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Federal Communications Commission 1919 - M Street, N.W.

Washington, D. C. 20554

Missouri Public Sarvice Commission

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

March 31, 1999

FCC RELEASES REPORT ON LONG DISTANCE MARKET

The FCC has released a staff report entitled Long Distance Market Shares. The report summarizes publicly available data on long distance market shares.

Total toll revenues earned by long distance carriers have increased consistently since 1984. According to revenues reported to the FCC by carriers, AT&T's share of long distance carrier toll revenues fell from 90% in 1984 to slightly less than half the market in 1997. MCIWorldCom and Sprint now account for about one third of the long distance market. The market shares of smaller carriers grew even faster, increasing from 3% to 20% during that same period of time.

Switched access minutes have also increased consistently since 1984. With smaller carriers access minutes growing faster than AT&T's access minutes, AT&T's share of the overall market for interstate switched minutes declined from over 80% in late 1984 to under 52% in the fourth quarter of 1998.

In addition to information on revenues and minutes, the report contains information on international revenues, residential revenues, and presubscribed lines.

The report is available for reference in the Common Carrier Bureau Public Reference Room, 1919 M Street N.W., Room 222. Copies may be purchased by calling International Transcription Services, Inc. (ITS) at (202) 857-3800. The report can be downloaded [file name: MKSH4Q98.ZIP] from the FCC-State Link internet site at http://www.fcc.gov/ccb/stats on the World Wide Web.

-FCC-

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Case No(s). The Date 715-03 Rptr 716

LONG DISTANCE MARKET SHARES FOURTH QUARTER 1998

James Zolnierek Katie Rangos James Eisner

Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
March 1999



This report is available for reference in the Common Carrier Bureau's Public Reference Room, 1919 M Street, N.W., Room 222. Copies may be purchased by calling International Transcription Services, Inc. (ITS) at (202) 857-3800. The report can be downloaded [file name: MKSH4Q98.ZIP] from the FCC-State Link internet site at http://www.fcc.gov/ccb/stats on the World Wide Web.

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LONG DISTANCE MARKET SHARES

This report presents information on access minutes, presubscribed lines, and revenues for long distance telephone companies. Company shares of the long distance market are presented for each measure. Market shares are also reported according to each measure for the residential long distance market, and according to revenues for the international long distance market.

1. INTERSTATE CALLING MINUTES

"Switched access minutes" provide one measure of the volume of traffic carried on the public switched telephone network. Long distance telephone companies ordinarily access the distribution networks of local telephone companies at both ends of long distance calls. Access minutes are a measure of the number of minutes that long distance companies need to access local lines in order to complete long distance calls for their customers. For each conversation minute of a long distance call there are typically two access minutes, one on the originating end and one on the terminating end. Access minutes on the originating end are measured from the time the call is delivered to the caller's long distance carrier. On the terminating end, usage is measured from the time the call is received by the called party. Timing of usage at both ends of a call terminates when either the calling or called party disconnects.

Column 1 of Table 1.1 shows total interstate, including international, switched access minutes reported for all long distance carriers by the National Exchange Carrier Association (NECA).² Interstate calling has grown steadily, with access minutes more than tripling, since this information was first measured in the third quarter of 1984.

Terminating access minutes, which do not include dialing and call set up time, closely approximate long distance conversation minutes.³ Table 1.1 Column 2 shows the number of terminating switched interstate access minutes reported for all long distance carriers by NECA since terminating minutes were first reported separately in 1986. Terminating access minutes have tripled in this time.

Columns 3 and 4 of Table 1.1 show AT&T's reported total and terminating access minutes. ⁴ Columns 5 and 6 show AT&T's market shares of total and terminating access minutes. Since mid-1984, AT&T's traffic has grown at a rate slower than the industry average. AT&T's minutes have doubled during that period while the minutes for other carriers increased more than ten-fold. As a result AT&T's share of long distance access minutes has decreased 40%.

¹800 and 888 calls only generate originating access minutes, which are billed, somewhat confusingly, at the rate normally charged for terminating minutes. WATS calls generate only terminating access minutes. International calls only generate originating access minutes when exiting the United States and only terminating access minutes when entering the United States. Access minutes are not measured for calls made on private telecommunications systems and on leased lines.

²NECA reports information on switched access minutes March 15, June 15, September 15, and December 15 each year. NECA revises estimates of total industry minutes as additional information is received.

³Terminating minutes do not equal conversation minutes because terminating minutes for international calls exiting the United States are not counted and terminating minutes for some personal 800 numbers are counted twice.

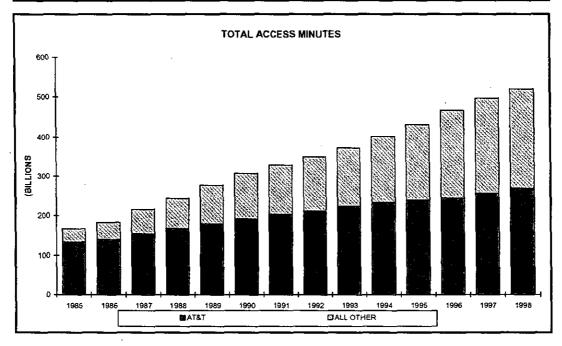
⁴AT&T also files information on its switched minutes on March 15, June 15, September 15, and December 15 each year. AT&T includes the access minutes it sells to other carriers in its counts.

TABLE 1.1 - INTERSTATE SWITCHED ACCESS MINUTES (FIGURES SHOWN IN BILLIONS)

		INDUSTRY		T&T		HARE OF
	ACCESS T	TERMINATING MINUTES	ACCESS MINUTES	TERMINATING MINUTES	ACCESS MINUTES	TERMINATING MINUTES
1984 THIRD QUARTER FOURTH QUARTER	37.5 39.6	:	31.6 31.8	18.1 18.2	84.2 % 80.2	
1985 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1985	39.6 41.5 42.8 43.3 167.1		32.8 33.3 33.8 33.4 133.3	19.0 19.2 19.4 19.2 77.0	83.0 80.3 78.9 77.1 79.8	
1986 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1986	43.0 44.8 46.7 48.5 183.1	26.7 27.6	34.2 34.7 35.8 35.9 140.6	19.9 20.2 20.7 20.6 81.5	79.5 77.5 76.6 74.0 76.8	77.7 % 74.7
1987 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1987	51.2	28.9	37.4	21.4	72.9	74.2
	52.5	29.7	38.6	22.1	73.7	74.2
	55.0	30.9	39.2	22.3	71.2	72.1
	57.0	32.3	40.1	22.6	70.4	70.1
	215.7	121.8	155.3	88.4	72.0	72.6
1988 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1988	59.0	33.4	41.2	23.3	69.8	69.9
	59.6	33.6	41.1	23.0	69.0	68.5
	62.1	34.9	42.3	23.6	68.2	67.6
	64.0	35.9	43.0	23.6	67.2	65.8
	244.6	137.8	167.6	93.6	68.5	67.9
1989 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1989	66.2	37.3	44.2	24.5	66.8	65.7
	68.5	38.1	44.4	24.5	64.8	64.4
	69.7	38.6	44.9	24.7	64.4	64.1
	72.6	40.0	46.4	25.3	63.9	63.3
	277.1	153.9	179.9	99.0	64.9	64.3
1990 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1990	74.7	41.2	47.1	25.8	63.0	62.5
	75.8	41.9	47.1	25.7	62.1	61.5
	77.9	43.4	48.7	26.4	62.5	60.9
	79.1	43.1	49.8	27.8	63.0	64.5
	307.4	169.6	192.6	105.8	62.6	62.4
1991 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1991	79.2	43.4	49.9	27.1	63.0	62.4
	81.9	44.9	50.5	26.8	61.7	59.6
	82.6	45.1	51.2	27.1	61.9	60.1
	84.4	46.4	52.4	27.9	62.1	60.0
	328.0	179.8	204.0	108.8	62.2	60.5
1992 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1992	85.6	47.7	53.3	28.6	62.2	59.9
	86.5	48.2	51.9	27.9	60.0	57.8
	87.9	49.1	53.0	28.4	60.3	57.9
	89.8	50.4	53.5	28.8	59.7	57.1
	349.7	195.4	211.7	113.6	60.5	58.2
1993 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1993	90.6	51.0	55.5	29.7	61.3	58.1
	91.2	51.9	55.0	29.9	60.3	57.6
	93.6	54.8	56.3	31.4	60.2	57.2
	95.9	56.4	56.8	31.9	59.3	56.6
	371.2	214.1	223.6	122.8	60.2	57.4

TABLE 1.1 - INTERSTATE SWITCHED ACCESS MINUTES (CONT'D) (FIGURES SHOWN IN BILLIONS)

		LINDUSTRY		AT&T		HARE OF
	ACCESS	TERMINATING	ACCESS	TERMINATING	ACCESS	TERMINATING
	MINUTES	MINUTES	MINUTES	MINUTES	MINUTES	MINUTES
1994 FIRST QUARTER	98.7	58.2	59.0	31.4	59.8 %	53.9 %
SECOND QUARTER	97.9	58.3	57.7	31.1	59.0	53.3
THIRD QUARTER	101.9	60.9	58.5	32.6	57.4	53.5
FOURTH QUARTER	102.9	62.0	59.5	33.3	57.9	53.6
TOTAL 1994	401.4	239.4	234.7	128.3	58.5	53.6
1995 FIRST QUARTER	105.6	63.8	59.9	33.6	56.7	52.7
SECOND QUARTER	106.8	64.7	59.3	33.5	55.5	51.8
THIRD QUARTER	109.0	66.7	59.8	34.4	54.8	51.6
FOURTH QUARTER	110.6	67.5	60.8	34.6	55.0	51.2
TOTAL 1995	431.9	262.7	239.8	136.1	55.5	51.8
1996 FIRST QUARTER	115.7	71.2	62.4	35.9	54.0	50.5
SECOND QUARTER	114.7	71.5	60.2	35.1	52.4	49.0
THIRD QUARTER	117.5	73.9	60.7	35.5	51.6	48.1
FOURTH QUARTER	120.2	76.2	61.7	35.6	51.3	46.8
TOTAL 1996	468.1	292.8	244.9	142.1	52.3	48.6
1997 FIRST QUARTER	122.1	76.6	63.9	37.1	52.3	48.5
SECOND QUARTER	124.4	79.2	63.2	37.1	50.8	46.8
THIRD QUARTER	124.9	79.2	65.3	38.6	52.3	48.7
FOURTH QUARTER	125.8	80.4	64.1	37.4	50.9	46.5
TOTAL 1997	497.3	315.4	256.5	150.2	51.6	47.6
1998 FIRST QUARTER	124.0	79.7	65.9	39.1	53.2	49.0
SECOND QUARTER	131.4	84.6	67.0	37.6	51.0	44.4
THIRD QUARTER	131.9	85.5	68.4	39.0	51.9	45.6
FOURTH QUARTER	132.8	86.0	68.4	38.7	51.5	45.0
TOTAL 1998	520.1	335.9	269.8	154.3	51.9	45.9



2. PRESUBSCRIBED LINES

A telephone line is said to be presubscribed to the long distance carrier that receives the ordinary long distance calls placed on that line. In areas where equal access is available (areas now covering more than 99% of the nation's lines), customers may choose a long distance carrier. Thereafter, all of the customer's long distance calls are routed to the chosen carrier unless the customer alters normal dialing procedure. For example, the customer might dial a special code to reach an alternate long distance carrier. In areas where equal access is not yet available, all lines are considered presubscribed to AT&T. By the end of 1996, more than 600 companies were providing long distance service to their own presubscribed customers.

Information on the number of lines presubscribed to each long distance carrier was collected by NECA because FCC rules required NECA to recover certain expenses from the larger long distance carriers. A long distance carrier "qualified" for paying these expenses if the number of lines presubscribed to the carrier equaled or exceeded .05% of the nation's presubscribed lines. NECA filed information semi-annually with the Commission. This information is summarized in Table 2.1. Following passage of the Telecommunications Act of 1996, the FCC changed its rules on universal service. At the end of 1996, NECA stopped collecting the presubscribed line data used in this report. As a result, information for December 1996 is the last presubscribed line data collected by NECA.

As of December 1996, NECA reported 158.7 million presubscribed lines in the United States. Special access lines, WATS lines, 800 lines, and other specialized lines are not included in the counts of presubscribed lines. In addition, there are some customers who decide not to choose a long distance carrier and some customers who have toll-restricted lines. Those lines are also not in the count of presubscribed lines.

Table 2.2 lists the market share of presubscribed lines for the top four long distance carriers individually and a composite market share for all other carriers. As of year end 1996, about 63% of the nation's lines were presubscribed to AT&T, 15% to MCI, 7% to Sprint, and 3% to WorldCom.

In recent years, many incumbent local exchange carriers (ILECs) have entered the long distance market. Table 2.3 shows the number of ILECs with presubscribed lines in their own service areas, the number of study areas in which serving ILECs have presubscribed lines, and the ILECs' share of presubscribed lines in these areas.⁵ The number of lines presubscribed for long distance service to ILECs in their own service areas has increased approximately 400 percent from year-end 1989 to year-end 1996, and the number of study areas in which ILECs provide interLATA long distance service has increased over 1,000 percent, for the same time period. In 1996, GTE began to offer long distance service. As a result, by the end of 1996 the number of lines located in areas where a customer could select a long distance carrier affiliated with the local telephone company increased to more than 30 million.

Table 2.4 shows the distribution of ILECs providing long distance service by the number of their own study areas in which they provided service. In 1989, only one ILEC provided long distance service in three or more of its study areas. By year-end 1996, this number had increased to six. These six ILECs provided long distance service in 186 study areas.

⁵A study area is a local exchange carrier's operations in a given state.

