were data as of December 31, 1999. An updated 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 <a href="https://www.fcc.gov/formpage.html">www.fcc.gov/formpage.html</a>.

<sup>&</sup>lt;sup>4</sup> The terms "broadband connections" (which is used as a synonym for "high-speed connections" in the Form 477 program) and "facilities-based provider" are defined on the first page of the Form 477 instructions that are available at <u>www.fcc.gov/formpage.html</u>, and the term "end users" is defined on the third page. Facilities-based providers report information about high-speed connections they provide directly to their own end-user customers and also high-speed connections they provide to Internet Service Providers for resale to end users.

channels) in service in a particular state were not required to report data for that state.<sup>5</sup> Small providers of high-speed connections, many of whom serve rural areas with relatively small populations, were therefore underrepresented in the earlier data. Including these providers resulted in a substantial one-time increase in the number of holding companies and unaffiliated entities reporting information about high-speed connections from December 31, 2004 to June 30, 2005.<sup>6</sup>

The data reported for December 31, 2007 include detail about the information transfer rates ("speeds") of the reported connections and a breakdown of high-speed connections by type of technology.<sup>7</sup> The reported data also enable us to estimate, for individual states, the extent to which Digital Subscriber Line (DSL) high-speed connections provided by incumbent local exchange carriers (incumbent LECs), and cable modem high-speed service provided by cable system operators, are available to households residing in the areas these companies serve.

Readers can draw the following broad conclusions from the data summarized in this report:

- High-speed lines (or wireless channels) connecting homes and businesses to the Internet at speeds that exceed 200 kbps in *at least one* direction increased from 101.0 million lines to 121.2 million lines during the second half of 2007. For the full twelve-month period ending December 31, 2007, high-speed lines increased by 38.4 million, from 82.8 million lines to 121.2 million lines. See Table 1 and Chart 1.
- ADSL lines increased by 1.9 million lines during the second half of 2007, fiber connections increased by 0.4 million lines, and cable modem service increased by 2.1 million lines. For the full twelve-month period ending December 31, 2007, ADSL increased by 4.0 million lines, fiber connections increased by 0.8 million lines, and cable modem service increased by 4.5 million lines. See Table 1.
- Of the 121.2 million total high-speed lines, 30.1% were cable modem, 24.3% were ADSL, 0.7% were symmetric DSL (SDSL) or traditional wireline, 1.5% were fiber to the end user premises, and 43.3% used other technologies.<sup>8</sup> See Chart 2.

<sup>6</sup> The nationwide number of holding companies and unaffiliated entities reporting high-speed lines increased from 552 as of December 31, 2004 to 1,270 as of June 30, 2005. See Table 7.

<sup>7</sup> Some Internet-access connections that telephone companies, cable system operators, and wireless service providers offer do not meet the 200 kbps criterion for reporting high-speed connections to the Commission, but may nevertheless meet the needs of the subscribers who select them over a more expensive service option.

<sup>&</sup>lt;sup>5</sup> High-speed lines reported in voluntary submissions of data prior to June 2005 represented less than 0.05% of total reported high-speed lines. As of June 30, 2005, filers with fewer than 250 lines in a state (including some entities that previously made voluntary submissions) represented about 0.2% of total reported high-speed lines.

<sup>&</sup>lt;sup>8</sup> Providers are instructed to report a high-speed connection in the (mutually exclusive) technology category that characterizes the last few feet of distribution plant to the subscriber's premises. In addition to cable modem, ADSL, SDSL, traditional wireline when used for Internet access, and optical carrier (fiber to the end user) connections, reporting entities specify satellite, terrestrial fixed wireless (licensed or unlicensed), terrestrial mobile wireless (licensed or unlicensed), electric power line, or "all other" technology. See additional notes following Chart 10.

- Lines connecting homes and businesses to the Internet at transmission speeds that exceed 200 kbps in *both* directions increased from 69.6 million lines to 80.2 million lines during the second half of 2007. For the full twelve-month period ending December 31, 2007, they increased by 20.4 million, from 59.8 million lines to 80.2 million lines. See Table 2 and Chart 3.
- Of the 80.2 million lines which were faster than 200 kbps in *both* directions, 45.1% were cable modem, 31.5% were ADSL, 1.1% were SDSL or traditional wireline, 2.3% were fiber to the end user premises, and 20.1% used other technologies. See Chart 4.
- Of the 121.2 million total high-speed lines, 74.0 million were designed to serve primarily residential end users. Cable modem represented 47.8% of these lines while 35.8% were ADSL, 0.1% were SDSL or traditional wireline connections, 2.3% were fiber to the end user premises, and 14.0% used other technologies. See Table 3 and Chart 6. For state-specific data, see Table 13.
- Of the 74.0 million lines that were faster than 200 kbps in *both* directions, 69.1 million lines were designed to serve primarily residential end users. Of these, cable modem represented 50.7% while 32.6% were ADSL, 0.1% were SDSL or traditional wireline, 2.4% were fiber to the end user premises, and 14.1% used other technologies. See Table 4 and Chart 8.
- Of the 80.2 million reported high-speed lines that were faster than 200 kbps in *both* directions as of December 31, 2007, 56.4% were at least 2.5 mbps in the faster direction and 43.5% were slower than 2.5 mbps in the faster direction. See Table 5.
- Incumbent LECs or their affiliates reported 97.1% of ADSL connections, 90.9% of fiber-tothe-premises connections, 81.5% of the mobile service subscribers whose wireless device is capable of operating on a high-speed mobile wireless network, and 34.2% of traditional wireline connections. When all technologies are considered, incumbent LECs reported 59.6% of total high-speed connections. See Table 6.
- High-speed lines were reported in all 50 states, the District of Columbia, American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands. See Table 9 and, for historical data, Tables 10 12.
- As a nationwide average, we estimate that high-speed DSL connections were available to 82% of the households to whom incumbent LECs could provide local telephone service, and that high-speed cable modem service was available to 96% of the households to whom cable system operators could provide cable TV service. See Table 14.

- The Commission's data collection program requires providers to list the Zip Codes in which the provider has at least one high-speed connection in service to an end user, and over 99% of Zip Codes were listed by at least one provider.<sup>9</sup> The most widely reported technologies by this measure were high-speed mobile wireless (with at least some presence reported in 94% of Zip Codes), satellite (in 93% of Zip Codes), ADSL (in 87% of Zip Codes), and cable modem service (in 66% of Zip Codes). ADSL and/or cable modem connections were reported to be present in 91% of Zip Codes.<sup>10</sup> See Tables 15 and 16. For state-specific data, see Table 17.
- Our analysis indicates that more than 99% of the country's population lives in the more than 99% 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 16.
- 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, high-speed subscribers were reported to be present in more than 99% of the most densely populated Zip Codes and in 90% of Zip Codes with the lowest population densities.<sup>11</sup> See Table 18.
- 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 99% of Zip Codes. By contrast, high-speed subscribers are reported in 92% of Zip Codes with the lowest median household income. See Table 19.

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. Note that, on June 12, 2008, the Commission adopted a Report and Order (FCC 08-89) and Order on Reconsideration (FCC 08-148) that together revise the Form 477 reporting requirements.<sup>12</sup> The changes will become

<sup>11</sup> 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).

<sup>12</sup> Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on *Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Report and Order, 23 FCC Rcd 9691 (2008); Order on Reconsideration, 23 FCC Rcd 9800 (2008).

<sup>&</sup>lt;sup>9</sup> Lists of Zip Codes with number of service providers as reported in the FCC Form 477 filings are made available at <u>www.fcc.gov/wcb/stats</u> in a format that honors requests for nondisclosure of information the reporting entities assert is competitively sensitive.

<sup>&</sup>lt;sup>10</sup> The 91.0% figure includes Zip Codes with either ADSL subscribers reported, cable modem subscribers reported, or both. In 61.0% of Zip Codes, both ADSL and cable modem subscribers have been reported. In 25.6% of Zip Codes, there are ADSL subscribers reported but no cable modem subscribers, and in 4.4% of Zip Codes there are cable modem subscribers reported but no ADSL subscribers reported.

effective upon review and approval by the Office of Management and Budget.

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 <u>James.Eisner@fcc.gov</u> or <u>Suzanne.Mendez@fcc.gov</u>,
- 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 <sup>1</sup>	
(Over 200 kbps in at least one direction)	

2	2000	2001	2002	2003	2004	2005	200	)6	20	007
Technology <sup>2</sup>	Dec	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec
ADSL	1,977,101	3,947,808	6,471,716	9,509,442	13,817,280	19,515,483	22,584,255	25,412,883	27,561,867	29,451,719
SDSL and Traditional Wireline	1,021,291	1,078,597	1,216,208	1,305,070	1,468,566	878,973	948,134	1,030,698	1,071,996	886,269
SDSL	-	-	-	-	-	368,782	337,412	344,759	319,987	293,974
Traditional Wireline	-	-	-	-	-	510,191	610,722	685,939	752,009	592,295
Cable Modem	3,582,874	7,059,598	11,369,087	16,446,322	21,357,400	26,558,206	29,174,494	31,981,705	34,404,368	36,497,284
Fiber <sup>3</sup>	63,206	91,921	108,541	116,390	159,653	448,257	685,823	1,035,677	1,403,729	1,850,695
Satellite and Wireless	112,405	212,610	276,067	367,118	549,621	3,812,029	11,872,998	23,344,106	36,560,869	52,474,070
Satellite	-	-	-	-	-	426,928	495,365	571,980	668,803	791,142
Fixed Wireless	-	-	-	-	-	257,431	361,113	484,377	586,813	705,014
Mobile Wireless	-	-	-	-	-	3,127,670	11,016,520	22,287,749	35,305,253	50,977,914
Power Line and Other	-	-	-	-	-	4,571	5,208	4,776	5,420	5,274
Total Lines	6,756,877	12,390,534	19,441,619	27,744,342	37,352,520	51,217,519	65,270,912	82,809,845	101,008,249	121,165,311

For data through December 2004, only those providers with at least 250 lines per state were required to file. Some historical data have been revised. See additional notes following Chart 10.

