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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)

February 10, 1995

FCC RELEASES SEMIANNUAL STUDY ON TELEPHONE TRENDS

The FCC has released a semiannual report on Trends in Telephone Service. The report is a summary of information collected by the Commission in much more detailed reports.

This report is available for reference in the Industry Analysis Division Reference Room, Common Carrier Bureau, 1250 23rd Street, N.W., Plaza Level. Copies may be purchased by calling International Transcription Services, Inc. (ITS) at (202) 857-3800. The report can also be downloaded from the **FCC-State Link** computer bulletin board at (202) 418-0241 [BBS file name TREND195.ZIP]. The **FCC-State Link** also can be reached through the National Technical Information Service's **FedWorld** system at (703) 321-8020 or through **FedWorld's** telnet internet node (fedworld.gov).

FCC

For further information, contact the Industry Analysis Division, Common Carrier Bureau, at (202) 418-0940.

TRENDS IN TELEPHONE SERVICE

Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
February 1995

This report is available for reference in the Industry Analysis Division Reference Room, Common Carrier Bureau, 1250 23rd Street, N.W., Plaza Level. Copies may be purchased by calling International Transcription Services, Inc. at (202) 857-3800. The report can also be downloaded from the **FCC-State Link** computer bulletin board [BBS file name: TREND195.ZIP] directly at (202) 418-0241 or through NTIS's **FedWorld** system at (703) 321-8020 or through **FedWorld**'s telnet internet node (fedworld.gov).

Customer Response

Publication: Trends in Telephone Service, February 1995

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

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_____ current telecommunications carrier
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Data accuracy	(_)	(_)	(_)	(_)	(_)
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To discuss the information in this report contact: Industry Analysis Division at 202-418-0940		
Fax this response to	or	Mail this response to
202-418-0236		FCC/IAD Mail Stop 1600 F Washington, DC 20554

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INTRODUCTION:

This publication summarizes a variety of information on telephone service. In most cases, the reports underlying this summary provide a much greater level of detail. More detailed information is available from the sources listed at the end of the document and through the automated **FCC-State Link** bulletin board. The bulletin board can be accessed via computer modem by dialing (202) 418-0241. The **FCC-State Link** can also be reached through the National Technical Information Service's **FedWorld** system at (703) 321-8020 or through **FedWorld's** telnet internet node (fedworld.gov).

TELEPHONE SUBSCRIBERSHIP:

Under contract with the Federal Communications Commission, the Bureau of the Census includes questions on telephones as part of its Current Population Survey. This survey, which monitors demographic trends between the decennial censuses, has several strengths: it is conducted regularly by an expert agency, the sample is very large, and the questions are consistent. Thus, changes in the results can be compared over time with a great deal of confidence.

Fourteen million households have been added to the nation's telephone system since these surveys began in November 1983 -- reflecting both an increase in the total number of households and a small, but statistically significant, increase in the percentage of households that subscribe to telephone service. The Census data also reflect slight, but statistically significant, seasonal variations in penetration rates. This pattern, after allowing for effects of the upward trend in the data, is an increase of 0.2 from November to March, followed by a decrease of 0.1 from March to July, followed by a decrease of 0.1% from July to November.

Because of smaller sample sizes, state-by-state data are subject to greater sampling errors than the national data shown in Table 1. Consequently, the state-by-state data shown in Table 2 are based on annual average penetration rates.

TABLE 1

HOUSEHOLD TELEPHONE SUBSCRIBERSHIP IN THE U.S.

	HOUSEHOLDS (MILLIONS)	HOUSEHOLDS WITH TELEPHONES (MILLIONS)	PERCENTAGE WITH TELEPHONES	HOUSEHOLDS WITHOUT TELEPHONES (MILLIONS)	PERCENTAGE WITHOUT TELEPHONES
1983 NOVEMBER	85.8	78.4	91.4 %	7.4	8.6 %
1984 MARCH	86.0	78.9	91.8	7.1	8.2
JULY	86.6	79.3	91.6	7.3	8.4
NOVEMBER	87.4	79.9	91.4	7.5	8.6
1985 MARCH	87.4	80.2	91.8	7.2	8.2
JULY	88.2	81.0	91.8	7.2	8.2
NOVEMBER	88.8	81.6	91.9	7.2	8.1
1986 MARCH	89.0	82.1	92.2	6.9	7.8
JULY	89.5	82.5	92.2	7.0	7.8
NOVEMBER	89.9	83.1	92.4	6.8	7.6
1987 MARCH	90.2	83.4	92.5	6.8	7.5
JULY	90.7	83.7	92.3	7.0	7.7
NOVEMBER	91.3	84.3	92.3	7.0	7.7
1988 MARCH	91.8	85.3	92.9	6.5	7.1
JULY	92.4	85.7	92.8	6.7	7.2
NOVEMBER	92.6	85.7	92.5	6.9	7.5
1989 MARCH	93.6	87.0	93.0	6.6	7.0
JULY	93.8	87.5	93.3	6.3	6.7
NOVEMBER	93.9	87.3	93.0	6.6	7.0
1990 MARCH	94.2	87.9	93.3	6.3	6.7
JULY	94.8	88.4	93.3	6.4	6.7
NOVEMBER	94.7	88.4	93.3	6.3	6.7
1991 MARCH	95.3	89.2	93.6	6.1	6.4
JULY	95.5	89.1	93.3	6.4	6.7
NOVEMBER	95.7	89.4	93.4	6.3	6.6
1992 MARCH	96.6	90.7	93.9	5.9	6.1
JULY	96.6	90.6	93.8	6.0	6.2
NOVEMBER	97.0	91.0	93.8	6.0	6.2
1993 MARCH	97.3	91.6	94.2	5.7	5.8
JULY	97.9	92.2	94.2	5.7	5.8
NOVEMBER	98.8	93.0	94.2	5.8	5.8
1994 MARCH	98.1	92.1	93.9	6.0	6.1
JULY	98.6	92.4	93.7	6.2	6.3

TABLE 2

TELEPHONE PENETRATION BY STATE
(ANNUAL AVERAGE PERCENTAGE OF HOUSEHOLDS WITH TELEPHONE SERVICE)

STATE	1984	1993	CHANGE
ALABAMA	88.4 %	91.9 %	3.4 % *
ALASKA	86.5	89.9	3.4 *
ARIZONA	86.9	93.3	6.4 *
ARKANSAS	86.6	87.8	1.3
CALIFORNIA	92.5	95.8	3.3 *
COLORADO	93.2	96.1	2.9 *
CONNECTICUT	95.5	96.7	1.2
DELAWARE	94.3	96.5	2.3 *
DISTRICT OF COLUMBIA	94.9	90.2	−4.7 *
FLORIDA	88.7	93.8	5.1 *
GEORGIA	86.2	93.2	7.0 *
HAWAII	93.5	94.4	0.9
IDAHO	90.7	94.4	3.7 *
ILLINOIS	94.2	93.6	−0.5
INDIANA	91.6	93.7	2.1 *
IOWA	96.2	96.4	0.2
KANSAS	94.3	95.6	1.3
KENTUCKY	88.1	89.8	1.6
LOUISIANA	89.7	90.4	0.8
MAINE	93.4	96.0	2.6 *
MARYLAND	95.7	96.7	1.0
MASSACHUSETTS	95.9	96.9	1.1
MICHIGAN	92.8	95.6	2.7 *
MINNESOTA	95.8	96.1	0.3
MISSISSIPPI	82.4	87.2	4.8 *
MISSOURI	91.5	93.1	1.6
MONTANA	91.0	94.6	3.6 *
NEBRASKA	95.7	96.6	0.9
NEVADA	90.4	95.4	5.0 *
NEW HAMPSHIRE	94.3	96.0	1.6
NEW JERSEY	94.8	94.3	−0.5
NEW MEXICO	82.0	90.2	8.1 *
NEW YORK	91.8	93.5	1.7 *
NORTH CAROLINA	88.3	92.7	4.4 *
NORTH DAKOTA	94.6	97.1	2.4 *
OHIO	92.4	94.9	2.5 *
OKLAHOMA	90.3	92.1	1.9
OREGON	90.6	94.8	4.1 *
PENNSYLVANIA	94.9	97.3	2.4 *
RHODE ISLAND	93.6	95.5	1.9 *
SOUTH CAROLINA	83.7	89.8	6.2 *
SOUTH DAKOTA	93.2	93.7	0.5
TENNESSEE	88.5	92.0	3.5 *
TEXAS	88.4	91.6	3.2 *
UTAH	92.5	96.0	3.5 *
VERMONT	92.3	94.6	2.3
VIRGINIA	93.1	94.3	1.3
WASHINGTON	93.0	96.8	3.7 *
WEST VIRGINIA	87.7	90.6	2.9 *
WISCONSIN	95.2	96.9	1.7
WYOMING	89.9	93.9	4.0 *
TOTAL UNITED STATES	91.6	94.2	2.6 *

* CHANGE IS STATISTICALLY SIGNIFICANT AT THE 95% CONFIDENCE LEVEL.

DETAILS MAY NOT ADD DUE TO ROUNDING.

PRICE INDEXES FOR TELEPHONE SERVICES:

The Bureau of Labor Statistics (BLS) collects a variety of information on telephone service as part of three separate programs -- the Consumer Price Index (CPI), the Producer Price Index (PPI), and the Consumer Expenditure Survey. The following material illustrates the range of information available on price indexes.

1. Long Term Trends in Price Indexes:

A price index for telephone service was first published in 1935. Since that time, telephone prices have tended to increase at a slower pace than most other prices. Table 3 shows long run changes in the Consumer Price Indexes for all items, all services, telephone services, each of the seven major categories that currently constitute the overall CPI, and several services that are often characterized as being public utilities.

2. Comprehensive Price Indexes:

The CPI index of telephone services is based on a "market basket" intended to represent the telephone related expenditures of a typical urban household. It includes both local and long distance services. Changes in telephone prices tend to lag behind other price changes. Overall inflation in the American economy peaked in 1979 and 1980. In contrast, the price of telephone services rose most rapidly during the years 1981 through 1984. The annual rate of change is shown in Table 4 for the overall CPI (which measures the impact of inflation on consumers) and the CPI for telephone services. In addition, Table 4 shows the Gross National Product fixed weight price index prepared by the Bureau of Economic Analysis (which measures inflation throughout the economy).

3. Price Indexes for Local Service:

The CPI index of local telephone charges is based on a broadly defined "market basket" that includes monthly service charges, message unit charges, leased equipment, installation, service enhancements (such as tone dialing and call waiting), taxes, subscriber line charges, and all other consumer expenditures associated with telephone services except long distance charges. In contrast, the PPI index of monthly residential rates is much more narrowly defined. It is based only on monthly service charges for residential service, optional touch-tone service, and subscriber line charges. It excludes taxes, charges for special services such as call waiting, and all

other expenditures. The annual rates of change for these indexes of local costs are presented in Table 5.

4. Price Indexes for Long Distance Service:

Consumer price index data is available for intrastate toll and interstate toll services since December 1977. These series are also presented in Table 5.

The interstate toll indexes show significant increases in recent years. These increases overstate the increase in average charges. The CPI sample underweights discount plans and the PPI sample excludes discount plans. Since 1992, interexchange carriers have been increasing base charges but also offering greater discounts to more customers. A large number of customers qualify for and utilize the wide variety of discount plans. Therefore, the average amounts paid by consumers have not risen as much as is presented in the indexes.

Table 3

Long Term Changes for Various Price Indexes *

(Annual Rates of Change)

	1935 – 1994	1984 – 1994
CPI all items	4.1 %	3.6 %
CPI all services	4.6	4.5
CPI telephone services	2.1	1.4
CPI major categories		
– food & beverages	*	3.5
– housing	*	3.4
– apparel & upkeep	3.2	2.7
– transportation	3.9	2.6
– medical care	5.3	7.0
– entertainment	*	3.8
– other goods & services	*	6.3
CPI public transportation	5.1	5.0
CPI piped gas	3.7	0.3
CPI electricity	2.4	1.9
CPI sewer & water maintenance	*	5.9
CPI postage	4.2	3.8

* Series not established until after 1935.

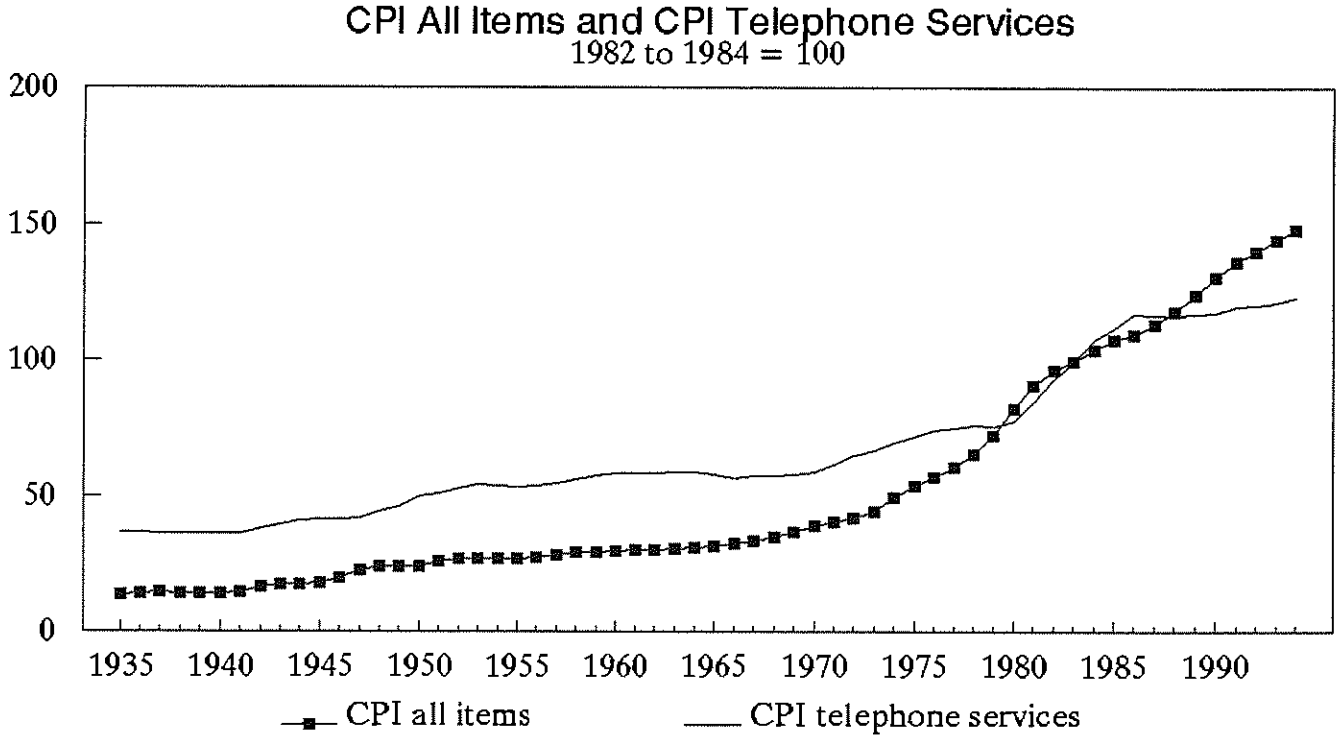


Table 4

Annual Changes in Major Price Indexes

	GNP Fixed Weight Price Index *	CPI: All Items	CPI: Telephone Services
1978	7.2 %	9.0 %	0.9 %
1979	8.8	13.3	0.7
1980	9.8	12.5	4.6
1981	8.5	8.9	11.7
1982	5.0	3.8	7.2
1983	3.4	3.8	3.6
1984	3.4	3.9	9.2
1985	3.6	3.8	4.7
1986	2.5	1.1	2.7
1987	3.4	4.4	−1.3
1988	4.2	4.4	1.3
1989	4.4	4.6	−0.3
1990	4.6	6.1	−0.4
1991	3.6	3.1	3.5
1992	3.1	2.9	−0.3
1993	2.4	2.7	1.8
1994 **	2.9	2.7	0.7

* In 1992 the BEA revised the methodology for calculating the GNP Fixed Weight Price Index. The BEA revised the index for 1982 through the present. The Table shows percentage changes for the unrevised series for 1978 through 1982.

** The 1994 CPI changes are measured December through December. The 1994 GNP Price Index changes are measured Third Quarter through Third Quarter.

