

10. Infrastructure

The infrastructure information contained in this section is based upon data collected by the FCC as part of its price-cap monitoring procedures.¹ This summary is intended to highlight changes in the use of technology in the local telephone company plant. The data (ARMIS 43-07 reports²) upon which this infrastructure summary is based are due April 1 for the previous calendar year. This infrastructure report includes data through 2003.³ The most recent data were due April 1, 2004. No revisions have been filed in time for inclusion in this summary.

Background

The data items presented here summarize ARMIS Report 43-07, which is filed by local exchange carriers subject to mandatory price-cap regulation. The information contained in this report is for the years 1993 through 2003. Recent changes to our infrastructure data collection process are reflected in data beginning with data for 2002. A number of items were eliminated from reporting requirements and historical information for these items is no longer shown in this report.⁴ Most of the eliminated items relate to switching technologies that have become obsolete or reflect virtually complete deployment of capabilities such as touch-tone capability. New data are being collected on hybrid copper/fiber interfaces in the network but most of the carriers have

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- 1 *Policy and Rules Concerning Rates For Dominant Carriers*, CC Docket No. 87-313, Second Report and Order, 5 FCC Rcd 6786 (1990) (*LEC Price Cap Order*), Erratum, 5 FCC Rcd 7664 (Com. Car. Bur. 1990); *Policy and Rules Concerning Rates For Dominant Carriers*, CC Docket No. 87-313, Memorandum Opinion and Order, 8 FCC Rcd 7474 (Com. Car. Bur. 1993) (*Service Quality Modifications Order*).
 - 2 ARMIS, an acronym for Automated Reporting Management Information System, is a publicly available repository of financial, plant, demand, and quality-of-service data. Additional infrastructure data are contained in the ARMIS 43-08 report. See *Statistics of Communications Common Carriers*, published annually by the Wireline Competition Bureau's Industry Analysis and Technology Division for a compilation of ARMIS 43-08 infrastructure data.
 - 3 See *Infrastructure of the Local Operating Companies Aggregated to the Holding Company Level*, released April 24, 1995 for data for the years 1989 and 1990. Some of the data for those early years are not a part of this summary and may contain discrepancies that make the early data inconsistent with that of later years. Reports containing data for the early years can be found in the infrastructure section of the FCC-State Link Internet site at www.fcc.gov/wcb/stats under the file names INFRA99.ZIP, INFRA98.ZIP, INFRA95.ZIP, and INFRA93.ZIP. More recent reports can be found in Section 10 of earlier versions of this report on the same web page under the section covering the Commission's Federal-State Joint Board Monitoring Reports.
 - 4 Historical information for the entries that are no longer reported can be found in *Monitoring Reports* released prior to 2003 and in the reports noted in footnote 3.

requested proprietary treatment for the data. As a result, the data are not provided in this public report.

The ARMIS 43-07 reports are filed only by those local exchange companies originally subject to mandatory price-cap regulation--the Bell operating companies (BOCs).⁵ Together, these large companies are estimated to serve about 90% of the incumbents' access lines. The data are generally filed at the study area level, which typically consists of a company's operations within a state. The state-by-state data are available from the Commission's ARMIS web page at <<http://www.fcc.gov/wcb/eafs/>>.⁶ This web page has been redesigned and provides more features than were previously available. The information summarized in this report is organized into two sets of tables with the following designations: Table 10.1 shows switching system data and gross plant expenditures covering all types of plant. Table 10.2 shows transmission system data. Each set of tables contains segments for each of the regional Bell operating companies (along with Verizon's GTE companies shown separately) with aggregated summary data for all the reporting companies. The data summarized for each holding company reflect the aggregate of data filed for individual states or study areas and should be useful in assessing overall trends. In some cases, refiled data may cause values to differ from prior summary reports. Recent data reflect mergers of GTE and Bell Atlantic, which are now under the name Verizon Communications, and the acquisitions by SBC of Ameritech and Pacific Telesis.

Description of the Technologies and Analysis of the Data

The data in the attached tables provide an historical series for a variety of plant elements that illustrate the deployment of technology in the networks of the major local exchange carriers.⁷ The data items provide a picture of the well established technologies in use. This report highlights key trends in the evolution of basic telecommunications infrastructure and illustrates the replacement of older technologies with newer ones. In some cases, older technologies either no longer exist or are in very limited use. This report reflects recent revisions to the ARMIS 43-07 report from which the data in this summary are obtained.⁸

5 See footnote 1.

6 To access ARMIS data from <www.fcc.gov/wcb/eafs/> click on the words "download ARMIS data" and select the desired report, table and row(s)." To access data instructions and definitions applicable to the 43-07 report click on the words "ARMIS site map" at the top of the second screen and then select the 43-07 report and table desired.

7 A number of irregularities including time series anomalies were noted in the data. The companies are typically notified of these observed problems and either file revisions or explanations. Revisions are initially made available on the ARMIS database website noted above.

8 *2000 Biennial Regulatory Review – Comprehensive Review of the Accounting Requirements and ARMIS Reporting Requirements for Incumbent Local Exchange Carriers: Phase 2; Amendments to the Uniform System of Accounts for Interconnection;*

ARMIS data currently collected only cover circuit switches that provide a dedicated path through the network for the duration of a call, not routers or switches that are used to handle internet traffic or in connection with frame relay and ATM services that are specifically designed to handle data packets.⁹ Almost all of the major local exchange carrier switches are digital. About one-third of these are ISDN capable. However, the rate at which new ISDN switching capability is being added to the networks has slowed considerably, in recent years with 43 additional ISDN capable switches being reported in 2003. In 2003, the reported number of equipped ISDN Primary Rate Interfaces declined about 2 percent, from 558,763 to 547,761. ISDN basic rate services also declined with the use of xDSL technologies, with about 20% fewer reported new Basic Rate Interfaces equipped in 2003 than in 2002.

