



# NEWS

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## FCC Releases Study on the Long Distance Telecommunications Industry

Washington, D.C. – Today, the Federal Communications Commission (FCC) released a new report, *Statistics of the Long Distance Telecommunications Industry*. The report replaces a previous report, *Long Distance Market Shares*, which was last published in March 1999. The new report covers several of the subjects in the previous report as well as consolidates a variety of statistics on the long distance market.

The report is divided into two sections. The first section contains information that describes the total long distance market, such as revenues, market shares, number of companies, and international calling volumes. The second section shows data on residential long distance calling, focusing on usage patterns, market shares, prices, and expenditures.

Highlights from the report are shown below:

- In 1999, the long distance market had more than \$108 billion in revenues, compared to \$105 billion in 1998. In 1999, long distance carriers accounted for over \$99 billion and local telephone companies accounted for the remaining \$9 billion.
- Interstate long distance revenues increased by 12.8% in 1999 compared to 1.5% the year before.
- Since 1984, international revenues have grown more than 5 fold from less than \$4 billion in 1984 to over \$20 billion in 1999. The number of calls has increased from about half a billion in 1984 to almost 8 billion in 1999.
- In 1984, AT&T's market share was about 90% of the toll revenues reported by long distance carriers. By 1999, AT&T's market share had declined to about 40%, WorldCom's share was 25%, Sprint's was 10% and more than 700 other long distance carriers had the remaining quarter of the market.
- According to a sampling of residential telephone bills, in 1999 the average household spent \$64 monthly on telecommunications. Of this, \$21 were for services provided by long distance carriers, \$34 for services by local exchange carriers and the remainder for services by wireless carriers.

- According to the same sampling of residential telephone bills, 38% of toll calls in 1999 were interstate and accounted for 50% of toll minutes. Also, 33% of residential long distance minutes were on weekdays, 30% on weekday evenings and 37% on weekends.

This report is available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12th, S.W. Copies may be purchased by calling International Transcription Services, Inc. (ITS) at (202) 857-3800. The report can be downloaded [file names: LDRPT101.ZIP, LDRPT101.PDF] from the **FCC-State Link** Internet site at <<http://www.fcc.gov/ccb/stats>>.

-- FCC --

For further information, contact the Industry Analysis Division, Common Carrier Bureau, at (202) 418-0940, or for users of TTY equipment, call 202-418-0484.

News about the Federal Communications Commission can also be found on the Commission's web site [www.fcc.gov](http://www.fcc.gov).

*Statistics of the  
Long Distance Telecommunications Industry*

*Industry Analysis Division  
Common Carrier Bureau  
Federal Communications Commission  
January 2001*



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*This report is available for reference in the FCC's Information Center at 445 12<sup>th</sup> Street, S.W., Courtyard Level. Copies may be purchased by calling International Transcription Service, Inc. at (202) 857-3800. The report can also be downloaded [file names: LDRPT101.ZIP, LDRPT101.PDF] from the **FCC-State Link** Internet site at <http://www.fcc.gov/ccb/stats>.*

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# Statistics of the Long Distance Telecommunications Industry

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## Introduction

This report contains a variety of information on the market for long distance telephone service. It is divided into two sections. The first section contains information that describes the total long distance market--including both residential and business calling. The second section shows data on residential long distance calling, focusing on usage patterns, market shares, prices, and expenditures.

Until the 1970s, AT&T had a virtual monopoly on long distance service in the United States. In the 1970s, competitors such as MCI and Sprint also began to offer long distance service. With the gradual emergence of competition, long distance rates dropped, calling volumes surged, and AT&T's dominance declined.

More than 700 companies now offer long distance service. These carriers remain subject to the Commission's jurisdiction. The Commission, however, has chosen to rely on competition rather than regulation as much as possible. Thus, the Commission forbears from regulating most aspects of long distance service. Nevertheless, the Commission continues to monitor the long distance market, in part because the market for toll services remains more highly concentrated among a handful of carriers than many other industries in the competitive market place.