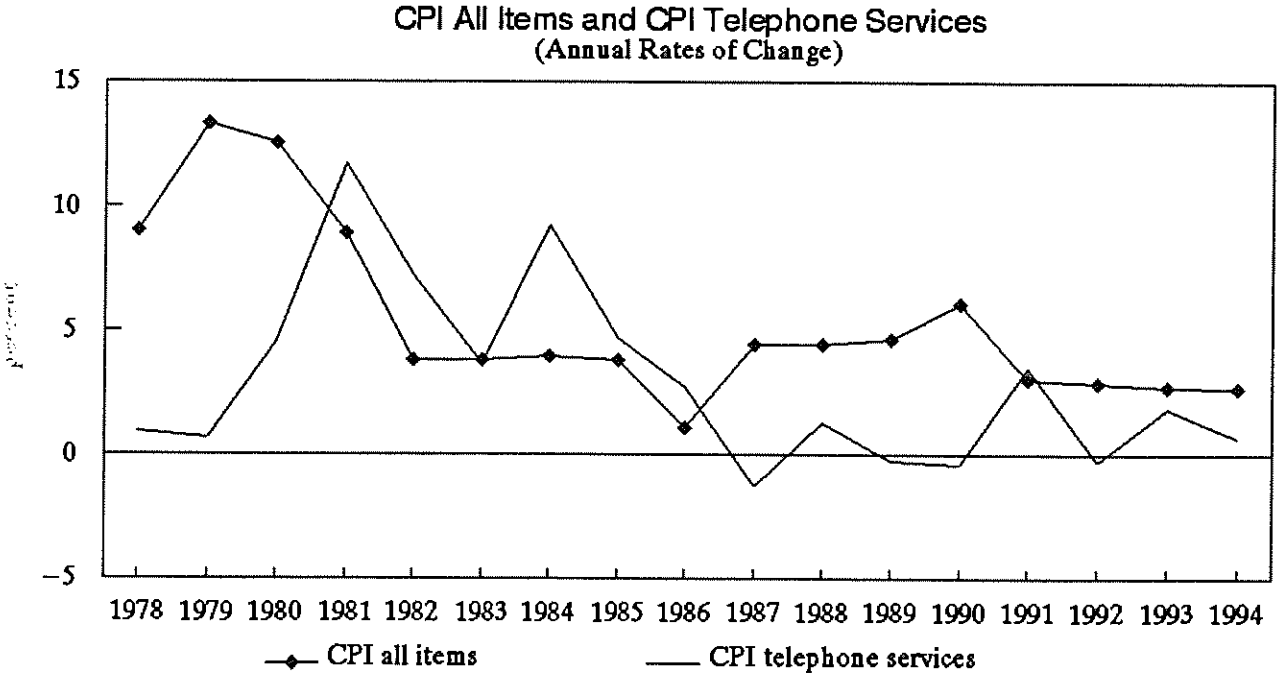
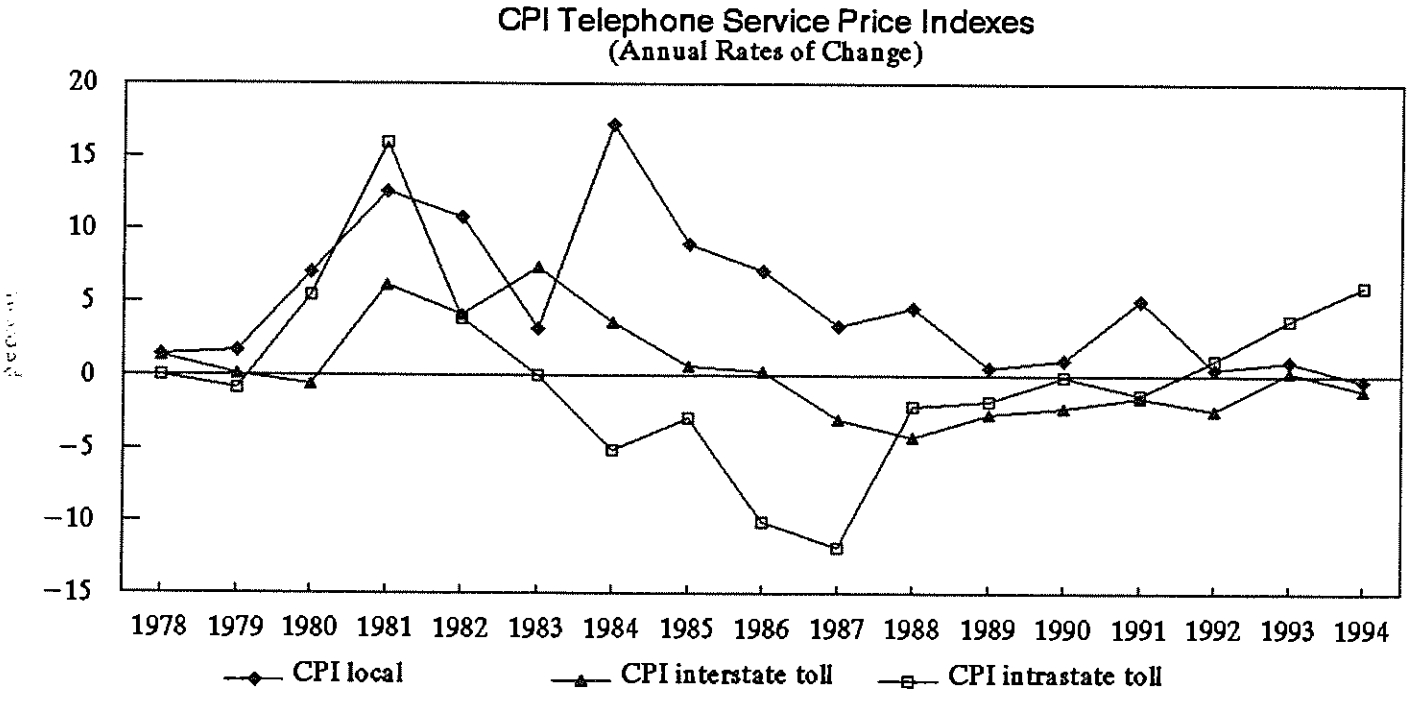


Table 5

Annual Changes in Price Indexes for Local and Long Distance Telephone Services

	Local Residential Service		Toll Service *			
	CPI: all local charges	PPI: Monthly Service Charges	Interstate Toll Calls		Intrastate Toll Calls	
			CPI	PPI	CPI	PPI
1978	1.4 %	3.1 %	−0.8 %	0.0 %	1.3 %	0.1 %
1979	1.7	1.6	−0.7	−0.9	0.1	−0.7
1980	7.0	7.1	3.4	5.5	−0.6	2.3
1981	12.6	15.6	14.6	15.9	6.2	8.0
1982	10.8	9.0	2.6	3.9	4.2	1.7
1983	3.1	0.2	1.5	0.0	7.4	3.9
1984	17.2	10.4	−4.3	−5.1	3.6	3.8
1985	8.9	12.4	−3.7	−3.0	0.6	2.1
1986	7.1	8.9	−9.4	−10.0	0.3	−3.5
1987	3.3	2.6	−12.4	−11.8	−3.0	−3.0
1988	4.5	4.6	−4.2	−2.1	−4.2	−3.7
1989	0.6	1.9	−1.3	−1.7	−2.6	0.5
1990	1.0	1.5	−3.7	−0.1	−2.2	−2.2
1991	5.1	2.1	1.3	−1.3	−1.5	−2.6
1992	0.5	−0.2	−1.3	1.0	−2.4	1.3
1993	1.0	0.8	6.5	3.8	0.2	−1.1
1994	−0.3	0.6	5.4	6.1	−1.0	−1.4

* CPI toll indexes represent rates for households. PPI toll indexes represent rate changes for both business and residential consumers.



PRICE LEVELS:

1. Local Rate Levels:

The price indexes maintained by the Bureau of Labor Statistics indicate percentage changes in the price of telephone services. The BLS does not publish actual rate levels. Calculations of average rates are based on surveys by FCC staff. These surveys use the same sampling areas and weights used by the BLS in constructing the Consumer Price Index.

Table 6 presents average local rates for residential customers. In October 1993, the national average for flat rate residential service was $18.82 monthly, including taxes and subscriber line charges.

In most cities, consumers can subscribe to a service with a lower recurring charge than the cost of unlimited one party service. Lower priced service options include party line service and measured service. As of October 1993, the national average for the lowest generally available recurring charge was $6.36. The average minimum monthly bill, including subscriber line charges and taxes, was $11.27.

Table 6 also shows rates for a single-line business customer. These rates are representative of the cost of a local access line for small businesses.

2. Long Distance Rates:

In Table 7, AT&T's prices for directly dialed long distance calls are shown for January 1984 and December 1994. Higher charges apply to other types of calls such as those using operator assistance. Lower prices are available through calling plans and other volume discounts. In 1993, AT&T first began to charge different rates to residential and business customers. Since 1984, AT&T's basic schedule charges for directly dialed interstate calls have been reduced about 30%.

Table 6

National Averages for Local Telephone Rates

	October Data										
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Residential rates*											
Unlimited service	$10.50	$12.10	$12.17	$12.58	$12.44	$12.32	$12.30	$12.39	$13.10	$13.12	$13.21
Subscriber line charges	0.00	0.00	1.01	2.04	2.66	2.67	3.53	3.55	3.56	3.55	3.55
Taxes including 911 charges	1.08	1.25	1.36	1.51	1.56	1.58	1.70	1.85	2.00	2.03	2.06
Total	11.58	13.35	14.54	16.13	16.66	16.57	17.53	17.79	18.66	18.70	18.82
Lowest generally available rate	5.37	5.62	5.75	5.96	5.81	5.67	5.67	5.68	6.18	6.22	6.36
Subscriber line charges	0.00	0.00	1.01	2.04	2.66	2.67	3.53	3.55	3.56	3.55	3.55
Taxes including 911 charges	0.56	0.58	0.70	0.84	0.94	0.91	1.03	1.15	1.28	1.31	1.36
Total	5.93	6.20	7.46	8.84	9.41	9.25	10.23	10.38	11.02	11.08	11.27
Basic Connection***	35.01	43.71	44.32	45.63	44.04	42.94	42.71	43.06	42.00	41.52	41.38
Taxes	1.75	2.19	2.22	2.28	2.20	2.11	2.24	2.32	2.19	2.18	2.21
Total	36.76	45.90	46.54	47.91	46.24	45.05	44.95	45.38	44.19	43.70	43.59
Business rates **											
Representative rate	29.16	32.74	33.42	34.26	33.71	31.03	31.06	30.97	32.29	32.45	32.70
Touch–Tone service	**	**	**	**	**	2.45	2.43	2.35	1.84	1.71	1.67
Subscriber line charges	0.00	0.00	1.01	2.04	2.68	2.69	3.55	3.57	3.57	3.56	3.57
Taxes including 911 charges	3.35	3.77	3.96	4.17	4.18	3.95	4.21	4.32	4.42	4.57	4.63
Total	32.51	36.51	38.39	40.47	40.57	40.12	41.25	41.21	42.12	42.29	42.57
Average charge for 5 minute same zone daytime business call	0.085	0.090	0.090	0.092	0.092	0.091	0.093	0.093	0.091	0.093	0.094
Basic Connection***	56.04	68.84	70.82	72.94	72.15	70.48	71.05	71.36	72.75	72.55	71.41
Touch–Tone service	**	**	**	**	**	2.03	1.70	1.89	1.13	1.19	1.17
Taxes	3.08	3.79	3.90	4.01	3.97	3.92	4.06	4.15	4.32	4.33	4.25
Total	59.12	72.63	74.72	76.95	76.12	76.43	76.81	77.40	78.20	78.07	76.83
5 minute payphone call	0.168	0.212	0.222	0.223	0.226	0.228	0.228	0.228	0.228	0.228	0.235

* The residential rates shown in this table do not include additional charges for touch–tone service.

** The representative rate is based on the single–line rate for unlimited service where that service is offered, and the measured service rate plus additional charges for the first 200 five–minute messages in other cities. The representative business rate includes the additional monthly cost for touch–tone service for 1983 through 1987. The additional charge is shown separately thereafter.

*** Connection charges do not include drop line and block charges. Residential connection charges do not include additional charges for touch–tone service. Business connection charges for 1983 through 1987 include the additional connection charge for installing touch–tone service. The charge is shown separately thereafter.

Table 7

Changes in the Price of Directly Dialed Five Minute Long Distance Calls
(AT&T Tariff #1*)

Calling Distance in airline miles, rate center to rate center		Residential			Business		
		January 1984	December 1994	Percentage change	January 1984	December 1994	Percentage change
1 – 10	Day	$0.96	$1.20	25.0 %	$0.96	$1.26	31.3 %
	Evening	$0.57	$0.70	22.8	$0.57	$0.80	40.4
	Night & Weekend	$0.38	$0.60	57.9	$0.38	$0.80	110.5
11 – 22	Day	$1.28	$1.20	−6.2	$1.28	$1.26	−1.6
	Evening	$0.76	$0.70	−7.9	$0.76	$0.80	5.3
	Night & Weekend	$0.51	$0.65	27.5	$0.51	$0.80	56.9
23 – 55	Day	$1.60	$1.25	−21.9	$1.60	$1.26	−21.3
	Evening	$0.96	$0.80	−16.7	$0.96	$0.80	−16.7
	Night & Weekend	$0.64	$0.65	1.6	$0.64	$0.80	25.0
56 – 124	Day	$2.05	$1.30	−36.6	$2.05	$1.38	−32.7
	Evening	$1.22	$0.80	−34.4	$1.22	$0.86	−29.5
	Night & Weekend	$0.82	$0.70	−14.6	$0.82	$0.86	4.9
125 – 292	Day	$2.14	$1.35	−36.9	$2.14	$1.38	−35.5
	Evening	$1.28	$0.80	−37.5	$1.28	$0.86	−32.8
	Night & Weekend	$0.85	$0.70	−17.6	$0.85	$0.86	1.2
293 – 430	Day	$2.27	$1.35	−40.5	$2.27	$1.38	−39.2
	Evening	$1.36	$0.85	−37.5	$1.36	$0.86	−36.8
	Night & Weekend	$0.90	$0.70	−22.2	$0.90	$0.86	−4.4
431 – 925	Day	$2.34	$1.35	−42.3	$2.34	$1.38	−41.0
	Evening	$1.40	$0.85	−39.3	$1.40	$0.86	−38.6
	Night & Weekend	$0.93	$0.70	−24.7	$0.93	$0.86	−7.5
926 – 1910	Day	$2.40	$1.35	−43.8	$2.40	$1.48	−38.3
	Evening	$1.44	$0.85	−41.0	$1.44	$0.92	−36.1
	Night & Weekend	$0.96	$0.70	−27.1	$0.96	$0.92	−4.2
1911 – 3000	Day	$2.70	$1.40	−48.1	$2.70	$1.48	−45.2
	Evening	$1.62	$0.85	−47.5	$1.62	$0.92	−43.2
	Night & Weekend	$1.08	$0.75	−30.6	$1.08	$0.92	−14.8
3001 – 4250	Day	$2.80	$1.55	−44.6	$2.80	$1.73	−38.2
	Evening	$1.68	$1.10	−34.5	$1.68	$1.21	−28.0
	Night & Weekend	$1.12	$0.85	−24.1	$1.12	$1.21	8.0
4251 – 5750	Day	$2.91	$1.70	−41.6	$2.91	$1.90	−34.7
	Evening	$1.74	$1.15	−33.9	$1.74	$1.26	−27.6
	Night & Weekend	$1.16	$0.85	−26.7	$1.16	$1.26	8.6

* AT&T initiated a new rate structure for business customers on July 1, 1993. The rate structure consolidates mileage bands and replaces the Evening and Night & Weekend periods with a single off–peak period. The new rates are shown in the old rate structure for the purposes of comparison.

CONSUMER EXPENDITURES:

The Bureau of Labor Statistics conducts surveys of consumer expenditures, in part, to develop weights for CPI indexes. Table 8 shows expenditures for telephone service for all consumer units. Average annual expenditures on telephone service increased from $325 per household in 1980 to $658 in 1993.

About 2% of all consumer expenditures are devoted to telephone service. This percentage has remained virtually unchanged over the past 15 years, despite major changes in the telephone industry and in telephone usage.

The information on average telephone expenditures can be used to estimate the average monthly bills for households with telephone service. This average was about $58 per month for 1993. Monthly bills have increased significantly since 1980, due partly to higher local rates, but primarily due to more long distance calling. Residential toll calling grew by about 10% a year between 1985 and 1989 -- a period when toll rates declined dramatically. The average American household now spends more on long distance service than on basic local service, reflecting the growth in long distance calling since the AT&T divestiture in 1984.