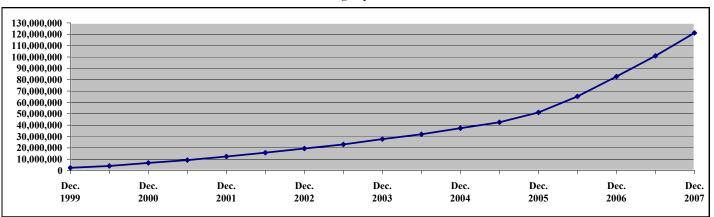


Chart 1 Total High-Speed Lines

Chart 2 High-Speed Lines by Technology as of December 31, 2007

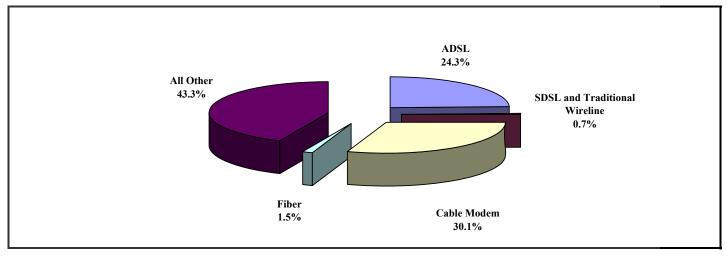


Table 2
Advanced Services Lines <sup>1</sup>
(Over 200 kbps in both directions)

<b>T 1 1 2</b>	2000	2001	2002	2003	2004	2005	200	)6	20	007
Technology <sup>2</sup>	Dec	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec
ADSL	675,366	1,369,143	2,178,394	3,037,474	5,695,548	15,921,336	18,310,957	21,144,159	23,426,407	25,244,128
SDSL and Traditional Wireline	1,021,291	1,078,597	1,216,208	1,305,070	1,468,566	874,261	946,874	1,029,782	1,071,280	886,188
SDSL	-	-	-	-	-	368,736	336,586	344,739	319,348	293,974
Traditional Wireline	-	-	-	-	-	505,525	610,288	685,043	751,932	592,214
Cable Modem	2,193,609	4,394,778	8,342,234	15,327,247	20,891,624	26,293,596	28,878,587	31,594,111	33,935,733	36,155,563
Fiber <sup>3</sup>	63,200	84,206	108,192	115,633	157,127	447,235	684,729	1,034,317	1,401,641	1,847,181
Satellite and Wireless	26,906	75,341	65,929	73,222	106,616	338,635	2,275,154	4,982,675	9,801,378	16,094,910
Satellite	-	-	-	-	-	36,331	27,489	36,026	57,202	73,747
Fixed Wireless	-	-	-	-	-	220,268	333,209	455,741	554,316	673,951
Mobile Wireless	-	-	-	-	-	82,036	1,914,456	4,490,908	9,189,860	15,347,212
Power Line and Other	-	-	-	-	-	4,501	5,209	4,776	5,420	5,274
Total Lines	3,980,372	7,002,065	11,910,957	19,858,646	28,319,482	43,879,564	51,101,510	59,789,820	69,641,859	80,233,244

For data through December 2004, only those providers with at least 250 lines per state were required to file. Some historical data have been revised. See additional notes following Chart 10.

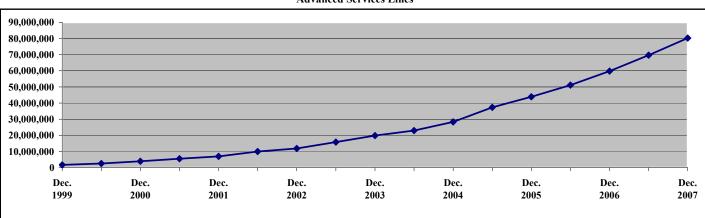


Chart 3 Advanced Services Lines

Chart 4 Advanced Services Lines by Technology as of December 31, 2007

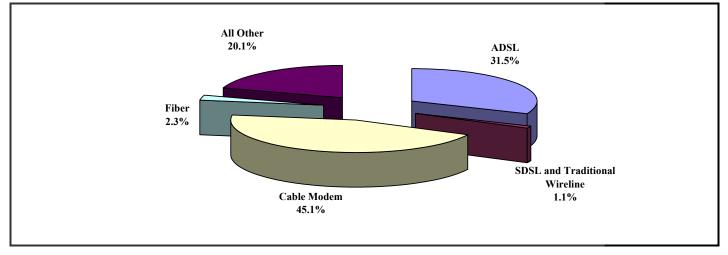


Table 3
Residential High-Speed Lines <sup>1</sup>
Over 200 kbps in at least one direction

	(Over 200 kbps in at least one direction)										
Technology <sup>2</sup>	2000 2001		2002	2003	2004	2005	2006		2007		
rechnology	Dec	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec	
ADSL	1,594,879	3,615,989	5,529,241	8,909,027	13,119,326	17,370,508	20,152,290	22,768,500	24,731,180	26,477,656	
SDSL and Traditional Wireline	176,520	139,660	213,489	289,764	419,215	129,444	112,017	117,708	117,522	99,953	
SDSL	-	-	-	-	-	122,220	102,605	105,012	105,029	82,659	
Traditional Wireline	-	-	-	-	-	7,224	9,412	12,696	12,493	17,294	
Cable Modem	3,294,546	7,050,709	11,342,512	16,416,364	21,270,158	25,714,461	28,365,648	31,118,079	33,336,493	35,332,613	
Fiber <sup>3</sup>	1,994	4,139	14,692	19,830	34,959	213,479	442,027	763,394	1,153,058	1,684,136	
Satellite and Wireless	102,432	194,897	256,978	341,864	422,623	532,391	1,840,060	3,572,231	6,598,757	10,376,966	
Satellite	-	-	-	-	-	320,142	382,047	455,936	530,357	626,466	
Fixed Wireless	-	-	-	-	-	203,179	301,293	424,374	523,180	642,641	
Mobile Wireless	-	-	-	-	-	9,071	1,156,720	2,691,921	5,545,220	9,107,859	
Power Line and Other	-	-	-	-	-	4,550	5,093	4,711	5,347	5,159	
Total Lines	5,170,371	11,005,396	17,356,912	25,976,850	35,266,281	43,964,834	50,917,135	58,344,623	65,942,357	73,976,483	

For data through December 2004, only those providers with at least 250 lines per state were required to file.

Small business lines were included in totals through December 2004. Some historical data have been revised. See additional notes following Chart 10.

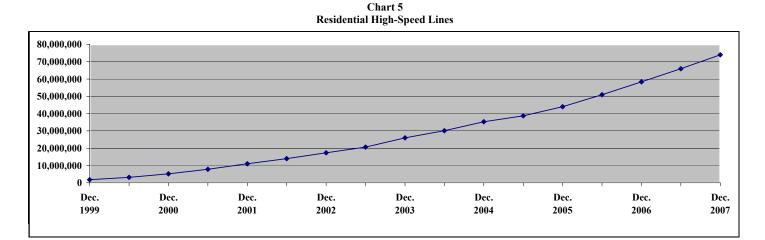


Chart 6 Residential High-Speed Lines by Technology as of December 31, 2007

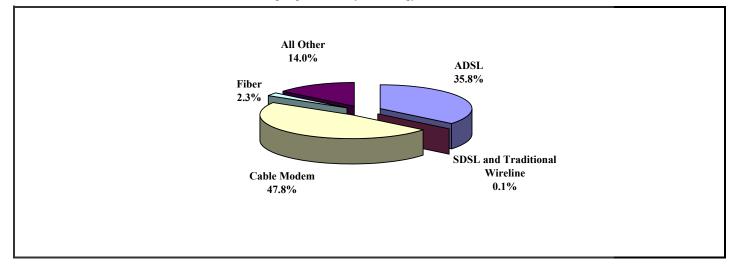


Table 4
Residential Advanced Services Lines <sup>1</sup>
(Over 200 kbps in both directions)

(Over 200 kbps in both directions)										
	2000	2001	2002	2003	2004	2005	20	06	20	007
Technology <sup>2</sup>	Dec	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec
ADSL	393,246	1,243,996	1,827,547	2,437,059	5,026,367	14,242,291	16,416,522	18,878,873	20,875,941	22,555,758
SDSL and Traditional Wireline	176,520	139,660	213,489	289,764	419,215	125,116	111,935	117,652	116,966	99,925
SDSL	-	-	-	-	-	122,220	102,580	105,002	104,517	82,659
Traditional Wireline	-	-	-	-	-	2,895	9,355	12,650	12,449	17,266
Cable Modem	2,177,328	4,388,967	8,322,157	15,297,289	20,811,704	25,533,423	28,121,912	30,770,517	32,916,212	35,026,467
Fiber <sup>3</sup>	1,992	3,523	14,408	19,074	33,189	212,862	441,128	762,083	1,151,109	1,681,895
Satellite and Wireless	17,043	58,113	47,903	51,944	84,465	204,703	1,449,299	3,114,987	6,074,880	9,770,874
Satellite	-	-	-	-	-	25,117	15,055	23,334	35,319	47,743
Fixed Wireless	-	-	-	-	-	170,515	277,524	399,732	494,341	615,272
Mobile Wireless	-	-	-	-	-	9,071	1,156,720	2,691,921	5,545,220	9,107,859
Power Line and Other	-	-	-	-	-	4,481	5,093	4,711	5,347	5,159
Total Lines	2,766,130	5,834,258	10,425,505	18,095,131	26,374,940	40,322,876	46,545,889	53,648,823	61,140,455	69,140,078

For data through December 2004, only those providers with at least 250 lines per state were required to file.