The amount of information available on the long distance industry has increased as competition has developed and this report has evolved over the years. The Industry Analysis Division of the Common Carrier Bureau began a quarterly report on AT&T's share of interstate switched access minutes in 1987. At that time, when AT&T was a dominant provider of long distance services in the U.S., that data was the only periodic and consistent market share information available.<sup>1</sup>

As more data became publicly available, information on other carriers was added and alternative market share calculations were included (based on such measures as revenues and lines). The final quarterly report of *Long Distance Market Shares* was published in 1999 when the collection of some of the underlying information was discontinued.<sup>2</sup> The current report has been developed to meet the continuing need to monitor the long distance industry and to provide the information frequently requested by consumers, Congressional staff, other government agencies, carriers, and members of the business and academic communities.

## Executive Summary

- In 1999, the long distance market had more than \$108 billion in revenues, compared to \$105 billion in 1998. In 1999, long distance carriers accounted for over \$99 billion and local telephone companies accounted for the remaining \$9 billion.

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<sup>1</sup> See, Industry Analysis Division's *AT&T's Share of the Interstate Switched Market: Third Quarter 1987*.

<sup>2</sup> See, Industry Analysis Division's *Long Distance Market Shares: Fourth Quarter 1998*.

- Interstate long distance revenues increased by 12.8% in 1999 compared 1.5% to the year before.
- Since 1984, international revenues have grown more than 5 fold from less than \$4 billion in 1984 to over \$20 billion in 1999. The number of calls has increased from about half a billion in 1984 to almost 8 billion in 1999.
- In 1984, AT&T's market share was about 90% of the toll revenues reported by long distance carriers. By 1999, AT&T's market share had declined to about 40%, Worldcom's share was 25%, Sprint's was 10% and more than 700 long distance carriers had the remaining quarter of the market.
- According to a sampling of residential telephone bills, in 1999 the average household spent \$64 monthly on telecommunications. Of this, \$21 were for services provided by long distance carriers, \$34 for services by local exchange carriers and the remainder for services by wireless carriers.
- According to the same sampling of residential telephone bills, 38% of toll calls in 1999 were interstate and accounted for 50% of toll minutes. In addition, the average length of haul for interstate calls was 702 miles. Also, 33% of residential long distance minutes were on weekdays, 30% on weekday evenings and 37% on weekends.

## Total Market

### Carrier Revenues

In 1999, long distance carriers generated approximately \$99 billion in toll revenues. Local telephone companies also provide toll service, primarily intrastate calling within their service territories. In 1999, local telephone companies provided over \$9 billion of such service. When combined, the total long distance market was more than \$108 billion. These revenues are shown in Table 1.<sup>3</sup>

Toll calls can be divided into three jurisdictional categories--intrastate, interstate, and international. The revenues for each of the three types of calls are shown in Table 2.<sup>4</sup> Of considerable interest is the enormous growth (more than 500%) in international revenues from 1984 to 1999.

Toll revenues divided between residential and nonresidential services are shown in Table 3.<sup>5</sup> In 1999, residential customers generated about 42% of total toll revenues.

The number and types of carriers reporting long distance revenues are shown in Table 4. The Telecommunications Reporting Worksheet (FCC Form 499-A) requires each filer to select one of 18 categories as best describing its primary line of business.<sup>6</sup> Six of these categories consist of carriers that are primarily engaged in providing long distance service and are collectively described as being toll carriers:

- \* Interexchange Carriers (IXCs),
- \* Operator Service Providers (OSPs),
- \* Other Toll Service Providers,
- \* Prepaid Calling Card Providers,

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<sup>3</sup> The revenue information for the larger long distance telephone companies, shown in Table 1, is reported annually to the FCC in response to 47 CFR § 43.21(c). The revenue information for large local exchange telephone companies is based on annual ARMIS (Automated Reporting Management Information System) USOA reports (FCC Reports 43-02). The Commission also collects revenue information on FCC Form 499-A, Telecommunications Reporting Worksheet, and, in previous years, on FCC Form 431, Telecommunications Relay Service Worksheet, and FCC Form 457, Universal Service Worksheet. Revenues for carriers not subject to Section 43.21 or ARMIS reports are estimated by FCC staff based on carriers' filings of FCC Forms 431, 457, and 499-A.