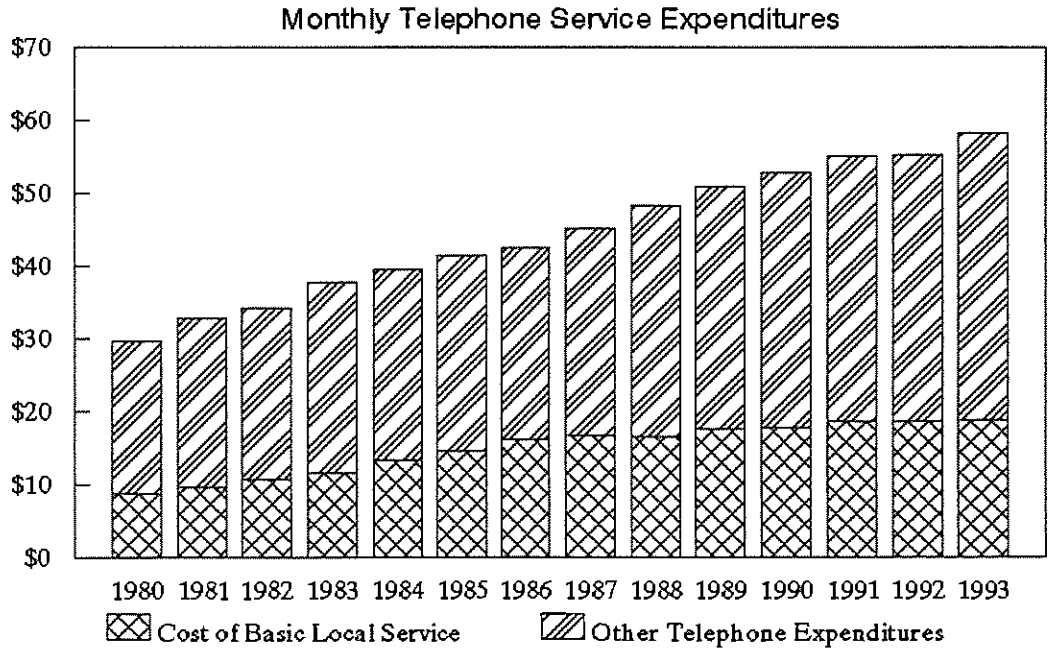
Table 8

Telephone Service Expenditures

Year	Annual Expenditures (Average for All Households)		Monthly Expenditures (for Households with Telephone Service)		
	Telephone Expenditures	Percentage of Total Expenditures	Basic Local Service Charge *	Toll and Other Telephone Expenditures **	Total Telephone Expenditures
1980	$325	1.9 %	$8.74	$21	$30
1981	360	2.1	9.71	23	33
1982	375	2.1	10.75	23	34
1983	415	2.1	11.58	26	38
1984	435	2.0	13.35	26	40
1985	455	1.9	14.54	27	41
1986	471	2.0	16.11	26	43
1987	499	2.0	16.66	28	45
1988	537	2.1	16.57	32	48
1989	567	2.0	17.53	33	51
1990	592	2.1	17.79	35	53
1991	618	2.1	18.66	36	55
1992	623	2.1	18.70	37	55
1993	658	2.1	18.82	39	58

* Monthly service charges for unlimited local service, taxes, and subscriber line charges.

** Calculated as total monthly bill minus the cost of basic local service. Figures may not add due to rounding. The Toll and Other category is primarily toll, but also includes charges for equipment, additional access lines, connection, touch tone, call waiting, "900" service, directory listings, etc.



STATE TELEPHONE RATE CASES:

The actions of state regulatory commissions provide important indicators of future rate changes. Rate cases completed by the state commissions tend to result in immediate rate changes. At the same time, the amount of rate relief requested by local telephone companies, but not yet acted upon by state commissions, provides an indicator of future rate changes.

The total amount of rate increases pending before public utility commissions is about $180 million. Since it typically takes more than a year for a rate case to be completed, the low level of pending cases -- viewed in conjunction with recent reductions ordered by state commissions -- should indicate a low level of rate changes for local and intrastate toll rates during the next year.

TABLE 9

STATE TELEPHONE RATE CASES
(MILLIONS OF DOLLARS)

	REVENUE INCREASES REQUESTED	REVENUE CHANGES ORDERED	REQUESTED INCREASES PENDING
1985 FIRST QUARTER	$977	$248	$3,779
SECOND QUARTER	172	315	3,316
THIRD QUARTER	108	287	2,664
FOURTH QUARTER	370	307	1,437
1986 FIRST QUARTER	155	58	766
SECOND QUARTER	250	58	362
THIRD QUARTER	230	173	316
FOURTH QUARTER	9	1	323
1987 FIRST QUARTER	7	(33)	87
SECOND QUARTER	19	(112)	48
THIRD QUARTER	62	(94)	94
FOURTH QUARTER	58	(280)	125
1988 FIRST QUARTER	46	(215)	149
SECOND QUARTER	155	(232)	302
THIRD QUARTER	141	(388)	377
FOURTH QUARTER	15	(531)	199
1989 FIRST QUARTER	52	(204)	141
SECOND QUARTER	28	(108)	149
THIRD QUARTER	363	(49)	490
FOURTH QUARTER	6	(478)	420
1990 FIRST QUARTER	898	(135)	904
SECOND QUARTER	58	(110)	955
THIRD QUARTER	129	(317)	1,038
FOURTH QUARTER	24	110	230
1991 FIRST QUARTER	184	3	343
SECOND QUARTER	98	8	330
THIRD QUARTER	45	76	196
FOURTH QUARTER	54	(174)	104
1992 FIRST QUARTER	0	(126)	104
SECOND QUARTER	146	(91)	208
THIRD QUARTER	50	(173)	158
FOURTH QUARTER	10	(41)	160
1993 FIRST QUARTER	40	(56)	127
SECOND QUARTER	61	5	123
THIRD QUARTER	128	(11)	251
FOURTH QUARTER	24	(359)	213
1994 FIRST QUARTER	0	(157)	213
SECOND QUARTER	28	(96)	230
THIRD QUARTER	0	(120)	179
ANNUAL DATA:			
1985	1,627	1,155	1,437
1986	644	290	323
1987	146	(519)	125
1988	358	(1,366)	199
1989	447	(839)	420
1990	1,109	(451)	230
1991	381	(87)	104
1992	205	(431)	160
1993	252	(421)	213

CHANGES IN TECHNOLOGY AND EQUAL ACCESS:

1. Central Office Technology:

During the 1980's, the Bell Operating Companies replaced most of their older "electromechanical" switches with newer equipment. The newer offices use computers to switch calls. In the telephone industry these computers are referred to as "stored program control" switches. Switches with the most current technologies are fully digital. That is, computers are used to switch calls and, in addition, telephone conversations are converted to a digital form before being passed through the switch and later reconverted to their original analog form. Some offices are of an intermediate variety: the switching function is done by computer but the calls continue to be processed in their analog form. The spread of these technologies is shown in Table 10.

The use of digital technology has allowed local telephone companies to equip most of their offices for the provision of "equal access" to competing long distance carriers. Newer signaling systems have been developed that permit calls to be set up more quickly and efficiently. In the late 1980's, telephone company offices began to be converted to the newest system, "Signaling System 7." For several years the telephone industry has been working to develop standards for an Integrated Systems Digital Network (ISDN). One of the attractions of ISDN is that ordinary local telephone lines (copper loops) can transport high speed data between computers and handle more than one telephone conversation at a time. The number of offices and lines equipped for these features are shown in Table 11.

2. Equal Access:

The Bell Operating Companies serve more than 75% of the nation's telephone lines. Under the Modification of Final Judgment that settled the AT&T antitrust case, the Bell Operating Companies are obligated to offer equal access to all long distance carriers. The Bell Operating Companies have converted almost all of their lines to equal access, although there are a few lines at smaller, older offices where equal access is being provided as the offices are converted to more modern equipment. Independent telephone companies, which serve almost 25% of the nation's lines, are converting offices to equal access at a less rapid pace, and have converted about 90% of their lines. Overall, more than 97% of the nation's telephone lines have been converted to equal access.

3. Data for Individual Companies and States:

The information shown in Tables 10 and 11 is based on special studies completed around 1989. The information is valuable because it presents a lengthy time series for data not usually available. Unfortunately, the projections made in 1989 for future years have not been updated. More detailed data for the years since 1989 are available for the larger telephone companies. This information is reported on a state-by-state basis and can be obtained from the **FCC-State Link** bulletin board. Because the detailed data have not been carefully checked for inaccuracies and omissions, we have not summarized the results to update the projections shown in Tables 10 and 11.

Table 12 shows the number of telephone lines and the percentage of these lines converted to equal access since divestiture. Bell companies converted almost half of their lines between December 1984 and December 1985, and an additional 40% in the next three years. Including independents, the United States reached 90% equal access conversion by the end of 1990.

Table 13 shows the number of central office wire centers in each state that had been converted to equal access as of November 1, 1994. The table is derived from NECA's tariff 4 data base, which is updated by local exchange carriers. In some cases, there is a lag between an office converting to equal access and that change being reflected in the data base. Thus, in some cases, the data continues to show some offices not yet converted to equal access even in states where equal access is reported to be available to all customers. Because the non-equal access offices tend to be smaller offices, the percentage of converted lines is significantly greater than the percentage of converted offices. Table 14 shows the number of local exchange carriers and access lines in each state, and shows breakdowns for equal access and non-equal access lines. By December 1993, equal access was provided on 97% of all lines.

TABLE 10

CENTRAL OFFICES AND ACCESS LINES BY TECHNOLOGY (BELL OPERATING COMPANIES)

YEAR END	TOTAL OFFICES	ELECTRO–MECHANICAL OFFICES		ANALOG STORED PROGRAM CONTROL OFFICES		DIGITAL STORED PROGRAM CONTROL OFFICES	
1980	9,195	6,842	74.4 %	2,353	25.6 %	0	0.0 %
1981	9,198	6,647	72.3	2,527	27.5	24	0.3
1982	9,173	6,357	69.3	2,736	29.8	80	0.9
1983	9,156	6,075	66.3	2,910	31.8	171	1.9
1984	9,102	5,714	62.8	3,041	33.4	347	3.8
1985	9,124	5,244	57.5	3,020	33.1	860	9.4
1986	9,167	4,604	50.2	2,943	32.1	1,620	17.7
1987	9,190	3,819	41.6	2,833	30.8	2,538	27.6
1988	9,300	3,031	32.6	2,692	28.9	3,577	38.5
1989	9,338	2,416	25.9	2,519	27.0	4,403	47.2
1990 *	9,352	1,804	19.3	2,209	23.6	5,339	57.1
1991 *	9,338	1,199	12.8	2,166	23.2	5,973	64.0
1992 *	9,314	825	8.9	2,043	21.9	6,446	69.2
1993 *	9,320	659	7.1	1,919	20.6	6,742	72.3
1994 *	9,311	510	5.5	1,789	19.2	7,012	75.3

ACCESS LINES SERVED BY TYPE OF OFFICE (THOUSANDS)

YEAR END	TOTAL OFFICES	ELECTRO–MECHANICAL OFFICES		ANALOG STORED PROGRAM CONTROL OFFICES		DIGITAL STORED PROGRAM CONTROL OFFICES	
1980	81,032	44,930	55.4 %	36,092	44.5 %	10	0.0 %
1981	82,581	40,425	49.0	42,099	51.0	57	0.1
1982	83,819	36,813	43.9	46,803	55.8	203	0.2
1983	86,186	32,652	37.9	52,919	61.4	615	0.7
1984	88,630	30,074	33.9	56,404	63.6	2,151	2.4
1985	91,455	24,778	27.1	58,532	64.0	8,145	8.9
1986	93,630	19,491	20.8	59,252	63.3	14,886	15.9
1987	96,593	14,205	14.7	59,442	61.5	22,946	23.8
1988	99,564	8,707	8.7	60,364	60.6	30,493	30.6
1989	102,684	5,646	5.5	58,846	57.3	38,192	37.2
1990 *	106,016	2,987	2.8	56,991	53.8	46,038	43.4
1991 *	109,403	1,722	1.6	55,631	50.8	52,050	47.6
1992 *	112,655	954	0.8	53,843	47.8	57,858	51.4
1993 *	115,885	741	0.6	51,963	44.8	63,180	54.5
1994 *	121,706	803	0.7	52,258	42.9	68,646	56.4

* Projected in CC Docket 89–624.

TABLE 11

FEATURES AVAILABLE IN CENTRAL OFFICES
(BELL OPERATING COMPANIES)

YEAR END	TOTAL OFFICES	EQUAL ACCESS OFFICES		SIGNALING SYSTEM 7 OFFICES		ISDN OFFICES	
1980	9,195	0	0.0 %	0	0.0 %	0	0.0 %
1981	9,198	0	0.0	0	0.0	0	0.0
1982	9,173	0	0.0	0	0.0	0	0.0
1983	9,156	0	0.0	0	0.0	0	0.0
1984	9,102	124	1.4	0	0.0	0	0.0
1985	9,124	1,891	20.7	0	0.0	0	0.0
1986	9,167	3,623	39.5	0	0.0	0	0.0
1987	9,190	4,823	52.5	29	0.3	4	0.0
1988	9,300	6,071	65.3	435	4.7	82	0.9
1989	9,338	6,788	72.7	931	10.0	179	1.9
1990 *	9,352	7,534	80.6	2,028	21.7	426	4.6
1991 *	9,338	7,951	85.1	2,834	30.3	1,591	17.0
1992 *	9,314	8,267	88.8	3,845	41.3	1,746	18.7
1993 *	9,320	8,449	90.7	4,566	49.0	1,952	20.9
1994 *	9,311	8,602	92.4	4,988	53.6	2,197	23.6

EQUIPPED ACCESS LINES BY TYPE OF OFFICE
(THOUSANDS)

YEAR END	TOTAL OFFICES	EQUAL ACCESS OFFICES		SIGNALING SYSTEM 7 OFFICES		ISDN OFFICES	
1980	81,032	0	0.0 %	0	0.0 %	0	0.0 %
1981	82,581	0	0.0	0	0.0	0	0.0
1982	83,819	0	0.0	0	0.0	0	0.0
1983	86,186	146	0.2	0	0.0	0	0.0
1984	88,630	9,350	10.5	0	0.0	0	0.0
1985	91,455	49,241	53.8	0	0.0	0	0.0
1986	93,630	70,543	75.3	0	0.0	0	0.0
1987	96,593	81,743	84.6	1,035	1.1	12	0.0
1988	99,564	91,809	92.2	10,325	10.4	47	0.0
1989	102,684	97,410	94.9	21,917	21.3	111	0.1
1990 *	106,016	103,079	97.2	38,597	36.4	504	0.5
1991 *	109,403	107,205	98.0	53,066	48.5	1,053	1.0
1992 *	112,655	111,033	98.6	68,438	60.8	1,358	1.2
1993 *	115,885	114,669	99.0	79,926	69.0	1,874	1.6
1994 *	121,706	120,664	99.1	82,765	68.0	2,122	1.7

* Projected in CC Docket 89–624.

TABLE 12

TELEPHONE LINES CONVERTED TO EQUAL ACCESS

(ACCESS LINES IN THOUSANDS)

	BELL COMPANIES		OTHER COMPANIES		TOTAL	
	LINES	% EQUAL ACCESS	LINES	% EQUAL ACCESS	LINES	% EQUAL ACCESS
1984 JUNE	84,321	0.0	26,278	0.0	110,599	0.0
DECEMBER	85,457	3.8	26,633	1.0	112,090	3.1
1985 JUNE	86,609	26.9	26,992	2.5	113,601	21.1
DECEMBER	87,777	50.9	27,355	3.4	115,132	39.6
1986 JUNE	88,960	61.9	27,724	13.6	116,684	50.4
DECEMBER	90,159	74.3	28,098	28.0	118,257	63.3
1987 JUNE	91,374	77.7	28,477	37.7	119,851	68.2
DECEMBER	92,606	84.7	28,860	47.8	121,467	75.9
1988 JUNE	93,520	87.4	29,145	51.6	122,665	78.9
DECEMBER	94,813	91.3	29,548	56.3	124,361	83.0
1989 JUNE	96,632	93.4	30,115	59.6	126,747	85.4
DECEMBER	98,214	94.1	30,268	60.8	128,482	86.2
1990 JUNE	99,815	95.0	30,962	63.8	130,777	87.6
DECEMBER	100,993	96.8	31,416	70.6	132,409	90.6
1991 JUNE	102,027	97.4	31,870	73.5	133,896	91.7
DECEMBER	103,102	98.4	32,185	77.5	135,287	93.4
1992 JUNE	104,060	98.9	32,643	80.7	136,704	94.5
DECEMBER	105,744	99.3	32,981	84.5	138,725	95.8
1993 JUNE	107,084	99.4	33,531	86.6	140,615	96.3
DECEMBER	108,847	99.6	33,963	89.1	142,809	97.1