TABLE 2.1 - PRESUBSCRIBED TELEPHONE LINES BY CARRIER

	DEC 96	JUNE 96	DEC 95	JUNE 95	DEC 94	JUNE 94
TOTAL NUMBER OF CARRIERS WITH PRESUBSCRIBED LINES						
	621	582	583	549	511	454
TOTAL NUMBER OF QUALIFYING CARRIERS TOTAL NUMBER OF NON-QUALIFYING CARRIERS	45 576	43 539	44 539	36 513	35 476	29 425
QUALIFYING COMPANIES 1/		-				
AT&T COMPANIES: AT&T COMMUNICATIONS	100,177,257	00 500 355	101 129 700	100 500 074	400.053.405	
AT&T ALASCOM, INC. 2/	224,192	99,599,355	101,138,792	102,502,271	103,957,425 226,974	102,421,583
MCI TELECOMMUNICATIONS CORP. SOUTHERNET	22,938,608	24,338,086	23,911,437	23,459,534	22,040,062	22,286,410
TELECOM*USA		!				·
TELECONNECT SPRINT	. 44 700 747	45.005.040				Ì
LA CONEXION FAMILIAR, INC.	11,788,717	10,905,940	9,784,388	9,589,788	9,467,999	9,244,159
LONG DISTANCE/USA WORLDCOM 3/	4 207 400	4 440 750	4 200 040		·	
ADVANCED TELECOM CORP. (ATC)	4,297,498	4,110,753	4.088,816	3,683,433	1,954,198	1,831,304
AMERICAN NETWORK CLAYDESTA DIGITAL	[l	[l	
COM SYSTEMS DBA SUN DIAL			Į		•	
IIT .						
METROMEDIA MICROTEL					Į	
MID-AMERICAN						
NATIONAL TELECOMMUNICATIONS NTS (NATIONAL TELEPHONE SYSTEMS)	ļ	ļ	Į	,	ļ	,
TELUS/TELTEC SAVING	i	1	l ·			
TOUCH-1 LONG DISTANCE WILTEL 4/					320,571 960,004	161,143 677,430
MFS INTELENET, INC.	211,086	177,648	106,489			077,430
EXCEL TELECOMMUNICATIONS, INC. LC! COMPANIES:	3,792,171	3,313,287	1,486,953	223,235	75,543	
LCI INTERNATIONAL/LITEL 5/	2,244,192	1,965,532	1.227,925	840,968	638,464	614,937
LCI CORPORATE TELEMANAGEMENT GROUP LCI/US SIGNAL CORP. 6/			85,868 128,305	121,445	114.006	
FRONTIER COMPANIES; 7/	2,050,019	2,097,182	2,348,301	121,445	114,026	
FRONTIER doa ALLNET COMM. SVC., INC. 8/ FRONTIER COMMUNICATIONS INT'L 9/	(1,334,100) (488,074)			1,650,296 365,841	1,334,360	1.078,577
FRONTIER COMM-NORTH CENTRAL REGION 10/	(134,721)		(161,242)	154,038	283,372 132,946	278,542
FRONTIER OF THE GREAT LAKES 11/ FRONTIER OF THE WEST 12/	(93,124)	(97,277) (90,438)	(95,633)	88,043 133,300	84,141	80,573
SNET AMERICA LONG DISTANCE	783,135	597,251	(106,159) 304,391	223,844	137,489 105,855	144,240
GTE LONG DISTANCE CO. CABLE & WIRELESS COMMUNICATIONS	733,558 625,367	169,609	545.547			
TELEFONICA LARGA DISTANCIA	470,267	584,802 458,783	543,617 452,017	524,014 444,205	524,153 441,467	537,919 446,390
U.S. LONG DISTANCE/ZERO PLUS UNITED TELEPHONE LONG DISTANCE	356,932	276,153	212,611	149,308	116,602	
TOUCH 1 COMMUNICATIONS	289,380 209,905	471,687 49,392	517,379	545,189 108,550	572,010	612,991
CITIZENS TELECOM LONG DISTANCE SAVERS	206,698 185,247	141,636 170,359	450.004			
BUSINESS TELECOM, INC. (BTI)	177,423	171,239	158,001 146,118	151,473 132,196	141,697 121,822	128,716 100,808
INTER CONTINENTAL TELEPHONE L.D. SERVICES, INC.	160,084	117,780	134,572	120,932	99,033	84,534
COASTAL TELEPHONE COMPANY	143,601 141,358	116,239 133,108	99,557 97,917	90,774	ļ	
NATIONAL TELEPHONE COMMUNICATIONS, INC. VARTEC TELECOM, INC.	,139,185 137,594	116,898	100.000	400 500	400.004	400.000
CINCINNATI BELL LONG DISTANCE INC.	134,506	120,710	120,832 115,398	136,568 102,634	122,991 102,163	130,738 92,302
GENERAL COMMUNICATIONS, INC. ALLITEL LONG DISTANCE	130,994	124,969	119,883	102,813	102,528	102,202
SWITCHED SERVICES COMMUNICATIONS 13/	127,563 126,721	78,401	ļ		!	
TELAMERICA, INC. ATX TELECOMMUNICATIONS SERVICES	124,628	122,093	115,403	109,463	105,053	100,282
ONE CALL COMMUNICATIONS	122,297 120,952	119,843 110,352	118,637 93,613	113,466 78,328	107,979	110,023
AMERIVISION COMMUNICATIONS CENTURY AREA LONG LINES	117,120					
ACCESS LONG DISTANCE	116,708 107,423	104,143 101,914	90,562	81,438	İ	
OCI (ONCOR) INTERNATIONAL TELECHARGE	106,742	116,046	128,209	148,918	161,085	163,972
COMMONWEALTH LONG DISTANCE (CLD)	103,421	109,349	139,414	146.663	147,045	125,682
AMERICAN TELCO, INC. TWT-HEARTLINE	99,806	89,783	83,402	,,,,,,,	141,54	ĺ
ACC LONG DISTANCE CORPORATION	97,531 87,667	118,455 80,795	117,739 79,652		74,482	72,803
MATRIX TELECOM TRESCOM INTERNATIONAL, INC.	85,971 84,766	89,689	91,031			
DELTACOM L.D.S.	84,766 83,580	ŀ			[
WINSTAR GATEWAY NETWORK, INC MIDCOM COMMUNICATIONS		109,991	86,652	400.070	ļ	
COMMUNIQUE TELECOM		79,472	81,386	102,076	188,295	197,874
WORLDXCHANGE 14/ CHERRY COMMUNICATIONS			140,610	127,839	156,055	79,270
LINTEL (LINCOLN)			104,367 79,281	93,746 81,010	85.496	88.136
SONIC COMMUNICATIONS 15/ TELESPHERE NETWORK 15/		İ		3,,,,,,	114,041] 35,.00
PUERTO RICO TEL-COM	ţ	ļ	1		ļ	
NETECH COMM, US WEST		1				
TOTAL QUALIFYING CARRIERS	154,461,869	152,080.868	149,232,439	146,960,164	145,317,426	142,215,682
NON-QUALIFYING CARRIERS						
TOTAL INDUSTRY PRESUBSCRIBED LINES	4,210,374	3,920,356	3,368,738	3,384,888	3,161,902	3,013,060
	100,012,243	100,001,224	152,601,177	150,345,052	148,479,328	145,228,742

TABLE 2.1 - PRESUBSCRIBED TELEPHONE LINES BY CARRIER (CONT'D)

	DEC 93	JUNE 93	DEC 92	JUNE 92	DEC 91	JUNE 91
TOTAL NUMBER OF CARRIERS WITH PRESUBSCRIBED LINES	436					
	İ	412	414	425	388	355
TOTAL NUMBER OF QUALIFYING CARRIERS TOTAL NUMBER OF NON-QUALIFYING CARRIERS	27 409	28 384	28 386	24 401	22 366	24 331
QUALIFYING COMPANIES 1/						
AT&T COMPANIES: AT&T COMMUNICATIONS	101,711,178	101 770 744	101 202 000	104 204 440	400.000	404 040 500
AT&T ALASCOM, INC. 2/	216,964	218,225	101,203,888	101,384,413	101,498,260 203,105	101,013,529 196,244
MCI TELECOMMUNICATIONS CORP. SOUTHERNET	21,818,212	21,170,832	20,167,298	19,189,649	18,329,870	17,603,453
TELECOMPUSA	1	1	}	Ì	•	
TELECONNECT SPRINT	9,212,893	8,621,177	8,856,004	8,424,303	8,353,583	0.702.005
LA CONEXION FAMILIAR, INC.	0,2,2,000	0,021,111	71,327	72,555	0,303,363	8,702,085
LONG DISTANCE/USA WORLDGOM 3/	1,752,616	931,553	482.043	338,820	332,244	134,043
ADVANCED TELECOM CORP. (ATC)	1,11,11	[440,961	331,136	333,152	334,157
AMERICAN NETWORK CLAYDESTA DIGITAL	1					
COM SYSTEMS DBA SUN DIAL		134,950	126,190	117,571	116,326	119,034
METROMEDIA		538,362	494,864	468,698	476,128	497,187
MICROTEL MID-AMERICAN						751,1141
NATIONAL TELECOMMUNICATIONS			\ \	'	\	91,417
NTS (NATIONAL TELEPHONE SYSTEMS) TELUS/TELTEC SAVING						
TOUCH-1 LONG DISTANCE	98,044	105,244	110,929			
WILTEL 4/ MFS INTELENET, INC.	432,844	339,960	191,076	116,501	87,758	
EXCEL TELECOMMUNICATIONS, INC.						
LCI COMPANIES: LCI INTERNATIONAL/LITEL 5/	405 644	250 575	220 400	222.252	400 004	470.000
LCI CORPORATE TELEMANAGEMENT GROUP	405,644	359,575	338,496	226,350	186,884	163,089
LCI/US SIGNAL CORP. 6/ FRONTIER COMPANIES: 7/	109,071	93,155	77,096			
FRONTIER dba ALLNET COMM, SVC., (NC. 8/	891.577	846,961	859,499	830,548	813,748	775,847
FRONTIER COMMUNICATIONS INTL 9/ FRONTIER COMM-NORTH CENTRAL REGION 10/	279,304	260,760	252,495	240,670	190,382	180,321
FRONTIER OF THE GREAT LAKES 11/	77,699	76,521	71,059			
FRONTIER OF THE WEST 12/ SNET AMERICA LONG DISTANCE	96,539				ŀ	
GTE LONG DISTANCE CO.	l					
CABLE & WIRELESS COMMUNICATIONS TELEFONICA LARGA DISTANCIA	529,398 442,922	522,112 436,695	513,419 432,701	490,228 425,334	466,935 419,293	448,951 393,034
U.S. LONG DISTANCE/ZERO PLUS		1	1		1	!
UNITED TELEPHONE LONG DISTANCE TOUCH 1 COMMUNICATIONS	648,131	625,831	639,341	626,850	596,114	590,187
CITIZENS TELECOM LONG DISTANCE SAVERS	440.005					
BUSINESS TELECOM , INC. (BTI)	112,905 79,396	98,514	87,687	80,839	77,568	73,696
INTER CONTINENTAL TELEPHONE L.D. SERVICES, INC.	}	1	\		 	ì
COASTAL TELEPHONE COMPANY	1]		1	
NATIONAL TELEPHONE COMMUNICATIONS, INC. VARTEC TELECOM, INC.	117,692	77,258	İ			
CINCINNATI BELL LONG DISTANCE INC.	93,659	93,014	90,841	85,974	79,182	74,387
GENERAL COMMUNICATIONS, INC. ALLTEL LONG DISTANCE	99,911	91,812	97,798	94,229	93,233	90,252
SWITCHED SERVICES COMMUNICATIONS 13/						
TELAMÉRICA, INC. ATX TELECOMMUNICATIONS SERVICES	94,114	92,719 86,186	92,860 82,303	91,460 70,246	85,801	90,887
ONE CALL COMMUNICATIONS AMERIVISION COMMUNICATIONS			1 32,555	10,10		ļ
CENTURY AREA LONG LINES						
ACCESS LONG DISTANCE OCI (ONCOR)	124 511	400.005	07.500	}	}	}
INTERNATIONAL TELECHARGE	144,511	106,625	87,593		72,813	82,085
COMMONWEALTH LONG DISTANCE (CLD) AMERICAN TELCO, INC.	113,072	103,407	103,684	93,241		
TWT-HEARTLINE			i			
ACC LONG DISTANCE CORPORATION MATRIX TELECOM		l		į	Į	
TRESCOM INTERNATIONAL, INC.]				[
DELTACOM L.D.S. WINSTAR GATEWAY NETWORK, INC						
MIDCOM COMMUNICATIONS	1					
COMMUNIQUÉ TELECOM WORLDXCHANGE 14/	189,781	161,398	148,865	133,090	106,892	93,809
CHERRY COMMUNICATIONS			1	}	\	}
LINTEL (LINCOLN) SONIC COMMUNICATIONS 15/	90,146	91,420	93,427	93,562	94,183	96,415
TELESPHERE NETWORK 15/			1			94,666
PUERTO RICO TEL-COM NETECH COMM, US WEST		107,063]	79,146
TOTAL QUALIFYING CARRIERS	139,963,294	i	136,423,594	134,230 099	133,013,454	132 017 924
NON-QUALIFYING CARRIERS	 	 	 -			
TOTAL INDUSTRY PRESUBSCRIBED LINES	2,845,986	2,452,609	2,301,446	2,473,551	2.273,128	1,878,542
TOTAL INDUSTRIT PRESUBSURIBED LINES	142,809,280	140,614,679	138,725,040	136,703,650	135,286,582	133,896,463