A number of transmission elements are included in Table 10.2. Definitions for these elements can be found on the Commission's ARMIS website noted above. These illustrate the rapid development of fiber capacity in terms of terminations, sheath kilometers, and links. The number of sheath kilometers of fiber more than doubled over the decade 1993-2003, with more than 28,000 new fiber sheath kilometers being reported in 2003. During the same period, the number of sheath kilometers of copper remained steady at somewhat over 5 million, and other sheath data, in relative terms, were not significant.

Table 10.2 also highlights the relative magnitude of equipped and working channels. Both copper and fiber channels have declined in 2003. Total interoffice circuit links have also declined from last year. Although circuits connecting local central offices could typically be provided on only two fibers, the economics of fiber deployment have resulted in deployments of typical fiber cables containing more than 40 fibers. This suggests that there is a significant amount of fiber capacity currently unused in the *interoffice* transmission plant.¹⁰

Jurisdictional Separations Reform and Referral to the Federal-State Joint Board; and Local Competition and Broadband Reporting, CC Docket Nos. 00-199, 99-301, 97-212, 80-286, Report and Order in CC Docket Nos. 00-199, 97-212, and 80-286, Further Notice of Proposed Rulemaking in CC Docket Nos. 00-199, 99-301, and 80-286, 16 FCC Rcd 19911 (2001), *recon pending* (Phase 2 Report and Order).

9 Remote switches as defined in this report only cover those switches capable of functioning if the host switch fails.

10 A large portion of the cost of fiber deployment is associated with labor and installation rather than with the cable itself. Thus, the incremental cost of installing a larger fiber cable is typically relatively small. This suggests that the sheath-kilometer parameter shown in the attached tables may be a better measure of fiber coverage than fiber kilometers. In general, care should be exercised in interpreting aggregate fiber data when determining, for example, whether fiber is concentrated in certain parts of a company's service area with relatively little fiber elsewhere. See *Fiber Deployment Update - End of Year 1998*, released Sept. 9, 1999: <www.fcc.gov/wcb/iatd/stats.html>: FIBER98.ZIP (authored by J. Kraushaar, Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission).

Although the historical level of growth in fiber has been high, its use in the local loop at present appears to be relatively small. The reporting companies included in this report had an installed base of about 240 million copper-pair mainframe terminations in their central offices for local loop use in 2003. In comparison, about 2.7 million fiber loop central office terminations had been installed by end-of-year 2003. The data show that the number of these terminations actually declined by more than 10% during 2003. In 2003, DS-3 terminations on fiber facilities grew by about 18 %, nearly double the growth in 2002, but still lower than historical growth rates. Fiber and hybrid copper/fiber systems will likely become increasingly important in the local loop as the number of high-quality copper pairs available to support higher data rate digital services declines.

As noted earlier, the data presented in this report do not include data associated with hybrid fiber/copper interfaces including information on offerings of xDSL services for which the companies requested proprietary treatment.¹¹ Nonetheless the number of ISDN capable lines can be used as an upper bound for potential broadband availability over copper loops, since copper loop characteristics necessary to support ISDN services are also required for newer xDSL services.¹² Readers interested in more disaggregated information may wish to examine data at a more localized level than presented here.¹³

11 xDSL (Digital Subscriber Loop) services that are now available offer broadband digital capability using special terminal equipment that enhances the capability of existing copper access lines.

12 Table 10.1 includes the number of switch terminations that are available for ISDN and ISDN capable lines. Table 10.2 includes the number of copper loops that are capable of supporting ISDN.

13 Individual study-area data are also available to address more localized issues. This information is available from the ARMIS web page at www.fcc.gov/wcb/eafs/.

Table 10.1
Switching Data
Total - All Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	16,650	16,017	16,157	16,267	16,186	16,117	16,261	14,702	14,700	13,906	13,893
Tandems	475	456	470	484	481	493	492	498	516	520	545
Hosts	2,366	2,309	2,382	2,432	2,515	2,471	2,461	2,322	2,278	2,241	2,192
Remotes (Stand Alone Only)	6,349	6,706	7,140	7,098	7,164	7,977	8,103	7,335	7,356	7,538	7,296
Total Switches	16,858	16,195	16,342	16,486	16,448	16,392	16,516	14,953	14,972	14,208	14,210
Analog Stored Program Control	1,632	1,179	1,002	735	558	431	314	200	139	107	114
Digital Stored Program Control	13,733	13,987	14,601	15,356	15,722	15,961	16,202	14,753	14,833	14,101	14,096
Total Number Access Lines in Service (000)	129,642	133,409	138,907	143,239	150,043	155,530	159,364	158,107	153,614	146,034	139,510
Analog Stored Program Control Lines Served	42,746	33,699	29,409	24,803	21,416	16,688	11,713	7,192	4,810	3,283	2,424
Digital Stored Program Control Lines Served	85,549	98,799	108,903	118,149	128,470	138,842	147,651	150,915	148,804	142,752	137,087
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	8,037	10,358	11,890	13,171	13,879	15,148	15,994	14,681	14,817	14,122	14,121
Total Switches Equipped with ISDN	2,146	2,670	3,258	3,852	4,681	5,392	5,735	5,340	5,364	5,526	5,569
Lines with Access to ISDN (000)	41,970	61,549	77,523	95,113	106,575	121,408	127,357	131,003	127,382	122,420	117,534
Basic Rate ISDN (BRI) Interfaces Equipped	591,561	801,518	1,039,456	1,507,551	1,797,254	2,491,509	2,720,871	2,775,102	3,059,482	3,143,977	2,538,211
Primary Rate ISDN (PRI) Interfaces Equipped	5,816	15,526	32,580	67,885	136,233	234,515	334,910	429,295	551,102	558,763	547,761

Source: ARMIS Report 43-07.