TABLE 13

CENTRAL OFFICES CONVERTED TO EQUAL ACCESS AS OF NOVEMBER 1, 1994

	Bell Company Central Offices			Other Central Offices			Bell & Other Central Offices	
	Equal Access	Non–Equal Access	% Equal Access	Equal Access	Non–Equal Access	% Equal Access	Total Offices	% Equal Access
Alabama	147	5	96.7 %	160	52	75.5 %	364	84.3 %
Alaska	0	0	N.A.	35	219	13.8	254	13.8
Arizona	159	8	95.2	30	65	31.6	262	72.1
Arkansas	135	8	94.4	122	91	57.3	356	72.2
California	749	0	100.0	296	100	74.7	1145	91.3
Colorado	229	2	99.1	22	50	30.6	303	82.8
Connecticut	2	0	100.0	130	13	90.9	145	91.0
Delaware	37	0	100.0	0	0	N.A.	37	100.0
District of Col.	34	5	87.2	0	0	N.A.	39	87.2
Florida	211	0	100.0	275	18	93.9	504	96.4
Georgia	146	51	74.1	149	97	60.6	443	66.6
Hawaii	0	0	N.A.	77	26	74.8	103	74.8
Idaho	93	0	100.0	58	44	56.9	195	77.4
Illinois	260	53	83.1	506	240	67.8	1059	72.3
Indiana	168	5	97.1	347	68	83.6	588	87.6
Iowa	169	2	98.8	447	172	72.2	790	78.0
Kansas	162	12	93.1	148	266	35.7	588	52.7
Kentucky	178	1	99.4	168	52	76.4	399	86.7
Louisiana	232	0	100.0	59	43	57.8	334	87.1
Maine	147	1	99.3	65	53	55.1	266	79.7
Maryland	203	21	90.6	0	1	0.0	225	90.2
Massachusetts	287	2	99.3	1	2	33.3	292	98.6
Michigan	336	30	91.8	204	167	55.0	737	73.3
Minnesota	213	5	97.7	390	137	74.0	745	80.9
Mississippi	199	7	96.6	27	32	45.8	265	85.3
Missouri	226	11	95.4	141	329	30.0	707	51.9
Montana	82	0	100.0	75	129	36.8	286	54.9
Nebraska	106	1	99.1	190	171	52.6	468	63.2
Nevada	24	29	45.3	48	22	68.6	123	58.5
New Hampshire	125	1	99.2	21	10	67.7	157	93.0
New Jersey	219	1	99.5	23	5	82.1	248	97.6
New Mexico	76	0	100.0	26	91	22.2	193	52.8
New York	614	2	99.7	260	59	81.5	935	93.5
North Carolina	146	0	100.0	330	41	88.9	517	92.1
North Dakota	111	5	95.7	11	174	5.9	301	40.5
Ohio	236	18	92.9	449	165	73.1	868	78.9
Oklahoma	196	21	90.3	200	99	66.9	516	76.7
Oregon	111	0	100.0	151	50	75.1	312	84.0
Pennsylvania	407	0	100.0	342	110	75.7	859	87.2
Puerto Rico	0	0	N.A.	95	0	100.0	95	100.0
Rhode Island	31	0	100.0	0	0	N.A.	31	100.0
South Carolina	120	0	100.0	153	4	97.5	277	98.6
South Dakota	110	3	97.3	94	60	61.0	267	76.4
Tennessee	202	2	99.0	128	54	70.3	386	85.5
Texas	570	29	95.2	532	200	72.7	1331	82.8
Utah	84	5	94.4	19	60	24.1	168	61.3
Vermont	93	2	97.9	34	11	75.6	140	90.7
Virgin Islands	0	0	N.A.	0	6	0.0	6	0.0
Virginia	230	10	95.8	222	33	87.1	495	91.3
Washington	162	0	100.0	180	64	73.8	406	84.2
West Virginia	146	2	98.6	54	35	60.7	237	84.4
Wisconsin	145	1	99.3	406	103	79.8	655	84.1
Wyoming	23	7	76.7	9	50	15.3	89	36.0
Total United States	9,091	368	96.1 %	7,909	4,143	65.6 %	21,511	79.0 %

* The Information in this table is based on the NECA FCC Tariff No. 4 data base. Some companies do not report information on their remote switches in Tariff No. 4. As a result, central office counts may be lower than reported in other sources.

TABLE 14

TELEPHONE LINES BY STATE AS OF DECEMBER 31, 1993

STATE NAME	NUMBER OF TELEPHONE COMPANIES	BELL COMPANY LINES			OTHER COMPANY LINES			TOTAL LINES	% EQUAL ACCESS
		EQUAL ACCESS	NON-EQUAL ACCESS	% EQUAL ACCESS	EQUAL ACCESS	NON-EQUAL ACCESS	% EQUAL ACCESS		
ALABAMA	30	1,629,946	0	100.00	315,621	79,721	79.83	2,025,288	96.06
ALASKA	25	0	0	N.A.	277,863	39,010	87.69	316,873	87.69
ARIZONA	13	1,916,682	24,570	98.73	33,286	91,536	26.67	2,066,054	94.38
ARKANSAS	29	797,831	1,424	99.82	250,738	122,265	67.22	1,172,258	89.45
CALIFORNIA	22	13,998,531	0	100.00	3,950,010	67,194	98.33	18,015,735	99.63
COLORADO	27	2,029,577	2,587	99.87	10,151	28,869	26.01	2,071,184	98.48
CONNECTICUT	2	0	0	N.A.	1,856,122	0	100.00	1,856,122	100.00
DELAWARE	1	427,437	0	100.00	0	0	N.A.	427,437	100.00
DISTRICT OF COLUMBIA	1	779,786	0	100.00	0	0	N.A.	779,786	100.00
FLORIDA	13	4,924,578	0	100.00	3,040,162	61,177	98.03	8,025,917	99.24
GEORGIA	36	3,068,771	0	100.00	425,440	167,449	71.76	3,661,660	95.43
HAWAII	1	0	0	N.A.	490,019	105,798	82.24	595,817	82.24
IDAHO	20	404,299	24	99.99	96,095	35,186	73.20	535,604	93.43
ILLINOIS	56	5,581,114	0	100.00	974,877	187,926	83.84	6,743,917	97.21
INDIANA	42	1,795,958	0	100.00	1,033,195	80,989	92.73	2,910,142	97.22
IOWA	153	898,370	27,348	97.05	401,483	88,127	82.00	1,415,328	91.84
KANSAS	39	1,124,468	0	100.00	84,763	141,320	37.49	1,350,551	89.54
KENTUCKY	19	1,012,717	0	100.00	663,811	60,444	91.65	1,736,972	96.52
LOUISIANA	20	1,904,740	0	100.00	65,443	81,251	44.61	2,051,434	96.04
MAINE	19	574,156	0	100.00	75,693	35,589	68.02	685,438	94.81
MARYLAND	2	2,855,171	0	100.00	0	5,204	0.00	2,860,375	99.82
MASSACHUSETTS	3	3,711,354	0	100.00	936	2,440	27.73	3,714,730	99.93
MICHIGAN	38	4,423,515	0	100.00	678,213	137,812	83.11	5,239,540	97.37
MINNESOTA	91	1,803,141	50,157	97.29	503,643	102,898	83.04	2,459,839	93.78
MISSISSIPPI	19	1,049,060	0	100.00	28,440	39,218	42.03	1,116,718	96.49
MISSOURI	44	2,102,446	1,243	99.94	499,075	208,151	70.57	2,810,915	92.55
MONTANA	16	300,126	37,722	88.83	66,396	31,350	67.93	435,594	84.14
NEBRASKA	42	454,981	10,293	97.79	323,945	73,499	81.51	862,718	90.29
NEVADA	13	223,253	22,779	90.74	598,961	10,389	98.30	855,382	96.12
NEW HAMPSHIRE	12	619,909	0	100.00	36,859	4,036	90.13	660,804	99.39
NEW JERSEY	3	5,049,073	0	100.00	156,032	7,832	95.22	5,212,937	99.85
NEW MEXICO	14	647,465	0	100.00	76,607	28,887	72.62	752,959	96.16
NEW YORK	44	9,488,732	51,193	99.46	1,001,997	81,259	92.50	10,623,181	98.75
NORTH CAROLINA	28	1,846,826	0	100.00	1,726,180	99,706	94.54	3,672,712	97.29
NORTH DAKOTA	24	227,818	14,068	94.18	11,156	84,956	11.61	337,998	70.70
OHIO	42	3,311,584	0	100.00	2,096,766	216,691	90.83	5,625,041	96.15
OKLAHOMA	39	1,244,633	101,585	92.45	190,005	96,451	66.33	1,632,674	87.87
OREGON	34	1,112,735	0	100.00	444,467	54,377	89.10	1,611,579	96.63
PENNSYLVANIA	39	5,243,378	0	100.00	1,407,661	126,481	91.76	6,777,520	98.13
RHODE ISLAND	1	550,593	0	100.00	0	0	N.A.	550,593	100.00
SOUTH CAROLINA	28	1,170,808	0	100.00	537,386	23,557	95.80	1,731,751	98.64
SOUTH DAKOTA	31	266,663	9,039	96.72	50,980	28,575	64.08	355,257	89.41
TENNESSEE	25	2,170,100	0	100.00	392,832	132,840	74.73	2,695,772	95.07
TEXAS	56	7,278,749	7,647	99.90	1,785,956	300,270	85.61	9,372,622	96.71
UTAH	12	788,848	7,708	99.03	19,247	14,614	56.84	830,417	97.31
VERMONT	9	273,194	0	100.00	41,228	13,095	75.89	327,517	96.00
VIRGINIA	21	2,648,961	0	100.00	770,921	59,624	92.82	3,479,506	98.29
WASHINGTON	22	2,019,577	0	100.00	737,875	93,817	88.72	2,851,269	96.71
WEST VIRGINIA	10	680,771	0	100.00	108,379	26,578	80.31	815,728	96.74
WISCONSIN	94	1,815,289	0	100.00	816,991	106,311	88.49	2,738,591	96.12
WYOMING	10	197,542	32,054	86.04	7,667	11,925	39.13	249,188	82.35
UNITED STATES	1,434	108,445,236	401,441	99.63	29,161,573	3,696,694	88.75	141,704,944	97.11
MICRONESIA	1	0	0	N.A.	13,367	0	100.00	13,367	100.00
PUERTO RICO	2	0	0	N.A.	1,037,527	121	99.99	1,037,648	99.99
VIRGIN ISLANDS	1	0	0	N.A.	53,321	0	100.00	53,321	100.00
GRAND TOTAL	1,438	108,445,236	401,441	99.63	30,265,788	3,696,815	89.12	142,809,280	97.13

TELEPHONE LINES AND LOCAL TELEPHONE COMPANIES:

Within the telephone industry there are several alternative, but closely related, definitions of telephone lines or loops. While these differences often make it difficult to easily reconcile data from different statistical series, they are not usually large enough to affect comparisons among companies or trends over time.

Table 15 shows the nation's total number of local loops during each year. With virtually all businesses having telephone lines and more than 90% of the nation's households having telephone service, the growth in the number of lines tends to reflect growth in the population and the economy -- averaging about 3% per year.

There are about 1300 local telephone companies in the United States. Table 16 shows the number of companies and the number of switched access lines in each state.

TELEPHONE NUMBERS FOR 800 SERVICE:

Prior to early 1993, toll free 800 calls were routed in a manner similar to that used for 900 calls (with the first three digits of the 800 number indicating the long distance carrier handling the call). On May 1, 1993, procedures for routing 800 calls were changed. The first three digits of 800 calls no longer indicate the carrier handling the call. The new system enables customers to change service providers while still retaining the same 800 number. This system of "portability" relies on a large data base maintained by Database Service Management, Inc. (DSMI). During the two years since portability was implemented, the number of working 800 telephone numbers is reported to have doubled. The growth of 800 telephone numbers is shown in Table 17.[1]

[1]DSMI supplies a monthly summary of the number of 800 numbers assigned, and that summary is available in the Industry Analysis Division's public reference room.

Table 15

Total U.S. Telephone Lines
(Local Loops)

	Loops	Annual Growth
1980	102,216,367	N.A.
1981	105,559,222	3.3%
1982	107,519,214	1.9%
1983	110,612,689	2.9%
1984	112,550,739	1.8%
1985	115,985,813	3.1%
1986	118,289,121	2.0%
1987	122,789,249	3.8%
1988	127,086,765	3.5%
1989	131,504,512	3.5%
1990	136,114,358	3.5%
1991	139,413,353	2.4%
1992	143,478,120	2.9%
1993	148,190,420	3.3%

Table 16
Local Telephone Companies and Access Lines
by State as of June 30, 1994

State	Companies	Bell Company Lines	Other Company Lines	Total Lines	Percent Of Total United States	Rate of Growth **
Alabama	30	1,656,058	400,255	2,056,313	1.4 %	3.4 %
Alaska	25	0	324,343	324,343	0.2	4.6
Arizona	13	1,966,488	127,663	2,094,151	1.5	5.3
Arkansas	29	814,409	370,488	1,184,897	0.8	2.8
California	22	14,426,265	4,162,303	18,588,568	12.9	4.6
Colorado	27	2,059,043	40,558	2,099,601	1.5	4.4
Connecticut	2	0	1,845,197	1,845,197	1.3	−1.5
Delaware	1	437,150	0	437,150	0.3	3.5
District of Col.	1	779,802	0	779,802	0.5	−1.2
Florida	13	5,031,953	3,471,693	8,503,646	5.9	8.0
Georgia	36	3,152,652	620,158	3,772,810	2.6	5.6
Hawaii	1	0	581,109	581,109	0.4	−0.2
Idaho	20	412,130	135,336	547,466	0.4	4.3
Illinois	56	5,675,569	1,140,864	6,816,433	4.7	2.9
Indiana	42	1,829,550	1,092,105	2,921,655	2.0	2.4
Iowa	153	935,375	486,647	1,422,022	1.0	0.8
Kansas	39	1,136,310	228,517	1,364,827	0.9	1.8
Kentucky	19	1,028,819	725,409	1,754,228	1.2	2.5
Louisiana	20	1,941,657	149,745	2,091,402	1.5	3.1
Maine	20	577,227	112,142	689,369	0.5	1.0
Maryland	2	2,913,130	5,283	2,918,413	2.0	2.8
Massachusetts	3	3,714,454	3,474	3,717,928	2.6	2.0
Michigan	38	4,510,667	804,035	5,314,702	3.7	3.3
Minnesota	90	1,854,297	615,645	2,469,942	1.7	1.8
Mississippi	19	1,071,664	70,431	1,142,095	0.8	4.1
Missouri	44	2,129,233	697,012	2,826,245	2.0	1.8
Montana	18	307,750	133,613	441,363	0.3	3.6
Nebraska	42	469,767	398,405	868,172	0.6	0.7
Nevada	13	254,992	636,512	891,504	0.6	8.3
New Hampshire	13	821,247	41,321	662,568	0.5	2.1
New Jersey	3	5,113,377	167,051	5,280,428	3.7	2.7
New Mexico	14	644,129	104,113	748,242	0.5	2.0
New York	44	9,468,917	1,090,514	10,559,431	7.3	0.5
North Carolina	28	1,889,196	1,860,500	3,749,696	2.6	4.7
North Dakota	24	243,323	98,608	341,931	0.2	2.7
Ohio	42	3,404,679	2,314,747	5,719,426	4.0	2.8
Oklahoma	39	1,374,432	288,823	1,663,255	1.2	2.9
Oregon	34	1,132,660	509,968	1,642,628	1.1	4.7
Pennsylvania	37	5,289,699	1,548,958	6,838,657	4.7	2.5
Rhode Island	1	544,335	0	544,335	0.4	0.3
South Carolina	28	1,195,361	576,664	1,772,025	1.2	3.5
South Dakota	31	277,210	79,806	357,016	0.2	1.7
Tennessee	25	2,218,375	533,503	2,751,878	1.9	4.3
Texas	57	7,431,660	2,052,349	9,484,009	6.6	3.0
Utah	13	813,342	37,676	851,018	0.6	4.4
Vermont	10	273,588	53,913	327,501	0.2	1.0
Virginia	21	2,718,454	851,115	3,569,569	2.5	4.1
Washington	22	2,068,303	851,230	2,919,533	2.0	2.7
West Virginia	10	689,190	133,917	823,107	0.6	1.3
Wisconsin	94	1,851,533	931,095	2,782,628	1.9	3.7
Wyoming	10	233,511	20,181	253,692	0.2	3.3
United States	1438 *	110,582,932	33,524,994	144,107,926	100.0	3.3
Micronesia	1	0	13,603	13,603		7.5
Puerto Rico	2	0	1,052,585	1,052,585		3.4
Virgin Islands	1	0	54,628	54,628		3.5
Grand Total	1442 *	110,582,932	34,645,810	145,228,742		3.3

* This figure overstates the actual number of operating companies because many operating companies serve more than one state. There are about 1300 separate operating companies.

** This is the percent change in total lines for the previous 12 months.

TABLE 17
TELEPHONE NUMBERS ASSIGNED FOR 800 SERVICE
(REPORTED AT THE END OF THE MONTH SHOWN)

YEAR	MONTH	WORKING 800 NUMBERS	MISC* 800 NUMBERS	TOTAL 800 NUMBERS
1993	APRIL	2,448,985	642,725	3,091,710
	MAY	2,511,933	708,192	3,220,125
	JUNE	2,589,123	722,006	3,311,129
	JULY	2,675,483	705,416	3,380,899
	AUGUST	2,738,259	701,009	3,439,268
	SEPTEMBER	2,818,262	639,547	3,457,809
	OCTOBER	2,891,994	660,544	3,552,538
	NOVEMBER	3,083,250	728,514	3,811,764
	DECEMBER	3,155,955	731,438	3,887,393
1994	JANUARY	3,257,540	580,216	3,837,756
	FEBRUARY	3,381,646	731,005	4,112,651
	MARCH	3,516,620	743,813	4,260,433
	APRIL	3,659,129	699,212	4,358,341
	MAY	3,793,865	738,767	4,532,632
	JUNE	3,933,037	792,698	4,725,735
	JULY	4,099,174	699,803	4,798,977
	AUGUST	4,312,486	807,881	5,120,367
	SEPTEMBER	4,506,014	841,381	5,347,395
	OCTOBER	4,611,014	871,684	5,482,698
	NOVEMBER	4,817,854	875,416	5,693,270
	DECEMBER	4,948,605	763,235	5,711,840

*MISCELLANEOUS NUMBERS INCLUDE THOSE IN THE 800 SERVICE MANAGEMENT SYSTEM MAINTAINED BY DSMI AND CATEGORIZED AS RESERVED, ASSIGNED BUT NOT YET ACTIVATED, RECENTLY DISCONNECTED, OR SUSPENDED.