1,222,040 121,46 6 ,500	1,315,809	1.24,797,791		097,893,1 974,284,851	252,3TT,1 310,TTT,021	480,618,1 808,804,281	NON-QUALIFYING CARRIERS NON-QUALIFYING CARRIERS TOTAL INDUSTRY PRESUBSCRIBED LINES
120,244,460	909,848,121	123,063,038	<u>-</u>	126,883,689	287,000,8S1	130,689,644	TOTAL QUALIFYING CARRIERS
				j			NETECH COMM, US WEST
	- 1		İ			386,111 128,66	ETESPHERE NETWORK 16/
798,862	92,636	160,4e	636,69	996'96	921'98	Þ69`66	SONIC COMMUNICATIONS 15/ FINTEL (LINCOLN)
.36.00	363 00	160 10	130 00	330 90	30,30	10300	CHERRY COMMUNICATIONS
l							COMMUNIQUE TELECOM WORLDXCHANGE 14/
	į	.				•	MIDCOM COMMUNICATIONS MINSTAR GATEWAY NETWORK, INC
	1	}	1			<u> </u>	TRESCOM INTERNATIONAL, INC. DELTACOM L.D.S.
		ļ				.	ACC LONG DISTANCE CORPORATION MATRIX TELECOM
-							TWT-HEARTLINE
-	-	-					COMMONWEALTH LONG DISTANCE (CLD) AMERICAN TELCO, INC.
			11,346	96,252	137,78	83,726	OCI (ONCOR) INTERNATIONAL TELECHARGE
						İ	CENTURY AREA LONG LINES ACCESS LONG DISTANCE
							WEEVIAISION COMMUNICATIONS
		<u>.</u>]	ATX TELECOMMUNICATIONS SERVICES NOTE CALL COMMUNICATIONS
262'96	7 99' 7 6	078,06	860,68	E1S,001	102,530	896,101	ZELAMERICA, INC.
85.68	708. № 8	834,68	£17,28	680,88	986, <u>S</u> 8	086,88	GENERAL COMMUNICATIONS, INC. ALLTEL LONG DISTANCE
						688,78	VERTEC TELECOM, INC. CINCINNETI BELL LONG DISTENCE INC.
							NATIONAL TELEPHONE COMMUNICATIONS, INC.
							L.D. SERVICES, INC. COMPANY COASTAL TELEPHONE COMPANY
							BUSINĘSS TELECOM , INC. (877) INTER CONTINENTAL TELEPHONE
]	CITIZENS TELECOM LONG DISTANCE SAVERS
82,602	520,781	285,385	430'220	613,033	114,428	€0€,8≱8	UNITED TELEPHONE LONG DISTANCE TOUCH 1 COMMUNICATIONS
\$05C0	300 234	100 300	033 067	260 613	127 703		U.S. LONG DISTANCE/ZERO PLUS
236,000	987,88S	976 AOC	358,290	394,020	906,704	422,534 496,67£	CABLE & WIRELESS COMMUNICATIONS TELEFONICA LARGA DISTANCIA
							SNET AMERICA LONG DISTANCE GTE LONG DISTANCE CO.
						1	FRONTIER OF THE GREAT LAKES 11/ FRONTIER OF THE WEST 12/
	473,£3	686,88	96,334	626,611	1 690,031	881,171	FRONTIER COMM-NORTH CENTRAL REGION 10/ FRONTIER COMMUNICATIONS INTLL 9/
₽ 76,9∑7	080,818	088,687	760,788	153,778	978,90Y	744,452	FRONTIER 4ba ALLNET COMM, SVC., INC. 8/
							LOINS SIGNAL CORP. 6/
		\$10°26	208,70t	123,748	137,164	144,926	LOI INTERNATIONALAITEL & LOI CORPORATE TELEMANAGEMENT GROUP
'		Ì			1	1	EXCEL TELECOMMUNICATIONS, INC. LCI, COMPANIES:
							MFC INTELENET, INC.
106,243	161,711	655,331 .	134,150				TELUS/TELTEC SAVING
106 243	101 211	066 301	031,651	T33,TT	621,TB	} \	(RMSTEWS) TELEPHONE SYSTEMS)
186,38	E11,001	929'26	798,98	ŀ	,	1	MID-PMERICAN MD-AMERICAN
215,485	783,587 783,587	181,812 675,07	950,60S	665,702	₽7£,861	117,818	METROMEDIA .
948,612	707, 1 66	ETT,28 EET,0SA	425,109	180,68 791,214	352,811 188,086	686,811	COM SYSTEMS DBA SUN DIAL
161,11 026,00	₱-08,87	Þ16'96	00120	*************************************	200 077		CLAYDESTA DIGITAL
926'96			262,542	616,86£	372,260	813,336	ADVANCED TELECOM CORP. (ATC) AMERICAN NETWORK
089,88	Sea,18]		973,88	18Y.0Y	≯98'9t l	FONG DISTANCEAUSA LONG DISTANCEAUSA
671,8£8.8	STE,28E,8	961,791,7	909,478,7	869,781,8	8,148,013	888,641,8	PRINT TA CONEXION FAMILIAR, INC.
156,614	211,949	247,042	918,668	180,848	712,263		TELECOM*USA TELECONNECT
193,099,9 697,581	702,149,01 860,691	12,149,921		15,055,643	100,988,81	868,464,71	SOUTHERNET SOUTH SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTHERNET SOUTH
162.040	157,250	161,572	SEE, 231 SSB, 178, E1	560'891	371,971	182,341	AT&T ALASCOM, INC. 24
878,S38,101	698,258,001	TT9,205,001	728,800,00t	609,865,66	99,612,726	119,190,001	AT&T COMPANIES: SMUUNICATIONS
						<u> </u>	ORALIFYING COMPANIES 1/
19	222 20	282 12	592 \$2,	585 50	507 50	304	LOTAL NUMBER OF NON-QUALIFYING CARRIERS
553	242	593	97.2	302	314	326	ALLH BEERDRECKIRED FINES LOLVE NOWBEK OF CARRIERS

TABLE 21 - PRESUBSCRIBED TELEPHONE LINES BY CARRIER

Notes for Table 2.1 - Presubscribed Telephone Lines by Carrier

- 1/ Information for each qualifying company is only shown for years in which the carrier had at least 0.05% of overall presubscribed lines.
- 2/ Purchased by AT&T in 1995.
- 3/ LDDS/WorldCom changed its name to WorldCom, Inc. in May 1995.
- 4/ WorldCom and Wiltel merged on January 5, 1995.
- 5/ Name changed from Litel, December 1994.
- 6/ Name changed from Teledial America, December 1994.
- 7/ The total number of presubscribed lines reported by Frontier in 1995 and 1996 are only for those subsidiaries which meet the qualifying companies' threshold noted in footnote 1 above.
- 8/ Purchased by Frontier in 1995.
- 9/ Name changed to RCI, December 1994.
- 10/ Formerly American Sharecom; purchased by Frontier in 1995.
- 11/ Formerly Schneider Communications; purchased by Frontier in 1995.
- 12/ Formerly West Coast Telecommunications; purchased by Frontier in 1995.
- 13/ Subsidiary of IXC Communications.
- 14/ Name changed from Communications Telesystems International (CTI) in 1995.
- 15/ Company went bankrupt.

TABLE 2.2 - MARKET SHARE OF PRESUBSCRIBED LINES

	АТ&Т	MCI	SPRINT	WORLDCOM	OTHER CARRIERS
1987 DEC	83.7 %	8.2 %	4.8 %		3.3 %
1988 JUNE	82.2	8.9	5.2	:	3.7
DEC	80.6	9.8	5.8		3.9
1989 JUNE	78.9	10.8	6.1	0.0 %	4.3
DEC	77.4	11.7	6.4	0.1	4.5
1990 JUNE	76.2	12.9	6.2	0.1	4.7
DEC	75.6	13.2	6.6	0.1	4.6
1991 JUNE	75.4	13.1	6.5	0.1	4.8
DEC	75.0	13.5	6.2	0.2	5.0
1992 JUNE	74.2	14.0	6.2	0.2	5.4
DEC	73.0	14.5	6.4	0.3	5.8
1993 JUNE	72.4	15.1	6.1	0.7	5.8
DEC	71.2	15.3	6.5	1.2	5.8
1994 JUNE	70.5	15.3	6.4	1.3	6.5
DEC	70.0	14.8	6.4	1.3	7.4
1995 JUNE	68.2	15.6	6.4	2.4	7.4
DEC	66.4	15.7	6.4	2.7	8.8
1996 JUNE	64.0	15.6	7.0	2.6	10.8
DEC	63.3	14.5	7.4	2.7	12.1

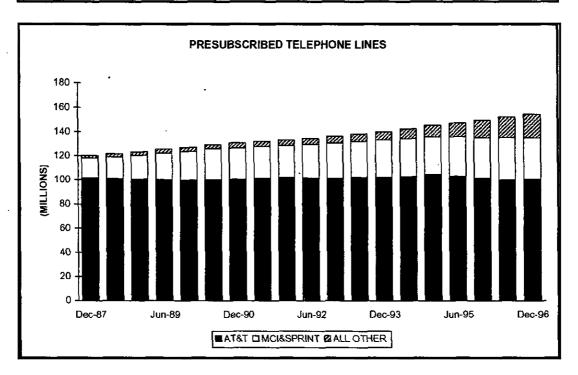


TABLE 2.3 - SHARE OF LINES SERVED BY ILECS IN THEIR OWN LOCAL SERVICE AREAS

Year	ILECs with Presubscribed Lines in their own service areas	Study Areas with Lines Presubscribed to the serving ILEC	Lines Presubscribed to ILECs in their own service areas	Total Lines in Study Areas with Lines Presubscribed to the serving ILEC	ILEC's Share of Total Lines
1989	7	21	861,174	4,982,221	17.3 %
1990	9	25	957,969	5,275,279	18.2
1991	12	37	1,101,824	5,922,057	18.6
1992	18	55	1,422,150	7,989,993	17.8
1993	28	75	1,628,055	10,564,681	15.4
1994	42	101	1,819,772	11,357,655	16.0
1995	48	141	2,269,976	12,789,604	17.7
1996	. 66	254	4,020,982	31,016,942	13.0

TABLE 2.4 - DISTRIBUTION OF ILECS BY NUMBER OF AREAS IN WHICH THEY PROVIDE BOTH LOCAL AND LONG DISTANCE SERVICE

Year	ILECs Serving 1 Study Area	ILECs Serving 2 Study Areas	ILECs Serving 3 to 10 Study Areas	ILECs Serving 11 to 24 Study Areas	ILECs Serving 25 or More Study Areas	Total
1989	4	2	0	i	0	7
1990	5	3	0	1	0	9
1991	8	2	1	1	0	12
1992	12	3	2	1	0	18
1993	21	4	1	2	0	28
1994	33	6	0	3	0	42
1995	37	7	1	1 .	2	48
1996	52	8	0	2	4	66

3. TOLL REVENUES

The larger long distance telephone companies (those with \$112 million or more in annual operating revenues for calendar year 1997) are required to report their annual revenues to the FCC. Unlike the information on switched access minutes, which excludes intrastate toll calls, reported revenues include intrastate calls, along with other domestic and interstate calls. For most carriers, no information is publicly available that separates their revenues into interstate versus intrastate service. In 1997, services provided by long distance carriers generated over \$88 billion in revenue. These revenues are shown in Table 3.1.6 Table 3.1 also contains toll revenues reported by the larger local telephone companies, which provide a substantial amount of intrastate toll service. In 1997, revenues reported by local telephone companies was approximately \$10 billion.7 When combined, the toll revenues for both local and long distance telephone companies reached nearly \$99 billion in 1997.

In 1997, AT&T's revenues were \$39 billion, having grown slightly from \$35 billion in 1984. MCI's revenues grew from almost \$2 billion in 1984 to over \$17 billion in 1997. Sprint's revenues grew from about \$1 billion in 1984 to about \$9 billion in 1997. WorldCom's revenues, which were first reported to the FCC in 1989, have grown from \$110 million to nearly \$6 billion. In 1997, four other companies, Excel, Frontier, LCI, and Cable & Wireless also had long distance revenues exceeding \$1 billion.

Table 3.2 shows market share information based on revenues for long distance carriers. AT&T's 1984 toll revenues accounted for about 90% of the revenues received by all long distance carriers. In 1997, AT&T's revenues accounted for a little over 44% of all long distance carrier revenues. MCI's long distance carrier market share has increased from over 5% in 1984 to over 19% in 1997. Sprint's long distance carrier market share has increased from 3% in 1984 to 10% in 1997. WorldCom's long distance carrier market share has increased from slightly more than 0% in 1989 to 7% in 1997. Smaller long distance carriers increased their share of the market nearly seven-fold, growing from less than 3% in 1984 to 20% in 1997.

Table 3.3 shows market share information based on revenues for long distance carriers including toll revenues collected by local exchange carriers. AT&T's toll revenues, which accounted for about 68% of all toll calling in 1984, fell to 40% in 1997.

Tables 3.2 and 3.3 also contain annual Hirschman-Herfindahl Indices (HHI). The HHI is the sum of squares of the market shares of the companies in a particular industry and is used by the Department of Justice to measure changes in industry concentration resulting from horizontal mergers or acquisitions. Since 1984, the HHI has fallen dramatically from 8,155 to 2,508 when calculated based on long distance carrier revenue. The HHI for the total toll market, which includes toll revenues for both long distance carriers and local exchange companies, has fallen from 4,734 to 2,048 over the same period of time.

⁶The revenue information for long distance telephone companies, shown in Table 3.1, is reported annually to the FCC. The revenues received by long distance carriers that are too small to file revenue reports with the FCC are estimated by the FCC staff.

⁷The revenue information for local exchange telephone companies, shown in Table 3.1, is taken from annual ARMIS (Automated Reporting Management Information System) USOA reports to the FCC (FCC Report 43-02). Revenues for local exchange carriers too small to file reports with the FCC are estimated by the FCC staff.

Table 3.4 shows annual toll revenues divided into three toll categories: intrastate, domestic interstate, and international.⁸ Though the total toll revenue figures are composed mostly of telephone service revenues, they also include revenues generated from telegraph, telex, and private line services. The intrastate toll figure includes both intraLATA and interLATA toll revenues. Of considerable interest is the enormous growth (almost 400%) in the international toll market from 1984 to 1997.

Quarterly reports to stockholders (the source for SEC 10Q filings) represent an alternative source of data on revenues. There are, however, usually differences between revenues reported to the FCC and the revenues reported to stockholders. These differences are related to the treatment of access charges, international settlements, and miscellaneous communications revenues that carriers include in the financial reports to stockholders but exclude in reports to the FCC. Quarterly market share estimates based on financial reports to shareholders are shown in Table 3.5 and are similar to the results produced from annual data.⁹

In 1976, AT&T and local exchange carrier (LEC) revenues constituted more than 99% of all long distance telephone service revenues. Over time, these traditional carriers have lost market share to new entrants in the long distance market. In the third quarter of 1998 new entrants' long distance revenues constituted nearly 50% of all long distance telephone service. In Table 3.6, along with the market shares of new entrants, long distance revenues are presented for both traditional carriers and new entrants in the long distance market. LEC long distance revenues are also provided in Table 3.6 along with new entrant revenues as a fraction of all non-LEC revenues.

⁸The total toll revenue figures reported in Table 3.4 are taken from Table 3.1. The total international revenue figures, which become available for each year in the second half of the following year, are taken from Table 1 in the *Trends in the International Telecommunications Industry* report published by the FCC. This revenue information includes facilities-based, facilities-resale, and pure resale revenue. Domestic revenues are divided between the intrastate and interstate jurisdictions based on FCC staff estimates and revenue divisions reported in the FCC report *Telecommunications Industry Revenue*.

⁹Quarterly revenue information for AT&T, MCI, Sprint, and WorldCom, shown in Table 3.5, is based on initial reports to stockholders. Quarterly revenue figures for all other carriers are estimated by the FCC staff. Accounting differences have caused some inconsistencies in the revenue measures over time. For example, AT&T, which has been subject to the FCC's Uniform System of Accounts (USA), and MCI, which has chosen to report in a similar manner, have deducted settlement payments to foreign correspondents and added settlement receipts from foreign correspondents before reporting revenues to the FCC, but have not netted out settlement payments and receipts when reporting revenues to stockholders. When carrier reporting detail permits, inconsistencies are eliminated.