**Table 10.1
Switching Data
BellSouth Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	1,661	1,658	1,647	1,650	1,654	1,653	1,649	1,644	1,642	1,637	1,629
Tandems	70	70	71	70	70	71	71	73	77	77	78
Hosts	269	280	289	297	317	307	306	297	304	305	295
Remotes (Stand Alone Only)	714	732	742	747	766	765	765	776	819	829	877
Total Switches	1,680	1,677	1,668	1,670	1,674	1,673	1,668	1,665	1,665	1,664	1,658
Analog Stored Program Control	236	182	158	130	106	100	83	69	54	44	41
Digital Stored Program Control	1,444	1,495	1,510	1,540	1,568	1,573	1,585	1,596	1,611	1,620	1,617
Total Number Access Lines in Service (000)	19,233	20,141	21,064	22,019	23,080	23,909	24,458	24,558	23,756	22,955	22,206
Analog Stored Program Control Lines Served	5,929	4,837	4,455	4,020	3,746	3,536	2,972	2,362	1,729	1,309	1,154
Digital Stored Program Control Lines Served	13,304	15,304	16,609	17,999	19,334	20,373	21,486	22,197	22,027	21,646	21,052
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	1,447	1,627	1,629	1,652	1,674	1,673	1,668	1,665	1,665	1,664	1,658
Total Switches Equipped with ISDN	324	407	467	518	584	596	645	691	678	697	701
Lines with Access to ISDN (000)	7,606	9,708	10,988	12,948	14,894	15,980	17,413	18,396	17,660	17,457	16,927
Basic Rate ISDN (BRI) Interfaces Equipped	65,607	76,348	80,641	122,043	167,512	183,458	202,391	223,294	228,898	230,066	269,254
Primary Rate ISDN (PRI) Interfaces Equipped	1,814	3,534	4,803	9,154	21,389	33,564	51,669	72,347	85,983	81,328	81,682

Source: ARMIS Report 43-07.

Table 10.1
Switching Data
Qwest Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	1,841	1,738	1,641	1,521	1,441	1,446	1,428	1,400	1,354	1,337	1,322
Tandems	51	51	51	51	51	51	51	53	51	56	56
Hosts	222	232	238	248	249	253	251	245	252	226	217
Remotes (Stand Alone Only)	880	984	961	852	781	786	752	733	680	651	631
Total Switches	1,858	1,752	1,654	1,534	1,492	1,458	1,441	1,414	1,363	1,351	1,336
Analog Stored Program Control	261	213	188	146	113	95	71	20	1	1	0
Digital Stored Program Control	1,387	1,519	1,465	1,387	1,379	1,363	1,370	1,394	1,362	1,350	1,336
Total Number Access Lines in Service (000)	13,710	14,309	14,817	15,405	16,132	16,859	17,449	17,626	17,070	15,682	14,277
Analog Stored Program Control Lines Served	6,257	5,303	4,706	4,245	4,228	3,574	2,501	636	30	28	0
Digital Stored Program Control Lines Served	7,292	8,988	10,110	11,159	11,905	13,286	14,948	16,991	17,040	15,654	14,277
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	620	819	1,116	1,143	1,305	1,346	1,350	1,340	1,311	1,311	1,312
Total Switches Equipped with ISDN	213	240	262	327	541	557	583	623	603	587	635
Lines with Access to ISDN (000)	3,982	5,045	6,192	9,668	10,264	11,189	12,522	14,573	14,419	13,153	12,575
Basic Rate ISDN (BRI) Interfaces Equipped	108,775	120,058	126,530	146,570	162,953	165,733	167,623	176,696	174,079	199,302	201,232
Primary Rate ISDN (PRI) Interfaces Equipped	674	742	2,315	2,734	4,329	4,867	6,112	7,822	11,046	61,993	65,672

Source: ARMIS Report 43-07.

**Table 10.1
Switching Data
SBC Ameritech Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	1,422	1,413	1,415	1,410	1,435	1,419	1,432	1,447	1,451	1,455	1,439
Tandems	47	47	46	46	47	51	52	53	55	63	65
Hosts	230	236	238	236	243	236	234	234	235	236	236
Remotes (Stand Alone Only)	684	717	731	743	769	764	775	790	789	790	776
Total Switches	1,469	1,460	1,461	1,456	1,482	1,470	1,485	1,500	1,506	1,518	1,504
Analog Stored Program Control	224	119	97	71	58	46	39	37	34	24	16
Digital Stored Program Control	1,245	1,341	1,364	1,385	1,424	1,424	1,446	1,463	1,472	1,494	1,488
Total Number Access Lines in Service (000)	17,500	18,122	19,310	19,553	20,335	20,790	21,036	20,898	20,074	19,151	18,309
Analog Stored Program Control Lines Served	5,862	3,845	3,727	3,228	2,793	2,193	1,811	1,730	1,491	927	562
Digital Stored Program Control Lines Served	11,638	14,278	15,583	16,324	17,541	18,597	19,225	19,168	18,583	18,224	17,747
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	1,001	1,254	1,400	1,438	1,463	1,451	1,476	1,492	1,496	1,504	1,504
Total Switches Equipped with ISDN	387	444	489	601	695	784	816	822	844	933	863
Lines with Access to ISDN (000)	8,056	10,259	12,860	13,802	15,464	16,804	17,472	17,388	16,814	16,810	16,160
Basic Rate ISDN (BRI) Interfaces Equipped	67,415	87,862	97,550	226,355	180,280	220,867	259,312	271,468	283,600	290,367	282,643
Primary Rate ISDN (PRI) Interfaces Equipped	707	1,505	1,677	4,247	14,569	24,800	38,037	53,926	70,542	75,184	75,766

Source: ARMIS Report 43-07.