MINUTES OF CALLING:

1. Dial Equipment Minutes:

As in the case of telephone lines, there are many alternative measures of calling volumes. Most subscribers purchase service with unlimited local calling. As a result, most calls are not metered and estimates of total calling are subject to wide margins of error. Periodic studies are used within the telephone industry to estimate the number of calls and calling minutes for a variety of purposes. For example, periodic studies of dial equipment minutes (DEMs) are used to estimate the proportion of calling that is interstate and to allocate costs between interstate and intrastate services.

Dial equipment minutes are shown in Table 18. Dial equipment minutes are measured as calls enter and leave telephone switches. Therefore, two DEM minutes are counted for every conversation minute. The volume of local calls has grown at approximately the same rate as the number of local telephone lines. In contrast, the volume of long distance calling surged as prices fell. As a result, a greater portion of calls are long distance. Intrastate toll minutes increased from 8% of all minutes in 1980 to 12% in 1993. During that same period, interstate calling minutes increased from 8% of the total to 15%.

As shown in Table 19, the average telephone line is used primarily for local calling and is used somewhat less than an hour per day. This level has remained relatively constant for a long period of time despite increases in long distance calling and the introduction of facsimile machines and other devices that affect usage.

TABLE 18

DIAL EQUIPMENT MINUTES

(BILLIONS OF MINUTES)				
	LOCAL	INTRASTATE TOLL	INTERSTATE TOLL	TOTAL
1980	1,458	141	133	1,733
1981	1,492	151	144	1,787
1982	1,540	158	154	1,853
1983	1,587	166	169	1,923
1984	1,639	198	208	2,045
1985	1,673	222	250	2,145
1986	1,699	237	270	2,207
1987	1,713	253	295	2,261
1988	1,795	269	321	2,384
1989	1,829	286	344	2,459
1990	1,854	300	355	2,510
1991	1,868	304	368	2,540
1992	1,950	318	387	2,654
1993	2,090	328	434	2,852
INCREASE OVER PRIOR YEAR				
1981	2 %	7 %	8 %	3 %
1982	3	5	7	4
1983	3	5	10	4
1984	3	19	23	6
1985	2	12	20	5
1986	2	7	8	3
1987	1	7	9	2
1988	5	6	9	5
1989	2	6	7	3
1990	1	5	3	2
1991	1	1	4	1
1992	4	5	5	4
1993	7	3	12	7
PERCENT DISTRIBUTION				
1980	84 %	8 %	8 %	100 %
1981	83	8	8	100
1982	83	9	8	100
1983	83	9	9	100
1984	80	10	10	100
1985	78	10	12	100
1986	77	11	12	100
1987	76	11	13	100
1988	75	11	13	100
1989	74	12	14	100
1990	74	12	14	100
1991	74	12	14	100
1992	73	12	15	100
1993	73	12	15	100

TABLE 19

LINE USAGE PER DAY

(DIAL EQUIPMENT MINUTES PER LOCAL LOOP)				
	LOCAL	INTRASTATE TOLL	INTERSTATE TOLL	TOTAL
1980	39	4	4	46
1981	39	4	4	46
1982	39	4	4	47
1983	39	4	4	48
1984	40	5	5	50
1985	40	5	6	51
1986	39	5	6	51
1987	38	6	7	50
1988	39	6	7	51
1989	38	6	7	51
1990	37	6	7	50
1991	37	6	7	50
1992	37	6	7	51
1993	39	6	8	53
INCREASE OVER PRIOR YEAR				
1981	−1 %	4 %	5 %	0 %
1982	1	3	5	2
1983	0	2	7	1
1984	1	17	21	4
1985	−1	9	17	2
1986	−0	5	6	1
1987	−3	3	5	−1
1988	1	2	5	2
1989	−1	3	4	−0
1990	−2	1	−0	−1
1991	−2	−1	1	−1
1992	1	2	2	2
1993	4	−0	9	4

2. Switched Access Minutes:

An alternative measure of interstate calling became available in 1984. "Switched access minutes" are those minutes transmitted by long distance carriers that also use the distribution networks of local telephone companies. The measure includes minutes associated with ordinary long distance calls and the "open end" of WATS-like calls. It excludes calls made on private telecommunications systems, on leased lines, and minutes on the "closed end" of WATS-like calls. On ordinary long distance calls, minutes are counted both where the call originates and where the call terminates.

Table 20 shows the total number of interstate switched access minutes handled by all long distance carriers. The number of minutes has grown steadily since mid-1984, stemming from a combination of overall economic growth, price reductions, and extensive advertising. Premium minutes have grown rapidly, reflecting both strong underlying traffic growth and the conversion of offices to equal access. Non-premium minutes (principally minutes handled by AT&T's competitors in areas where equal access has not yet been provided) continue to decline as the process of conversion to equal access continues.

Telephone industry traffic experts usually argue that dial equipment minutes represent the best available information on the proportions of different types of calls while access minutes are the most accurate available data on the volume of interstate calling. However, for reasons that are far from clear, reported changes in access minutes are not entirely consistent with reported changes in dial equipment minutes.

TABLE 20

INTERSTATE SWITCHED ACCESS MINUTES
(FIGURES SHOWN IN BILLIONS)

	PREMIUM MINUTES	NON–PREMIUM MINUTES	TOTAL MINUTES
1984 THIRD QUARTER	32.0	5.5	37.5
FOURTH QUARTER	33.6	6.0	39.6
1985 FIRST QUARTER	32.9	6.6	39.6
SECOND QUARTER	34.9	6.6	41.5
THIRD QUARTER	36.6	6.2	42.8
FOURTH QUARTER	38.0	5.3	43.3
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
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
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
1989 FIRST QUARTER	64.1	2.1	66.2
SECOND QUARTER	66.5	2.0	68.5
THIRD QUARTER	67.7	2.0	69.7
FOURTH QUARTER	70.7	1.9	72.6
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
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
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
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	95.1	0.6	95.8
1994 FIRST QUARTER	98.2	0.6	98.7
SECOND QUARTER	97.4	0.5	97.9
THIRD QUARTER	100.8	0.5	101.3
INCREASE OVER PRIOR YEAR:			
1986	18.3%	–41.0%	9.5%
1987	21.0%	–18.8%	17.8%
1988	15.5%	–22.5%	13.4%
1989	14.3%	–13.0%	13.3%
1990	11.6%	–11.3%	11.0%
1991	7.3%	–18.2%	6.7%
1992	7.2%	–27.5%	6.6%
1993	6.6%	–29.6%	6.1%

LONG DISTANCE CARRIERS:

Carrier Identification Codes provide information on the number of firms seeking to acquire certain types of interconnecting arrangements with local telephone companies. Any firm that seeks to use "trunk side" connections with local telephone companies is provided a carrier identification code so that traffic can be efficiently routed.

Beginning in 1986, a number of corporations, government agencies and other organizations began to acquire carrier identification codes for their own use, rather than for the purpose of providing telecommunications services to others. After that time, the use of such codes to estimate the number of long distance carriers became less reliable. We believe, however, that the number of firms obtaining these codes provides the best information available on the entry of new firms into the long distance market prior to 1986. The number of codes assigned is shown in Table 21.

Table 22 shows several alternative sources of information on the development of long distance carriers. A large share of the firms purchasing access--over 400 companies--purchase the premium access needed to provide direct dial long distance service.

Table 23 shows the number of long distance carriers that purchase equal access from the larger local telephone companies in each state. Equal access is the premium access used by major carriers to provide "1-plus" dialing. Within any state, a carrier purchasing access may concentrate its efforts in serving only a few exchanges or a small portion of the state. Thus, the number of carriers available to a particular customer will tend to be smaller than the number of long distance carriers that purchase access somewhere in the state. No data is available for Alaska, which is not served by any of the reporting local companies.

Most small long distance carriers purchase access in only one state, providing nationwide service from the area in which they operate by reselling services purchased from other carriers. Table 24 shows the evolution of larger carriers that purchase equal access.

Since 1993, all carriers with interstate revenues have been required to file annual Telecommunications Relay Service Fund Worksheets. Over 2700 carriers filed these worksheets in 1994. Local telephone companies, cellular companies, and competitive access providers all filed worksheets because they earn revenues from interstate access service.

Table 25 shows the number of carriers of each type that filed worksheets, and the categories of revenue reported. The publication Carrier Locator: Interstate Service Providers lists each carrier that filed a worksheet along with the categories of revenues reported. It also contains an address and contact telephone number for each carrier.

TABLE 21
NUMBER OF CARRIER IDENTIFICATION CODES (CICS) ASSIGNED BY BELL COMMUNICATIONS RESEARCH

YEAR	NUMBER OF CICS ASSIGNED	
1982 FIRST QUARTER	11	
SECOND QUARTER	13	
THIRD QUARTER	13	
FOURTH QUARTER	11	
1983 FIRST QUARTER	15	
SECOND QUARTER	25	
THIRD QUARTER	33	
FOURTH QUARTER	42	
1984 FIRST QUARTER	54	
SECOND QUARTER	86	
THIRD QUARTER	121	
FOURTH QUARTER	155	
1985 FIRST QUARTER	182	
SECOND QUARTER	212	
THIRD QUARTER	236	
FOURTH QUARTER	256	
1986 FIRST QUARTER	276	
SECOND QUARTER	331	
THIRD QUARTER	361	
FOURTH QUARTER	413	
1987 FIRST QUARTER	444	
SECOND QUARTER	495	
THIRD QUARTER	530	
FOURTH QUARTER	573	
1988 FIRST QUARTER	602	
SECOND QUARTER	621	
THIRD QUARTER	601	
FOURTH QUARTER	639	
1989 FIRST QUARTER	685	
SECOND QUARTER	714	
THIRD QUARTER	730	
FOURTH QUARTER	747	
1990 FIRST QUARTER	774	
SECOND QUARTER	794	
THIRD QUARTER	817	
FOURTH QUARTER	791	
1991 FIRST QUARTER	745	
SECOND QUARTER	766	
THIRD QUARTER	783	
FOURTH QUARTER	807	
1992 FIRST QUARTER	786	
SECOND QUARTER	831	
THIRD QUARTER	840	
FOURTH QUARTER	886	
YEAR	**FGB**	**FGD**
1993 FIRST QUARTER	694**	709
SECOND QUARTER	738	746
THIRD QUARTER	739	760
FOURTH QUARTER	753	796
1994 FIRST QUARTER	781	815
SECOND QUARTER	795	845
THIRD QUARTER	843	899

* CONVERSION FROM 2-DIGIT TO 3-DIGIT CIC.
** CONVERSION FROM 3-DIGIT TO 4-DIGIT CIC FOR FGB.

TABLE 22

ALTERNATE SOURCES OF LONG DISTANCE CARRIER DATA

YEAR	MONTH	CARRIERS WITH PRESUBSCRIBED LINES	CARRIERS PURCHASING EQUAL ACCESS 1/	FIRMS WITH CARRIER IDENTIFICATION CODES	FIRMS PURCHASING ACCESS
1986	MARCH	*	169	231	*
	JUNE	*	183	276	*
	SEPTEMBER	*	190	302	506
	DECEMBER	*	210	334	533
1987	MARCH	*	211	360	561
	JUNE	*	213	397	*
	SEPTEMBER	*	224	421	*
	DECEMBER	223	239	451	540
1988	MARCH	*	238	471	511
	JUNE	242	248	489	519
	SEPTEMBER	*	256	464	506
	DECEMBER	253	266	493	510
1989	MARCH	*	274	520	519
	JUNE	276	287	544	*
	SEPTEMBER	*	304	560	*
	DECEMBER	302	318	577	514
1990	MARCH	*	289	594	512
	JUNE	314	288	611	506
	SEPTEMBER	*	304	636	511
	DECEMBER	325	304	601	499
1991	MARCH	*	306	571	505
	JUNE	355	327	597	542
	SEPTEMBER	*	337	605	538
	DECEMBER	388	351	631	576
1992	MARCH	*	361	616	595
	JUNE	425	370	659	577
	SEPTEMBER	*	379	654	587
	DECEMBER	414	394	692	599
1993	MARCH	*	*	*	*
	JUNE	412	401	*	*
	SEPTEMBER	*	401	*	*
	DECEMBER	436	420	*	*
1994	MARCH	*	433	*	*
	JUNE	454	444	*	*
	SEPTEMBER	*	458	*	*

* DATA NOT AVAILABLE

1/ DATA FOR THE PERIODS PRIOR TO MARCH 1990 INCLUDE A SMALL NUMBER OF FIRMS PURCHASING EQUAL ACCESS THAT WERE NOT CARRIERS.

TABLE 23

LONG DISTANCE CARRIERS PURCHASING EQUAL ACCESS BY STATE
SEPTEMBER 30, 1994

STATE	NUMBER O3 CARRIERS
ALABAMA	28
ALASKA	N.A.
ARIZONA	42
ARKANSAS	27
CALIFORNIA	64
COLORADO	42
CONNECTICUT	46
DELAWARE	6
DIST OF COLUMBIA	49
FLORIDA	58
GEORGIA	43
HAWAII	13
IDAHO	26
ILLINOIS	71
INDIANA	42
IOWA	27
KANSAS	26
KENTUCKY	29
LOUISIANA	32
MAINE	24
MARYLAND	46
MASSACHUSETTS	40
MICHIGAN	55
MINNESOTA	33
MISSISSIPPI	17
MISSOURI	46
MONTANA	14
NEBRASKA	20
NEVADA	23
NEW HAMPSHIRE	30
NEW JERSEY	66
NEW MEXICO	36
NEW YORK	68
NORTH CAROLINA	23
NORTH DAKOTA	19
OHIO	60
OKLAHOMA	58
OREGON	39
PENNSYLVANIA	75
RHODE ISLAND	36
SOUTH CAROLINA	27
SOUTH DAKOTA	24
TENNESSEE	33
TEXAS	134
UTAH	27
VERMONT	26
VIRGINIA	39
WASHINGTON	40
WEST VIRGINIA	30
WISCONSIN	48
WYOMING	16
UNDUPLICATED TOTAL	458

N.A. -- Not Available.

TABLE 24

NUMBER OF LONG DISTANCE CARRIERS PURCHASING EQUAL ACCESS IN FOUR OR MORE STATES

YEAR	MONTH	CARRIERS SERVING 45 OR MORE STATES	CARRIERS SERVING 25 TO 44 STATES	CARRIERS SERVING 12 TO 24 STATES	CARRIERS SERVING 4 TO 11 STATES	TOTAL CARRIERS SERVING 4 OR MORE STATES
1986	MARCH	2	6	1	14	23
	JUNE	2	6	1	14	23
	SEPTEMBER	3	5	1	15	24
	DECEMBER	3	5	1	14	23
1987	MARCH	3	5	1	18	27
	JUNE	3	4	2	20	29
	SEPTEMBER	3	4	2	19	28
	DECEMBER	3	3	4	16	26
1988	MARCH	3	5	4	12	24
	JUNE	4	4	4	18	30
	SEPTEMBER	4	5	3	17	29
	DECEMBER	4	5	3	21	33
1989	MARCH	4	6	3	24	37
	JUNE	5	6	4	28	43
	SEPTEMBER	5	7	7	30	49
	DECEMBER	7	5	9	34	55
1990	MARCH	7	5	8	37	57
	JUNE	7	6	9	36	58
	SEPTEMBER	6	5	9	38	58
	DECEMBER	6	3	12	37	58
1991	MARCH	6	2	14	38	60
	JUNE	5	3	15	39	62
	SEPTEMBER	5	3	16	41	65
	DECEMBER	6	3	15	44	68
1992	MARCH	6	3	16	52	77
	JUNE	5	6	17	50	78
	SEPTEMBER	6	8	15	52	81
	DECEMBER	9	6	11	55	81
1993	MARCH	*	*	*	*	*
	JUNE	9	6	11	66	92
	SEPTEMBER	8	7	15	66	96
	DECEMBER	7	7	16	68	98
1994	MARCH	7	7	18	73	105
	JUNE	9	5	19	85	118
	SEPTEMBER	9	6	22	89	126

*DATA NOT AVAILABLE.