TABLE 3.1 - TOTAL OPERATING REVENUES OF LONG DISTANCE SERVICE PROVIDERS

COMPANY	1997	1996	1995	1994	1993	1992	1991
AT&T COMPANIES 1/ AT&T COMMUNICATIONS, INC. ALASCOM, INC.	\$39,470	\$39,264	\$38,069 325	\$37,166 329	\$35,731 320	\$35,495 333	\$34,384 338
MCI COMPANIES 2/ MCI COMMUNICATIONS CORP. TELECOM*USA	17,150	16,372	14,617	11,715	10,947	9,719	8,266
SPRINT COMPANIES 3/ SPRINT COMMUNICATIONS CO. GTE SPRINT	8,595	7,944	7,277	6,805	6,139	5,658	5,378
US TELECOM WORLDCOM COMPANIES 4/ WORLDCOM, INC. ADVANCED TELECOMMUNICATIONS CORP.	5,897	4,485	3,640	2,221	1,145	801	263 356
METROMEDIA COMMUNICATIONS CORP. ITT COMMUNICATION SERVICES, INC.					297	369	369
COMSYSTEMS NETWORK SERVICES WILTEL, INC. MFS INTELENET, INC.	i	122	118	917	116 664	135 494	131 405
EXCEL COMPANIES 5/ EXCEL TELECOMMUNICATIONS, INC. TELCO HOLDINGS, INC. LONG DISTANCE WHOLESALE GROUP	1,180 379 176	1,091 429	363 215	156			
FRONTIER COMPANIES 6/ ALLNET COMM, SVCS, dba FRONTIER COMM, SVCS.	775	1,119	827	568	436	376	347
FRONTIER COMMUNICATIONS INT'L, INC. FRONTIER COMMUNICATIONS OF THE WEST, INC. FRONTIER COMM. OF THE NORTH CENTRAL REGION	223 324	323 121	309 127 133	306 144 123	213	168	155
LCI COMPANIES 7/ LCI INTERNATIONAL TELECOM CORP. USLD COMMUNICATIONS CORP.	1,001 241	1,103 188	671 155	453 136	317 100	243	208
CABLE & WIRELESS, INC. VARTEC TELECOM, INC. STAR TELECOMMUNICATIONS, INC. PT-1 COMMUNICATIONS, INC.	1,066 820 376 358	470 208	125	654 107	557	495	406
COMMUNICATION TELESYSTEMS INT'L. GTE COMMUNICATIONS CORP. TELEGROUP, INC.	345 340 337	213	129				
TEL-SAVE, INC. PACIFIC GATEWAY EXCHANGE, INC. IXC LONG DISTANCE, INC. WILLIAMS COMMUNICATIONS, INC.	305 299 258 227	162					
BUSINESS TELECOM, INC. 8/ RSL COMMUNICATIONS, LTD. CHERRY COMMUNICATIONS, INC. 9/	195 192 180	149	1		į		
GENERAL COMMUNICATION, INC. TRESCOM INTERNATIONAL, INC. SNET AMERICA, INC.	158 158 142	143 140	120	106	92		
TOTAL-TEL USA COMMUNICATIONS, INC. ACC LONG DISTANCE CORP. ONE CALL COMMUNICATIONS, INC. MIDCOM COMMUNICATIONS, INC. 10/	123 122 118	118		109			
GE CAPITAL COMMUNICATIONS SERVICES CORP. ONCOR COMMUNICATIONS, INC.			120 111	ļ		159	181
THE FURST GROUP, INC. AMERICAN NETWORK EXCHANGE, INC. TELESPHERE NETWORK, INC. 11/ NATIONAL TELEPHONE SERVICES. INC.			109 101				308
OTHERS 12/	7,097	5,788	5,168	5,055	4,319	3,923	2,948
TOTAL LONG DISTANCE CARRIERS	88,627	82,033	74,143	67,351	61,533	58,368	54,443
TOLL SERVICE REVENUES: BELL OPERATING COMPANIES OTHER LOCAL TELEPHONE COMPANIES 12/	7,138 2,804					9,718 3,897	
TOTAL LOCAL EXCHANGE COMPANIES	9,942					<u> </u>	
TOTAL REVENUES OF LONG DISTANCE SERVICE PROVIDERS					\$75,290	\$71,983	

TABLE 3.1 - TOTAL OPERATING REVENUES OF LONG DISTANCE SERVICE PROVIDERS

COMPANY	1990	1989	1988	1987	1986	1985	1984
AT&T COMPANIES 1/	400.000	201.510	225 127	225.240	\$50.544		201.005
AT&T COMMUNICATIONS, INC. ALASCOM, INC.	\$33,880 259	\$34,549 278	\$35,407 272	\$35,219 2621	\$36,514 267	\$36,770 271	\$34,935 255
MCI COMPANIES 2/	2001	2,5	-,-]	202	-"]	-, ')	
MCI COMMUNICATIONS CORP.	7,392	6,171	4,886	3,938	3,372	2,331	1,761
TELECOM*USA	- 1	713	524	396	291	201	105
SPRINT COMPANIES 3/ SPRINT COMMUNICATIONS CO.	5.041	4,320	3,405	2,592	1,141		l
GTE SPRINT	5,541	7,020	0,400	2,002	779	1,122	1,052
US TELECOM	.		l		212	387	T l
WORLDCOM COMPANIES 4/	454	440					
WORLDCOM, INC. ADVANCED TELECOMMUNICATIONS CORP.	1541 342	110 326	178	162	124	86	72
METROMEDIA COMMUNICATIONS CORP.	381	127	''"[102	'^"	00	, ' ' [
ITT COMMUNICATION SERVICES, INC.		404	379	287	282	241	161
COMSYSTEMS NETWORK SERVICES	130	000					
WILTEL, INC. MFS INTELENET, INC.	376	300					
EXCEL COMPANIES 5/							- 1
EXCEL TELECOMMUNICATIONS, INC.							
TELCO HOLDINGS, INC.							
LONG DISTANCE WHOLESALE GROUP FRONTIER COMPANIES 6/	;						
ALLNET COMM, SVCS, dba FRONTIER COMM, SVCS.	326	334	394	395	450	309	
LEXITEL		33.1				127	
FRONTIER COMMUNICATIONS INTL, INC.	142	104					
FRONTIER COMMUNICATIONS OF THE WEST, INC. FRONTIER COMM. OF THE NORTH CENTRAL REGION							
ILCI COMPANIES 7/							1
LCI INTERNATIONAL TELECOM CORP.	215	197					
USLD COMMUNICATIONS CORP.							
CABLE & WIRELESS, INC.	359	275	218	, 180	171	146	
VARTEC TELECOM, INC. STAR TELECOMMUNICATIONS, INC.							
PT-1 COMMUNICATIONS, INC.	•						
COMMUNICATION TELESYSTEMS INT'L.	<u> </u>						<u> </u>
GTE COMMUNICATIONS CORP. TELEGROUP, INC.							
TELESROOF, INC.							
PACIFIC GATEWAY EXCHANGE, INC.	\	\ 		l	\ \	1	1
IXC LONG DISTANCE, INC.	ł			ł			
WILLIAMS COMMUNICATIONS, INC.]						
BUSINESS TELECOM, INC. 8/ IRSL COMMUNICATIONS, LTD.	}	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	l	Ì	}	\	[
CHERRY COMMUNICATIONS, INC. 9/	1						
GENERAL COMMUNICATION, INC.					•		
TRESCOM INTERNATIONAL, INC.	1	1	}	1	}		\
SNET AMERICA, INC. TOTAL-TEL USA COMMUNICATIONS, INC.							
ACC LONG DISTANCE CORP.		ŀ	İ			Ì	
ONE CALL COMMUNICATIONS, INC.		ì	Ì			`	1
MIDCOM COMMUNICATIONS, INC. 10/ GE CAPITAL COMMUNICATIONS SERVICES CORP.]			1
ONCOR COMMUNICATIONS, INC.	230	275		i			1
THE FURST GROUP, INC.)	Ì	1	1	1	1	ì
AMERICAN NETWORK EXCHANGE, INC.						Į	
TELESPHERE NETWORK, INC. 11/ NATIONAL TELEPHONE SERVICES, INC.	293	192 150				{	
TELET (IONE SERVICES, INC.	Ì	1 '~~	Ì		Ì	}	ì
OTHERS 12/	2,582	2,359	1,823	1,352	992	639	414
TOTAL LONG DISTANCE CARRIEDS	E0 400	E4 464	47 402	44 705	44 505	40,000	20 755
TOTAL LONG DISTANCE CARRIERS TOLL SERVICE REVENUES:	52,102	51,184	47,487	44,783	44,595	42,630	38,755
	40.5		40.000	40.00	ممدم ا		
BELL OPERATING COMPANIES OTHER LOCAL TELEPHONE COMPANIES 12/	10,578						
OTHER LOCAL TELEPHONE COMPANIES 121	4.112	4,291	4,445	3,468	3,274	3,159	3,364
TOTAL LOCAL EXCHANGE COMPANIES	14,690	14,840	15,113	13,736	12,873	12,185	12,401
TOTAL REVENUES OF LONG DISTANCE SERVICE PROVIDERS	\$66,792	\$66,024	\$62,600	\$58,519	\$57,468	\$54,815	\$51,156

Notes for Table 3.1 - Total Toll Service Revenues

- 1/ AT&T Communications, Inc. acquired Alascom, Inc. August 7, 1995 and began filing consolidated revenues in 1996.
- 2/ MCI Communications Corp. and Telecom*USA merged in 1989 and began filing consolidated revenues in 1990.
- 3/ In July 1986, GTE Sprint and US Telecom merged into US Sprint. The information shown for GTE Sprint and US Telecom for 1986 is for January 1 June 30. The information shown for Sprint Communications Corp. (then US Sprint) for 1986 is for July 1 December 31. United Telecommunications, Inc., then majority owner of US Sprint, purchased the remaining interest from GTE in July 1992. Effective February 26, 1992, the company's name became Sprint Communications Co.
- 4/ Metromedia Communications Corp. and ITT Communications Services, Inc. merged during 1988, but reported 1989 revenue separately. LDDS Communications, Inc. and Advanced Telecommunications Corp. merged in 1992. In 1993, LDDS merged with Metromedia Communications Corp. and Comsystems Network Services. For 1993, only the revenues that were received after the merger are included in LDDS's revenues. Those revenues up to the merger are listed individually for 1993. LDDS and Wiltel merged January 5, 1995. In May 1995 LDDS changed its name to WorldCom, Inc. WorldCom acquired MFS Intelenet December 31, 1996.
- 5/ Excel Telecommunications, Inc. acquired Telco Holdings, Inc. in October 1997. Telco Holdings, Inc. and its affiliate Long Distance Wholesale Group filed a consolidated revenue statement for 1996. Excel Telecommunications, Inc., Telco Holdings, Inc., and Long Distance Wholesale Club each filed separate revenue statements for 1997.
- 6/ Allnet Communications Services and Lexitel merged at the end of 1985. In 1994, RCI Long Distance, Inc. changed its name to Frontier Communications International, Inc. Frontier Corporation, the parent company of Frontier Communications International, Inc., acquired ALC Communications, the parent company of Allnet, August 16, 1995. May 18, 1995, Frontier Corporation acquired WCT Communications, the parent company of West Coast Telecommunications, which is now known as Frontier Communications of the West, Inc. In addition, March 17, 1995, Frontier Corporation acquired American Sharecom, which is now Frontier Communications of the North Central Region.
- 7/ In September 1997 U.S. Long Distance, Inc. changed its name to USLD Communications, Inc. LCI International Telecom Corp. and USLD Communications, Inc. merged in December 1997, and filed separate revenue statements for 1997.
- 8/ Data for 1996 taken from the Annual Report to the Colorado Public Utilities
 Commission for telecommunications carriers regulated pursuant to §40-15-301 C.R.S.
- 9/ Cherry Communications, Inc. filed for bankruptcy protection in October 1997.
- 10/ MC Liquidating Corp. F/K/A Midcom Communications, Inc. filed for bankruptcy protection in November 1997.
- 11/ Telesphere Network, Inc. and National Telephone Services, Inc. merged during 1989. In 1991 Telesphere Network, Inc. went into bankruptcy.
- 12/ Estimated by FCC staff.

TABLE 3.2 - REVENUES: MARKET SHARE BASED ON OPERATING REVENUES OF LONG DISTANCE CARRIERS ONLY

YEAR	АТ&Т	MCI	SPRINT	WORLDCOM	ALL OTHER LONG DISTANCE CARRIERS	HERFINDAHL- HIRSCHMAN INDEX (HHI) *
1984	90.1 %	4.5 %	2.7 %	[2.6 %	8,155
1985	86.3	5.5	2.6		5.6	7,479
1986	81.9	7.6	4.3		6.3	6,783
1987	78.6	8.8	5.8	}	6.8	6,298
1988	74.6	10.3	7.2	1	8.0	5,720
1989	67.5	12.1	8.4	0.2 %	11.8	4,778
1990	65.0	14.2	9.7	0.3	10.8	4,527
1991	63.2	15.2	9.9	0.5	11.3	4,321
1992	60.8	16.7	9.7	1.4	11.5	4,074
1993	58.1	17.8	10.0	1.9	12.3	3,795
1994	55.2	17.4	10.1	3.3	14.0	3,466
1995	51.8	19.7	9.8	4.9	13.8	3,197
1996	47.9	20.0	9.7	5.5	17.0	2,823
1997	44.5	19.4	9.7	6.7	19.8	2,508

^{*} FCC estimate.