Table 10.1
Switching Data
SBC Pacific Telesis Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	846	837	840	833	810	801	799	778	781	779	779
Tandems	20	20	20	20	21	24	24	24	31	31	31
Hosts	111	121	117	114	135	121	116	189	114	114	116
Remotes (Stand Alone Only)	302	320	316	310	364	361	350	361	360	358	359
Total Switches	866	857	860	853	830	824	822	802	812	810	809
Analog Stored Program Control	176	109	87	72	49	38	17	0	0	0	30
Digital Stored Program Control	687	746	772	781	781	786	805	802	812	810	779
Total Number Access Lines in Service (000)	14,971	15,417	16,021	16,460	17,155	18,158	18,285	18,236	17,788	17,248	16,693
Analog Stored Program Control Lines Served	7,036	5,029	4,036	3,354	2,422	1,825	754	0	0	0	0
Digital Stored Program Control Lines Served	7,934	10,387	11,985	13,106	14,733	16,333	17,531	18,236	17,788	17,248	16,693
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	522	764	772	794	791	803	796	778	812	810	779
Total Switches Equipped with ISDN	229	347	417	473	531	551	574	574	562	560	588
Lines with Access to ISDN (000)	5,349	8,494	10,291	11,895	13,632	15,134	16,529	17,589	16,966	16,427	16,251
Basic Rate ISDN (BRI) Interfaces Equipped	65,683	115,146	171,305	304,182	314,003	468,493	489,369	421,744	630,816	615,934	347,052
Primary Rate ISDN (PRI) Interfaces Equipped	357	708	3,491	13,448	20,125	31,345	47,794	49,712	94,742	54,902	34,378

Source: ARMIS Report 43-07.

Table 10.1
Switching Data
SBC Southwestern Bell Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	1,437	1,511	1,644	1,670	1,690	1,644	1,658	1,663	1,660	1,652	1,658
Tandems	64	60	60	60	60	67	56	69	70	70	71
Hosts	230	233	245	241	267	230	228	229	230	244	245
Remotes (Stand Alone Only)	672	779	935	1,077	1,077	1,158	1,163	1,152	1,150	1,150	1,101
Total Switches	1,469	1,539	1,679	1,730	1,750	1,711	1,727	1,715	1,716	1,722	1,728
Analog Stored Program Control	308	264	252	162	136	115	88	67	46	34	23
Digital Stored Program Control	1,078	1,202	1,369	1,568	1,614	1,596	1,639	1,648	1,670	1,688	1,705
Total Number Access Lines in Service (000)	13,180	13,611	14,095	14,104	15,306	15,872	16,287	16,411	15,842	15,294	14,670
Analog Stored Program Control Lines Served	7,078	6,608	6,531	5,657	5,055	4,119	3,107	2,246	1,448	963	652
Digital Stored Program Control Lines Served	6,000	6,907	7,502	8,447	10,251	11,753	13,180	14,165	14,394	14,331	14,018
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	723	1,263	1,466	1,597	1,724	1,707	1,724	1,713	1,713	1,722	1,728
Total Switches Equipped with ISDN	92	123	303	331	331	360	428	441	461	472	479
Lines with Access to ISDN (000)	1,476	1,933	8,826	9,440	10,577	13,361	12,158	12,169	12,056	11,241	10,721
Basic Rate ISDN (BRI) Interfaces Equipped	88,960	57,041	108,784	104,604	185,018	225,427	267,190	281,459	310,326	308,501	309,907
Primary Rate ISDN (PRI) Interfaces Equipped	410	1,238	5,084	6,150	15,434	31,570	46,533	59,513	68,236	68,793	71,035

Source: ARMIS Report 43-07.

Table 10.1
Switching Data
Verizon - Bell Atlantic Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	2,712	2,705	2,696	2,684	2,703	2,616	2,636	2,634	2,622	2,623	2,628
Tandems	65	65	65	71	67	67	74	76	81	87	110
Hosts	349	358	371	367	365	369	381	386	382	464	428
Remotes (Stand Alone Only)	1,365	1,407	1,424	1,444	1,447	1,405	1,437	1,435	1,424	1,660	1,437
Total Switches	2,747	2,738	2,729	2,723	2,737	2,652	2,682	2,683	2,675	2,681	2,702
Analog Stored Program Control	349	246	194	137	86	37	16	7	4	4	4
Digital Stored Program Control	2,398	2,492	2,535	2,586	2,651	2,615	2,666	2,676	2,671	2,677	2,698
Total Number Access Lines in Service (000)	34,774	35,745	36,959	38,305	39,714	40,838	41,833	41,669	40,582	38,810	36,988
Analog Stored Program Control Lines Served	9,750	7,569	5,576	4,057	2,975	1,442	568	218	112	55	55
Digital Stored Program Control Lines Served	25,024	28,176	31,383	34,248	36,739	39,396	41,266	41,451	40,469	38,754	36,933
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	1,690	2,381	2,577	2,650	2,707	2,641	2,671	2,672	2,664	2,682	2,701
Total Switches Equipped with ISDN	629	839	930	1,079	1,220	1,298	1,304	1,305	1,303	1,328	1,329
Lines with Access to ISDN (000)	13,406	21,107	22,117	27,682	31,125	34,367	36,336	36,825	35,637	34,012	31,991
Basic Rate ISDN (BRI) Interfaces Equipped	164,380	282,051	363,320	505,652	660,542	1,088,060	1,167,022	1,226,934	1,258,543	1,330,487	965,028
Primary Rate ISDN (PRI) Interfaces Equipped	958	6,393	12,507	24,775	43,922	71,983	97,177	123,323	150,029	147,282	151,276

Source: ARMIS Report 43-07.

Table 10.1
Switching Data
Verizon - GTE Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local Switches	6,731	6,155	6,274	6,499	6,453	6,538	6,659	5,136	5,190	4,423	4,438
Tandems	158	143	157	166	165	162	164	150	151	136	134
Hosts	955	849	884	929	939	955	945	742	761	652	655
Remotes (Stand Alone Only)	1,732	1,767	2,031	1,925	1,960	2,738	2,861	2,088	2,134	2,100	2,115
Total Switches	6,769	6,172	6,291	6,520	6,483	6,604	6,691	5,174	5,235	4,462	4,473
Analog Stored Program Control	78	46	26	17	10	0	0	0	0	0	0
Digital Stored Program Control	5,494	5,192	5,586	6,109	6,305	6,604	6,691	5,174	5,235	4,462	4,473
Total Number Access Lines in Service (000)	16,274	16,064	16,641	17,393	18,321	19,105	20,015	18,709	18,503	16,894	16,366
Analog Stored Program Control Lines Served	834	508	378	242	197	0	0	0	0	0	0
Digital Stored Program Control Lines Served	14,357	14,759	15,731	16,866	17,966	19,105	20,015	18,709	18,503	16,894	16,366
Total Switches Equipped w/SS7-394 (InterLATA) Svc.	2,034	2,250	2,930	3,897	4,215	5,527	6,309	5,021	5,156	4,429	4,439
Total Switches Equipped with ISDN	272	270	390	523	779	1,246	1,385	884	913	949	974
Lines with Access to ISDN (000)	2,095	5,003	6,249	9,678	10,619	14,574	14,926	14,064	13,830	13,320	12,908
Basic Rate ISDN (BRI) Interfaces Equipped	30,741	63,012	91,326	98,145	126,946	139,471	167,964	173,507	173,220	169,320	163,095
Primary Rate ISDN (PRI) Interfaces Equipped	896	1,406	2,703	7,377	16,465	36,386	47,588	62,652	70,524	69,281	67,952

Source: ARMIS Report 43-07.