Table 25
Number of Carriers Reporting Each Type of Revenue for 1993

TRS Carrier Classifications	Total Carriers by Class	Number of Carriers Reporting Revenue for Each Type of Service								
		Local Exchange	Local Private Line	Mobile Radio Cellular or Paging	Alternate Access PCS or Other Local	Intrastate or Interstate Access	Operator Service	Non Operator Switched Toll	Long Distance Private Line	Other Long Distance Service
Competitive Access Providers (CAPs)	20	2	4		8	10	1	1		1
Cellular Service Carriers	798	16	1	757	16	116	6	27	1	340
Interexchange Carriers (IXCs)	83		1	1		27	24	36	26	26
Local Exchange Carriers (LECs)	1,281	1,228	537	214	1,018	1,271	639	552	435	451
Mobile Service Carriers	126		1	103	1	4	1	1	1	3
Operator Service Providers	35	1				4	31	6	1	2
Other Carriers	32	1	1		3	4	3	3	4	18
Pay Telephone Operators	163	18			1	15	134	15		3
Personal Communications Service Resellers	171	5	3	3	5	57	38	69	17	58
Total by Type of Revenue	2,709	1,271	548	1,078	1,052	1,508	877	710	485	902

LONG DISTANCE MARKET SHARES:

1. Minutes of Interstate Calling

Measures of switched access minutes first became available in 1984 and are shown in Table 20. Such information is publicly available for the total industry and for AT&T but not for other carriers. Thus, access minutes can be used to compute a market share for AT&T but not for smaller carriers.

Since 1984, AT&T's traffic has grown at a rate slower than the industry average. The result has been a declining market share for AT&T. AT&T's market share is shown in Table 26. AT&T's share of the interstate market, measured in minutes, declined from over 80% in late 1984 to about 58% in late 1994. At the same time, its share of the equal access market, which was 100% prior to the implementation of equal access, has also declined to about 58%.

2. "Presubscribed" Lines

Telephone lines are said to be "presubscribed" to the long distance carrier that receives the ordinary long distance calls placed on the line. Where equal access is available, each customer is asked to choose a long distance carrier. Thereafter, all of the customer's long distance calls will be routed to the chosen long distance carrier unless the customer alters normal dialing procedure -- for example, accessing an alternate long distance carrier by dialing special codes. Where equal access is not yet available, the use of long distance carriers other than AT&T usually requires alternative dialing procedures.

The National Exchange Carrier Association (NECA) provides information on the number of lines presubscribed to each long distance carrier. NECA collects the information from each local telephone company in order to comply with FCC rules that require NECA to recover certain expenses from the larger long distance carriers. This information is shown in Table 27.

NECA reports that, in June 1994, there were 145 million presubscribed lines in the United States. Special access lines, WATS lines, and other specialized lines are not included in the counts of presubscribed lines. The number of lines presubscribed to AT&T has remained roughly constant while the number of lines presubscribed to other carriers has grown. In mid-1994, about 71% of these lines were presubscribed to AT&T, 15% to MCI, and 6% to Sprint. About four hundred smaller carriers, serving 11 million lines, account for the remaining 8% of the industry.

3. Toll Revenues

Since 1993, all carriers with interstate revenues have been required to file annual Telecommunications Relay Service (TRS) Fund Worksheets. Because revenues derived from providing access to the interstate network are considered to be interstate, virtually all carriers are required to file information. Over 2700 carriers filed these worksheets in 1994 and reported $171 billion of revenue for 1993. Table 28 details revenues reported by each type of carrier. Carriers billed $79.4 billion for toll services in 1993, considerably more than the $59.2 billed for local services.

Table 29 shows intrastate and interstate data for the ten revenue categories provided in the TRS worksheets. The table also shows the toll revenue totals for IXCs, OSPs, Resellers, Pay Telephone Providers, and Other carriers. These totals show that toll carriers billed $63.7 billion for toll service in 1993, compared with $15.7 billion of toll services billed by local exchange carriers, competitive access providers, cellular carriers and mobile service carriers. The four largest interexchange carriers--AT&T, MCI, Sprint, and LDDS--reported $58.4 billion of toll revenue. This represented 73% of all toll revenue and 92% of toll revenue billed by toll carriers.

Long distance telephone companies with over $100 million in annual revenues report their annual revenues to the FCC. The reported revenues are shown in Table 30, and include both interstate and intrastate revenues. In 1993, services provided by long distance carriers generated about $61.5 billion in revenues. During the past few years, revenues have grown at a far slower pace than the volume of long distance calling because of sharp price cuts. In 1984, AT&T's toll revenues of $35 billion accounted for 90% of the revenues received by all long distance carriers. By 1993, with its revenues virtually unchanged, its share of total revenues had fallen to 58%. Primarily as a result of differing treatments of international settlements, the total revenues and market shares shown in Table 30 differ from those that would be calculated from Table 29.

Chart 1 compares alternative measures of AT&T's market share using minutes, lines and revenues. In that chart, a second measure of revenues has been added. The alternative measure is based on financial reports to stockholders. Revenues reported to the FCC usually differ from revenues reported to stockholders. The largest differences tend to relate to the treatment of access charges and international settlements--accounting for the difference between the annual revenue share points labeled "FCC" and the revenue share line labeled "SEC" in Chart 1.

TABLE 26

AT&T'S SHARE OF INTERSTATE MINUTES

	PREMIUM MINUTES	ALL MINUTES
1984 THIRD QUARTER	98.7 %	84.2 %
FOURTH QUARTER	94.6	80.2
1985 FIRST QUARTER	99.8	83.0
SECOND QUARTER	95.5	80.3
THIRD QUARTER	92.2	78.9
FOURTH QUARTER	87.9	77.1
1986 FIRST QUARTER	88.2	79.5
SECOND QUARTER	84.7	77.5
THIRD QUARTER	82.8	76.6
FOURTH QUARTER	78.9	74.0
1987 FIRST QUARTER	77.8	72.9
SECOND QUARTER	78.3	73.7
THIRD QUARTER	75.2	71.2
FOURTH QUARTER	73.7	70.4
1988 FIRST QUARTER	72.8	69.8
SECOND QUARTER	71.8	69.0
THIRD QUARTER	70.8	68.2
FOURTH QUARTER	69.6	67.2
1989 FIRST QUARTER	68.9	66.8
SECOND QUARTER	66.8	64.8
THIRD QUARTER	66.3	64.4
FOURTH QUARTER	65.6	63.9
1990 FIRST QUARTER	64.6	63.0
SECOND QUARTER	63.6	62.1
THIRD QUARTER	64.0	62.5
FOURTH QUARTER	64.3	63.0
1991 FIRST QUARTER	64.3	63.0
SECOND QUARTER	62.8	61.7
THIRD QUARTER	63.0	61.9
FOURTH QUARTER	63.2	62.1
1992 FIRST QUARTER	63.1	62.2
SECOND QUARTER	60.8	60.0
THIRD QUARTER	61.0	60.3
FOURTH QUARTER	60.3	59.7
1993 FIRST QUARTER	61.6	61.2
SECOND QUARTER	60.8	60.3
THIRD QUARTER	60.6	60.2
FOURTH QUARTER	59.7	59.3
1994 FIRST QUARTER	60.1	59.7
SECOND QUARTER	59.2	58.9
THIRD QUARTER	58.1	57.8

TABLE 27

"PRESUBSCRIBED" TELEPHONE LINES BY CARRIER
(Thousands of Lines)

	DEC 1987	JUNE 1988	DEC 1988	JUNE 1989	DEC 1989	JUNE 1990	DEC 1990	JUNE 1991	DEC 1991	JUNE 1992	DEC 1992	JUNE 1993	DEC 1993	JUNE 1994
TOTAL NUMBER OF CARRIERS WITH PRESUBSCRIBED LINES	223	242	253	276	302	314	325	355	388	425	414	412	436	454
NUMBER OF PRESUBSCRIBED LINES:														
AT&T	101,653	100,833	100,206	100,007	99,397	99,613	100,062	101,014	101,498	101,384	101,204	101,771	101,711	102,422
MCI	9,991	10,941	12,150	13,872	15,056	16,884	17,435	17,603	18,330	19,190	20,167	21,171	21,818	22,266
SPRINT	5,836	6,382	7,197	7,675	8,166	8,148	8,744	8,702	8,354	8,424	8,856	8,621	9,213	9,244
ALL OTHER CARRIERS	3,987	4,509	4,808	5,393	5,863	6,152	6,188	6,577	7,105	7,705	8,498	9,052	10,067	11,277
TOTAL INDUSTRY LINES	121,467	122,665	124,361	126,747	128,482	130,777	132,409	133,896	135,287	136,704	138,725	140,615	142,809	145,229
ANNUAL CHANGE:														
AT&T	–	–	−1.4%	−0.8%	−0.8%	−0.4%	0.7%	1.4%	1.4%	0.4%	−0.3%	0.4%	0.5%	0.64%
MCI	–	–	21.6%	25.0%	23.9%	23.4%	15.8%	4.4%	5.1%	9.0%	10.0%	10.3%	8.2%	5.27%
SPRINT	–	–	23.3%	20.2%	13.5%	6.2%	7.1%	6.6%	−4.5%	−3.2%	6.0%	2.3%	4.0%	7.23%
ALL OTHER CARRIERS	–	–	20.6%	19.6%	21.9%	14.1%	5.2%	6.9%	15.2%	17.1%	19.6%	17.5%	18.5%	24.58%
TOTAL INDUSTRY LINES	–	–	2.4%	3.3%	3.3%	3.2%	3.1%	2.4%	2.2%	2.1%	2.5%	2.9%	2.9%	3.28%
PERCENTAGE SHARE OF TOTAL LINES:														
AT&T	83.7%	82.2%	80.6%	78.9%	77.4%	76.2%	75.6%	75.4%	75.0%	74.2%	73.0%	72.4%	71.2%	70.52%
MCI	8.2%	8.9%	9.8%	10.8%	11.7%	12.8%	13.2%	13.1%	13.5%	14.0%	14.5%	15.1%	15.3%	15.35%
SPRINT	4.8%	5.2%	5.8%	6.1%	6.4%	6.2%	6.6%	6.5%	6.2%	6.2%	6.4%	6.1%	6.5%	6.37%
ALL OTHER CARRIERS	3.3%	3.7%	3.9%	4.3%	4.6%	4.7%	4.7%	4.9%	5.3%	5.6%	6.1%	6.4%	7.0%	7.76%
TOTAL INDUSTRY LINES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%

Table 28

Telecommunications Revenue Reported by Classes of Carriers for 1993

(Dollar amounts shown in Millions)

TRS Fund Worksheet Data	Total	Local Service				Access	Long Distance Service			
		Local Exchange	Local Private Line	Mobile Radio Cellular or Paging	Alternate Access PCS or Other Local	Intrastate or Interstate Access	Operator Service	Non Operator Switched Toll	Long Distance Private Line	Other Long Distance Service
Competitive Access Providers (CAPs)	$191	**	$2	$0	$80	$96	**	**	$0	**
Cellular Service Carriers	9,215	19	**	9,053	6	37	*	7	**	95
Interexchange Carriers (IXCs)	61,118	0	**	**	0	344	8,133	42,125	6,697	3,815
Local Exchange Carriers (LECs)	95,228	40,098	1,082	152	7,881	30,604	1,665	12,368	1,150	226
Mobile Service Carriers	964	0	**	796	**	2	**	**	**	165
Operator Service Providers	695	**	0	0	0	13	612	49	**	**
Other Carriers	711	**	**	0	2	20	1	87	42	559
Pay Telephone Operators	175	10	0	0	**	6	149	10	0	**
Personal Communications Service	0	0	0	0	0	0	0	0	0	0
Resellers	1,869	21	*	39	1	371	70	950	38	381
Total by Type of Revenue	$170,166	$40,148	$1,085	$10,040	$7,969	$31,492	$10,631	$55,596	$7,927	$5,241

* Denotes amounts less than $500,000.

** Indicates instances where only one or two carriers filed data, and therefore data were omitted to preserve confidentiality of an individual carrier's data.

Table 29

Intrastate and Interstate Revenue Reported in TRS Fund Worksheets for 1993

(Dollar amounts shown in Millions)

All Reporting Carriers	Intrastate Revenue	Interstate Revenue	Total Revenue 1993	Interstate as % of Total	Growth Over 1992
Local Exchange Service	$40,128	$20	$40,148	0.0 %	2.3 %
Local Private Line Service	1,084	0	1,085	0.0	3.4
Mobile Radio, Cellular, and Paging	9,428	612	10,040	6.1	38.0
Alternative Access, PCS & Other	6,847	1,122	7,969	14.1	3.7
Total Local Revenues	57,487	1,754	59,241	3.0	7.2
Interstate Access	(0)	23,012	23,012	100.0	6.0
Intrastate Access	8,481	0	8,481	0.0	2.9
Total Access Revenues	8,480	23,012	31,492	73.1	5.2
Operator Service	3,667	6,964	10,631	65.5	10.2
Non–operator Switched Toll Service	22,486	33,111	55,596	59.6	3.5
Long Distance Private Line Service	2,276	5,652	7,927	71.3	0.3
All Other Long Distance	1,372	3,869	5,241	73.8	26.2
Total Toll Revenues	29,800	49,596	79,395	62.5	5.3
Total Carrier Revenue	$95,777	$74,389	$170,166	43.7 %	6.0 %
Toll Carriers: IXCs, OSPs Resellers, Pay Telephone Providers, and Other					
Operator Service	$2,031	$6,934	$8,965	77.3 %	–2.7 %
Non–operator Switched Toll Service	10,534	32,687	43,221	75.6	3.4
Long Distance Private Line Service	1,136	5,641	6,777	83.2	0.3
All Other Long Distance	1,052	3,702	4,754	77.9	63.3
Total Toll Revenues	$14,754	$48,964	$63,718	76.8 %	5.0 %
Big 4: AT&T, LDDS, MCI, and Sprint					
Operator Service	$1,661	$6,389	$8,050	79.4 %	–3.7 %
Non–operator Switched Toll Service	9,743	31,018	40,761	76.1	4.9
Long Distance Private Line Service	1,023	4,939	5,962	82.8	1.9
All Other Long Distance	818	2,788	3,606	77.3	78.3
Total Toll Revenues	$13,244	$45,135	$58,379	77.3 %	5.9 %
As Percent of Total Toll Revenues Reported by All Carriers	44.4%	91.0%	73.5%		
As Percent of Total Toll Revenues Reported by Toll Carriers	89.8%	92.2%	91.6%		

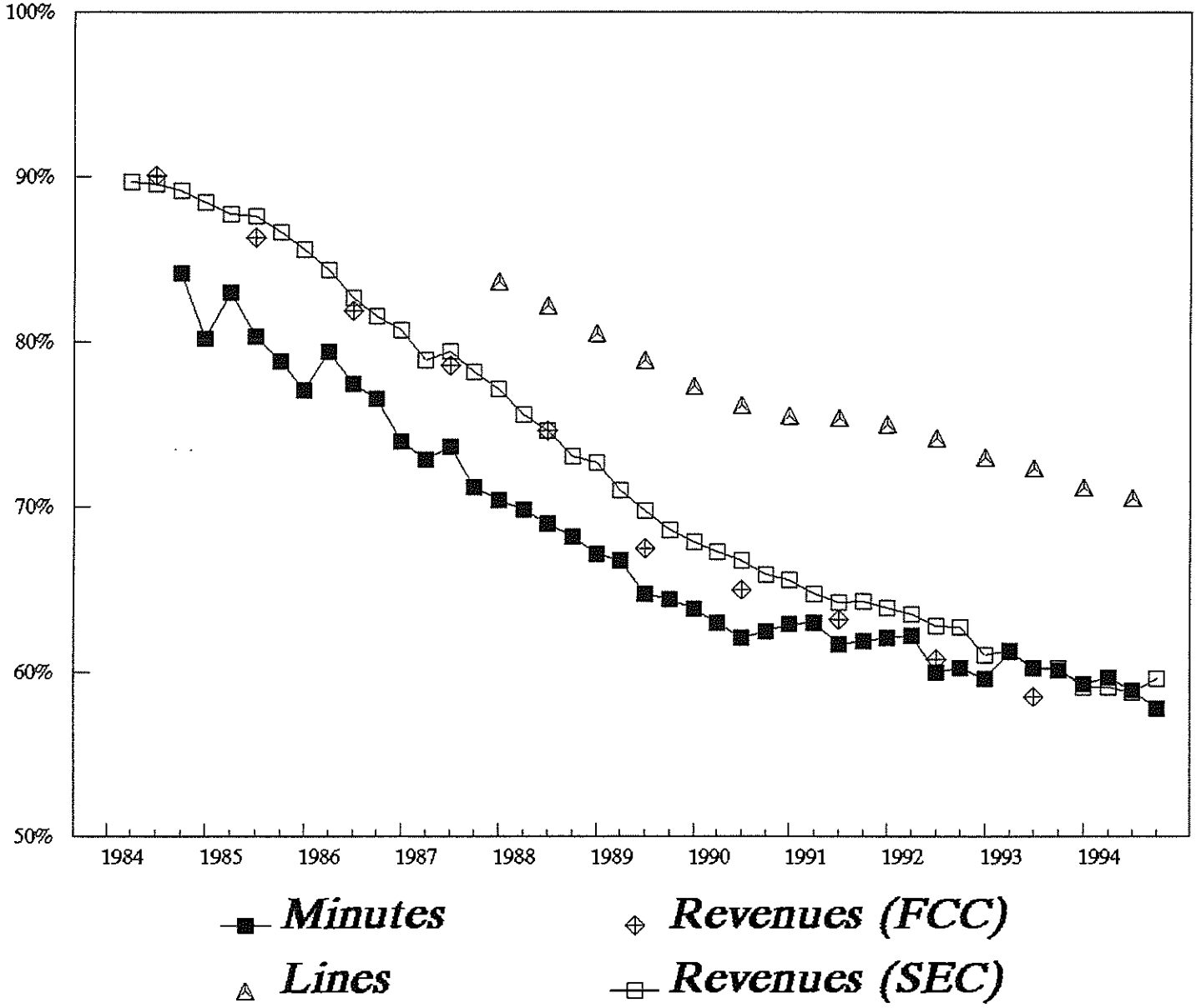
TABLE 30—TOTAL TOLL SERVICE REVENUES
(DOLLAR AMOUNTS SHOWN IN MILLIONS)