Small business lines were included in totals through December 2004.

Some historical data have been revised. See additional notes following Chart 10.

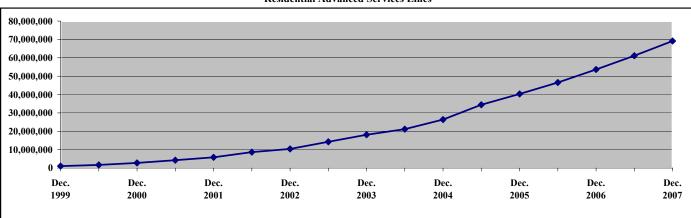


Chart 7 Residential Advanced Services Lines

Chart 8 Residential Advanced Services Lines by Technology as of December 31, 2007

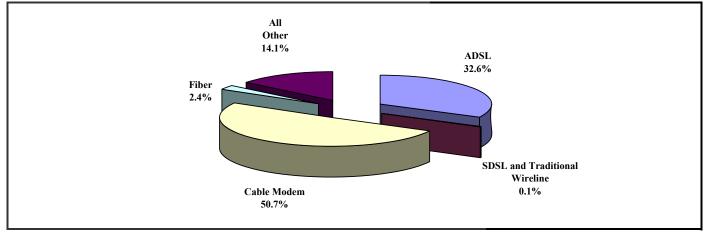
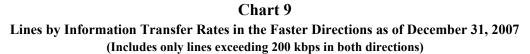


Table 5High-Speed Lines by Information Transfer Rates 1As of December 31, 2007

		Exceeding 200 kbps in both directions, and:									
Technology <sup>2</sup>	Exceeding 200 kbps in only one direction	Greater than 200 kbps and less than 2.5 mbps in the faster direction	Greater than or equal to 2.5 mbps and less than 10 mbps in the faster direction	Greater than or equal to 10 mbps and less than 25 mbps in the faster direction	Greater than or equal to 25 mbps and less than 100 mbps in the faster direction	Greater than or equal to 100 mbps in the faster direction					
ADSL	4,207,591	14,023,169	11,192,006	24,613	*	*					
SDSL	0	292,566	1,251	*	*	0					
Traditional Wireline	81	536,571	32,241	7,680	8,051	7,671					
Cable Modem	341,721	3,879,526	28,315,879	*	*	0					
Fiber	3,514	139,420	812,666	866,994	14,448	13,653					
Satellite	717,395	*	*	0	0	0					
Fixed Wireless	31,063	636,396	36,836	473	*	*					
Mobile Wireless	35,630,702	*	0	*	0	0					
Power Line and Other	0	*	*	0	*	0					
Total Lines	40,932,067	34,930,315	40,394,418	4,765,239	121,870	21,412					

See notes following Chart 10.



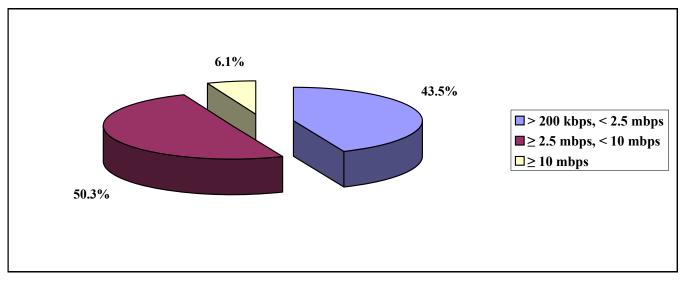
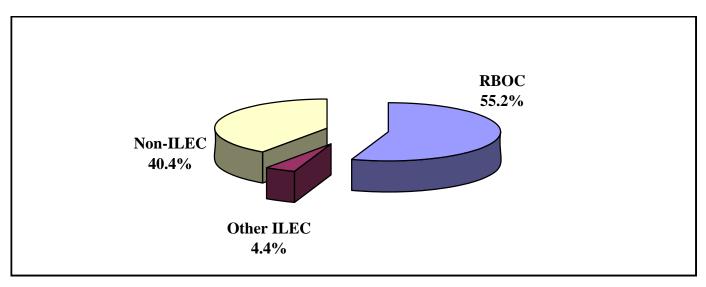


Table 6High-Speed Lines by Type of Provider as of December 31, 2007 1(Over 200 kbps in at least one direction)

		Li	Percent of Lines				
Technology <sup>2</sup>	RBOC <sup>4</sup>	Other ILEC	Non- ILEC <sup>5</sup>	Total	RBOC <sup>4</sup>	Other ILEC	Non- ILEC <sup>5</sup>
ADSL	23,511,357	5,072,800	867,562	29,451,719	79.8 %	17.2 %	2.9 %
SDSL	*	*	205,423	293,974	*	*	69.9
Traditional Wireline	182,876	19,630	389,789	592,295	30.9	3.3	65.8
Cable Modem	*	*	36,401,489	36,497,284	*	*	99.7
Fiber	1,616,587	64,827	169,281	1,850,695	87.4	3.5	9.1
Satellite	0	0	791,142	791,142	0.0	0.0	100.0
Fixed Wireless	*	*	679,952	705,014	*	*	96.4
Mobile Wireless	*	*	9,436,498	50,977,914	*	*	18.5
Power Line and Other	0	0	5,274	5,274	0.0	0.0	100.0
Total Lines	66,858,578	5,360,323	48,946,410	121,165,311	55.2 %	4.4 %	40.4 %

See notes following Chart 10.

Chart 10 Share of High-Speed Lines by Type of Provider as of December 31, 2007



### Notes for Tables 1 - 6 and Charts 1 - 10.

Advanced services lines, residential high-speed lines, and residential advanced services lines are estimated based on data reported on FCC Form 477. Therefore, figures may not add to totals due to rounding.

<sup>1</sup> High-speed lines are connections to end-user locations that deliver services at speeds exceeding 200 kbps in at least one direction. Advanced services lines, which are a subset of high-speed lines, are connections that deliver services at speeds exceeding 200 kbps in both directions. In Tables 2 and 4, we enumerate those reported high-speed lines that also qualify as advanced services lines. More detailed information about connection speeds is presented in Table 5. Line counts presented in this report are not adjusted for the number of persons at a single end-user location who have access to, or who use, the Internet-access services that are delivered over the high-speed connection to that location.

<sup>2</sup> 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; symmetric digital subscriber line (SDSL) technologies; traditional wireline technologies when used to provide equivalent Internet access functionality, including Ethernet service if delivered to the subscriber's location over copper (as opposed to optical fiber) plant; cable modem, 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); satellite and fixed and mobile terrestrial wireless systems, which use radio spectrum to communicate with a radio transmitter; electric power line; and other.

<sup>3</sup> Fiber lines included electric power line through December 2004.

<sup>4</sup> RBOC lines include lines owned by AT&T, Qwest and Verizon, and their affiliates.

<sup>5</sup> High-speed lines reported by non-ILEC affiliates of RBOCs are reported in the column for RBOC lines and are excluded from the column for non-ILEC lines. Lines reported by non-ILEC affiliates of ILECs other than the RBOCs are reported in the column for non-ILEC lines.

Table 7
Nationwide Number of Providers of High-Speed Lines by Technology
(Over 200 kbps in at least one direction)

	ADSL	Cable Modem	All Other <sup>1</sup>	Total
Dec 1999	28	43	65	105
Jun 2000	47	36	75	116
Dec 2000	68	39	87	136
Jun 2001	86	47	98	160
Dec 2001	117	59	122	203
Jun 2002	142	68	138	237
Dec 2002	178	87	169	299
Jun 2003	235	98	217	378
Dec 2003	274	110	246	432
Jun 2004	298	129	281	485
Dec 2004	352	147	312	552
Jun 2005	758	227	779	1,270
Dec 2005	820	242	835	1,347
Jun 2006	833	254	814	1,326
Dec 2006	857	279	880	1,394
Jun 2007	861	282	872	1,371
Dec 2007	854	290	901	1,393

For data through December 2004, only those providers with at least 250 lines per state were required to file. Some historical data have been revised.

<sup>1</sup> All other includes SDSL, traditional wireline, fiber, satellite, fixed and mobile wireless, and power line.