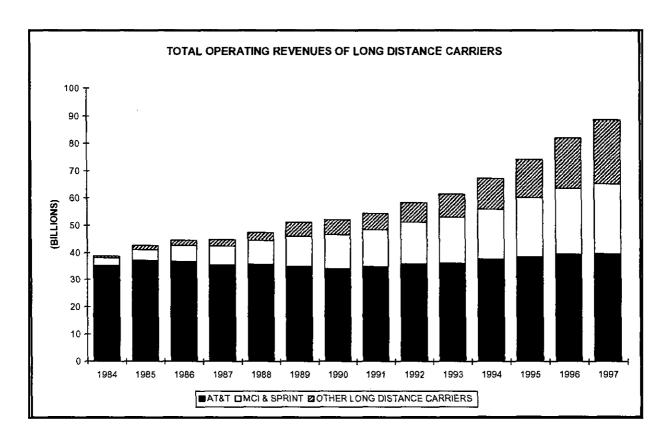


TABLE 3.3 - REVENUES: MARKET SHARE BASED ON TOTAL OPERATING REVENUES OF LONG DISTANCE CARRIERS AND TOTAL TOLL REVENUES FOR LOCAL EXCHANGE CARRIERS

YEAR	AT&T	MCI	SPRINT	WORLDCOM	ALL OTHER LONG DISTANCE CARRIERS	BELL OPERATING COMPANIES	OTHER LOCAL TELEPHONE COMPANIES	HERFINDAHL- HIRSCHMAN INDEX (HHI) *
1984	68.3 %	3.4 %	2.1 %		2.0 %	17.7 %	6.6 %	4,734
1985	67.1	4.3	2.0		4.4	16.5	5.8	4, 571
1986	63.5	5.9	3.3		4.9	16.7	5.7	4,129
1987	60.2	6.7	4.4]	5.2	17.5	5.9	3,742
1988	56.6	7.8	5.4		6.1	17.0	7.1	3,344
1989	52.3	9.3	6.5	0.2 %	9.1	16.0°	6.5	2,920
1990	50.7	11.1	7.5	0.2	8.4	15.8	6.2	2,801
1991	50.2	12.1	7.8	0.4	9.0	14.7	5.9	2,768
1992	49.3	13.5	7.9	1.1	9.3	13.5	5.4	2,715
1993	47.5	14.5	8.2	1.5	10.1	13.1	5.2	2,568
1994	46.0	14.5	8.4	2.8	11.7	11.8	4.8	2,440
1995	44.9	17.1	8.5	4.3	12.0	9.6	3.7	2,390
1996	42.1	17.6	8.5	4.8	15.0	8.5	3.5	2,197
1997	40.0	17.4	8.7	6.0	17.8	7.2	2.8	2,048

^{*} FCC estimate.

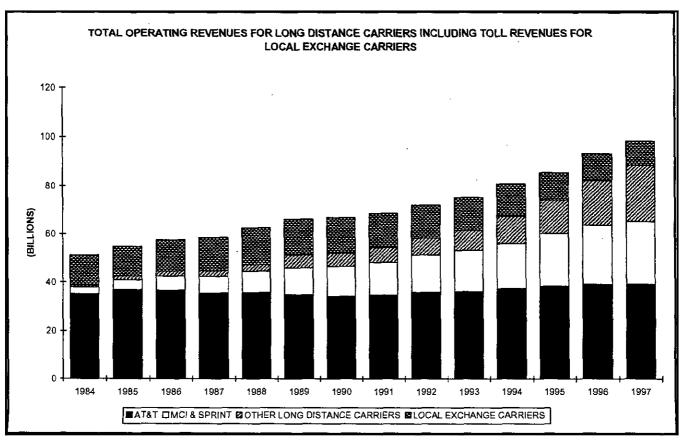


TABLE 3.4 - THE TOLL MARKET (DOLLAR AMOUNTS SHOWN IN MILLIONS)

		REVENUES			AS PERCENTAGE OF TOTAL TOLL REVENUES						
	INTRASTATE	DOMESTIC INTERSTATE	INTERNATIONAL	TOTAL TOLL REVENUES	INTRASTATE	DOMESTIC INTERSTATE	INTERNATIONAL				
1984	\$20,872	\$26,490	\$3,794	\$51,156	40.8 %	51.8 %	7.4 %				
1985	22,310	28,387	4,119	54,815	40.7	51.8	7.5				
1986	23,734	29,123	4,611	57,468	41.3	50.7	8.0				
1987	25,339	27,844	5,336	58,519	43.3	47.6	9.1				
1988	26,542	29,724	6,334	62,600	42.4	47.5	10.1				
1989	28,060	30,585	7,379	66,024	42.5	46.3	11.2				
1990	27,652	30,676	' 8,464	66,792	41.4	45.9	12.7				
1991	27,149	31,331	10,078	68,558	39.6	45.7	14.7				
1992	27,066	33,719	11,199	71,983	37.6	46.8	15.6				
1993	28,158	34,661	12,470	75,290	37.4	46.0	16.6				
1994	28,496	38,262	13,968	80,726	35.3	47.4	17.3				
1995	29,147	39,903	16,425	85,475	34.1	46.7	19.2				
1996	31,995	42,771	18,515	93,281	34.3	45.9	19.8				
1997	32,133	46,142	20,293	98,569	32.6	46.8	20.6				
		·	·								

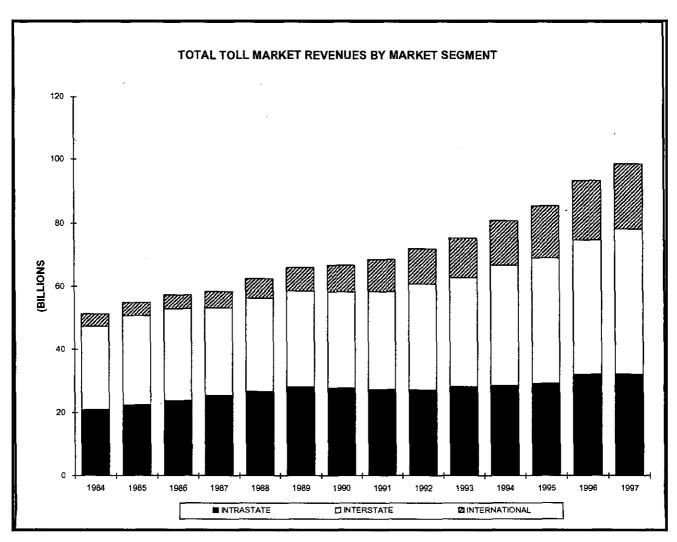


TABLE 3.5 - QUARTERLY TOLL REVENUES REPORTED TO SHAREHOLDERS (DOLLAR AMOUNTS SHOWN IN MILLIONS)

· 1							MARKET SHARE					
	AT&T	MCIWO MCI	ORLDCOM 1/ WORLDCOM	SPRINT	OTHERS	TOTAL	AT&T		RLDCOM 1/ WORLDCOM	SPRINT	OTHERS	
1Q84	\$8,684	\$475		\$302	\$63	\$9,524	91.2 %	5.0 %	··· OILLE COIII	3.2 %	0.7 %	
2Q84	9,169	485		317	85	10,055	91.2	4.8		3.1	0.8	
3Q84	9,097	478		307	114	9,995	91.0	4.8		3.1	1.1	
4Q84	9,272	521		320	152	10,265	90.3	5.1		3.1	1.5	
1Q85	9,369	571		320	283	10,543	88.9	5.4		3.0	2.7	
2Q85	9,840	601		322	297	11,060	89.0	5.4		2.9	2.7	
3Q85	9,742	649		335	312	11,038	88.3	5.9		3.0	2.8	
4Q85	9,838	721		368	328	11,255	87.4	6.4		3.3	2.9	
1Q86	9,865	819		395	383	11,462	86.1	7.1		3.4	3.3	
2Q86	9,705	943		432	396	11,476	84.6	8.2		3.8	3.5	
3Q86	9,642	910		552	410	11,514	83.7	7.9		4.8	3.6	
4Q86	9,502	920		589	423	11,435_	83.1	8.0		5.2	3.7	
1Q87	9,085	1,005	-	615	452	11,156	81.4	9.0		5.5	4.0	
2Q87	9,298	1,002		546	471	11,317	82.2	8.8		4.8	4.2	
3Q87	9,474	1,044		685	492	11,694	81.0	8.9		5.9	4.2	
4Q87	9,413	1,088	.,	746	513	11,759_	80.1	9.2		6.3	4.4	
1Q88	9,229	1,212	\$9	· 760	538	11,748	78.6	10.3	0.1 %	6.5	4.6	
2Q88	9,272	1,300	11	799	583	11,965	77.5	10.9	0.1	6.7	4.9	
3Q88	9,378	1,437	14	916	631	12,377	75.8	11.6	0.1	7.4	5.1	
4Q88	9,578	1,512	18	930	683	12,722	75.3	11.9	0.1	7.3	5.4	
1Q89	9,326	1,625	21	984	951	12,906	72.3	12.6	0.2	7.6	7.4	
2Q89	9,251	1,719	26	1,038	965	12,998	71.2	13.2	0.2	8.0	7.4	
3Q89	9,175	1,792	31	1,111	978	13,087	70.1	13.7	0.2	8.5	7.5	
4Q89	9,239	1,835	32	1,191	992	13,289	69.5	13.8	0.2	9.0	7.5	
1Q90	9,511	2,001	34	1,215	1,007	13,768	69.1	14.5	0.2	8.8	7.3	
2Q90	9,553	2,061	37	1,239	1,026	13,916	68.6	14.8	0.3	8.9	7.4	
3Q90	9,626	2,197	43	1,279	1,046	14,191	67.8	15.5	0.3	9.0	7.4	
4Q90	9,693	2,197	41	1,331	1,067	14,329	67.6	15.3	0.3	9.3	7.4	
1Q91	9,594	2,283	134	1,339	1,086	14,436	66.5	15.8	0.9	9.3	7.5	
2Q91	9,637	2,354	142	1,358	1,120	14,611	66.0	16.1	1.0	9.3	7.7	
3Q91	9,820	2,412	164	1,348	1,155	14,900	65.9	16.2	1.1	9.0	7.8	
4Q91	9,792	2,442	177	1,343	1,192	14,945	65.5	16.3	1.2	9.0	8.0	
1Q92	9,873 9,851	2,513	184	1,357	1,287	15,214	64.9	16.5	1.2	8.9	8.5	
2Q92 3Q92	10,132	2,606 2,682	198 206	1,378 1,432	1,322 1,359	15,356	64.2	17.0 17.0	1.3 1.3	9.0 9.1	8.6 8.6	
4Q92	9,724	2,082	213	1,432	1,339	15,811 15,584	62.4	17.0 17.7	1.3	9.1 9.6	8.6 9.0	
1Q93	9,724	2,761	219	1,491	1,430	15,384	62.6	17.7	1.4	9.4	9.0	
2Q93	9,833	2,929	252	1,510	1,503	16,027	61.4	18.3	1.6	9.4	9.4	
3Q93	10,142	3,054	282	1,541	1,580	16,599	61.1	18.4	1.7	9.3	9.5	
4Q93	9,921	3,128	392	1,598	1,661	16,699	59.4	18.7	2.3	9.6	9.9	
1Q94	10,224	3,221	524	1,660	1,934	17,563	58.2	18.3	3.0	9.5	11.0	
2Q94	10,335	3,309	555	1,696	2,009	17,903	57.7	18.5	3.1	9.5	11.2	
3Q94	10,378	3,407	569	1,740	2,087	18,181	57.1	18.7	3.1	9.6	11.5	
4Q94	10,331	3,400	573	1,709	2,168	18,181	56.8	18.7	3.2	9.4	11.9	
1Q95	10,736	3,561	839	1,753	2,320	19,208	55.9	18.5	4.4	9.1	12.1	
2Q95	11,035	3,706	869	1,772	2,451	19,833	55.6	18.7	4.4	8.9	12.4	
3Q95	11,330	3,862	908	1,827	2,590	20,517	55.2	18.8	4.4	8.9	12.6	
4Q95	11,250	3,912	924	1,926	2,736	20,748	54.2	18.9	4.5	9.3	13.2	

TABLE 3.5 - QUARTERLY TOLL REVENUES REPORTED TO SHAREHOLDERS - (CONT'D) (DOLLAR AMOUNTS SHOWN IN MILLIONS)

										7.1.1	====
ŀ	Į								MARKET SHA	RE	
ľ	AT&T	MCIW	ORLDCOM 1/	SPRINT	OTHERS	TOTAL	AT&T	MCIW	ORLDCOM 1/	SPRINT	OTHERS
l		MCI	WORLDCOM				L	MCI	WORLDCOM		
1Q96	\$11,313	\$4,050	\$1,006	\$2,002	\$3,245	\$21,616	52.3 %	18.7 %	4.7 %	9.3 %	15.0 %
2Q96	11,223	4,158	1,038	2,053	3,385	21,857	51.3	19.0	4.7	9.4	15.5
3Q96	11,552	4,274	1,111	2,084	3,532	22,552	51.2	19.0	4.9	9.2	15.7
4Q96	11,541	4,302	1.215	2,164	_3,684	22,906	50.4	18.8	5.3	9.4	16.1
1Q97	11,509	4,384	1,305	2,172	4,066	23,436	49.1	18.7	5.6	9.3	17.4
2Q97	11,582	4,353	1,339	2,219	4,268	23,760	48.7	18.3	5.6	9.3	18.0
3Q97	11,695	4,343	1,416	2,252	4,479	24,185	48.4	18.0	5.9	9.3	18,5
4Q97	11 <u>,3</u> 88	4,539	1,508	2,312	4,701	24,449	46.6	18.6	6.2	9.5	19.2
1Q98	11,264	4,838	1,658	2,368	5,393	25,521	44.1	19.0	6.5	9.3	21.1
2Q98	11,301	4,935	1,744	2,382	5,628	25,990	43.5	19.0	6.7	9.2	21.7
3Q98	11,382	6,427		2,458	5,873	26,140	43.5	24.6		9.4	22.5
4Q98	10,995	6,613		2,582	6,128	26,318	41.8	25.1		9.8	23.3

^{1/} WorldCom completed a merger with MCI 9/14/98. Beginning 3Q98 the revenues for the combined company, MCIWorldCom are reported in the MCI column. MCI and WorldCom Revenues for 1Q98 and 2Q98 and MCIWorldCom revenues for 3Q98 include local revenues, which were not separated from long distance revenues in reports to shareholders.