Table 10.2
Transmission System Data
Total - All Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	5,631,823	5,570,853	5,553,702	5,587,572	5,664,315	5,763,419	5,846,319	5,683,568	5,769,882	5,711,875	5,774,729
Copper	5,281,958	5,185,466	5,127,707	5,124,940	5,163,039	5,212,873	5,255,778	5,063,534	5,097,955	5,017,883	5,052,195
Fiber	341,415	378,038	419,175	456,814	495,380	536,520	576,868	604,175	655,753	681,587	710,067
Other	8,451	7,350	6,819	5,819	5,896	14,026	13,672	15,860	16,174	12,406	12,468
Interoffice Working Facilities:											
Total Circuit Links	20,533,013	23,293,421	25,385,271	24,387,840	28,847,081	32,231,481	41,873,877	47,960,986	52,221,937	52,226,424	51,269,485
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	248,436,477	254,793,596	263,768,547	255,430,475	264,429,362	279,341,845	299,779,275	313,014,677	356,758,489	362,470,008	350,082,435
Copper	221,879,025	222,353,743	226,953,330	227,384,081	230,903,175	236,490,113	239,486,801	246,638,738	253,939,285	248,684,364	243,769,816
Fiber Digital Carrier	26,549,664	32,433,491	36,809,055	28,041,605	33,515,370	42,846,429	60,287,936	66,371,982	102,815,393	113,783,074	106,311,551
Other	7,791	6,360	6,162	4,789	10,817	5,303	4,538	3,957	3,811	2,570	1,068
Total Working Channels	142,822,216	149,000,831	155,980,548	163,245,940	170,083,120	182,546,160	190,911,880	193,922,477	225,431,349	216,483,361	208,981,967
Copper	133,010,643	136,073,024	141,452,266	144,576,836	147,286,389	151,593,687	151,501,241	151,494,238	151,678,473	137,864,407	133,003,843
Fiber Digital Carrier	9,807,620	12,924,773	14,525,425	18,666,394	22,793,636	30,950,165	39,163,693	42,213,715	73,751,357	78,617,515	75,977,602
Other	3,955	3,035	2,857	2,710	3,095	2,308	246,946	214,524	1,519	1,439	522
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	212,060,160	210,515,830	212,867,099	213,115,863	215,534,261	218,990,613	218,470,177	217,441,743	218,397,896	215,320,122	240,398,337
Fiber Strands Term in the CO (Loop Plant Only)	598,657	982,625	1,203,705	1,465,877	1,651,999	2,019,697	2,125,055	2,881,827	3,267,300	3,008,735	2,681,116
Fiber Term at Customer Premises DS1 Rate	146,405	184,235	222,040	294,808	363,189	421,075	527,784	647,502	1,282,847	1,888,451	8,693,859
Fiber Term at Customer Premises DS3 Rate & Higher	16,251	19,963	22,699	32,352	29,893	47,205	92,534	167,284	227,831	253,213	298,798
ISDN Capable Lines	NA	NA	NA	NA	105,949,659	107,514,215	122,963,106	116,839,259	105,059,057	105,956,829	96,494,155

NA: Not available

Source: ARMIS Report 43-07.

**Table 10.2
Transmission System Data
BellSouth Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	993,633	1,005,397	1,020,809	1,034,601	1,050,186	1,074,896	1,094,569	1,115,897	1,134,363	1,145,506	1,155,144
Copper	927,265	930,812	937,626	943,090	951,758	965,108	973,995	983,221	989,541	992,446	994,980
Fiber	65,100	73,370	82,012	90,093	96,852	105,335	116,507	129,209	141,356	149,609	156,707
Other	1,268	1,215	1,171	1,418	1,576	4,453	4,067	3,466	3,466	3,452	3,457
Interoffice Working Facilities:											
Total Circuit Links	2,935,085	4,287,654	4,756,430	5,245,925	6,107,816	6,134,728	8,564,658	9,828,726	10,690,256	10,835,682	10,539,995
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	33,070,338	34,669,704	36,022,283	37,866,890	39,550,588	40,957,871	42,025,575	49,435,188	51,061,973	39,822,163	39,957,594
Copper	29,291,200	29,995,720	30,351,794	30,903,216	31,270,774	31,917,878	31,849,537	37,493,164	38,176,168	30,263,142	30,684,759
Fiber Digital Carrier	3,778,341	4,673,140	5,669,647	6,962,832	8,278,972	9,039,151	10,175,104	11,940,618	12,883,709	9,557,876	9,272,835
Other	798	842	842	842	842	842	934	1,406	2,096	1,145	0
Total Working Channels	21,275,558	23,284,636	24,682,894	26,230,400	27,921,162	29,836,968	30,422,706	33,655,481	34,114,639	25,039,974	24,334,185
Copper	18,288,532	19,283,574	19,871,262	20,318,019	20,708,890	21,233,672	21,237,643	22,044,514	21,597,814	17,250,216	16,854,022
Fiber Digital Carrier	2,986,937	4,000,986	4,811,550	5,912,292	7,212,190	8,603,214	9,184,935	11,610,551	12,516,193	7,789,007	7,480,163
Other	90	77	82	89	82	82	128	416	632	751	0
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	26,433,408	26,451,200	26,527,293	26,342,776	26,703,438	27,082,625	26,602,864	31,771,617	32,464,246	26,813,386	51,027,738
Fiber Strands Term in the CO (Loop Plant Only)	59,663	73,260	106,710	138,364	157,957	185,416	205,840	226,360	248,433	310,092	322,590
Fiber Term at Customer Premises DS1 Rate	9,078	13,941	19,132	27,482	36,911	50,431	67,886	85,205	93,687	593,755	448,233
Fiber Term at Customer Premises DS3 Rate & Higher	3,294	4,034	4,559	5,353	6,847	8,974	35,492	94,022	107,998	112,931	121,680
ISDN Capable Lines	NA	NA	NA	NA	25,918,582	15,841,265	13,049,642	13,111,821	12,636,844	16,230,309	16,065,806

NA: Not available

Source: ARMIS Report 43-07.