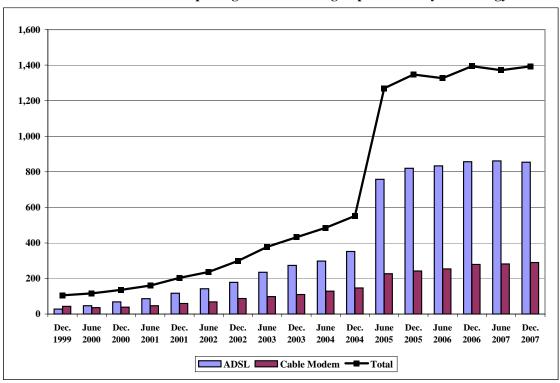


Chart 11 Historical Number of Reporting Providers of High-Speed Lines by Technology

 
 Table 8

 Providers of High-Speed Lines by Technology as of December 31, 2007 (Over 200 kbps in at least one direction)

State	ADSL	SDSL	Traditional Wireline	Cable Modem	Fiber	Satellite	Fixed Wireless	Mobile Wireless	Power Line and Other	Total (Unduplicated)
Alabama	32	9	19	20	11	*	6	4	*	73
Alaska	10	5	5	*	*	*	7	*	0	20
American Samoa	*	*	0	0	0	0	*	0	0	*
Arizona	25	8	15	9	11	*	13	5	0	55
Arkansas	22	7	9	10	6	*	5	4	0	47
California	28	16	35	17	16	*	22	*	0	84
Colorado	29	13	18	12	10	*	17	7	0	67
Connecticut	9	8	12	6	6	*	0	4	0	30
Delaware	9	6	15	*	*	*	0	*	0	29
District of Columbia	13	8	15	*	5	*	*	*	0	30
Florida	30	14	34	15	20	*	11	4	*	78
Georgia	41	14	24	26	23	*	8	4	0	84
Guam	*	0	*	*	0	0	0	0	0	*
Hawaii	*	*	5	*	4	*	*	*	0	14
Idaho	24	8	13	7	12	*	14	4	0	49
Illinois	61	21	38	18	11	*	39	4	*	126
Indiana	43	12	26	13	19	*	28	*	*	89
Iowa	130	40	26	35	28	*	20 54	6	0	192
Kansas	40	15	14	26	18	*	24	4	0	82
Kentucky	31	10	14	19	11	*	13	4	0	73
Louisiana	21	8	15	10	11	*	6	5	*	50
Maine	15	10	11	4	6	*	*	*	0	29
Maryland	15	10	17	12	7	*	*	*	0	44
Massachusetts	16	10	22	7	7	*	*	*	0	46
Michigan	43	11	25	13	14	*	20	5	*	82
Minnesota	70	24	20	13	25	*	16	*	0	101
Mississippi	20	4	16	13	8	*	*	5	0	51
Missouri	45	21	10	17	12	4	26	4	*	95
Montana	17	7	9	4	7	*	10	*	0	36
Nebraska	35	14	13	15	4	*	22	4	0	68
Nevada	17	10	15	*	6	*	7	4	0	37
New Hampshire	19	9	15	5	5	*	*	*	0	37
New Jersey	21	14	32	7	9	*	*	*	0	51
New Mexico	22	8	9	6	4	*	6	4	0	39
New York	44	16	32	12	13	*	8	4	0	80
North Carolina	32	10	22	12	11	*	8	5	0	69
North Dakota	23	15	10	7	10	*	11	*	0	41
Northern Mariana Islands	*	0	*	*	*	0	*	0	0	*
Ohio	44	18	27	19	19	*	16	4	*	88
Oklahoma	40	8	21	10	9	*	16	4	0	74
Oregon	40	8	14	9	13	*	10	*	0	62
Pennsylvania	45	19	33	19	16	*	9	4	0	80
Puerto Rico	*	0	6	*	*	*	4	*	0	14
Rhode Island	10	6	11	*	5	*	0	*	0	23
South Carolina	24	7	19	14	11	*	4	4	0	46
South Dakota	24	9	10	7	11	4	9	*	0	44
Tennessee	24 29	13	10	12	10	*	6	5	0	68
Texas	65	22	35	26	21	*	48	6	0	138
Utah	14	10	55 11	20	21 8	*	48 10	5	0	39
Vermont	14	5	11	*	8 4	*	10	3 *	0	26
Virgin Islands	15	*	10	0	0	*	*	*	0	6
Virginia	26	11	26	14	13	*	12	4	0	67
Washington	20 30	11	20	14 14	13	*	21	4	*	72
West Virginia		4	23 10	14	18	*	21 4	*		32
	13					*			0 *	
Wisconsin	55 12	14	16	12 *	12	*	21	4		87
Wyoming	13	6	7		5		8	4	0	33
Nationwide	854	233	250	290	275	5	511	20	7	1,393

\* Indicates one to three providers.

Table 9	
High-Speed Lines by Technology as of December 31, 2007	
(Over 200 kbps in at least one direction)	

State	ADSL	SDSL	Traditional Wireline	Cable Modem	Fiber	Satellite	Fixed Wireless	Mobile Wireless	Power Line and Other	Total
Alabama	402,603	4,687	7,276	398,840	4,670	*	1,025	*	*	1,353,724
Alaska	67,386	7,555	472	*	*	*	9,683	*	0	171,257
American Samoa	*	*	0	0	0	0	*	0	0	*
Arizona	436,857	1,970	12,217	896,746	2,407	*	18,594	*	0	2,578,548
Arkansas	248,908	270	2,552	209,163	1,037	*	1,014	*	0	653,977
California	4,780,051	32,058	87,833	3,603,105	189,924	*	69,274	*	0	17,158,292
Colorado	573,387	2,662	16,787	604,247	2,539	*	25,186	*	0	2,269,027
Connecticut	*	3,120	4,896	550,019	2,385	*	20,100	*	0	1,837,729
Delaware	*	192	3,121	*	2,303	*	0	*	0	438,935
District of Columbia	*	2,142	2,900	*	918	*	*	*	0	420,251
Florida	2,046,084	7,681	56,426	2,543,384	168,491	*	39,328	*	*	7,415,862
Georgia	1,307,237	6,389	28,631	862,212	5,788	*	699	*	0	3,737,640
-	1,507,257		20,031	802,212						3,737,040
Guam	*	0 *		*	0	0 *	0 *	0	0	·
Hawaii			803		445				0	584,101
Idaho	142,440	379	1,617	123,067	972	*	40,949	*	0	613,110
Illinois	1,381,374	14,102	21,891	1,570,281	4,769	*	24,661	*	*	5,083,949
Indiana	635,507	3,932	8,931	439,417	41,861	*	11,965	*	*	2,267,037
Iowa	298,322	4,477	1,865	287,011	6,992	*	14,707	*	0	990,838
Kansas	235,919	4,558	5,782	366,557	4,202	*	16,327	*	0	987,350
Kentucky	367,452	4,860	4,864	434,900	2,895	*	3,094	*	0	1,161,667
Louisiana	333,076	1,289	4,990	485,349	19,031	*	2,516	*	*	1,286,450
Maine	117,393	3,595	5,061	179,398	2,980	*	*	*	0	396,074
Maryland	513,529	8,898	17,133	864,763	*	*	*	*	0	2,535,585
Massachusetts	*	5,803	17,457	1,135,807	*	*	*	*	0	3,140,383
Michigan	732,950	4,164	13,331	1,265,384	2,412	*	9,510	*	*	3,557,139
Minnesota	496,317	16,178	7,014	607,269	9,570	*	30,282	*	0	1,960,710
Mississippi	202,262	168	2,267	166,092	781	*	*	*	0	489,413
Missouri	682,572	5,727	11,367	497,878	3,569	*	8,157	*	*	1,865,899
Montana	103,798	2,974	884	83,006	443	*	8,234	*	0	433,903
	135,305	3,707	1,021	251,699	565	*	11,929	*	0	633,593
Nebraska Nevada	220,409	3,707	5,340	231,099	916	*	13,303	*	0	
					910	*	15,505	*		1,159,167
New Hampshire	99,602	2,222	5,300	239,605	*	*	*	*	0	637,954
New Jersey	734,903	4,798	21,009	1,538,490					0	4,923,248
New Mexico	200,497	360	1,946	126,692	874 *	*	2,729	*	0	661,684
New York	1,184,011	20,364	32,794	3,341,913		*	3,832	*	0	8,096,486
North Carolina	820,334	3,398	18,351	1,195,757	7,606	*	*	*	0	3,484,666
North Dakota	55,635	3,269	347	79,755	7,213	*	5,319	*	0	292,054
Northern Mariana Isl.	*	0	*	*	*	0	*	0	0	*
Ohio	1,024,412	4,415	14,368	1,498,317	7,349	*	19,417	*	*	4,612,073
Oklahoma	324,322	1,394	3,917	372,867	2,817	*	4,125	*	0	971,862
Oregon	355,563	12,644	5,946	531,258	*	*	25,988	*	0	1,566,567
Pennsylvania	1,191,348	17,049	21,628	1,398,950	*	*	8,369	*	0	5,148,613
Puerto Rico	*	0	1,151	*	*	*	5,027	*	0	470,663
Rhode Island	*	1,025	1,772	*	*	*	0	*	0	490,634
South Carolina	359,439	328	10,657	496,188	10,685	*	104	*	0	1,586,036
South Dakota	48,750	4,313	200	111,009	6,385	*	5,175	*	0	185,017
Tennessee	499,164	834	11,097	702,891	20,742	*	3,809	*	0	2,518,783
Texas	2,463,911	13,168	42,540	2,183,062	210,468	*	88,520	*	0	8,336,432
Utah	269,785	6,088	4,087	2,105,002	2,307	*	23,387	*	0	996,589
Vermont	72,006	*	2,336	*	457	*	*	*	0	240,251
Virgin Islands	*	*	2,330	0		*	*	*	0	18,996
Virginia	568,284	4,258	16,580	921,438	151,030	*	11,884	*	*	3,279,536
Washington						*		*	*	
U	592,133	9,884 *	10,347	909,108	27,525 *	*	67,236	*		3,114,392
West Virginia	137,948		3,271	158,921			1,046		0	336,283
Wisconsin	528,196	14,626	7,640	675,737	5,325	*	11,640	*	*	1,729,165
Wyoming	52,602	1,729	157	*	338	*	3,742	*	0	260,191
Nationwide	29,451,719	293,974	592,295	36,497,284	1,850,695	791,142	705,014	50,977,914	5,274	121,165,311