COMPANY	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
AT&T COMMUNICATIONS, INC.				$34,935	$36,770	$36,514	$35,219	$35,407	$34,549	$33,880	$34,384	$35,495	$35,731
MCI TELECOMMUNICATIONS CORP. 1/	$413	$802	$1,329	1,781	2,331	3,372	3,938	4,888	6,171	7,392	8,266	9,719	10,947
(TELECOM*USA)				105	201	291	396	524	713				
SPRINT COMMUNICATIONS CO. 2/						1,141	2,592	3,405	4,320	5,041	5,378	5,658	6,139
(GTE SPRINT)	231	393	740	1,052	1,122	779							
(US TELECOM)					387	212							
LDDS COMMUNICATIONS, INC. 3/									110	154	263	801	1,145
(ADVANCED TELECOMMUNICATIONS CORP.)				72	86	124	162	178	326	342	358		
(METROMEDIA COMMUNICATIONS CORP.) 4/									127	381	369	369	297
(ITT COMMUNICATION SERVICES, INC.)	83	129	163	161	241	282	287	379	404				
(COMSYSTEMS NETWORK SERVICES)										130	131	135	116
WILTEL, INC.									300	378	405	494	664
CABLE & WIRELESS COMMUNICATIONS, INC.					146	171	180	218	275	359	406	495	557
ALLNET 5/					309	450	395	394	334	326	347	376	436
(LEXITEL)					127								
ALASCOM, INC.	191	238	257	255	271	267	262	272	276	259	338	333	320
LCI INTERNATIONAL TELECOM CORP.									197	215	208	243	317
RCI LONG DISTANCE, INC.									104	142	155	168	213
ONCOR COMMUNICATIONS, INC.									275	230	181	159	140
U.S. LONG DISTANCE, INC.													100
GENERAL COMMUNICATION, INC. 6/													92
TELESPHERE NETWORK, INC. 7/									192	293	308		
(NATIONAL TELEPHONE SERVICES, INC.)									150				
OTHERS 8/	144	263	443	414	639	992	1,352	1,823	2,359	2,582	2,948	3,923	4,319
TOTAL LONG DISTANCE CARRIERS				38,755	42,630	44,595	44,783	47,487	51,184	52,102	54,443	58,388	61,533
AT&T COMMUNICATIONS SHARE:				90.1%	86.3%	81.9%	78.6%	74.6%	67.5%	65.0%	63.2%	60.8%	58.1%
MCI TELECOMMUNICATIONS SHARE:				4.5%	5.5%	7.6%	8.8%	10.3%	12.1%	14.2%	15.2%	16.7%	17.8%
SPRINT COMMUNICATIONS CO. SHARE:				2.7%	2.6%	4.3%	5.8%	7.2%	8.4%	9.7%	9.9%	9.7%	10.0%
LDDS COMMUNICATIONS, INC. SHARE:									0.2%	0.3%	0.5%	1.4%	1.9%
ALL OTHER LONG DISTANCE CARRIERS:				2.6%	5.6%	6.3%	6.8%	8.0%	11.8%	10.8%	11.3%	11.5%	11.6%
BELL OPERATING COMPANIES				9,037	9,026	9,599	10,268	10,668	10,549	10,578	10,066	9,718	9,849
OTHER LOCAL TELEPHONE COMPANIES 8/				3,364	3,159	3,274	3,468	4,445	4,291	4,112	4,049	3,897	3,908
TOTAL LOCAL EXCHANGE COMPANIES				12,401	12,185	12,873	13,736	15,113	14,840	14,690	14,115	13,615	13,757
TOTAL TOLL SERVICE REVENUES 9/	39,180	43,919	46,970	51,158	54,815	57,468	58,519	62,600	66,024	66,792	68,558	71,983	75,290
AT&T COMMUNICATIONS SHARE:				68.3%	67.1%	63.5%	60.2%	56.6%	52.3%	50.7%	50.2%	49.3%	47.5%
MCI TELECOMMUNICATIONS SHARE:				3.4%	4.3%	5.9%	6.7%	7.8%	9.3%	11.1%	12.1%	13.5%	14.5%
SPRINT COMMUNICATIONS CO. SHARE:				2.1%	2.0%	3.3%	4.4%	5.4%	8.5%	7.5%	7.8%	7.9%	8.2%
LDDS COMMUNICATIONS, INC. SHARE:									0.2%	0.2%	0.4%	1.1%	1.5%
ALL OTHER LONG DISTANCE CARRIERS:				2.0%	4.4%	4.9%	5.2%	6.1%	9.1%	8.4%	9.0%	9.3%	9.5%
LOCAL EXCHANGE COMPANIES SHARE:				24.2%	22.2%	22.4%	23.5%	24.1%	22.5%	22.0%	20.6%	18.9%	18.3%

SOURCES: LOCAL EXCHANGE CARRIER INFORMATION DERIVED FROM USTA ANNUAL REPORTS.
AT&T COMMUNICATIONS AND ALASCOM FROM STATISTICS OF COMMUNICATIONS COMMON CARRIERS.
OTHER COMPANIES:
1981–1982: ANNUAL REPORT FORM P.
1983–1993: AS REPORTED PURSUANT TO FCC REPORT AND ORDER IN CC DOCKET 83–1291.

1/ MCI TELECOMMUNICATIONS AND TELECOM*USA MERGED DURING 1989.
2/ 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 US SPRINT FOR 1986 IS FOR JULY 1 – DECEMBER 31. EFFECTIVE FEBRUARY 26, 1992, THE COMPANY'S NAME BECAME SPRINT COMMUNICATIONS CO.
3/ LDDS COMMUNICATIONS, INC. AND ADVANCED TELECOMMUNICATIONS CORP. MERGED DURING 1992. IN 1993, LDDS COMMUNICATIONS, INC. MERGED WITH METROMEDIA COMMUNICATIONS CORP. AND COMSYSTEMS NETWORK SERVICES. FOR 1993, ONLY THE REVENUES THAT OCCURRED AFTER THE MERGER ARE INCLUDED IN LDDS COMMUNICATIONS' REVENUES. THOSE REVENUES UP TO THE MERGER ARE LISTED INDIVIDUALLY FOR 1993.
4/ METROMEDIA COMMUNICATIONS CORP. AND ITT COMMUNICATIONS CORP. MERGED DURING 1988. INFORMATION FOR 1989 WAS REPORTED SEPARATELY.
5/ ALLNET AND LEXITEL MERGED AT THE END OF 1985.
6/ DOES NOT INCLUDE $10 MILLION FROM NON–COMMUNICATIONS OPERATIONS.
7/ TELESPHERE NETWORK, INC., AND NATIONAL TELEPHONE SERVICES, INC., MERGED DURING 1989. IN 1991, TELESPHERE NETWORK, INC., WENT INTO BANKRUPTCY.
8/ ESTIMATED BY FCC STAFF.
9/ WHILE TOTAL TOLL REVENUES ARE AVAILABLE PRIOR TO 1984, THE MANNER IN WHICH THEY WERE DIVIDED BETWEEN THE BELL SYSTEM AND OTHER TELEPHONE COMPANIES MAKES IT IMPOSSIBLE TO ACCURATELY DETERMINE THE AMOUNTS BILLED BY WHAT IS NOW AT&T COMMUNICATIONS, THE BELL COMPANIES, AND OTHER TELEPHONE COMPANIES.

Chart 1 – Indicators of AT&T Market Share



LIFELINE ASSISTANCE PROGRAMS:

The FCC has established two types of assistance programs for low income subscribers. Programs of the first type are designed to assist poor subscribers in affording the monthly costs of service, and are called "lifeline" plans. Other programs -- connection assistance or "Link-Up" programs -- are designed to help low income subscribers defray installation charges in order to begin receiving telephone service. Participating states have wide latitude in selecting means tests and shaping the benefits of the programs. In 1994, programs have been established in 49 states, the District of Columbia, the Virgin Islands, and the Commonwealth of Puerto Rico. The states with each type of program are indicated in Table 31, along with the year during which a program was first certified.

CELLULAR TELEPHONE SERVICE:

The Federal Communications Commission licenses cellular telephone companies but does not impose reporting requirements on the cellular industry. The Cellular Telecommunications Industry Association periodically publishes summary information on their industry, a selection of which is shown in Tables 32 and 33.

TABLE 31

LIFELINE AND LINK–UP TELEPHONE PROGRAMS
(YEAR FIRST CERTIFIED)

STATE	LIFELINE	LINK–UP
ALABAMA		87
ALASKA	93	93
ARIZONA	86	88
ARKANSAS	86	87
CALIFORNIA	85	*
COLORADO	90	90
CONNECTICUT	94	87
DELAWARE		
DISTRICT OF COLUMBIA	86	87
FLORIDA	94	88
GEORGIA	91	90
HAWAII	86	89
IDAHO	87	88
ILLINOIS		93
INDIANA		88
IOWA		88
KANSAS		88
KENTUCKY		87
LOUISIANA		88
MAINE	87	87
MARYLAND	86	87
MASSACHUSETTS	90	90
MICHIGAN	89	89
MINNESOTA	88	88
MISSISSIPPI	91	88
MISSOURI	87	87
MONTANA	87	87
NEBRASKA		88
NEVADA	87	88
NEW HAMPSHIRE		88
NEW JERSEY		87
NEW MEXICO	87	87
NEW YORK	87	87
NORTH CAROLINA	86	87
NORTH DAKOTA	87	89
OHIO	87	87
OKLAHOMA		90
OREGON	86	88
PENNSYLVANIA		88
PUERTO RICO		88
RHODE ISLAND	87	87
SOUTH CAROLINA		87
SOUTH DAKOTA	88	88
TENNESSEE	92	88
TEXAS	88	87
UTAH	86	88
VERMONT	86	90
VIRGIN ISLANDS U.S.	91	91
VIRGINIA	87	87
WASHINGTON	87	90
WEST VIRGINIA	86	87
WISCONSIN	88	90
WYOMING	91	89

* CALIFORNIA PROVIDES AN INDEPENDENT CONNECTION ASSISTANCE PROGRAM.

TABLE 32

CELLULAR TELEPHONE SERVICE

		NUMBER OF SYSTEMS	SUBSCRIBERS
1984	DECEMBER	32	91,600
1985	JUNE	65	203,600
	DECEMBER	102	340,213
1986	JUNE	129	500,000
	DECEMBER	166	681,825
1987	JUNE	206	883,778
	DECEMBER	312	1,230,855
1988	JUNE	420	1,608,697
	DECEMBER	517	2,069,441
1989	JUNE	559	2,691,793
	DECEMBER	584	3,508,944
1990	JUNE	592	4,368,686
	DECEMBER	751	5,283,055
1991	JUNE	1,029	6,390,053
	DECEMBER	1,252	7,557,148
1992	JUNE	1,483	8,892,535
	DECEMBER	1,506	11,032,753
1993	JUNE	1,523	13,067,318
	DECEMBER	1,529	16,009,461
1994	JUNE	1,550	17,883,306

SOURCE: CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION.

TABLE 33

CELLULAR TELEPHONE SERVICE: SURVEY RESULTS

		NUMBER OF SYSTEMS RESPONDING	PERCENT OF INDUSTRY SURVEYED	EMPLOYEES	SIX-MONTH REVENUES (THOUSANDS)	AVERAGE MONTHLY BILL
1984	DECEMBER	32	100.0%	1,404	$178,085	
1985	JUNE	65	100.0%	1,697	176,231	
	DECEMBER	101	100.0%	2,727	306,197	
1986	JUNE	122	96.0%	3,556	360,585	
	DECEMBER	160	95.3%	4,334	462,467	
1987	JUNE	192	88.0%	5,656	479,514	
	DECEMBER	297	97.2%	7,147	672,005	$96.83
1988	JUNE	409	99.9%	9,154	886,075	95.00
	DECEMBER	496	99.1%	11,400	1,073,473	98.02
1989	JUNE	513	99.1%	13,719	1,406,463	85.52
	DECEMBER	546	98.8%	15,927	1,934,132	89.30
1990	JUNE	554	98.8%	18,973	2,126,362	83.94
	DECEMBER	663	98.2%	21,382	2,422,458	80.90
1991	JUNE	905	96.4%	25,545	2,653,505	74.56
	DECEMBER	1,005	96.5%	26,327	3,055,017	72.74
1992	JUNE	1,129	96.3%	30,595	3,633,285	68.51
	DECEMBER	1,189	93.4%	34,348	4,189,441	68.68
1993	JUNE	1,110	92.2%	36,501	4,819,259	67.31
	DECEMBER	1,287	92.3%	39,775	6,072,906	61.48
1994	JUNE	1,242	92.7%	45,606	6,519,030	58.65

SOURCE: CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION.

INTERNATIONAL TELEPHONE SERVICE:

International telecommunications has become an increasingly important segment of the telecommunications market. International telephone calling -- propelled by technological innovation, increased economic integration with foreign countries, and stable or declining rates -- has skyrocketed. The number of calls has increased more than 600% since 1980. In 1993, Americans spent about $11.5 billion dollars on 1.9 billion international calls. International private line revenues have also increased since 1980, but telex and telegraph services declined substantially over the same period. These trends are shown in Table 34.

U.S. and foreign carriers compensate each other when one carries traffic that the other bills. The number of calls billed in the United States increased at a faster pace than calls billed in foreign countries, contributing to rapid increases in net settlement payments to foreign carriers. These net payments reached $3.7 billion in 1993. On average, carriers billed $1.00 per minute for international calls in 1993, and paid $.55 per minute in settlements. Trends in settlement payments are shown in Table 35. On average for all traffic, carriers retained $.44 for each international minute that they handled in 1993.

International traffic data is available on a country-by-country basis. Table 36 summarizes traffic by region of the world. Five markets -- Canada, Mexico, the United Kingdom, Germany, and Japan -- currently account for about half of the international calls billed in the United States.

Since 1985, when MCI first entered the market in competition with AT&T, numerous carriers have begun to provide international service. Table 37 lists the carriers that provided international service in 1993. Most of these carriers resold switched services of other carriers. Carriers reported $591 million of resale revenue in 1993. Twenty eight U.S. carriers provided facilities based telecommunications service in 1993. Facilities based carriers billed about $12.0 billion for all international services, of which $11.5 billion was for telephone service. Table 38 shows the U.S. billed revenues by service for each facilities based carrier, including service billed to smaller U.S. points such as the U.S. Virgin Islands and Guam. Together, AT&T, MCI, and Sprint account for 98% of the facilities based service billed in the United States.