**Table 10.2
Transmission System Data
Qwest Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	757,868	750,756	753,942	722,753	717,084	722,157	735,920	754,162	762,412	770,660	779,623
Copper	707,384	694,797	691,844	660,393	653,205	650,929	662,816	675,009	676,615	684,193	690,414
Fiber	50,485	55,960	62,098	62,360	63,880	65,171	66,986	69,906	76,585	80,891	83,638
Other	0	0	0	0	0	6,057	6,119	9,247	9,212	5,576	5,570
Interoffice Working Facilities:											
Total Circuit Links	2,315,598	2,569,216	2,802,203	3,178,552	3,561,748	4,129,315	5,232,282	6,152,970	6,926,823	7,018,987	6,746,390
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	23,876,582	24,088,839	24,246,870	25,284,411	24,893,900	27,316,968	28,023,288	28,733,473	29,643,140	30,106,628	30,149,357
Copper	23,170,964	23,393,955	23,561,093	23,500,796	23,193,518	25,517,759	25,361,821	25,581,184	25,939,651	26,077,832	25,727,523
Fiber Digital Carrier	703,502	694,588	685,674	1,782,962	1,699,888	1,799,003	2,661,211	3,152,009	3,703,244	4,028,568	4,421,607
Other	2,116	296	103	653	494	206	256	280	245	228	227
Total Working Channels	14,809,462	15,322,355	15,347,150	16,359,345	17,195,446	17,455,809	18,011,061	18,009,155	17,058,921	16,260,389	15,607,156
Copper	14,359,158	14,863,489	14,873,448	15,232,212	16,113,600	16,222,185	16,270,241	15,887,131	14,607,962	14,400,788	13,625,667
Fiber Digital Carrier	449,121	458,790	473,650	1,126,650	1,081,695	1,233,523	1,740,715	2,121,920	2,450,864	1,859,511	1,981,407
Other	1,183	76	52	483	151	101	105	104	95	90	82
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	22,128,231	22,179,411	22,168,426	22,291,697	20,463,591	21,558,602	21,606,866	21,572,942	21,653,395	21,724,140	22,858,456
Fiber Strands Term in the CO (Loop Plant Only)	73,993	83,313	81,953	112,185	123,691	174,430	202,329	238,802	299,315	309,154	316,793
Fiber Term at Customer Premises DS1 Rate	20,010	24,386	28,875	30,109	46,296	91,105	136,878	267,251	316,665	349,948	370,416
Fiber Term at Customer Premises DS3 Rate & Higher	1,066	1,297	1,289	1,223	1,142	6,085	28,354	38,224	51,546	60,366	63,678
ISDN Capable Lines	NA	NA	NA	NA	9,236,841	9,650,185	9,983,398	9,922,088	9,012,052	8,426,381	7,591,314

NA: Not available

Source: ARMIS Report 43-07.

**Table 10.2
Transmission System Data
SBC Ameritech Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	556,814	537,133	562,934	575,407	586,712	598,858	601,779	612,988	629,321	636,725	642,674
Copper	521,187	498,239	519,775	526,955	533,491	541,197	540,170	546,336	555,024	558,670	562,163
Fiber	34,655	37,980	42,370	47,676	52,450	56,687	60,637	65,632	73,334	77,084	79,541
Other	971	915	789	776	771	974	972	1,020	964	971	970
Interoffice Working Facilities:											
Total Circuit Links	2,800,655	2,964,296	3,278,058	3,577,253	4,118,183	4,912,927	5,990,907	6,753,643	7,625,684	8,084,023	7,633,513
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	30,818,287	31,847,802	31,957,236	33,365,840	34,740,814	36,301,862	37,842,246	39,092,223	40,436,388	42,145,712	38,326,987
Copper	29,549,359	29,482,850	29,124,886	29,571,017	29,797,059	30,063,619	30,255,769	30,775,153	30,444,126	30,690,174	34,469,562
Fiber Digital Carrier	1,268,928	2,364,952	2,832,350	3,794,823	4,943,755	6,238,243	7,586,477	8,317,070	9,992,262	11,455,538	3,857,425
Other	0	0	0	0	0	0	0	0	0	0	0
Total Working Channels	18,610,716	19,105,653	19,714,345	20,506,219	21,152,075	21,782,557	22,227,572	22,495,633	21,786,411	20,997,868	20,239,795
Copper	17,811,513	18,096,153	18,478,770	18,896,376	19,082,995	19,216,231	19,135,507	18,993,978	18,124,703	17,272,552	18,147,879
Fiber Digital Carrier	799,203	1,009,500	1,235,575	1,609,843	2,069,080	2,566,326	3,092,065	3,501,655	3,661,708	3,725,316	2,091,916
Other	0	0	0	0	0	0	0	0	0	0	0
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	28,687,860	28,645,733	28,217,638	28,693,470	28,970,660	29,303,138	29,605,539	30,212,004	29,938,625	30,208,945	30,632,552
Fiber Strands Term in the CO (Loop Plant Only)	56,834	66,035	79,661	103,648	123,302	141,621	165,171	205,342	275,069	300,927	248,340
Fiber Term at Customer Premises DS1 Rate	23,675	26,660	31,941	39,124	46,366	53,506	62,090	78,822	106,984	118,927	318,417
Fiber Term at Customer Premises DS3 Rate & Higher	2,434	2,755	3,192	3,874	4,453	5,145	5,788	7,188	9,583	10,810	26,849
ISDN Capable Lines	NA	NA	NA	NA	9,339,241	9,476,166	9,499,034	9,469,137	9,054,353	8,618,397	8,050,722

NA: Not available

Source: ARMIS Report 43-07.