## Table 10High-Speed Lines by State(Over 200 kbps in at least one direction)

<b>a</b>	2001	2002	2003	2004	2005	20	006	2007				
State	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec			
Alabama	138,979	227,888	352,215	410,054	531,350	615,510	898,850	1,118,302	1,353,724			
Alaska	50,277	55,975	71,778	110,416	109,484	125,005	145,008	156,187	171,257			
American Samoa	0	0	0	0	*	*	*	*	*			
Arizona	248,172	367,322	532,161	745,957	1,039,445	1,392,711	1,832,564	2,192,644	2,578,548			
Arkansas	66,377	100,089	157,959	220,051	302,881	363,933	431,530	529,530	653,977			
California	1,971,228	2,960,664	4,084,382	5,294,566	7,337,217	9,395,265	11,894,864	14,458,874	17,158,292			
Colorado	171,992	292,697	418,866	615,101	882,669	1,165,853	1,489,091	1,827,962	2,269,027			
Connecticut	188,164	304,338	440,480	598,582	807,796	1,024,053	1,262,569	1,547,949	1,837,729			
Delaware	25,955	50,380	68,210	91,975	132,399	1,024,033	273,734	353,763	438,935			
District of Columbia	32,521	52,873	76,275	101,638	132,599	200,221	268,008	337,897	420,251			
Florida	893,473	1,388,166	1,966,835	2,659,862	3,537,720	4,408,427	5,346,321	6,349,093	7,415,862			
Georgia	402,259	635,776	906,217	1,205,282	1,610,750	2,054,171	2,547,165	3,087,975	3,737,640			
Guam	402,239	035,770	00,217	1,205,202	1,010,750	2,034,171	2,547,105	3,007,975	3,737,040			
Hawaii	*	*	*	*	*	294,612	417,674	486,337	584,101			
Idaho	18,445	54,963	80,455	126,121	167,926	202,521	381,283	483,049	613,110			
Illinois	395,843	704,780	1,056,170	1,497,803	2,159,932	2,666,304	3,538,857	4,310,744	5,083,949			
Indiana	120,794	202,760	415,603	637,696	922,569	1,191,752	1,417,112	1,812,488	2,267,037			
Iowa	82,024	121,053	191,464	266,794	394,359	446,187	657,102	826,217	990,838			
Kansas	125,685	121,033	284,467	386,747	470,287	595,979	728,569	870,843	987,350			
	67,870	99,265	284,407 243,005	360,903	508,198	629,538	728,509	959,771	1,161,667			
Kentucky Louisiana	164,760	262,093	368,528	486,077	508,009	730,203	892,835	1,088,803	1,286,450			
Maine	49,220	72,683	98,768	142,246	214,599	248,440	306,006	358,986	396,074			
Maryland					1,120,826				2,535,585			
Maryland Massachusetts	250,580	380,538	565,857	782,757		1,492,484	1,813,960 2,243,742	2,172,522				
	489,429	661,471	900,025	1,122,230	1,431,925	1,811,845	· · ·	2,660,501	3,140,383			
Michigan Minnesota	427,110 195,327	633,490 330,635	840,855 480,122	1,088,090 645,505	1,557,918 855,752	1,917,892 1,057,576	2,430,869 1,312,900	2,969,105 1,579,346	3,557,139 1,960,710			
Mississippi	35,203	80,452	115,973	168,393	219,552	262,671	332,307	399,571	489,413			
Missouri Montana	178,469	256,492 20,090	433,714	584,743	811,837	1,016,732 139,946	1,275,123	1,566,595	1,865,899			
	13,037		39,240	72,880	112,662		264,121	346,230	433,903			
Nebraska Nevada	71,451 109,300	117,219	173,524 246,714	216,780	305,120	355,013	470,118	537,693	633,593			
		158,508		343,111	474,019	614,151	792,950	1,060,542	1,159,167			
New Hampshire	70,735	102,057	148,574	215,168	268,128	302,957	443,207	539,686	637,954			
New Jersey	553,308	798,410	1,061,722	1,423,698	1,989,803	2,654,674 252,361	3,392,607	4,153,343	4,923,248			
New Mexico	31,507	57,430	91,066	145,125	204,054		422,964	544,706	661,684			
New York	1,109,662	1,623,989	2,152,711	2,688,731	3,660,500	4,854,803	5,669,523	6,800,348	8,096,486			
North Carolina North Dakota	357,380	593,609	841,572	1,119,805	1,482,930	1,914,822	2,366,079	2,893,582 144,994	3,484,666			
	6,082	20,024 0	31,571	47,957	96,314 *	108,476	131,348	144,994	292,054			
Northern Mariana Isl. Ohio	0	705,739	072 686	0 1,340,976	1,932,269	2,461,379	3,200,543		4 612 072			
Oklahoma	432,338	193,123	972,686	387,456	502,984			3,960,289 781,549	4,612,073			
	111,918	,	282,596			569,398	657,940	1,285,947	971,862			
Oregon	156,147	273,433 616,407	378,226 954,083	508,068	688,487	860,385	1,060,386	4,121,608	1,566,567			
Pennsylvania	361,383			1,386,259	1,999,118	2,646,898	3,374,313 251,163	· · ·	5,148,613			
Puerto Rico Rhode Island		22,732 88,701	31,100 121,027	61,554 164,034	118,268	169,917 276,141	231,103 349,994	332,671	470,663 490,634			
	63,284				221,901	· · · · · ·		416,053				
South Carolina	135,165	222,980	310,906	415,844	549,019	646,344	1,041,762	1,308,281	1,586,036			
South Dakota	9,585	18,060	28,557	40,286	124,243	138,621	154,738	164,627	185,017			
Tennessee	236,514	368,242	470,092	628,846 2,551,963	847,025	1,153,432 4,357,437	1,574,022	2,036,625	2,518,783			
Texas	806,853	1,312,096	1,883,228		3,467,504		5,554,547	6,863,269	8,336,432 996,589			
Utah Verment	71,804	120,313	161,283	236,287	313,854	471,137	638,618	818,665	,			
Vermont	21,795	32,814	44,724	72,400	95,901	108,622	170,245	193,151	240,251			
Virgin Islands		450.200		001 022	2,967	7,226	11,139	16,014	18,996			
Virginia Washington	281,793	450,389	702,245	981,832	1,367,465	1,792,817	2,197,693	2,689,907	3,279,536			
Washington	335,667	485,063	672,247	889,368	1,219,631	1,575,375	2,015,564	2,481,537	3,114,392			
West Virginia	32,848	78,980	100,937	155,397	205,984	245,669	268,746	306,449	336,283			
Wisconsin	181,915	335,593	488,155	649,091	859,114	1,034,646	1,253,335	1,491,887	1,729,165			
Wyoming	7,856	14,696	24,818	45,602	70,574	83,086	156,940	205,711	260,191			
Nationwide	12,390,534	19,441,619	27,744,342	37,352,520	51,217,519	65,270,912	82,809,845	101,008,249	121,165,311			

\* Data withheld to maintain firm confidentiality.

Some historical data have been revised.

## Table 11ADSL High-Speed Lines by State(Over 200 kbps in at least one direction)

G4 4	2001	2002	2003	2004	2005	20	006	20	007
State	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec
Alabama	34,785	56,860	112,274	135,282	220,657	268,970	314,640	356,830	402,603
Alaska	7,975	14,295	17,184	33,690	43,249	53,687	60,055	63,708	67,386
American Samoa	0	0	0	0	*	*	*	*	*
Arizona	53,489	72,324	87,263	136,260	207,727	276,261	365,228	405,724	436,857
Arkansas	22,240	35,594	60,435	100,987	149,878	180,883	200,129	226,842	248,908
California	928,345	1,485,309	2,065,780	2,700,380	3,592,220	4,001,529	4,342,556	4,582,000	4,780,051
Colorado	70,615	113,040	155,137	248,285	333,313	404,989	473,148	529,504	573,387
Connecticut	41,261	100,722	167,439	244,509	*	*	*	*	*
Delaware	*1,201	*	*	16,490	*	*	*	*	*
District of Columbia	*	35,466	44,440	51,127	*	*	*	*	*
Florida	306,015	521,623	786,275	1,110,846	1,509,104	1,722,888	1,873,271	1,960,025	2,046,084
Georgia	172,556	305,004	452,567	636,170	890,128	1,008,705	1,126,082	1,218,885	1,307,237
Guam	0	0	452,507	050,170	890,128	1,000,705	1,120,082	1,210,005	1,307,237
	*	0 *	*	*	*	*	*	*	*
Hawaii									1 4 2 4 4 0
Idaho	13,643	17,930	24,503	48,500	81,520	97,662	113,001	129,188	142,440
Illinois	110,448	300,497	466,052	707,771	979,709	1,094,088	1,211,763	1,299,358	1,381,374
Indiana	22,385	63,463	129,341	239,454	379,465	443,473	515,054	566,103	635,507
Iowa	13,193	29,161	48,226	88,707	150,890	189,178	233,039	270,222	298,322
Kansas	23,564	39,315	68,044	112,063	159,996	179,430	202,751	217,231	235,919
Kentucky	43,191	55,254	94,126	148,963	213,131	250,715	303,296	340,350	367,452
Louisiana	58,019	86,359	116,047	163,021	207,488	235,750	270,811	306,283	333,076
Maine	*	8,432	17,785	41,000	72,709	89,964	104,780	115,138	117,393
Maryland	79,997	115,687	152,906	249,379	379,316	450,019	489,553	512,156	513,529
Massachusetts	125,630	181,426	230,333	302,537	*	*	*	*	*
Michigan	52,505	111,182	175,202	299,861	463,373	533,835	606,616	668,725	732,950
Minnesota	67,527	98,316	134,914	188,181	276,439	330,736	394,686	449,452	496,317
Mississippi	*	*	41,740	71,993	105,874	128,585	154,179	180,281	202,262
Missouri	68,186	114,861	182,119	282,904	398,671	468,334	545,679	618,302	682,572
Montana	4,272	6,549	19,417	36,183	57,300	70,471	82,876	95,790	103,798
Nebraska	13,637	16,117	25,599	46,283	81,188	95,404	112,032	124,126	135,305
Nevada	17,598	36,662	61,014	93,145	139,938	168,086	190,202	207,051	220,409
New Hampshire	9,618	14,630	23,555	42,835	71,689	85,247	93,589	98,283	99,602
New Jersey	151,829	197,615	251,754	372,949	540,382	638,293	703,950	734,700	734,903
New Mexico	*	22,607	36,546	68,359	105,210	130,998	156,620	179,856	200,497
New York	285,814	391,686	497,071	641,321	861,452	1,002,972	1,103,960	1,181,851	1,184,011
North Carolina	65,582			340,520	488,533	561,102	648,001	724,936	
North Dakota		124,031	210,958						820,334
	4,849	8,826	14,034	23,874	32,000	38,729	46,346 *	51,096 *	55,635
Northern Mariana Isl.	0	0	0	0					*
Ohio	112,527	205,140	303,969	455,336	663,011	752,633	858,846	945,096	1,024,412
Oklahoma	39,978	65,378	106,031	158,490	222,048	246,899	277,282	301,523	324,322
Oregon	57,899	82,555	117,253	171,861	244,694	280,286	311,604	338,765	355,563
Pennsylvania	136,829	200,501	284,870	436,503	692,079	871,164	1,012,845	1,125,794	1,191,348
Puerto Rico	*	*	*	*	*	*	*	*	*
Rhode Island	*	*	*	*	*	*	*	*	*
South Carolina	18,686	38,293	77,599	128,042	205,529	242,548	284,892	322,858	359,439
South Dakota	2,869	6,308	11,635	18,357	26,168	32,763	39,684	45,772	48,750
Tennessee	42,571	74,034	116,785	193,879	293,915	348,344	396,928	446,551	499,164
Texas	300,752	486,833	772,697	1,104,776	1,513,639	1,733,423	1,997,483	2,180,136	2,463,911
Utah	33,306	57,025	76,466	113,033	160,313	189,240	222,307	249,683	269,785
Vermont	*	12,062	18,646	28,524	43,934	51,382	61,441	68,041	72,006
Virgin Islands	*	*	*	*	*	*	*	*	*
Virginia	65,298	96,805	144,584	254,355	384,243	446,448	505,285	547,941	568,284
Washington	140,273	200,189	262,149	338,321	427,451	491,409	533,668	569,397	592,133
West Virginia	*	*	*	39,566	69,390	86,507	104,637	123,645	137,948
Wisconsin	28,233	64,521	120,236	202,882	298,111	359,530	417,510	473,795	528,196
	20,233	04,521						473,793 49,933	
Wyoming			8,467	20,402	33,030	38,541	44,347	49,933	52,602
Nationwide	3,947,808	6,471,716	9,509,442	13,817,280	19,515,483	22,584,255	25,412,883	27,561,867	29,451,719