<sup>4</sup> Total international revenue figures, which become available for each year in the second half of the following year, are based on the Industry Analysis Division's *Trends in the International Telecommunications Industry*. Preliminary international figures for 1999 are based on staff estimates. This revenue information includes facilities-based, facilities-resale, and pure resale revenues. Domestic revenues are divided between the intrastate and interstate jurisdictions based on FCC staff estimates and revenue divisions reported in the Industry Analysis Division's *Telecommunications Industry Revenues* and on FCC Form 499-A. The intrastate revenues include both intraLATA and interLATA calls.

<sup>5</sup> Residential and nonresidential proportions are estimated based on information from the *Annual Survey of Communication Services* published by the U.S. Census Bureau.

<sup>6</sup> The complete listing and detailed definitions of the filer categories are contained in the FCC Form 499-A detailed filing instructions, <<http://www.fcc.gov/Forms/Form499-A/499a.pdf>>.

- \* Satellite Service Providers, and
- \* Toll Resellers.

In 1999, 738 filers identified their primary activity as being a toll carrier and 1,777 other carriers reported long distance revenues even though the provision of long distance service is not their primary line of business.



**Table 1**  
**Total Toll Service Revenues by Carrier \***  
(Dollar Amounts Shown in Millions)

Company	1999	1998	1997	1996	1995	1994	1993	1992
AT&T Companies 1/								
AT&T Communications, Inc.	\$39,936	\$40,551	\$39,470	\$39,264	\$38,069	\$37,166	\$35,731	\$35,495
Alascom, Inc.					325	329	320	333
Teleport Communications Group, Inc.	284							
ACC Long Distance Corp.		123	122	118				
MCI WorldCom Companies 2/ 3/								
MCI WorldCom, Inc.	23,431	22,192						
MCI Telecommunications Corp.			17,150	16,372	14,617	11,715	10,947	9,719
Telecom*USA								
WorldCom, Inc.			5,897	4,485	3,640	2,221	1,145	801
Advanced Telecommunications Corp.								
Metromedia Communications Corp.							297	369
ITT Communication Services, Inc.								
Comsystems Network Services							116	135
Witel, Inc.						917	664	494
MFS Intelenet, Inc.				122	118			
Sprint Companies 4/ 5/								
Sprint Communications Co.	9,708	7,994	8,595	7,944	7,277	6,805	6,139	5,658
GTE Sprint								
US Telecom								
Owest Companies 6/								
LCI Int'l Telecom Corp. d/b/a Owest Comm. Svcs.	1,394	1,664	1,001	1,103	671	453	317	243
Owest Communications Corp.	517	320						
USLD Communications, Inc.	216	279	241	188	155	136	100	
Teleglobe Companies 7/								
Teleglobe USA, Inc.	557	275						
Excel Telecommunications, Inc.	942	1,219	1,179	1,091	363	156		
Long Distance Wholesale Club	131	121	176					
Teleglobe Business Solutions, Inc.	260	264	379	429	215			
Global Crossing Companies 8/								
Global Crossing Telecom Services, Inc.	874	874	775	1,119	827	568	436	376
Lexitel								
Global Crossing Bandwidth, Inc.	692	539	324		127	144		
Global Crossing North American Networks, Inc.			223	323	309	306	213	168
Frontier Comm. - North Central Region, Inc.				121	133	123		
Star Companies								
Star Telecommunications, Inc. 9/	443	401	253	140				
PT-1 Communications, Inc.	482	494	358	117				
Cable & Wireless USA, Inc.	913	953	1,066	919	700	654	557	495
IDT Corporation	850	376						
GTE Communications Corp.	834	607	340					
VarTec Telecom, Inc.	819	836	820	470	125	107		
Pacific Gateway Exchange	680	466	299	162				
Viatel Companies								
Viatel, Inc.	333							
Viatel Services, Inc.	324							
Broadwing Companies 10/								
Broadwing Communications Services, Inc.	453	724	258					
Broadwing Telecommunications, Inc.	150							
Intermedia Communications, Inc.	516	380						
RSL Companies 11/								
RSL Communications, Ltd.			192					
RSL COM USA, Inc.	270	171						
RSL COM Primecall, Inc.	160	130						
Westinghouse Communications		127						
Talk.com Holding Corp.	398	426	305	232	180			
Comm. TeleSystems Int'l d/b/a Worldxchange Comm.	374	308	345	196	115			
NOS Companies								
NOS Communications, Inc.	122	138						
NOSVA Limited Partnership	191							
Startec Global Operating Company	261	160						
Business Telecom, Inc. 12/	260	212	195	149	115			
Primus Companies 13/								
Primus Telecommunications, Inc.	240	176						
Trescom International, Inc.			158	140				
Telegroup, Inc.		384	337	213	129			
McLeodUSA Telecommunications	232							
Facicom International	202	164						
UniDial Communications, Inc.	189	180						
SNET America, Inc.	186	162	142					
Williams Communications, Inc.	184	126	227					
General Communication, Inc. 14/	184	175	158	143	120	106	92	
ITC/Deltacom Communications, Inc.	172	122						
Network Plus, Inc.	153							
Working Assets Funding Service, Inc.	140	131						
Total-Tel USA Communications, Inc.	140	137	123					
New Global Telecom, Inc.	134							
Americatel Corporation	129							
ALLTEL Communications, Inc.	120							
Others 15/	8,608	9,315	8,920	6,553	5,813	5,445	4,459	4,082
<b>Total Long Distance Carriers</b>	<b>98,788</b>	<b>94,396</b>	<b>90,028</b>	<b>82,113</b>	<b>74,143</b>	<b>67,351</b>	<b>61,533</b>	<b>58,368</b>
Bell Operating Companies	6,182	6,857	7,138	7,950	8,189	9,527	9,849	9,718
Other Incumbent Local Telephone Cos. 15/	1,864	2,572	3,077	3,298	3,143	3,848	3,908	3,897
CAPs, CLECs, & Other Local Telephone Cos. 15/	1,412	1,230	550					
<b>Total Local Exchange Carriers</b>	<b>9,458</b>	<b>10,659</b>	<b>10,765</b>	<b>11,248</b>	<b>11,332</b>	<b>13,375</b>	<b>13,757</b>	<b>13,615</b>
<b>Total Toll Service Revenues</b>	<b>\$108,246</b>	<b>\$105,055</b>	<b>\$100,793</b>	<b>\$93,361</b>	<b>\$85,475</b>	<b>\$80,726</b>	<b>\$75,290</b>	<b>\$71,983</b>