**Table 10.2
Transmission System Data
SBC Pacific Telesis Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	351,695	343,658	346,127	349,697	363,726	368,122	363,304	386,093	394,058	382,326	394,103
Copper	334,674	324,942	325,537	327,040	339,207	341,563	334,493	355,133	359,288	343,317	352,331
Fiber	15,814	17,598	19,472	21,513	23,375	25,416	27,648	29,797	33,227	37,466	40,279
Other	1,207	1,118	1,118	1,144	1,144	1,144	1,163	1,163	1,543	1,543	1,493
Interoffice Working Facilities:											
Total Circuit Links	2,137,179	2,568,706	2,646,904	2,240,779	3,369,967	3,760,855	4,352,282	5,032,433	5,141,975	4,792,666	4,649,070
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	26,287,306	26,447,355	26,850,298	27,732,011	28,635,080	29,739,661	30,729,411	33,317,471	34,687,259	34,988,223	31,628,755
Copper	25,859,697	25,914,609	26,178,875	26,951,967	27,548,645	28,348,883	29,062,676	31,479,491	32,170,875	32,337,338	30,161,010
Fiber Digital Carrier	427,522	532,661	671,162	779,783	1,086,411	1,390,754	1,666,523	1,837,699	2,516,055	2,650,609	1,467,745
Other	87	85	261	261	24	24	212	281	329	276	0
Total Working Channels	15,840,904	16,110,206	16,877,850	17,719,765	18,254,128	20,103,518	20,963,786	23,081,376	22,773,561	22,080,915	17,868,331
Copper	15,556,249	15,758,760	16,448,199	17,212,991	17,569,012	19,235,044	19,936,233	21,930,468	21,380,638	20,803,417	17,070,393
Fiber Digital Carrier	284,575	351,364	429,536	506,657	685,092	868,450	1,027,425	1,150,752	1,392,728	1,277,338	797,938
Other	80	82	115	117	24	24	128	156	195	160	0
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	24,632,897	24,577,002	24,619,462	25,055,625	25,412,880	25,953,289	26,639,408	27,102,231	27,403,873	27,620,878	27,668,068
Fiber Strands Term in the CO (Loop Plant Only)	39,830	33,538	34,692	37,156	88,192	97,385	101,516	115,670	139,598	182,250	49,626
Fiber Term at Customer Premises DS1 Rate	701	756	655	719	762	854	894	0	0	0	6,621,233
Fiber Term at Customer Premises DS3 Rate & Higher	2,410	3,108	4,047	3,113	6,145	7,432	9,456	13,132	16,805	19,925	23,252
ISDN Capable Lines	NA	NA	NA	NA	12,803,002	14,007,670	14,466,224	15,930,217	14,563,646	15,240,270	8,870,683

NA: Not available

Source: ARMIS Report 43-07.

Table 10.2
Transmission System Data
SBC Southwestern Bell Companies

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	646,283	652,224	662,108	676,945	685,526	700,914	715,915	734,982	749,279	758,096	768,714
Copper	608,238	609,725	612,764	617,776	622,960	634,236	645,280	657,915	665,754	671,033	678,357
Fiber	35,548	40,621	47,530	57,228	60,561	66,074	70,023	76,442	82,893	86,431	89,725
Other	2,497	1,878	1,814	1,942	2,005	604	612	625	632	632	632
Interoffice Working Facilities:											
Total Circuit Links	2,132,469	2,271,891	2,583,685	2,887,611	3,374,225	4,013,947	5,040,973	5,747,378	6,133,750	6,011,924	6,248,497
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	22,801,616	23,675,325	23,990,229	23,765,557	26,003,155	26,573,984	27,781,986	28,466,090	33,579,340	35,090,790	30,806,704
Copper	21,895,338	22,010,813	23,356,682	22,976,132	24,957,200	25,399,685	26,437,109	27,047,348	30,533,897	31,634,863	26,115,730
Fiber Digital Carrier	906,188	1,664,422	633,547	789,425	1,045,955	1,174,299	1,344,877	1,418,742	3,045,443	3,455,927	4,690,974
Other	90	90	0	0	0	0	0	0	0	0	0
Total Working Channels	13,431,477	15,446,486	15,917,610	16,579,937	16,305,661	17,626,797	17,857,937	18,053,445	16,482,996	15,888,373	15,236,915
Copper	12,703,861	14,046,786	15,376,311	15,937,288	15,532,286	16,738,819	16,854,720	16,970,439	15,386,074	14,767,650	12,653,096
Fiber Digital Carrier	727,542	1,399,626	541,299	642,649	773,375	887,978	1,003,217	1,083,006	1,096,922	1,120,723	2,583,819
Other	74	74	0	0	0	0	0	0	0	0	0
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	21,379,496	22,010,903	21,990,829	22,185,268	22,926,817	22,904,300	23,579,244	24,032,521	24,062,333	24,290,865	24,407,172
Fiber Strands Term in the CO (Loop Plant Only)	56,560	66,497	124,026	189,365	193,409	206,178	158,881	256,736	329,584	388,011	161,950
Fiber Term at Customer Premises DS1 Rate	38,568	44,622	48,552	77,598	77,545	113,701	103,739	130,287	160,740	172,872	273,498
Fiber Term at Customer Premises DS3 Rate & Higher	1,916	2,566	2,733	4,365	5,039	5,615	1,995	3,668	4,523	4,828	20,354
ISDN Capable Lines	NA	NA	NA	NA	3,773,275	4,157,674	12,158,269	12,168,819	12,055,812	11,177,094	4,981,445

NA: Not available

Source: ARMIS Report 43-07.