\* Data withheld to maintain firm confidentiality.

Some historical data have been revised.

Table 12
Coaxial Cable High-Speed Lines by State
(Over 200 kbps in at least one direction)

	2001	2002	2003	2004	2005	20	06	2	007
State	Dec	Dec	Dec	Dec	Dec	Jun	Dec	Jun	Dec
Alabama	83,933	144,259	207,397	233.004	285,177	310,548	342,340	374.029	398,840
Alaska	*	*	_0.,027.	*	*	*	*	*	*
American Samoa	0	0	0	0	0	0	0	0	0
Arizona	151,916	251,373	396,960	549,613	679,284	761,419	838,455	850,307	896,746
Arkansas	*	*	86,441	106,055	137,105	148,940	183,503	205,349	209,163
California	786,789	1,179,204	1,706,217	2,213,138	2,734,659	2,956,932	3,155,718	3,410,983	3,603,105
Colorado	*	*	231,075	332,927	433,184	476,463	523,159	560,557	604,247
Connecticut	137,003	192,155	260,415	341,146	403,723	441,092	454,348	513,211	550,019
Delaware	*	*	*	*	*	*	*	*	*
District of Columbia	*	*	*	*	*	*	*	*	*
Florida	486,977	741,426	1.050.062	1,384,059	1,757,875	1,939,409	2,178,484	2,344,445	2,543,384
Georgia	156,142	243,142	361,127	468,027	583,884	649,583	742,552	802,047	862,212
Guam	0	0	0	0	0	0	0	0	*
Hawaii	0	*	*	*	*	*	*	*	*
Idaho	*	*	*	*	73,528	75,185	108,595	116,273	123,067
Illinois	204,202	316,169	494,110	691,214	955,518	1,042,272	1,332,023	1,465,869	1,570,281
Indiana	78,837	114,237	257,023	364,887	445,420	490,020	370,200	410,438	439,417
Iowa	63,788	83,994	131,073	163,293	219,803	225,190	234,266	267,712	287,011
Kansas	94,047	142,563	199,369	246,185	272,660	316,866	320,638	351,371	366,557
Kentucky	*	22,113	124,535	183,726	269,274	306,487	333,339	383,593	434,900
Louisiana	88,851	*	227,047	291,857	254,819	378,613	419,735	446,485	485,349
Maine	*	*	*	95,182	132,075	145,831	152,291	169,458	179,398
Maryland	143,174	241,264	385,408	501,144	592,283	637,405	781,120	829,473	864,763
Massachusetts	339,244	453,473	638,441	778,595	885,578	954,812	1,044,333	1,088,170	1,135,807
Michigan	329,697	472,405	611,131	733,511	953,786	1,019,338	1,103,040	1,197,105	1,265,384
Minnesota	113,900	212,126	317,853	404,135	493,783	518,063	541,116	570,874	607,269
Mississippi	12,998	40,276	61,163	80,210	104,363	114,140	135,965	151,539	166,092
Missouri	89,370	117,403	221,917	264,917	353,331	400,808	444,118	473,449	497,878
Montana	*	*	*	29,278	45,442	54,056	65,238	74,246	83,006
Nebraska	49,939	92,261	130,319	155,796	200,600	218,335	239,465	238,019	251,699
Nevada	*	*	*	*	*	*	*	*	*
New Hampshire	*	*	118,456	165,188	188,212	201,873	209,781	229,855	239,605
New Jersey	375,362	578,337	781,898	1,015,944	1,205,182	1,312,433	1,385,953	1,473,709	1,538,490
New Mexico	*	*	47,721	68,143	89,003	100,157	108,906	117,336	126,692
New York	780,473	1,185,233	1,597,556	1,976,663	2,444,565	2,765,476	2,967,028	3,164,178	3,341,913
North Carolina	239,107	406,024	559,276	691,904	861,990	963,651	1,040,513	1,134,075	1,195,757
North Dakota	239,107	****	13,030	17,307	54,772	57,722	70,878	76,353	79,755
Northern Mariana Isl.	0	0	0	0	0	0	0	0	*
Ohio	264,031	435,404	597,442	804,712	1,064,948	1,184,924	1,303,470	1,405,899	1,498,317
Oklahoma	204,051	*	*	*	261,585	284,184	312,500	347,813	372,867
Oregon	*	165,343	233,737	301,586	375,351	407,195	452,517	489,902	531,258
Pennsylvania	190,915	376,611	621,381	885,925	1,074,912	1,164,080	1,255,720	1,271,157	1,398,950
Puerto Rico	0	*	*	*	*	*	*	*	*
Rhode Island	*	*	*	*	*	*	*	*	*
South Carolina	96,559	159,944	209,889	252,646	326,370	368,338	417,584	459,110	496,188
South Dakota	*	7,916	11,042	14,103	88,812	92,860	100,155	100,903	111,009
Tennessee	158,120	252,596	308,630	386,258	460,235	506,143	601,889	662,520	702,891
Texas	427,324	740,469	1,019,623	1,320,225	1,617,513	1,692,433	1,944,069	2,081,963	2,183,062
Utah	*	*	*	*	*	*	*	2,001,905	2,103,002
Vermont	*	*	*	*	*	*	*	*	*
Virgin Islands	0	0	0	0	0	0	0	0	0
Virginia	182,591	320,154	517,924	681,914	817,100	892,955	877,235	906,252	921,438
Washington	162,391	246,627	367,321	498,934	660,159	725,832	877,233	900,232 862,049	921,438 909,108
West Virginia	*	65,542	78,018	108,585	128,133	145,450	144,569	155,867	158,921
Wisconsin	*	243,043	334,394	408,512	497,262	542,881	591,981	636,675	675,737
Wyoming	*	245,045	334,394	* *	497,202	342,001	391,981	030,075	*
									-
Nationwide	7,059,598	11,369,087	16,446,322	21,357,400	26,558,206	29,174,494	31,981,705	34,404,368	36,497,284

Some historical data have been revised.