\* Includes intrastate, interstate and international toll revenues.

See notes following Table 1.

**Table 1**  
**Total Toll Service Revenues by Carrier \* - Continued**  
(Dollar Amounts Shown in Thousands)

Company	1991	1990	1989	1988	1987	1986	1985	1984
AT&T Companies 1/ AT&T Communications, Inc.	\$34,384	\$33,880	\$34,549	\$35,407	\$35,219	\$36,514	\$36,770	\$34,935
Alascom, Inc.	338	259	278	272	262	267	271	255
Teleport Communications Group, Inc. ACC Long Distance Corp.								
MCI WorldCom Companies 2/ 3/ MCI WorldCom, Inc.								
MCI Telecommunications Corp.	8,266	7,392	6,171	4,886	3,938	3,372	2,331	1,761
Telecom*USA			713	524	396	291	201	105
WorldCom, Inc.	263	154	110					
Advanced Telecommunications Corp.	356	342	326	178	162	124	86	72
Metromedia Communications Corp.	369	381	127					
ITT Communication Services, Inc.			404	379	287	282	241	161
Comsystems Network Services Wiltel, Inc.	131 405	130 376	300					
MFS Intelenet, Inc.								
Sprint Companies 4/ 5/ Sprint Communications Co.	5,378	5,041	4,320	3,405	2,592	1,141		
GTE Sprint US Telecom						779 212	1,122 387	1,052
Owest Companies 6/ LCI Int'l Telecom Corp. d/b/a Owest Comm. Svcs.	208	215	197					
Owest Communications Corp. USLD Communications, Inc.								
Teleglobe Companies 7/ Teleglobe USA, Inc.								
Excel Telecommunications, Inc. Long Distance Wholesale Club Teleglobe Business Solutions, Inc.								
Global Crossing Companies 8/ Global Crossing Telecom Services, Inc.	347	326	334	394	395	450	309	127
Lexitel Global Crossing Bandwidth, Inc. Global Crossing North American Networks, Inc.								
Frontier Comm. - North Central Region, Inc.	155	142	104					
Star Companies Star Telecommunications, Inc. 9/ PT-1 Communications, Inc.								
Cable & Wireless USA, Inc. IDT Corporation	406	359	275	218	180	171	146	
GTE Communications Corp. VarTec Telecom, Inc. Pacific Gateway Exchange Viatel Companies Viatel, Inc. Viatel Services, Inc.								