Table 34
International Service between Domestic U.S. and Foreign Points
(Minute, Message, and Revenue amounts shown in Millions)

	Telephone Service					Other Services			
			Billed Revenue			Billed Revenue			
	Minutes	Messages		Per minute	Per call	Telex	Telegraph	Private Line	Misc.
1980	1,569	199	$2,097	$1.34	$10.53	$325	$63	$115	
1981	1,857	233	2,239	1.21	9.61	350	62	126	
1982	2,187	274	2,382	1.09	8.70	363	56	138	
1983	2,650	322	2,876	1.09	8.92	379	54	154	
1984	3,037	367	3,197	1.05	8.71	394	46	158	
1985	3,350	411	3,435	1.03	8.37	415	45	172	
1986	3,917	482	3,891	0.99	8.07	390	42	175	
1987	4,480	570	4,559	1.02	8.00	360	35	191	
1988	5,190	687	5,507	1.06	8.02	310	30	194	
1989	6,109	835	6,517	1.07	7.80	243	27	208	
1990	7,215	984	7,626	1.06	7.75	196	24	201	
1991	8,986	1,371	9,096	1.01	6.63	200	15	303	$23
1992	10,156	1,643	10,179	1.00	6.20	155	16	313	24
1993	11,434	1,933	11,409	1.00	5.90	135	12	365	23

Table 35
International Telephone Service Settlements
(Revenue amounts shown in Millions)

							Average Per Minute		
	Billed Revenue	Owed to Foreign Carriers	Retained Revenue	Due From Foreign Carriers	Net Settlements	Net Revenue	Settlement Owed For U.S. Billed Calls	Settlement Due For Foreign Billed Calls	Net Revenue All Traffic
1980	$2,097	$1,063	$1,034	$716	($347)	$1,750	$0.68	$0.62	$0.64
1981	2,239	1,330	910	799	(531)	1,708	0.72	0.56	0.52
1982	2,382	1,674	708	961	(712)	1,670	0.77	0.60	0.44
1983	2,876	2,036	841	1,086	(950)	1,926	0.77	0.60	0.43
1984	3,197	2,269	928	1,066	(1,203)	1,994	0.75	0.54	0.40
1985	3,435	2,369	1,066	1,239	(1,130)	2,305	0.71	0.55	0.41
1986	3,891	2,802	1,089	1,387	(1,414)	2,476	0.72	0.56	0.39
1987	4,559	3,309	1,250	1,634	(1,675)	2,884	0.74	0.61	0.39
1988	5,507	3,868	1,640	1,840	(2,028)	3,480	0.75	0.62	0.41
1989	6,517	4,513	2,004	2,115	(2,398)	4,119	0.74	0.61	0.42
1990	7,626	5,079	2,547	2,317	(2,762)	4,863	0.70	0.60	0.42
1991	9,096	5,792	3,304	2,493 *	(3,298)	5,798	0.64	0.47	0.42
1992	10,179	5,945	4,234	2,601 *	(3,344)	6,835	0.59	0.43	0.43
1993	11,409	6,327	5,083	2,621 *	(3,705)	7,704	0.55	0.38	0.44

* Includes Transiting Traffic.

Table 36
International Message Telephone Service For 1993

(Figures Shown in Millions)

International Point	Traffic Billed in the United States					Traffic Billed in Foreign Countries				Total U.S. Carrier
						Originating or Terminating in the United States			TRANSITING	
	Number Of Messages	Number Of Minutes	U.S. Carrier Revenue	Owed to Foreign Carriers	Retained Revenue	Number Of Messages	Number Of Minutes	Due From Foreign Carriers	Retained Revenue	Retained Revenue
Total for Foreign Points	1,926	11,393	11,353	6,308	5,044	1,197	5,658	2,416	188	7,649
Western Europe	447	2,713	$2,698	$1,282	$1,416	331	1,535	$674	$49	$2,139
North and Central America	835	4,309	2,915	1,560	1,355	473	2,355	470	10	1,835
Asia	262	1,745	2,517	1,371	1,146	184	804	581	72	1,800
South America	129	849	927	640	287	58	241	178	5	470
Caribbean	102	721	742	439	303	58	259	133	10	446
Middle East	54	400	544	406	138	25	149	153	20	311
Oceania	35	203	276	98	178	35	173	76	13	267
Eastern Europe	34	247	346	216	130	22	115	99	7	236
Africa	31	235	324	211	112	17	70	62	4	178
Other Regions	3	12	122	104	18	1	3	5	*	23
American Samoa	1	5	9	4	5	1	4	3	*	8
Total for U.S. Points	6	42	57	18	39	7	46	16	1	55
Total for all International points	1,933	11,434	11,409	6,327	5,083	1,204	5,705	2,432	189	7,704

The region totals include all traffic reported by carriers serving Alaska, Hawaii, Puerto Rico, and the Conterminous United States, and include traffic between these points and off–shore U.S. points such as Guam and the U.S. Virgin Islands. The total for all international points also includes the traffic of carriers serving off–shore U.S. points.

Chart 2

U.S. Billed Minutes by Country

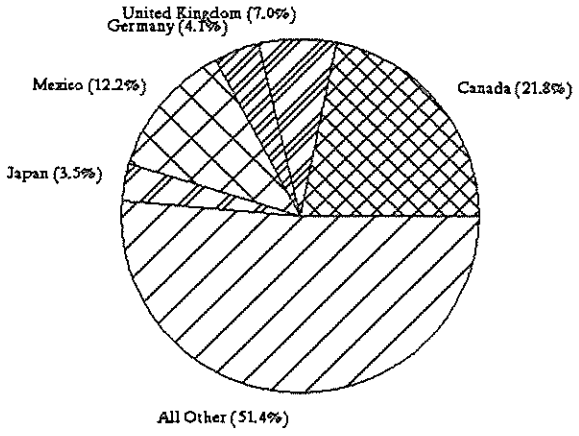


Table 37
Carriers Filing International Traffic Data For 1993

	Facilities Based	Resale
ACC CORP.		*
ACCESS LONG DISTANCE		*
ACOMM INC.		*
ACTION TELCOM CO.		*
ALASCOM, INC.	*	
ALLNET COMMUNICATION SERVICES, INC.		*
AMERICAN NETWORK EXCHANGE, INC.		*
AMERICAN SAMOA OFFICE OF COMMUNICATIONS	*	
AMERICAN SHARECOM, INC.		*
AMERICAN TELEGRAM CORPORATION		*
AMERICAN TELEPHONE AND TELEGRAPH, INC.	*	
AMERICAN TELEPHONE NETWORK (ATN)		*
AMER-I-NET SERVICES CORP.		*
BTI TELECOMMUNICATIONS SERVICES		*
BUDGET CALL LONG DISTANCE, INC.		*
BUFFALO VALLEY TELEPHONE COMPANY		*
CABLE & WIRELESS, INC.		*
CALL AMERICA BUSINESS COMMUNICATIONS		*
CALL TECHNOLOGY		*
CAPITAL NETWORK SYSTEM INC.		*
CARIBBEAN TELEPHONE & TELEGRAPH, INC.		*
CELLULAR LONG DISTANCE SERVICE CORP.		*
CENTURY TELECOMMUNICATIONS, INC.		*
CHEROKEE COMMUNICATIONS		*
CHESTER LONG DISTANCE SERVICES, INC.		*
CIMCO COMMUNICATIONS, INC.		*
CLEARTEL COMMUNICATIONS		*
COASTAL LONG DISTANCE SERVICES		*
COASTAL TELEPHONE COMPANY		*
COMMONWEALTH LONG DISTANCE CO.		*
COMMUNICATION SERVICE OF AMERICA, INC.		*
COMMUNICATION SERVICES OF COLORADO (CSC)		*
COMMUNIGROUP (KANSAS)		*
COMMUNIGROUP (MISSISSIPPI)		*
COMSERV TELECOMMUNICATIONS, INC.		*
CONCORD TELEPHONE LONG DISTANCE CO.		*
CONNECT AMERICA COMMUNICATIONS, INC.		*
CONQUEST		*
CONTINENTAL INTERCELL, INC.		*
CORPORATE SATELLITE COMMUNICATIONS, INC.	*	
CUSTOM TELECOM (CTN)		*
DATACOMM INT'L. CO., LTD.		*
DATRON SYSTEMS, INC.		*
DICKEYVILLE TELEPHONE CORP.		*
DIGITRAN CORPORATION		*
EASTERN TELECOM CORPORATION		*
EASTERN TELELOGIC CORPORATION		*
EASTERN TELEPHONE SYSTEMS, INC.		*
EATELNET, INC.		*
EMI COMMUNICATIONS CORPORATION	*	
ENTERPRISE TELECOM SERVICES, INC.		*
EXECUTIVE TELECARD LTD.		*
EXECUTONE INFORMATION SYSTEMS		*
EXPRESS COMMUNICATIONS, INC.		*
FAIRCHILD COMMUNICATIONS SERVICES CO.		*
FARMERS LONG DISTANCE, INC.		*
FONOROLA CORP.	*	
GENERAL COMMUNICATIONS INC. (GCI)		*
GOLDEN VALLEY TECHNOLOGIES		*
GTE	*	*
HORRY TELEPHONE LONG DISTANCE		*
HUGHES COMMUNICATIONS CARRIER SVCS., INC.	*	
IDB WORLDCOM SERVICES, INC.	*	*
IN-FLIGHT PHONE CORPORATION		*
INNOVATIVE TELECOM CORPORATION		*
INTERLINK TELECOMMUNICATIONS, INC.		*
INTERNATIONAL TELECOM, INC.		*
INTERQUEST, INC.		*
IOWA NETWORK SERVICES, INC.		*
IT&E OVERSEAS, INC.	*	
KEYSTONE TELECOMMUNICATIONS		*
LCI INTERNATIONAL		*
AFFORD-A-CALL		
LCI INTERNATIONAL TELECOM CORP.		
LDS TELECOMMUNICATIONS CORP.		
LCT LONG DISTANCE		*
LDCC INC.		*
LDDS METROMEDIA COMMUNICATIONS	*	*
L.D. SERVICES INC.		*
LEXINGTON TELEPHONE LONG DISTANCE CO.		*
LONG DISTANCE SAVERS, INC.		*
LOW COUNTRY CARRIERS INC., D/B/A HARGRAY LONG DISTANCE COMPANY		*
MATRIX TELECOM		*
MCI/WESTERN UNION INTERNATIONAL	*	*
MELBOURNE INTERNATIONAL COMM. LTD.	*	
MICRONESIAN TELECOMM. CORP. (MTC)	*	
MICRONET, INC.	*	
MID-COM COMMUNICATIONS INC.		*
MIDCO COMMUNICATIONS, INC.		*
MOBILE SATELLITE COMMUNICATIONS, INC. D/B/A PITTSBURGH INTERNATIONAL TELEPORT	*	
MTC TELEMANAGEMENT CORPORATION		*
NATIONAL COMMUNICATIONS ASSOCIATION		*
NATIONAL TECHNICAL ASSOCIATES		*
NATIONAL TELE-SAV., INC.		*
NATIONAL TELESERVICE, INC. (NTI)		*
NORTH AMERICAN TELECOMMUNICATIONS CORP.		*
NORTHERN COMMUNICATIONS, INC.	*	
NTS COMMUNICATIONS		*
OCOM CORPORATION		*
ONE-2-ONE COMMUNICATIONS		*
ONE CALL COMMUNICATIONS, INC.		*
OPERATOR COMMUNICATIONS, INC. D/B/A ONCOR COMMUNICATIONS, INC.		*
OVERSEAS TELECOMMUNICATIONS INC. (OTI)	*	
PC CELLULAR OF VERMONT, L.P.		*
PENNSYLVANIA ALTERNATIVE COMMUNICATIONS		*
PHOENIX NETWORK		*
PHONE ONE, INC.		*
POINT COMMUNICATIONS COMPANY		*
POLAR COMMUNICATIONS CORP.		*
RCI LONG DISTANCE NEW ENGLAND D/B/A/ LONG DISTANCE NORTH		*
ROCHESTER TEL COMPANY		*
MID ATLANTIC TELECOM		
RCI LONG DISTANCE, INC.		
VISIONS LONG DISTANCE AMERICA INC.		
VISIONS LONG DISTANCE NEW YORK INC.		
RGT UTILITIES, INC.		*
SCHNEIDER COMMUNICATIONS		*
SOUTHERN SATELLITE SYSTEMS/LMC SATCOM	*	
SOUTHERN PACIFIC TEL., CO. (SP TELECOM)		*
SOUTHNET SERVICES CORPORATION		*
SPRINT	*	*
SRT LONG DISTANCE		*
ST. THOMAS & SAN JUAN TEL. CO. INC.	*	*
STARTEC, INC.	*	*
STRATEGIC ALLIANCES INC.		*
TELCO COMMUNICATIONS GROUP, INC.		*
TELCORP, LTD.		*
TELECOMUNICACIONES ULTRAMARINAS-P.R.	*	
TELEDIAL AMERICA, INC.		*
TELEFONICA LARGA DISTANCIA DE PUERTO RICO	*	*
TELEGROUP, INC.		*
TELEPHONE EXPRESS		*
TELSTAR COMMUNICATIONS, INC.		*
TELTRUST COMMUN. SERVICES, INC.		*
TLC PRODUCTIONS INC.	*	
TRANSTEL COMMUNICATIONS, INC.		*
TTI TELECOMMUNICATIONS, INC.		*
UNITED COMMUNICATIONS, INC.		*
UNITED TELEPHONE LONG DISTANCE		*
UPS TELECOMMUNICATIONS, INC.	*	
USFI, INC.		*
U.S. LINK, INC.		*
U.S. LONG DISTANCE		*
U.S.V.I. CELLULAR TELEPHONE CORP.		*
VARTEC TELECOM, INC.		*
VISTA INT'L. COMMUNICATIONS, INC.		*
WARWICK VALLEY LONG DISTANCE CO., INC.		*
WASHINGTON INT'L. TELEPORT (WIT)		*
WESTINGHOUSE COMMUNICATION SVCS., INC.	*	
WILTEL, INC.	*	*
WORLD TELECOM GROUP, INC. (WTG)		*

* Carriers reported $12,042 million of facilities based international service revenue and $591 million of international resale revenue in 1993.

Table 38
U.S. Billed Service to all International Points in 1993
By Facilities Based Carriers
(Revenue amounts shown in Millions)

	Telephone	Telex	Telegraph	Private Line	Miscellaneous	Total
Conterminous U.S.	$11,259	$135	$12	$361	$23	$11,791
Alaska	15					15
Hawaii	80	*	*	2	*	83
Puerto Rico	56	*	*	1		57
Total for Domestic U.S. points	11,409	135	12	365	23	11,945
Guam	58	*	*	1		59
U.S. Virgin Islands	16					16
All other U.S. points	22					22
Total for All U.S. Points	11,505	136	12	366	23	12,042
Alascom, Inc.	15					15
American Samoa Office of Communications	3					3
American Telephone and Telegraph, Inc.	7,482	44	8	142	4	7,679
Corporate Satellite Communications, Inc.				*		*
EMI Communications Corporation					*	*
Fonorola Corp.	10					10
GTE	26			2	*	29
Hughes Communications Carrier Services, Inc.				*		*
IDB WorldCom Services, Inc.	64	26	1	86	*	178
IT&E Overseas, Inc.	38			1		39
LDDSMetromedia Communications	1					1
MCI / Western Union International	2,779	65	3	94	1	2,943
Melboum International Communications LTD.				*		*
Micronet, Inc.					*	*
Micronesian Telecommunications Corp.	16	*	*			16
Mobile Satellite Communications, Inc.				1		1
Northem Communications, Inc.				*		*
Overseas Telecommunications, Inc.				9		9
Southern Satellite Systems, Inc. /LMC SatCom				2		2
Sprint	1,048	1		24	17	1,089
Startec, Inc.	2					2
St. Thomas & San Juan Telephone Co. Inc.	9			3		12
Telecomunicaciones Ultramarinas–Puerto Rico				1		1
Telefonica Larga Distancia de Puerto Rico	11					11
TLC Productions, Inc.				*		*
UPS Telecommunications, Inc.				*		*
Westinghouse Communications Services, Inc.				*	*	*
WilTel, Inc.				1		1

* Represents revenues greater than $0 but less than $500,000.

* * *

The information in this report and, in many cases more detailed information, can be obtained from the **FCC-State Link** Electronic Bulletin Board by calling 202-418-0241. The **FCC-State Link** can also be reached through the National Technical Information Service's **FedWorld** system at (703) 321-8020 or through **FedWorld's** telnet internet node (fedworld.gov).

Printed copies of statistical reports are available in the Industry Analysis Division's Public Reference Room (Room 10 at 1250 23rd Street, N.W.) and from the Commission's duplicating contractor (International Transcription Services, Inc. (ITS) 202-857-3800).

Additional information on regulated carriers, including investments, revenues, expenses, and earnings, is contained in the annual Statistics of Communications Common Carriers, available from the U.S. Government Printing Office.

FCC rules require carriers to provide more detailed traffic data about international telephone service than about domestic service. Because of delays in international settlements, such information is typically received by the commission much later than domestic data and is usually published separately.

The information on cellular telephone service shown in Tables 32 and 33 was prepared by the Cellular Telecommunications Industry Association (1133 21st Street N.W., Washington, D.C. 20554, (202) 785-0081).

The United States Telephone Association represents virtually all local telephone companies (1401 H Street N.W., Washington D.C. 20005 -- (202) 326-7300). Like many trade associations, it collects information from each of its members. Annually, it publishes and sells statistical publications such as Phone Facts and Statistics of the Local Exchange Carriers.

Two widely used sources of names, addresses and other information for companies in the telephone industry are Telephony's Directory & Buyers' Guide for the Telecommunications Industry and the Telephone Engineer and Management Directory.

For more information on the following subjects, the following individuals may be contacted at (202) 418-0940:

Consumer Expenditures	Jim Lande
International Statistics	Linda Blake or Jim Lande
Lifeline Assistance Programs	Mary Green or Larry Povich
Lines and Calling Volumes	Alexander Belinfante
Long Distance Companies	Katie Rangos
Market Shares	Katie Rangos
Prices and Rates	Jim Lande
State Rate Cases	Mike Lehner
Subscribership and Penetration	Alexander Belinfante
Technology and Equal Access	Jonathan Kraushaar
Telecomm. Relay Fund Worksheets	Jim Lande