State	Residential	Business	Total
Alabama	808,291	545,433	1,353,724
Alaska	148,121	23,136	171,257
American Samoa	*	23,130	*
Arizona	1,451,169	1,127,379	2,578,548
Arkansas	532,171	1,127,379	653,977
California	9,843,965	7,314,327	17,158,292
Colorado			
	1,330,093	938,934	2,269,027
Connecticut	1,064,363	773,366	1,837,729
Delaware	223,672	215,263	438,935
District of Columbia	181,016	239,235	420,251
Florida	5,097,432	2,318,430	7,415,862
Georgia	2,296,983	1,440,657	3,737,640
Guam	*	*	*
Hawaii	338,668	245,433	584,101
Idaho	314,069	299,041	613,110
Illinois	3,274,074	1,809,875	5,083,949
Indiana	1,206,274	1,060,763	2,267,037
Iowa	581,263	409,575	990,838
Kansas	680,270	307,080	987,350
Kentucky	843,641	318,026	1,161,667
Louisiana	931,017	355,433	1,286,450
Maine	288,491	107,583	396,074
Maryland	1,672,064	863,521	2,535,585
Massachusetts	1,852,275	1,288,108	3,140,383
Michigan	2,160,962	1,396,177	3,557,139
Minnesota	1,210,079	750,631	1,960,710
Mississippi	384,772	104,641	489,413
Missouri	1,366,311	499,588	1,865,899
Montana	185,251	248,652	433,903
Nebraska	406,674	226,919	633,593
Nevada	730,495	428,672	1,159,167
New Hampshire	354,559	283,395	637,954
New Jersey	2,562,919	2,360,329	4,923,248
New Mexico	343,568	318,116	661,684
New York	5,059,401	3,037,085	8,096,486
North Carolina	2,081,708	1,402,958	3,484,666
North Dakota	137,207	154,847	292,054
Northern Mariana Islands	*	*	*
Ohio	2,634,429	1,977,644	4,612,073
Oklahoma	815,765	156,097	971,862
Oregon	1,006,057	560,510	1,566,567
Pennsylvania	2,852,177	2,296,436	5,148,613
Puerto Rico	413,322	57,341	470,663
Rhode Island	282,557	208,077	490,634
South Carolina	844,013	742,023	1,586,036
South Carolina South Dakota	160,821	24,196	1,586,056
Tennessee	1,263,139	1,255,644	2,518,783
Texas			8,336,432
	5,819,303	2,517,129 493,803	
Utah Vermont	502,786	,	996,589 240 251
Vermont	133,503	106,748	240,251
Virgin Islands	16,977	2,019	18,996
Virginia	1,790,773	1,488,763	3,279,536
Washington	1,783,479	1,330,913	3,114,392
West Virginia	297,852	38,431	336,283
Wisconsin	1,285,065	444,100	1,729,165
Wyoming	109,748	150,443	260,191
Nationwide	73,976,483	47,188,828	121,165,311

Table 13High-Speed Lines by Type of End User as of December 31, 2007<br/>(Over 200 kbps in at least one direction)

#### Table 14

State	xDSL Availability Where ILECs Can Provide Telephone Service	Cable Modem Availability Where Cable Systems Can Provide Cable TV Service
Alabama	77%	92%
Alaska	77%	*
American Samoa	*	0%
Arizona	83%	99%
Arkansas	75%	73%
California	90%	99%
Colorado	88%	96%
Connecticut	*	100%
Delaware	*	*
District of Columbia	*	*
Florida	89%	97%
	92%	90%
Georgia	92% *	
Guam	*	0%
Hawaii		
daho	80%	99%
llinois	85%	98%
ndiana	80%	92%
owa	85%	90%
Kansas	83%	91%
Kentucky	86%	91%
Louisiana	81%	96%
Maine	69%	93%
Maryland	75%	99%
Aassachusetts	*	100%
Michigan	71%	98%
Ainnesota	86%	96%
		91%
Mississippi	72%	
Missouri	79%	97%
Montana	78%	88%
Nebraska	86%	93%
Nevada	89%	*
New Hampshire	62%	98%
New Jersey	86%	96%
New Mexico	82%	77%
New York	76%	99%
North Carolina	85%	96%
North Dakota	88%	82%
Northern Mariana Isl.	*	0%
Dhio	84%	98%
Dklahoma	80%	91%
Dregon	82%	95%
Pennsylvania	83%	93%
Puerto Rico	*	*
Rhode Island	*	*
South Carolina	82%	92%
	82%	80%
South Dakota		
Tennessee	82%	96%
Texas	80%	96%
Jtah	87%	*
/ermont	69%	*
/irgin Islands	*	0%
Virginia	65%	97%
Vashington	82%	98%
Vest Virginia	74%	84%
Visconsin	81%	96%
Vyoming	81%	*
Nationwide	82%	96%

\* Data withheld to maintain firm confidentiality.

xDSL includes both asymmetric and symmetric DSL. Each state-specific estimate is a weighted average of the availability percentages that ILECs or cable system operators report for the areas they serve. Reported xDSL availability is weighted by ILEC end-user switched access lines. Reported cable modem availability is weighted by cable TV subscribers. The weighted averages include ILECs or cable system operators that report no availability.

 Table 15

 Percentage of Zip Codes with High-Speed Lines in Service

Number of	2000	200	)1	200	2	200	3	200	04	20	05	20	06	20	07
Providers	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec
Zero	26.8 %	22.2 %	20.6 %	16.1 %	12.0 %	9.0 %	6.8 %	5.7 %	4.6 %	2.0 %	1.0 %	0.7 %	0.4 %	0.1 %	0.2 %
One	22.7	20.3	19.3	18.4	17.3	16.4	14.9	13.8	12.5	9.3	5.6	3.7	2.4	0.9	1.3
Two	18.4	16.7	15.7	16.2	16.8	16.9	17.1	16.8	16.3	14.1	11.9	8.2	5.7	3.6	3.8
Three	10.9	13.2	13.1	13.3	14.4	14.0	14.9	14.9	15.1	15.0	14.8	11.3	8.9	7.0	6.7
Four	6.1	8.2	9.1	9.6	10.3	10.6	11.2	11.6	12.2	12.6	13.5	12.9	11.4	11.1	10.3
Five	4.0	4.9	6.1	6.9	7.3	7.7	7.8	8.4	8.9	9.7	10.3	12.2	12.5	13.6	12.8
Six	3.0	3.6	4.2	4.6	5.0	5.3	5.8	6.1	6.3	6.8	7.8	10.4	11.7	13.0	13.4
Seven	2.3	2.8	3.2	3.2	3.9	4.0	4.2	4.4	4.6	5.3	5.7	8.7	10.0	11.6	11.2
Eight	2.0	2.2	2.5	2.8	2.7	3.1	3.3	3.6	3.6	4.0	4.6	7.1	8.3	9.1	9.0
Nine	1.6	1.9	2.0	2.4	2.2	2.5	2.6	2.8	3.1	3.8	4.0	5.8	6.7	7.4	7.4
Ten or More	2.4	3.9	4.0	6.4	8.0	10.5	11.4	11.8	12.8	17.5	20.7	19.1	22.0	22.7	23.8

For data through December 2004, only those providers with at least 250 lines per state were required to file. Figures may not add up to 100% due to rounding.

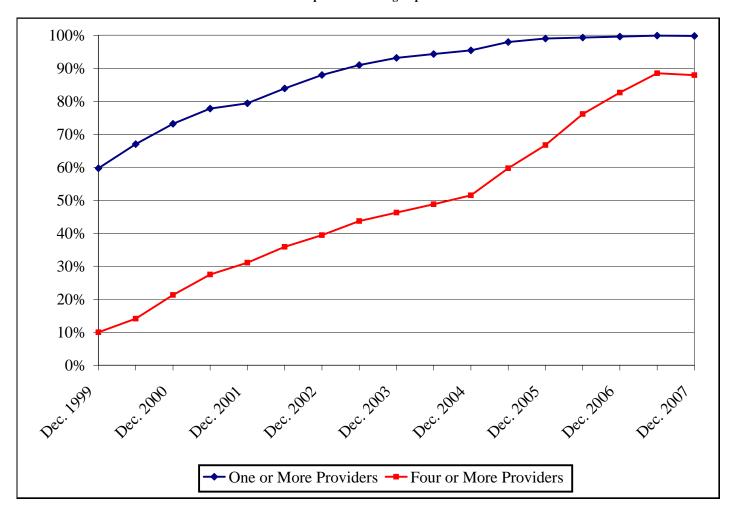


Chart 12 Percent of Zip Codes with High-Speed Providers

 Table 16

 Percentage of Zip Codes with High-Speed Lines in Service by Technology as of December 31, 2007

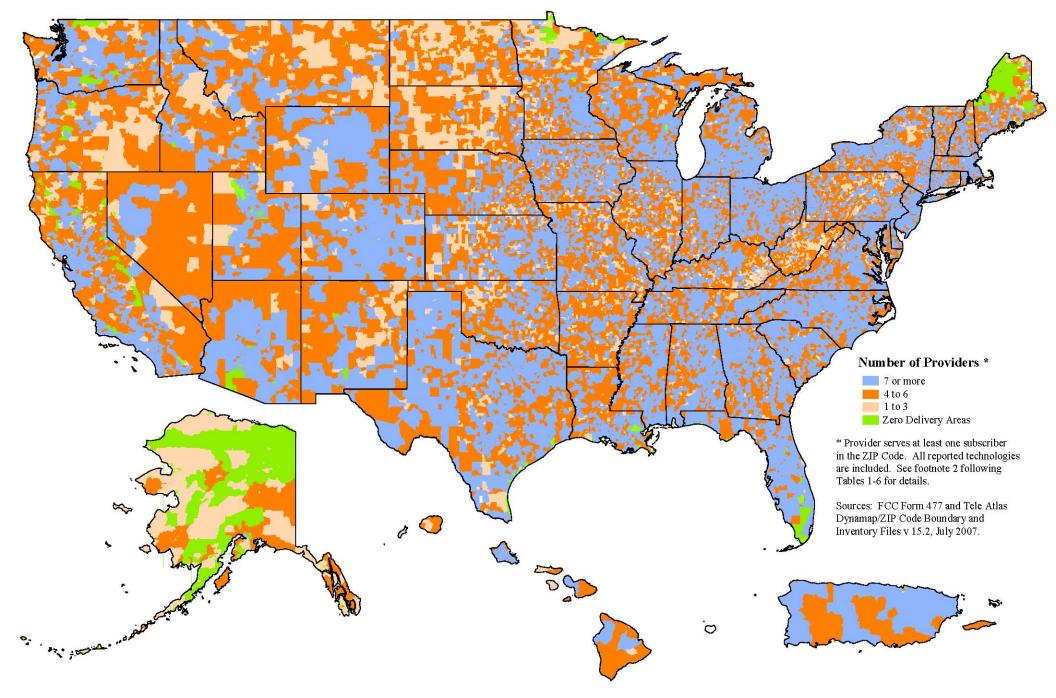
	Number of Providers										
Technology	Zero	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten or More
ADSL	13.4	37.5	20.4	10.9	7.2	5.0	2.8	1.5	0.9	0.3	0.2
SDSL	60.9	20.0	7.0	5.0	3.7	2.0	0.9	0.3	0.2	0.0	0.0
Cable Modem	34.2	56.5	8.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fiber	63.2	19.4	10.6	4.6	1.6	0.5	0.1	0.0	0.0	0.0	0.0
Satellite	7.0	22.4	50.1	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Wireless	74.0	20.0	4.9	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Mobile Wireless	6.0	27.5	31.8	29.6	4.9	0.2	0.0	0.0	0.0	0.0	0.0
Power Line and/or Other <sup>1</sup>	85.1	12.0	2.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADSL and/or Cable Modem	9.0	23.7	21.6	15.9	10.4	7.3	5.2	3.3	1.8	1.1	0.7
All Technologies	0.2	1.3	3.8	6.7	10.3	12.8	13.4	11.2	9.0	7.4	23.8

Figures may not add up to 100% due to rounding.