Broadwing Companies 10/ Broadwing Communications Services, Inc. Broadwing Telecommunications, Inc.								
Intermedia Communications, Inc. RSL Companies 11/ RSL Communications, Ltd. RSL COM USA, Inc. RSL COM Primecall, Inc. Westinghouse Communications								
Talk.com Holding Corp. Comm. TeleSystems Int'l d/b/a Worldxchange Comm.								
NOS Companies NOS Communications, Inc. NOSVA Limited Partnership								
Startec Global Operating Company Business Telecom, Inc. 12/ Primus Companies 13/ Primus Telecommunications, Inc. Trescom International, Inc. Telegroup, Inc.								
McLeodUSA Telecommunications Facilicom International UniDial Communications, Inc. SNET America, Inc. Williams Communications, Inc. General Communication, Inc. 14/ ITC/Deltacom Communications, Inc. Network Plus, Inc. Working Assets Funding Service, Inc. Total-Tel USA Communications, Inc. New Global Telecom, Inc. Americatel Corporation ALLTEL Communications, Inc.								
Others 15/	3,437	3,105	2,976	1,823	1,352	992	639	414
<b>Total Long Distance Carriers</b>	<b>54,443</b>	<b>52,102</b>	<b>51,184</b>	<b>47,487</b>	<b>44,783</b>	<b>44,595</b>	<b>42,630</b>	<b>38,755</b>
Bell Operating Companies Other Incumbent Local Telephone Cos. 15/ CAPs, CLECs, & Other Local Telephone Cos. 15/	10,066 4,049	10,578 4,112	10,549 4,291	10,668 4,445	10,268 3,468	9,599 3,274	9,026 3,159	9,037 3,364
<b>Total Local Exchange Carriers</b>	<b>14,115</b>	<b>14,690</b>	<b>14,840</b>	<b>15,113</b>	<b>13,736</b>	<b>12,873</b>	<b>12,185</b>	<b>12,401</b>
<b>Total Toll Service Revenues</b>	<b>\$68,558</b>	<b>\$66,792</b>	<b>\$66,024</b>	<b>\$62,600</b>	<b>\$58,519</b>	<b>\$57,468</b>	<b>\$54,815</b>	<b>\$51,156</b>

\* Includes intrastate, interstate and international toll revenues.

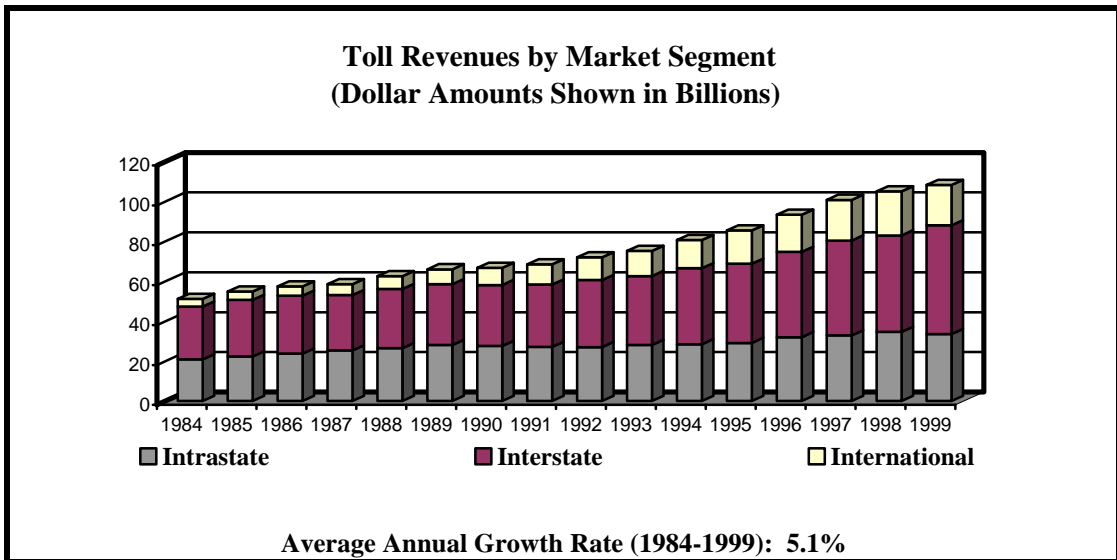
See notes following Table 1.