TABLE 3.6 - TOLL REVENUES BY TYPE OF PROVIDER (DOLLAR AMOUNTS SHOWN IN MILLIONS)

TRADITIONAL TOLL CARRIER REVENUE 1/ NEW ENTRANTS LOCAL TOTAL TOLL NEW ENTRANTS AT&T AND EXCHANGE EW ENTRANTS SHARE OF INDUSTRY ALASCOM TOLL CARRIERS TOLL TOLL SHARE OF NON-LEC YEAR REVENUE REVENUE. REVENUE REVENUE 2/ TOTAL TOLI TOLL 1976 \$19.867 \$19,800 \$67 0.3 % 1977 22,575 22,429 146 0.6 1978 26,079 25,891 188 0.7 29,551 1979 29,262 289 1.0 1980 33,335 32,855 480 1.4 1981 39,180 38,309 871 2.2 1982 43,919 42,332 1,587 3.6 46,970 1983 5.7 44,298 2,672 1984 51,156 35,190 \$12,401 3,565 7.0 9.2 % 1985 54,815 37,041 12,185 5.589 10.2 13.1 1986 57,468 36,782 12,873 7,813 17.5 13.6 1987 58,519 35,481 13,736 9,302 15.9 20.8 1988 62,600 35,679 15,113 11,807 18.9 24.9 1989 66,024 34,827 14,840 16,160 24.5 31.6 1990 66,792 34,139 14,690 17,748 34.1 26.6 68,558 1991 34,722 14,115 19,513 28.5 35.8 1992 71.983 35,828 13,615 22,297 31.0 38.2 75,290 1993 13,757 36,051 24,660 32.8 40.1 1994 80,726 37,495 13,375 29,856 37.0 44.3 38,394 1995 85,475 11,332 41.8 48.2 35,749 1996 93,281 39,264 11,248 42,769 45.8 52.1

9.942

49,157

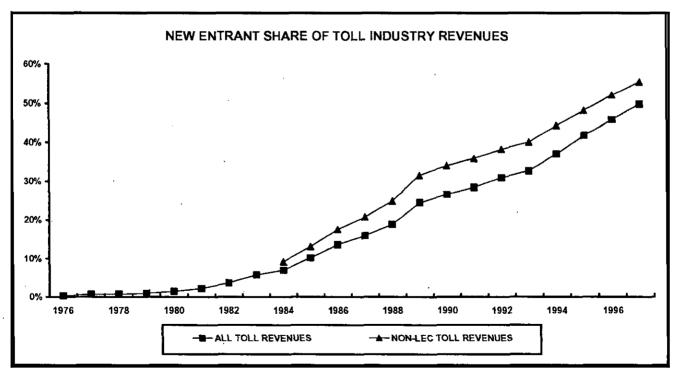
49.9

55.5

39,470

1997

98,569



^{1/} Prior to 1984 AT&T and Alascom toll revenue includes local exchange carrier toll revenue, which was not reported separately to the FCC prior to 2/ FCC staff estimates.

4. RESIDENTIAL LONG DISTANCE MARKET SHARES

Bill Harvesting data collected by PNR and Associates, Inc. (PNR) provides information on market shares in the long distance residential market, as opposed to the overall market for toll service. The Bill Harvesting data also provide information on the market shares of long distance carriers by state.

PNR is an economic research and consulting firm located in Jenkinstown, Pennsylvania. PNR conducts nationwide surveys of residential telephone usage and household expenditures on telephone service. These surveys, in which households are asked to mail copies of their phone bills for one month to PNR, are called Bill Harvesting studies.¹⁰

PNR has donated databases containing information from their 1995, 1996, and 1997 Bill Harvesting studies to the Commission. PNR has granted the Commission permission to use these databases for research purposes and to publish the results. Tables 4.1, 4.2, and 4.3, which are based on this information, present market shares for the residential long distance market based on lines, revenues and direct dial minutes. These tables include long distance market shares for AT&T, MCI, Sprint and other long distance carriers. PNR has granted the Commission permission to use these databases for research purposes and to publish the results. Tables 4.1, 4.2, and 4.3, which are based on this information, present market shares for the residential long distance market based on lines, revenues and direct dial minutes. These tables include long distance market shares for AT&T, MCI, Sprint and other long distance carriers.

Results of the Bill Harvesting surveys are interesting in several respects. For instance, AT&T's share of the residential long distance market is larger than its share of the total toll market. This result is consistent regardless of whether market shares are measured in lines, revenues or minutes. AT&T's share of the residential long distance market, by all three measures, dropped sharply from 1995 to 1997. As was the case in the overall toll market for long distance services, most of the growth occurred among smaller competitors. The Bill Harvesting data suggest that AT&T had 67% of presubscribed residential lines in 1997.

The Bill Harvesting data also indicate that competition is present in all parts of the country. Indeed, smaller competitors appear to be as successful in rural states as in more urban states. Although the Bill Harvesting surveys include several thousand households, sample sizes for individual states can be quite small and therefore subject to large margins of error. Thus, these small sample sizes may limit the usefulness of these data in analyzing differences among states and differences over time.

¹⁰PNR and Associates, Inc. can be contacted by phone at (215) 886-9200, and by e-mail at info@pnr.com. Their address is 101 Greenwood Avenue, Suite 502, Jenkinstown, PA 19046.

¹¹PNR first conducted a Bill Harvesting study in 1994 but the 1994 survey apparently is not fully comparable with later surveys. The 1995 survey is known as *Bill Harvesting II* and the 1996 survey, *Bill Harvesting III*. The expanded 1997 survey, which contains over twice as many observations, was conducted by both PNR and Associates, Inc. and by Market Facts, Inc. and is known as *TLC MarketShare Monitor*.

¹²Market share for WorldCom is not separated from other long distance carriers in the residential market share data since WorldCom has a small share of the end user residential market.

TABLE 4.1 - MARKET SHARE OF RESIDENTIAL ACCESS LINES BY STATE

			1997					1996	5		1995				
STATE	AT&T	MCI	SPRINT	OTHERS	SAMPLE SIZE	AT&T	мсі	SPRINT	OTHERS	SAMPLE SIZE	AT &T	мсі	SPRINT	OTHERS	SAMPLE SIZE
Alabama	73.8 %	8.2 %	1.9 %	16.1 %	286	69.5 %	14.7 %	2.1 %	13.7 %	95	73.6 %	12.0 %	3.2 %	11.2 %	125
Arizona	66.2	11.8	9.7	12.3	293	73.2	8.7	11.6	6.5	138	78.2	12.1	5.8	3.9	206
Arkansas	68,9	7.8	4.7	18.6	172	72.5	13.0	1.4	13.0	69	75,3	12.3	4.9	7.4	81
California	66.5	15.5	7.0	11.0	1,888	75.6	12.8	6.3	5.3	742	75.9	15.3	4.8	4.0	793
Colorado	64.5	16.0	3.9	15.6	256	72.6	11.9	9.6	5.9	135	62.3	19.4	6.9	11.4	175
Connecticut	42.4	9.7	3.0	44.9	216	44.6	9.2	6.2	40.0	65	83.1	8.4	2.4	6.0	83
Delaware	65.6	13.1	8.2	13.1	61	64.7	23.5	11.8	0.0	17	87.5	8.3	0.0	4.2	24
Dist. of Columbia	52.0	18.0	8.0	22.0	25	69.2	15.4	0.0	15.4	13	90.9	9.1	0.0	0.0	111
Florida	69.3	10.0	8.4	12.2	1.115	71.4	10.2	6.4	12.0	451	75.6	12.5	4.3	7.6	536
Georgia	72.3	9.2	5.5	12.9	417	79.5	8.9	4.1	7.5	146	73.3	16.8	3.8	6.1	131
Idaho	61.9	8.3	8.3	21.4	84	72.5	10.0	7.5	10.0	40	78.7	14.8	3.3	3.3	61
Illinois	69.7	12.1	4.7	13.5	774	73.8	15.2	3.8	7.2	290	77.4	13.1	3.3	6.1	359
Indiana	66.8	10.3	3.1	19.8	382	77.0	12.1	3.0	7.9	165	75.3	10.5	4.7	9.5	190
lowa	57.5	18.8	5.1	18.6	226	72.8	13.2	1.8	12.3	114	78.7	11.6	4.7	4.9	164
Kansas	64.7	10.2	8.6	16.6	187	60.7	14.8	8.2	16.4	61	72.1	13.5	3.6	10.8	111
Kentucky	71.1	8.0	6.2	14.7	268	71.6	14.7	2.0	11.8	102	74.7	11.6	2.1	11.6	146
Louisiana	66.8	10.2	4.9	18.1	274	70.5	12.5	4.5	12.5	88	70.0	18.5	4.6	6.9	130
Maine	72.5	11.9	3.1	12.5	80	81.5	18.5	0.0	0.0	27	74.6	14.3	1.6	9.5	63
Marvland	60.3	19.2	4.4	16.0	377	59.8	23.6	3.9	12.6	127	71.2	17.8	3.1	8.0	163
Massachusetts	76.3	10.9	3.7	9.1	340	39.8 74.6	9.8	4.1	1	127	82.8	8.9	1	6.1	180
									11.5				2.2		
Michigan	61.9	16.1	6.0	16.0	576	59.7	18.1	5.0	17.2	221	73.0	12.8	2.8	11.4	359
Minnesota	66.4	19.5	3.6 5.4	10.6	405	64.7	17.3	4.0	13.9	173	70.4	15.6	3.2	10.8	250
Mississippi	71.1	8.9	1	14.6	140	76.6	4.3	8.5	10.6	47	80.3	13.1	3.3	3.3	61
Missouri	66.7	13.0	6.0	14.3	300	59.1	17.4	3.8	19.7	132	73.8	11.6	6.7	7.9	164
Montana	66.9	14.9	1.4	16.9	74	67.7	16.1	0.0	16.1	31	80.8	11.5	1.9	5.8	52
Nebraska	67.1	14.7	4.2	14.0	143	71.2	17.3	1.9	9.6	52	73.6	13.9	1.4	11.1	72
Nevada	64.2	6.4	14.7	14.7	109	66.0	16.0	16.0	2.0	50	67.5	15.0	10.0	7.5	40
New Hampshire	76.5	9.1	3.8	10.6	66	77.5	10.0	10.0	2.5	40	80.5	7.3	7.3	4.9	41
New Jersey	74.9	11.3	,4.5	9.3	462	77.5	11.9	5.6	5.0	160	84.2	10.4	1.0	4.5	202
New Mexico	61.8	13.7	6.9	17.6	102	64.9	10.5	7.0	17.5	57	78.7	11.5	4.9	4.9	61
New York	71.7	11.9	5.1	11.3	1,079	69.4	15.4	3.7	11.5	461	78.3	11.9	4.1	5,7	663
North Carolina	69.8	4.7	9,5	16.0	425	63.6	14.9	6.7	14.9	195	78.3	11.1	4.4	6.2	226
North Dakota	46.4	26.8	3.6	23.2	56	50.0	18.8	6.3	25.0	16	69.2	7.7	5.1	17.9	39
Ohio	66.0	12.2	6.3	15.5	717	68.3	14.4	4.8	12.5	271	71.5	10.9	5.2	12.4	386
Oklahoma	68.4	9.3	3.0	19.3	236	64.1	12.5	4.7	18.8	64	75.8	12.5	3.3	8.3	120
Oregon	72.5	6.1	4.9	16.4	244	64.1	11.7	6.8	17.5	103	79.6	7.3	4.4	8.8	137
Pennsylvania	65.6	14.2	4.6	15.6	873	66.2	18.0	1.6	14.1	305	70.5	12.4	4.1	13.1	590
Rhode Island	80.5	9.8	0.0	9.8	41	74.1	11.1	3.7	11.1	27	95.7	4.3	0.0	0.0	23
South Carolina	67.7	9.4	4.2	18.8	240	70.4	7.0	5.6	16.9	71	76.9	8.3	2.8	12.0	108
South Dakota	66.7	4.4	1.8	27.2	57	73.9	13.0	0.0	13.0	23	61.7	25.5	2.1	10.6	47
Tennessee	71.5	10.5	7.3	10.8	324	71.5	9.3	4.0	15.2	151	77.0	9.1	3.9	10.0	230
Texas	63.4	13.6	6.1	16.9	1,072	71.4	14.3	4.0	10.2	420	66.2	15.6	5.4	12.8	461
Utah	52.3	15.7	9.9	22.1	86	59.6	14.0	14.0	12.3	57	68.2	10.6	10.6	10.6	85
Vermont	68.2	16.7	9.1	6.1	33	94.1	0.0	5.9	0.0	17	64.7	17.6	11.8	5.9	17
Virginia	64.8	17.1	6.9	11.3	444	66.9	18.9	4.0	10.3	175	76.5	12.4	5.3	5.8	226
Washington	66.8	11.1	5.8	16.3	361	67.3	10.1	6.9	15.7	159	65.9	15.3	7.6	11.2	170
West Virginia	64.5	11.0	3.5	20.9	172	74.4	18.6	0.0	7.0	43	69.6	17.7	1.3	11.4	79
Wisconsin	70.1	14.7	3.5	11.7	536	67.9	13.9	4.2	13.9	165	75.5	14.9	2.5	7.1	322
Wyoming	75.0	12.5	2.1	10.4	48	80.0	6.7	0.0	13.3	15	94.1	0.0	0.0	5.9	17
Total	67.2	12.6	5.7	14.5	17,140	69.9	13.7	5.0	11.4	6,708	74.6	13.0	4.2	8.3	8,980

Source: PNR and Associates Inc., Bill Harvesting II and III and PNR and Associates Inc. and Market Facts Inc., TLC MarketShare Monitor.