<sup>1</sup>Other includes high-speed lines provided over traditional wireline facilities such as T-carrier and also lines provided over any technology that is not specified in the table.

## High-Speed Providers by 5-Digit Geographical ZIP Code

(As of December 31, 2007)



Prepared by the Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division

 Table 17

 Percentage of Zip Codes with High-Speed Lines in Service as of December 31, 2007 (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	0 %	1 %	1 %	3 %	7 %	12 %	15 %	15 %	12 %	10 %	24 %
Alaska	0	15	35	22	15	6	1	1	4	0	0
Arizona	0	0	1	1	6	9	10	10	6	10	46
Arkansas	0	2	8	10	18	21	15	10	5	7	3
California	0	0	3	5	10	9	8	7	7	8	43
Colorado	0	0	2	4	7	8	9	10	12	8	40
Connecticut	0	0	0	3	7	14	17	14	13	9	25
Delaware	0	0	2	2	3	12	21	9	17	5	29
District of Columbia	0	0	0	4	4	0	4	0	0	0	88
Florida	0	0	0	0	1	4	7	9	9	11	58
Georgia	0	0	1	3	6	12	14	13	9	7	33
Hawaii	0	1	4	9	16	18	16	10	17	9	1
Idaho	0	1	4	10	10	16	18	9	10	6	17
Illinois	0	2	4	9	12	15	12	9	8	7	21
Indiana	0	1	3	5	11	15	12	13	10	9	18
Iowa	0	1	3	8	12	15	17	13	10	8	10
Kansas	0	1	6	10	12	13	13	10	9	9	17
Kentucky	4	10	10	13	12	13	12	8	7	3	8
Louisiana	4 0	10	10	3	8	14	22	12	7 7	3 7	24
Maine	2	3	8	11	18	13	16	12	7	4	5
	0	5 0	8 2	5	18	14 16	10	12	7	4 5	3 34
Maryland Magaaahugatta	0	0	0		8 3	10	15	10	11		34
Massachusetts				2						9	
Michigan	0	0	0	2	6	10	15	16	12	9	28
Minnesota	0	3	8	12	14 11	13 18	12	9 12	7	4 7	18 22
Mississippi	0	0		3			16				
Missouri	0	2 2	5	10	13	16	15	10	8	7	14
Montana Nalamata	0		6	19	27	16	10	4	7	3	6
Nebraska	0	1	4	9 7	17	16 12	20	12	8	5	8
Nevada	0	0	1	5	13	12	12	10	5	12	31
New Hampshire	0	0	0	2	4	15	24	20	13	8	13
New Jersey	0	0	0	1	2	4	8	9	11	12	52
New Mexico	0	2	3	10	15	21	16	10	5	5	14
New York	0	0	2	5	10	12	13	12	9	7	29
North Carolina	0	0	1	2	4	11	17	17	13	9	25
North Dakota	0	2	19	27	23	15	6	2	3	1	2
Ohio	0	0	0	1	2	8	16	17	16	12	28
Oklahoma	0	1	6	10	18	16	11	8	11	8	11
Oregon	0	2	4	13	16	13	10	9	6	4	22
Pennsylvania	1	2	7	8	11	14	12	10	7	6	22
Puerto Rico	0	0	0	2	2	7	21	34	21	13	1
Rhode Island	0	0	1	1	8	8	12	15	15	15	24
South Carolina	0	0	1	3	7	10	16	12	11	12	28
South Dakota	0	3	16	24	19	14	9	6	3	1	4
Tennessee	0	1	2	6	10	15	15	11	8	7	24
Texas	0	0	1	4	7	10	12	13	12	10	29
Utah	0	1	4	3	14	15	10	10	5	5	32
Vermont	0	0	3	9	19	17	19	14	9	5	4
Virginia	0	1	2	6	12	15	16	14	7	5	22
Washington	0	0	4	6	10	12	10	10	7	8	33
West Virginia	1	6	13	17	20	15	13	6	3	4	2
Wisconsin	0	1	1	5	8	20	19	14	8	6	18
Wyoming	0	0	1	7	14	15	20	13	9	4	16
Nationwide	0 %	1 %	4 %	7 %	10 %	13 %	13 %	11 %	9 %	7 %	24 %

# Table 18High-Speed SubscribershipRanked by Population Density

Persons per Square Mile <sup>1</sup>	Percentage of Zip Codes with at Least One High-Speed Subscriber							Percentage of Population that Resides in Zip Codes with High-Speed Service					ervice	
wine	Dec 2001	Dec 2002	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007	Dec 2001	Dec 2002	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007
More Than 3,147	98.1 %	98.7 %	98.9 %	99.1 %	99.2 %	99.5 %	99.6 %	99.8 %	100.0 %	100.0 %	100.0 %	99.9 %	99.9 %	99.9 %
947-3,147	97.3	98.2	98.5	98.7	99.3	99.7	99.7	99.7	100.0	99.9	99.9	99.9	99.9	99.9
268-947	95.8	97.9	98.8	99.1	99.3	99.5	99.6	99.5	99.9	100.0	100.0	100.0	100.0	100.0
118-268	93.3	96.7	97.9	98.2	99.2	99.3	99.2	99.1	99.7	99.8	99.8	99.8	99.8	99.9
67-118	89.3	95.0	97.5	98.0	98.8	99.0	98.9	97.1	99.1	99.7	99.7	99.8	99.8	99.7
41-67	83.3	91.5	96.0	97.5	98.8	99.1	99.3	94.4	97.8	99.0	99.3	99.5	99.5	99.6
25-41	73.1	87.6	92.6	95.5	98.1	98.6	98.7	87.6	95.6	97.7	98.5	99.3	99.5	99.4
15-25	61.2	77.8	88.0	91.4	96.6	97.8	97.8	80.4	90.8	95.7	96.8	98.9	99.1	99.2
6-15	52.1	69.4	82.7	86.2	95.8	97.2	97.5	76.2	86.4	93.2	95.0	98.4	98.7	98.8
Fewer Than 6	43.3	59.7	73.5	74.8	88.3	89.8	90.3	67.9	80.9	88.9	91.8	96.2	96.8	96.9

## Table 19High-Speed SubscribershipRanked by Household Income

Median Household	Р	Percentage of Zip Codes with at Least One High-Speed Subscriber					Percentage of Population that Resides in Zip Codes with High-Speed Servic				rvice			
Income <sup>1</sup>	Dec 2001         Dec 2002         Dec 2003         Dec 2004         Dec 2005         Dec 2006         Dec 2007				Dec 2007	Dec 2001	Dec 2002	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007		
\$53,494 to \$291,938	96.8 %	98.3 %	98.7 %	98.8 %	99.1 %	99.4 %	99.4 %	99.6 %	99.9 %	99.9 %	99.8 %	99.8 %	99.8 %	99.8 %
\$43,617 to \$53,478	91.7	95.3	97.4	97.6	98.7	99.0	99.0	99.3	99.8	99.9	99.9	99.9	99.9	99.9
\$38,396 to \$43,614	84.9	92.1	96.0	96.7	98.6	99.0	99.1	98.6	99.5	99.8	99.8	99.9	99.9	99.9
\$34,744 to \$38,395	79.9	88.2	94.0	95.0	98.2	98.7	98.7	97.6	99.1	99.6	99.7	99.8	99.9	99.9
\$32,122 to \$34,743	78.2	87.1	92.5	94.3	97.9	98.7	98.8	97.6	98.9	99.4	99.6	99.9	99.9	99.9
\$29,893 to \$32,121	75.5	85.6	91.8	93.8	98.2	98.6	98.8	96.8	98.5	99.3	99.4	99.8	99.8	99.8
\$27,542 to \$29,892	75.2	85.4	91.8	93.6	97.7	98.4	98.5	96.5	98.3	99.2	99.4	99.7	99.8	99.8
\$24,855 to \$27,541	71.8	83.2	89.8	92.6	97.6	98.2	98.3	95.6	98.1	98.9	99.2	99.6	99.6	99.7
\$21,645 to \$24,855	70.0	83.1	90.1	92.9	97.2	98.2	98.4	95.0	97.9	99.0	99.3	99.7	99.8	99.7
\$0 to \$21,644	62.7	74.5	81.9	83.3	90.1	91.3	91.6	95.1	97.5	98.6	99.0	99.4	99.5	99.5

<sup>1</sup> Persons per square mile and median household income are presented in decile groups. Each decile group contains 10% of the reported geographic Zip Codes for which the demographic information, as of the year 2000, is available in Demographic Power Pack, Current Year Update (2000), MapInfo Corporation.

### Customer Response

#### Publication: High-Speed Services for Internet Access: Status as of December 31, 2007

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