### Notes to Table 1 - Total Toll Service Revenues

- 1/ ACC Long Distance Corp. and Teleport Communications Group merged in April of 1998, and the combined company, Teleport Communications Group merged with AT&T Communications, Inc., in July of that year. AT&T Communications acquired Alascom, Inc., August 7, 1995 and began filing a consolidated revenue statement in 1996.
- 2/ MCI WorldCom's revenues were revised for 1998 to exclude enhanced services and to be consistent with revenues reported for 1999.
- 3/ WorldCom, Inc. completed a merger with MCI Communications Corp. in September of 1998 and filed 1998 revenue figures for the combined company, MCI WorldCom, Inc. MCI Communications Corp. and Telecom\*USA merged during 1989 and began reporting consolidated revenues in 1990. Metromedia Communications Corp. and ITT Communications Services, Inc., merged during 1988, but reported 1989 revenue separately. LDDS Communications, Inc., and Advanced Telecommunications Corp. merged in 1992. In 1993, LDDS merged with Metromedia Communications Corp. and Comsystems Network Services. For 1993, only the revenues that were received after the merger are included in LDDS's revenues; those preceding the merger are listed individually. LDDS and Wiltel merged January 5, 1995. In May 1995, LDDS changed its name to WorldCom, Inc. WorldCom acquired MFS Intelenet December 31, 1996.
- 4/ Sprint's revenues were revised for 1998 to exclude enhanced services and to be consistent with revenues reported for 1999.
- 5/ In July 1986, GTE Sprint and US Telecom merged into US Sprint. The information shown for GTE Sprint and US Telecom for 1986 is for January 1 - June 30. The information shown for Sprint Communications Corp. (then US Sprint) for 1986 is for July 1 - December 31. United Telecommunications, Inc., then majority owner of US Sprint, purchased the remaining interest from GTE in July of 1992. Effective February 16, 1992, the company's name became Sprint Communications Co.
- 6/ LCI International Telecom Corp. and USLD Communications, Inc., merged in December of 1997 and filed separate revenue statements for the year. Qwest Communications Corp. merged with LCI and USLD Communications, Inc., in June of 1998, and each of the three affiliated companies filed a separate revenue statement for 1998.
- 7/ Teleglobe Business Solutions was formerly known as Telco Holdings, Inc. Teleglobe USA, Inc., merged with Excel Telecommunications, Inc., and its affiliate in November of 1998. Excel Telecommunications, Inc. acquired Telco Holdings, Inc. in October of 1997.
- 8/ Global Crossing Ltd. acquired Frontier Corporation September 28, 1999. In 1994, RCI Long Distance, Inc., changed its name to Frontier Corporation.
- 9/ Star Telecommunications' s revenues for 1996 - 1998 have been prorated to reflect the decrease in in revised revenues reported for 1999.
- 10/ Cincinnati Bell Inc., merged with IXC Communications, Inc., on November 9, 1999 and soon began doing business as Broadwing, Inc.
- 11/ RSL COM USA bought Westinghouse Communications in August 1998.
- 12/ Data for 1996 taken from company's annual report to the Colorado Public Utilities Commission, which regulations telecommunications carriers pursuant to §40-15-301 C.R.S.
- 13/ Primus Telecommunications, Inc. acquired TresCom International, Inc., in 1998.
- 14/ For 1999, revenues exclude \$61 million from cable television operations.
- 15/ Estimated by FCC staff.