**Table 10.2
Transmission System Data
Verizon - Bell Atlantic Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	958,275	967,084	973,148	979,664	992,970	1,008,405	1,022,395	1,038,094	1,046,999	1,080,551	1,088,452
Copper	877,352	875,728	872,797	871,984	873,583	876,739	879,768	886,323	886,147	912,134	914,932
Fiber	78,415	89,132	98,425	107,141	118,987	130,872	141,888	151,432	160,494	168,185	173,174
Other	2,507	2,224	1,927	539	401	794	739	339	357	232	346
Interoffice Working Facilities:											
Total Circuit Links	5,159,173	5,201,204	5,213,347	5,357,022	5,853,744	6,834,238	8,687,801	10,262,940	11,001,835	11,120,804	11,201,109
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	82,980,954	86,021,165	90,107,803	77,287,239	80,327,245	86,996,490	90,777,075	89,384,018	125,406,917	138,190,365	136,579,521
Copper	65,122,822	65,275,522	65,663,036	65,333,981	66,426,101	67,001,475	66,639,008	65,672,215	71,057,709	73,002,465	72,752,820
Fiber Digital Carrier	17,858,134	20,745,643	24,444,767	11,953,258	13,901,144	19,995,015	24,138,067	23,711,803	54,349,208	65,187,900	63,826,701
Other	0	0	0	0	0	0	0	0	0	0	0
Total Working Channels	40,222,933	40,922,175	43,690,966	45,428,073	48,600,177	53,815,181	57,437,438	55,422,738	90,645,132	94,487,929	95,491,174
Copper	36,776,495	36,387,944	37,927,283	37,998,341	39,429,529	39,221,423	39,858,933	39,081,964	43,800,016	37,580,147	40,580,930
Fiber Digital Carrier	3,446,439	4,534,231	5,763,683	7,429,732	9,170,648	14,593,758	17,578,505	16,340,774	46,845,116	56,907,782	54,910,244
Other	0	0	0	0	0	0	0	0	0	0	0
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	60,557,866	60,577,213	60,635,648	60,742,136	61,342,895	61,875,146	61,342,016	60,962,933	60,979,463	62,622,453	62,718,766
Fiber Strands Term in the CO (Loop Plant Only)	273,279	604,501	704,901	804,787	872,210	1,088,063	1,247,579	1,799,523	1,942,003	1,487,203	1,552,120
Fiber Term at Customer Premises DS1 Rate	47,833	65,929	78,266	103,307	131,829	106,632	144,981	85,648	604,557	652,777	661,893
Fiber Term at Customer Premises DS3 Rate & Higher	1,306	1,767	2,333	3,381	4,094	9,515	11,225	10,090	36,396	43,716	42,415
ISDN Capable Lines	NA	NA	NA	NA	31,943,090	40,648,786	47,540,926	38,205,741	35,587,450	34,658,178	35,191,283

NA: Not available

Source: ARMIS Report 43-07.

**Table 10.2
Transmission System Data
Verizon - GTE Companies**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sheath Kilometers:											
Total Sheath Kilometers	1,367,255	1,314,600	1,234,633	1,248,505	1,268,110	1,290,068	1,312,437	1,041,353	1,053,450	938,012	946,019
Copper	1,305,857	1,251,223	1,167,365	1,177,702	1,188,835	1,203,101	1,219,257	959,596	965,586	856,090	859,017
Fiber	61,398	63,377	67,268	70,803	79,275	86,966	93,180	81,757	87,864	81,922	87,002
Other	0	0	0	0	0	0	0	0	0	0	0
Interoffice Working Facilities:											
Total Circuit Links	3,052,854	3,430,454	4,104,644	1,900,698	2,461,398	2,445,471	4,004,974	4,182,896	4,701,614	4,362,338	4,250,911
Loop Plant -- Central Office Terminations:											
Total Equipped Channels	28,601,394	28,043,406	30,593,828	30,128,527	30,278,580	31,455,009	42,599,694	44,586,214	41,943,472	42,126,127	42,633,517
Copper	26,989,645	26,280,274	28,716,964	28,146,972	27,709,878	28,240,814	29,880,881	28,590,183	25,616,859	24,678,550	23,858,412
Fiber Digital Carrier	1,607,049	1,758,085	1,871,908	1,978,522	2,559,245	3,209,964	12,715,677	15,994,041	16,325,472	17,446,656	18,774,264
Other	4,700	5,047	4,956	3,033	9,457	4,231	3,136	1,990	1,141	921	841
Total Working Channels	18,631,166	18,809,320	19,749,733	20,422,201	20,654,471	21,925,330	23,991,380	23,204,649	22,569,689	21,727,913	20,204,411
Copper	17,514,835	17,636,318	18,476,993	18,981,609	18,850,077	19,726,313	18,207,964	16,585,744	16,781,266	15,789,637	14,071,856
Fiber Digital Carrier	1,113,803	1,170,276	1,270,132	1,438,571	1,801,556	2,196,916	5,536,831	6,405,057	5,787,826	5,937,838	6,132,115
Other	2,528	2,726	2,608	2,021	2,838	2,101	246,585	213,848	597	438	440
Other Transmission Facility Data:											
Copper Pairs Term Main Frame (Loop Plant Only)	28,240,402	26,074,368	28,707,803	27,804,891	29,713,980	30,313,513	29,094,240	21,787,495	21,895,961	22,039,455	21,085,585
Fiber Strands Term in the CO (Loop Plant Only)	38,498	55,481	71,762	80,372	93,238	126,604	43,739	39,394	33,298	31,098	29,697
Fiber Term at Customer Premises DS1 Rate	6,540	7,941	14,619	16,469	23,480	4,846	11,316	289	214	172	169
Fiber Term at Customer Premises DS3 Rate & Higher	3,825	4,436	4,546	11,043	2,173	4,439	224	960	980	637	570
ISDN Capable Lines	NA	NA	NA	NA	12,935,628	13,732,469	16,265,613	18,031,436	12,148,900	11,606,200	15,742,902

NA: Not available

Source: ARMIS Report 43-07.