TABLE 4.2 - MARKET SHARE OF RESIDENTIAL TOLL REVENUE BY STATE

			199	7				100					100		•
}			199					199	<u> </u>	···-			199	5	
STATE	AT&T	MCI	SPRINT	OTHERS	SAMPLE SIZE	AT&T	MCI	SPRINT	OTHERS	SAMPL E SIZE	AT&T	MCI	SPRINT	OTHERS	SAMPLE SIZE
Alabama	71.2 %	10.9 %	2.2 %	15.7 %	331	60.5 %	17.4 %	5.2 %	16.9 %	99	59.9 %	19.4 %	4.2 %	16.5 %	121
Arizona	55.6	15.9	13.6	15.0	346	56.9	10.4	19.6	13.2	107	74.8	14.1	3.9	7.1	192
Arkansas	62.6	9.7	3.7	24.1	205	70.5	12.3	2.6	14.6	76	65.9	11.5	4.7	17.9	73
California.	58.7	17.3	7.2	16.8	2,125	68.4	15.3	7.1	9.2	752	70.4	16.2	6.9	6.5	741
Colorado	63.7	16.3	2.3	17.7	294	65.5	13.2	5.9	15.5	115	61.5	17.5	6.5	14.4	154
Connecticut	45.3	17.8	5.7	31.2	241	39.0	28.7	6.0	26.3	63	71.2	18.6	1.3	9.0	87
Delaware	66.5	11.1	10.5	12.0	72	55.9	19.5	10.7	13,9	18	79.4	10.9	0.0	9.7	23
Dist. of Columbia	46.2	27.3	6.4	20.1	29	74.6	20.5	1.8	3.1	15	83.6	9.0	0.0	7.4	11
Florida	67.5	12.9	5.2	14.4	1,251	65.0	12.7	9.2	13.0	438	67.6	12.7	8.8	10.9	503
Georgia	60.8	12.3	6.5	20.5	471	75.7	9.7	3.2	11.4	169	73.6	11.7	6.5	8.2	127
Idaho	64.8	6.8	5.6	22.9	102	75.3	8.3	5.5	11.0	31	71,2	16.5	4.1	8.2	60
Illinois	61.2	15.5	5.2	18.0	892	63.5	14.4	11.5	10.6	289	69.0	19.7	2.6	8.7	342
Indiana	62.7	13.1	6.2	18.0	446	64.0	15.4	4,9	15.7	161	73.0	11.2	4.3	11.5	183
Iowa	53.3	21.3	3.3	22.0	256	65.1	11.7	2.5	20.8	104	70.6	12.6	10.0	6.7	146
Kansas	57.7	9.8	9.6	22.9	222	48.1	17.2	11.4	23.4	73	73.4	11.6	4.2	10.9	108
Kentucky	65.5	10.0	5.8	18.7	333	66.9	18.6	1.6	12.9	109	68.6	16.4	1.1	14.0	143
Louisiana	55.8	15.3	5.7	23.3	340	72.4	8.3	2.9	16.4	106	62.5	12.6	5.4	19.5	128
Maine	64.5	8.5	4.5	22.6	97	55.6	18.5	0.0	25.9	25	63.1	17.3	0.3	19.4	58
Maryland	54.7	22.1	4.8	18.4	436	52.0	26.6	8.0	13.3	135	73.8	13.2	5.5	7.5	154
Massachusetts	73.4	12.4	3.6	10.6	378	75.4	10.6	1.6	12.4	117	75.6	10.6	5.4	8.4	169
Michigan	52.1	18.9	7.8	21.2	684	57.0	20.7	3.5	18.9	217	63.3	16.2	5.0	15.5	341
Minnesota	60.2	22.0	5.2	12.6	450	51.9	27.6	6.7	13.9	138	60.2	22.5	4.0	13.3	230
Mississippi	61.8	12.5	1.9	23.8	167	62.4	8.9	2.9	25.9	49	89.7	6.0	0.9	3.3	60
Missouri	58.3	15.7	7.2	18.8	368	55.3	19.9	4.0	20.8	135	68.0	14.2	3.3	14.6	151
Montana	59.1	14.1	1,7	25.1	89	62.4	16.1	0.0	21.5	25	78.0	18.7	1.7	1.6	50
Nebraska	57.1	25.5	6.8	10.5	166	63.5	20.2	1.6	14.7	46	60.4	17.5	4.3	17.8	69
Nevada	65.6	4.0	14.7	15.7	121	57.8	17.4	18.6	6.2	47	67.9	11.7	6.4	14.0	33
New Hampshire	80.2	8.9	1.4	9.6	79	67.5	10.0	15.5	7.0	39	68.1	16.3	5.4	10.2	40
New Jersey	66.2	14.5	5.0	14.3	514	71.7	14.2	5.1	9.0	166	77.6	15.1	1.4	5.9	195
New Mexico	55.6	17.5	5.7	21.2	119	61.2	8.9	7.8	22.1	48	71.4	7.3	9.0	12.3	56
New York	66.6	15.8	3.3	14.3	1,267	63.8	18.8	7.4	10.0	449	71.1	15.0	5.6	8.2	603
North Carolina	65.0	7.7	9.6	17.6	504	60.6	16.2	7.2	16.1	189	78.4	9.4	6.0	6.1	216
North Dakota	52.4	19.0	9.5	19.1	65	36.7	24.4	7.5	31.4	13	68.7	5.0	5.5	20.8	34
Ohio	61.5	14.9	6.0	17.6	858	66.1	15.5	4.3	14.1	275	69.1	10.8	5.3	14.8	358
Oklahoma	67.6	9.4	4.0	19.0	274	58.4	16.6	8.2	16.8	77	65.6	23.5	3.5	7.4	109
Oregon	58.0	7.7	5.0	29.3	299	66.0	15.4	3.2	15.5	105	69.8	7.8	6.0	16.4	132
Pennsylvania	59.5	15.2	4.6	20.7	1,054	62.0	19.1	2.3	16.6	322	62.4	14.8	4.2	18.5	574
Rhode Island	79.1	10.7	0.7	9.5	50	68.6	21.0	2.9	7.5	26	89.6	8.1	0.0	2.2	23
South Carolina	58.7	9.9	4.7	26.8	262	52.9	22.3	9.7	15.1	76	72.2	7.7	10.3	9.8	108
South Dakota	57.5	2.6	5.6	34.4	66	70.2	19.2	0.0	10.6	22	56.8	25.1	3.5	14.5	45
Tennessee	63.8	14.1	4.9	17.3	381	67.3	16.4	4.3	12.0	171	71.1	12.0	6.4	10.5	219
Texas	56.2	17.8	5.4	20.6	1,272	58.2	17.5	8.8	15.5	471	58.2	20.6	6.7	14.4	418
Utah	51.7	13.1	9.6	25.6	104	65.7	9.3	12.6	12.4	39	76.9	10.2	10.5	2.3	73
Vermont	58.3	34.9	1.9	4.9	38	89.6	0.0	10.4	0.0	14	58.1	13.1	0.5	28.3	15
Virginia	55.7	23.3	6.1	14.9	510	65.5	18.5	3.7	12.3	177	69.4	13.2	9.1	8.3	211
Washington	64.7	11.7	5.4	18.2	435	57.4	8.5	11.1	23.0	156	59.7	13.2	11.8	15.2	153
West Virginia	56.9	17.7	3.3	22.1	204	74.4	7.3	0.8	17.5	40	67.4	15.1	0.5	17.1	74
Wisconsin	62.8	17.4	3.1	16.7	610	64.3	17.1	3.4	15.2	157	68.3	15.4	4.0	12.3	321
Wyoming	77.2	10,3	1.2	11.3	53	88.8	4.3	0.0	6.8	10	78.2	2.8	17.1	1.9	16
Total	60.9	15.4	5.6	18.1	19,930	63.3	16.0	6.6	14.1	6,701	68.5	14.6	5.6	11.3	8,450

Source: PNR and Associates Inc., Bill Harvesting II and III and PNR and Associates Inc. and Market Facts Inc., TLC MarketShare Monitor. Taxes are not included in residential toll revenue.

TABLE 4.3 - MARKET SHARE OF RESIDENTIAL DIRECT DIAL TOLL MINUTES BY STATE

	 ,		199	7				199	6				199	5	
STATE	АТ&Т	MCI	SPRINT	OTHERS	MINUTES*	T&TA	MCI	SPRINT	OTHERS	MINUTES*	AT&T	MCI	SPRINT	OTHERS	MINUTES*
Alabama	73.2 %	8.2 %	1.8 %	16.8 %	39,443	58.5 %	12.4 %	6.4 %	22.7 %	11,787	67.3 %	16.0 %	5.7 %	11.0 %	16,385
Arizona	58.1	11.4	16.2	14.3	43,786	49.5	14.5	17.5	18.5	14,300	76.2	13.9	3.0	6.9	26,871
Arkansas	70.3	6.9	3.1	19.7	24,759	58.8	22.8	4.8	13.7	5,802	52.9	20.9	4.6	21.6	6,936
California	59.3	17.1	7.1	16.4	328,378	68.3	15.4	7.5	8.9	104,144	70.9	17.3	7.6	4.1	96,752
Colorado	61.5	18.5	3.5	16.4	36,811	58.4	16.5	6.3	18.8	14,565	59.6	21.4	4.3	14.7	20,972
Connecticut	46.9	14.3	6.6	32.2	32,204	35.8	37.8	5.4	20.9	8,674	76.0	15.0	1.3	7.7	11,673
Delaware	64.4	14.1	9.6	11.9	8,229	45.0	11.9	16.1	27.1	1,544	77.3	11.4	0.0	11.3	2,387
Dist. of Columb	38.4	38.0	9.3	14.3	4,035	61.0	32.8	0.0	6.2	3,690	75.6	14.5	0.0	10.0	1,334
Florida	69.0	10.8	6.7	13.5	187,628	61.1	14.1	9.8	15.0	61,047	71.6	13.4	6.9	10.0 8.1	72,362
Georgia	61.5	12.0	7.3	19.1	65,843	69.1	15.7	3.9	11.3	23,987	72.4	13.3	7.0	7.3	19,640
Idaho	61.3	8.7	4.9	25.1	10,120	73.3	7.4	4.7	14.6	3,591	69.4	18.4	6.0	6.3	5,638
Πlinois	63.4	15.7	4.7	16.2	125,319	61.3	17.3	10.0	11.4	38,738	70.4	22.3	2.1	5.3	45,772
Indiana	66.3	11.1	4.7	17.9	56,457	68.1	9.7	6.8	15.3	18,238	76.0	10.2	2.1	11.1	19,449
lowa	54.4	23.3	3.6	18.8	34,479	61.8	14.2	1.7	22.3	13,762	67.1	15.5	11.3	i	,
Kansas	58.4	8.2	11.6	21.7	23,412	46.4	17.2	12.9	23.5	10,014				6.2	23,683
Kentucky	68.1	11.0	4.7	16.2	33,209	71.4	11.8	0.7	16.1	12,504	71.2	11.8	4.2	12.8	12,259
Louisiana	56.5	13.9	7.2	22.3	37,346	70.2	7.7	2.9	19.2	,	71.1	17.1	1.6	10.2	12,544
Maine	66.6	8.6	5.1	19.7	10.802	40.9	11.8	0.0		9,366	63.9	21.0	10.9	4.2	15,285
Maryland	55.6	18.7	5.1	20.6	64,160	49.6	25.9	7.1	47.3	2,037	56.7	18.6	0.0	24.7	4,986
Massachusetts	70.9	12.7	4.9	11.4	40,035	67.0	11.5		17.3	16,987	68.7	16.4	4.1	10.9	19,365
Michigan	55.7	18.6	7.1	18.5	87,551	56.4		3.3	18.2	10,437	74.8	9.8	5.2	10.2	21,182
Minnesota	61.5	21.2	4.5	12.8	61,230	36.4 48.7	22.7 . 27.0	3.2	17.7	26,766	62.4	15.8	4.8	17.0	38,142
Mississippi	63.9	12.2	3.2	20.7	15,893	57.7	1	8.6	15.6	17,077	56.4	26.2	4.9	12.6	21,698
Missouri	59.8	16.0	6.4	17.8	,		7.1	5.3	30.0	5,276	92.5	5.4	0.2	1.9	6,860
Montana	56.0	14.8	2.0	27.2	46,470	51.6	13.7	1.3	33.4	16,546	74.9	14.7	5.3	5.1	16,175
Nebraska	56.1	19.1	12.1	12.6	11,115 20,733	63.8	9.4 24.9	0.0	26.8	4,125	63.2	30.8	0.0	6.0	6,185
Nevada	62.7	3.8	15.0	18.5	2			3.3	11.9	5,094	61.8	13.4	6.8	18.0	6,534
New Hampshire		9.0	2.1	11.4	17,011	61.3	13.0	23.4	2.3	6,279	65.8	12.0	8.4	13.8	5,605
New Jersey	67.9	12.8	5.5	13.8	9,505	64.0	9.5	14.9	11.6	4,919	76.4	5.2	8.1	10.2	4,870
New Mexico	50.4	18.5	8.9	22.2	78,978	76.1	10.2	4.5	9.2	23,931	79.6	13.3	3.0	4.1	26,503
New York	64.4	18.5	4.1	13.0	14,798	58.8	9.3	13.0	18.9	6,425	74.0	8.0	7.2	10.8	9,266
North Carolina	65.8	5.3			162,745	64.6	18.0	6.9	10.4	54,840	68.2	18.3	6.7	6.8	76,245
North Dakota			12.3	16.7	69,927	58.1	15.2	9.0	17.7	24,741	76.9	10.0	7.6	5.5	31,630
Ohio	45.9	20.9	6.8	26.4	8,402	35.8	23.0	0.0	41.2	1,550	67.2	6.3	1.6	24.9	4,837
Oklahoma	61.4	14.4	6.7	17.4	98,565	63.2	16.4	5.7	14.7	31,973	71.8	9.7	4.0	14.5	40,054
Oregon	65.7	9.9 7.2	2.8	21.7	34,317	38.9	17.0	17.1	27.1	5,272	66.4	22.3	3.4	7.9	12,569
			4.2	25.5	32,673	62.0	16.8	4.9	16.3	11,164	68.0	9.2	6.9	15.8	14,035
Pennsylvania	59.8	16.6	5.9	17.8	117,069	56.8	20.2	2.4	20.6	34,951	60.6	16.4	5.3	17.7	58,224
Rhode Island South Carolina	81.3	8.2	0.0	10.5	5,623	61.9	22.1	3.8	12.3	2,783	88.3	9.8	0.0	1.9	2,447
	59.1	8.4	5.5	27.0	36,609	59.0	14.9	13.4	12.7	9,329	74.4	12.4	7.2	. 6.0	14,387
South Dakota	58.4	1.7	0.3	39.5	8,025	72.8	17.1	0.0	10.1	1,976	54.6	32.2	2.8	10.4	7,173
Tennessee	65.9	10.5	6.9	16.7	48,659	64.7	16.3	5.2	13.9	24,508	75.2	11.6	4.4	8.9	24,362
Texas	55.7	16.8	5.9	21.5	163,883	58.3	15.2	9.9	16.6	. 59,461	57.8	23.9	7.3	11.1	58,182
Utah	45.5	14.6	13.8	26.0	11,041	41.6	18.1	14.5	25.8	3,923	68.9	18.1	9.6	3.3	7,160
Vermont	74.2	9.7	11.2	4.8	4,867	80.2	0.0	19.8	0.0	1,190	34.6	39.9	0.6	24.9	2,677
Virginia	57.8	23.8	6.5	12.0	77,465	64.0	20.2	4.8	11.0	24,394	67.1	15.7	11.6	5.7	30,744
Washington	63.1	11.3	7.0	18.6	48,929	58.3	10.4	6.7	24.6	17,264	56.6	15.9	13.0	14.5	15,038
West Virginia	63.8	11.9	1.4	23.0	22,992	65.4	9.7	2.0	23.0	3,896	78.3	13.3	0.0	8.4	6,186
Wisconsin	63.7	17.9	3.6	14.8	66,962	55.2	22.7	4.1	18.0	20,015	70.7	17.1	2.7	9.5	28,385
Wyoming	73,7	12.2	1.1	12.9	8,017	80.9	7.3	0.0	11.7	939	65.1	0.0	31.5	3.4	1,588
Total	61.7	14.8	6.2	17.3	2,596,506	61.3	16.4	7.0	15.4	835,817	68.6	16.2	5.8	9.4	1,033,236

^{*} Total minutes of direct dial toll calling for households in the Bill Harvesting study.

Source: PNR and Associates Inc., Bill Harvesting II and III and PNR and Associates Inc. and Market Facts Inc., TLC MarketShare Monitor.

5. THE INTERNATIONAL LONG DISTANCE TELEPHONE MARKET

Prior to 1985, AT&T was the monopoly provider of international long distance telephone service for U.S. customers. Since 1985 new firms have entered the international long distance business, reducing AT&T's share of this market.

Table 5.1 summarizes the portion of international toll revenues directly attributable to international telephone service.¹³ The information in this table is from reports to the FCC by international long distance carriers and does not include international revenues generated from sources such as telegraph, telex, and private line services. In this respect the figures reported in Table 5.1 are different from those shown in Table 3.4.

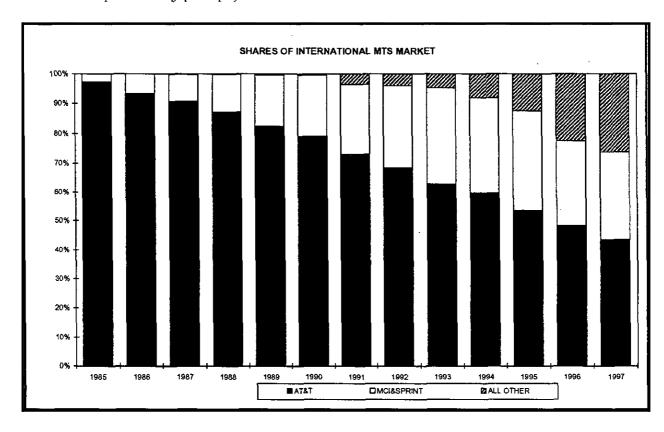
In 1997 AT&T's international telephone revenues were two and one-half times their 1985 values. International telephone market revenues for the entire industry have grown even faster during this time. In 1997 industry revenues were over \$19 billion, over five times 1985 industry revenues. Consequently, AT&T's formerly monopolized share of the market has fallen to 44%. At the same time MCI has amassed a 22% share of this market followed by Sprint with 8%. More recently WorldCom, who had no international revenues in 1985, has increased its share of the international long distance market to over 4%.

¹³The international telephone service revenue figures shown in Table 5.1, which become available for each year in the second half of the following year, are taken from Table 2 in the *Trends in the International Telecommunications Industry* report published by the FCC.

TABLE 5.1 - INTERNATIONAL TELEPHONE SERVICE

	REVE			BASED AND RES		MARKET SHARES						
	AT&T 2/	MCI 3/	SPRINT 3/	WORLDCOM	OTHER 4/	TOTAL	AT&T	MCI	SPRINT	WORLDCOM	OTHER	
1984	\$3,197					\$3,197	100.0 %	}		\ \		
1985	3,392	\$78	\$18			3,487	97.3	2.2 %	0.5 %			
1986	3,738	197	70			4,004	93.3	4.9	1.7			
1987	4,307	305	127		\$10	4,750	90.7	6.4	2.7	1 1	0.2 %	
1988	5,050	517	219		13	5,800	87.1	8.9	3.8	1 1	0.2	
1989	5,693	795	387		26	6,901	82.5	11.5	5.6		0.4	
1990	6,361	1,175	464		43	8,042	79.1	14.6	5.8	l l	0.5	
1991	6,962	1,552	692	\$ 5	325	9,536	73.0	16.3	7.3	0.1 %	3.4	
1992	7,314	2,113	849	40	374	10,690	68.4	19.8	7.9	0.4	3.5	
1993	7,482	2,814	1,076	100	472	11,944	62.6	23.6	9.0	0.8	4.0	
1994	7,984	3,008	1,285	338	759	13,375	59.7	22.5	9.6	1.9	6.3	
1995	8,425	4,019	1,357	479	1,465	15,745	53.5	25.5	8.6	3.0	9.3	
1996	8,559	3,592	1,58}	775	3,209	17,715	48.3	20.3	8.9	4.4	18.1	
1997	8,394	4,282	1,573	801	4,258	19,309	43.5	22.2	8.1	4.1	22.1	

- 1/ International message telephone service of the domestic United States for the year ending December 31. Company specific revenue informatic
- 2/ AT&T 1984-1990 data are from 43.61 international traffic reports, minus revenue for Alaska, Hawaii, and Puerto Rico, plus revenue for Cana Canada and Mexico were taken from Appendices B & C of Trends in the International Telecommunications Industry.
- 3/ MCI and Sprint 1985-1990 data are from 43.61 international traffic reports, less data for Alaska. MCI and Sprint were not required to report For these years, non-AT&T traffic estimated in Appendices B & C of Trends in the International Telecommunications Industry have been appropriate based on reported international revenues.
- 4/ Data for 1984-1990 exclude international calls placed from or to Alaska, Hawaii, and Puerto Rico. Data for 1984 do not include about \$5 mill American Telephone and Telegraph Company.



APPENDIX 1: AT&T'S MARKET SHARE

NECA revisions of total industry minutes affect the market share calculated for AT&T because total minutes represent the denominator of the market-share ratio. In Chart A1.1, AT&T's share of interstate switched minutes (based on current information) is compared with its market share as first published. As shown there, AT&T's market share is usually highest initially and then decreases after NECA revises the estimates.

Chart A1.2 is a composite of the alternative measures of AT&T's market share based on minutes, lines and revenues. By all measures AT&T's share of the long distance market has decreased significantly since 1984.

CHART A1.1 - AT&T SHARE OF INTERSTATE MINUTES

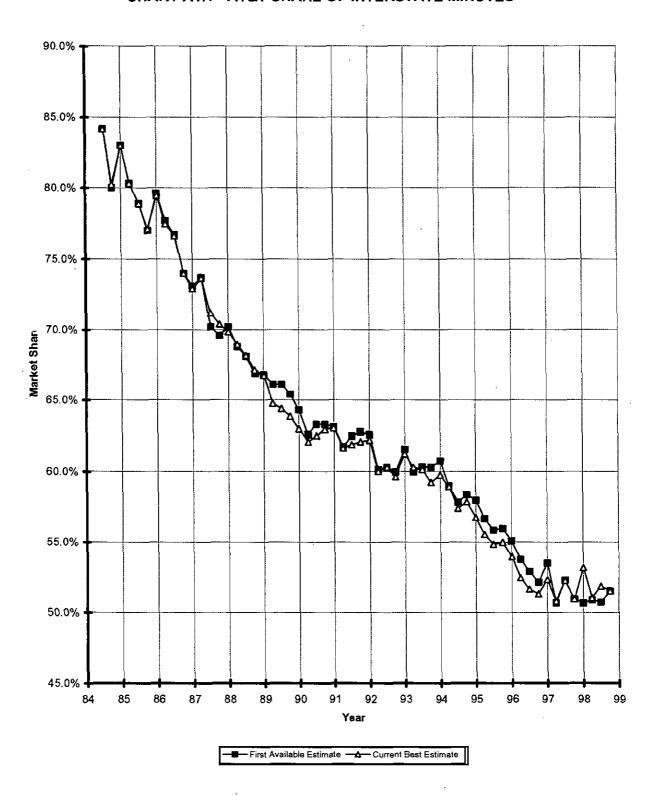
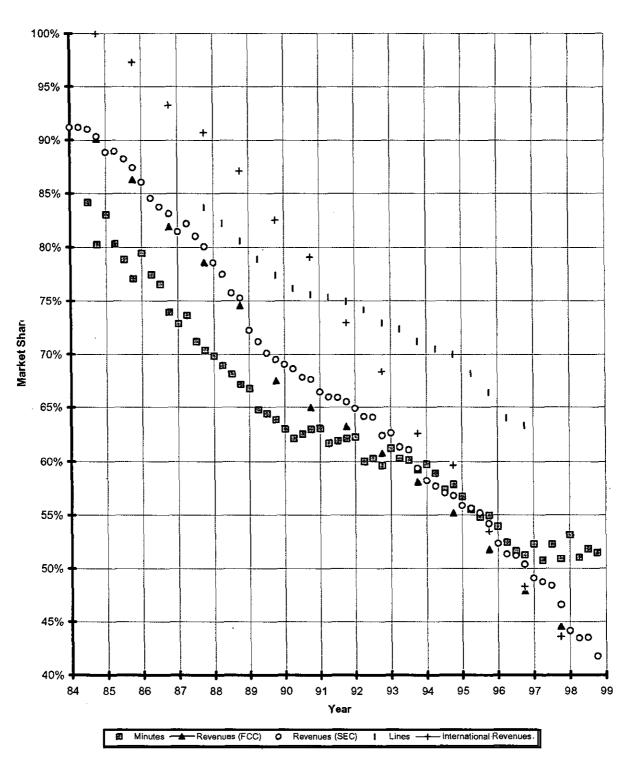


CHART A1.2 - INDICATORS OF AT&T MARKET SHARE



APPENDIX 2: PREMIUM VS. NON-PREMIUM ACCESS MINUTES

Table A2.1 shows "premium" minutes as reported by NECA separately from "non-premium" minutes. Premium minutes consist of all carriers dial 1 access minutes in equal access areas and only AT&T's access minutes in areas where equal access is not available. Prior to AT&T's divestiture of its local operating companies in 1984, competitors were unable to obtain connections with local telephone companies that were of equal quality to those offered to AT&T. After the divestiture, local companies began to offer equal access to all long distance carriers. More than 99% of the nation's lines have now been converted to equal access. As non-equal access minutes have virtually disappeared, there is no longer any significant difference between the number of total minutes and the number of equal access minutes.

APPENDIX 2

TABLE A2.1 - PREMIUM VS. NON-PREMIUM ACCESS MINUTES (FIGURES SHOWN IN BILLIONS)

	·	TOTAL INDUSTRY	
	PREMIUM	NON-PREMIUM	TOTAL
	MINUTES	MINUTES	MINUTES
1984 THIRD QUARTER	32.0	5.5	37.5
FOURTH QUARTER	33.6	6.0	39.6
1985 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1985	32.9	6.6	39.6
	34.9	6.6	41.5
	36.6	6.2	42.8
	38.0	5.3	43.3
	142.4	24.7	167.1
1986 FIRST QUARTER	38.8	4.3	43.0
SECOND QUARTER	41.0	3.8	44.8
THIRD QUARTER	43.2	3.5	46.7
FOURTH QUARTER	45.5	3.0	48.5
TOTAL 1986	168.5	14.6	183.1
1987 FIRST QUARTER	48.0	3.2	51.2
SECOND QUARTER	49.3	3.1	52.5
THIRD QUARTER	52.1	2.9	55.0
FOURTH QUARTER	54.4	2.6	57.0
TOTAL 1987	203.9	11.9	215.7
1988 FIRST QUARTER	56.6	2.4	59.0
SECOND QUARTER	57.3	2.3	59.6
THIRD QUARTER	59.8	2.3	62.1
FOURTH QUARTER	61.8	2.2	64.0
TOTAL 1988	235.4	9.2	244.6
1989 FIRST QUARTER SECOND QUARTER THIRD QUARTER FOURTH QUARTER TOTAL 1989	64.1	2.1	66.2
	66.5	2.0	68.5
	67.7	2.0	69.7
	70.7	1.9	72.6
	269.1	8.0	277.1
1990 FIRST QUARTER	72.9	1.9	74.7
SECOND QUARTER	74.0	1.8	75.8
THIRD QUARTER	76.1	1.8	77.9
FOURTH QUARTER	77.4	1.6	79.1
TOTAL 1990	300.4	7.1	307.4
1991 FIRST QUARTER	77.7	1.5	79.2
SECOND QUARTER	80.4	1.5	81.9
THIRD QUARTER	81.2	1.4	82.6
FOURTH QUARTER	83.0	1.4	84.4
TOTAL 1991	322.2	5.8	328.0

APPENDIX 2

TABLE A2.1 - PREMIUM VS. NON-PREMIUM ACCESS MINUTES (CONT'D)
(FIGURES SHOWN IN BILLIONS)

		TOTAL INDUSTRY	
	PREMIUM	NON-PREMIUM	TOTAL
	MINUTES	MINUTES	MINUTES
1992 FIRST QUARTER	84.5	1.2	85.6
SECOND QUARTER	85.4	1.1	86.5
THIRD QUARTER	86.8	1.0	87.9
FOURTH QUARTER	88.8	1.0	89.8
TOTAL 1992	345.5	4.2	349.7
1993 FIRST QUARTER	89.8	0.9	90.6
SECOND QUARTER	90.4	0.8	91.2
THIRD QUARTER	92.9	0.7	93.6
FOURTH QUARTER	95.2	0.6	95.9
TOTAL 1993	368.3	3.0	371.2
1994 FIRST QUARTER	98.1	0.6	98.7
SECOND QUARTER	97.4	0.5	97.9
THIRD QUARTER	101.4	0.5	101.9
FOURTH QUARTER	102.4	0.5	102.9
TOTAL 1994	399.3	2.1	401.4
1995 FIRST QUARTER	105.1	0.4	105.6
SECOND QUARTER	106.4	0.4	106.8
THIRD QUARTER	108.6	0.4	109.0
FOURTH QUARTER	110.2	0.4	110.6
TOTAL 1995	430.3	1.6	431.9
1996 FIRST QUARTER	115.3	0.3	115.7
SECOND QUARTER	114.4	0.3	114.7
THIRD QUARTER	117.2	0.3	117.5
FOURTH QUARTER	120.0	0.2	120.2
TOTAL 1996	466.9	1.2	468.1
1997 FIRST QUARTER	121.9	0.2	122.1
SECOND QUARTER	124.3	0.2	124.4
THIRD QUARTER	124.8	0.2	124.9
FOURTH QUARTER	125.7	0.1	125.8
TOTAL 1997	496.6	0.7	497.3
1998 FIRST QUARTER	123.9	0.1	124.0
SECOND QUARTER	131.3	0.1	131.4
THIRD QUARTER	131.8	0.1	131.9
FOURTH QUARTER	132.7	0.1	132.8
TOTAL 1998	519.8	0.4	520.1

Customer Response
Long Distance Market Shares, March 1999

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