**Table 2**  
**Intrastate, Interstate, and International Toll Revenues**  
**(Dollar Amounts Shown in Millions)**

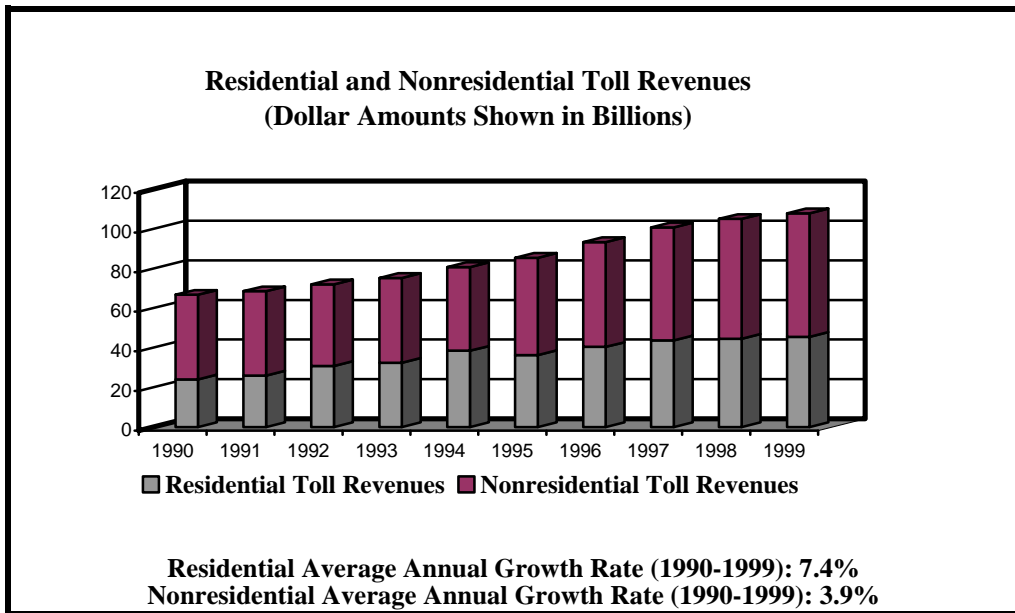
Year	Toll Revenues			Total Toll Revenues	As Percentage of Total Toll Revenues		
	Intrastate	Interstate	International		Intrastate	Interstate	International
1984	\$20,872	\$26,490	\$3,794	\$51,156	40.8 %	51.8 %	7.4 %
1985	22,310	28,387	4,119	54,815	40.7	51.8	7.5
1986	23,734	29,123	4,611	57,468	41.3	50.7	8.0
1987	25,339	27,830	5,350	58,519	43.3	47.6	9.1
1988	26,542	29,659	6,399	62,600	42.4	47.4	10.2
1989	28,060	30,472	7,492	66,024	42.5	46.2	11.3
1990	27,652	30,509	8,631	66,792	41.4	45.7	12.9
1991	27,149	31,202	10,207	68,558	39.6	45.5	14.9
1992	27,066	33,556	11,361	71,983	37.6	46.6	15.8
1993	28,158	34,499	12,633	75,290	37.4	45.8	16.8
1994	28,496	38,077	14,153	80,726	35.3	47.2	17.5
1995	29,147	39,725	16,603	85,475	34.1	46.5	19.4
1996	32,023	42,656	18,682	93,361	34.3	45.7	20.0
1997	32,859	47,579	20,355	100,793	32.6	47.2	20.2
1998	34,699	48,300	22,056	105,055	33.0	46.0	21.0
1999	33,600	54,482	20,164	108,246	31.0	50.3	18.6



**Table 3**  
**Residential and Nonresidential Toll Revenues**  
**(Dollar Amounts Shown in Millions)**

Year	Toll Revenues		Total Toll Revenues	As Percentage of Total Toll Revenues	
	Residential	Nonresidential		Residential	Nonresidential
1990	\$24,089	\$42,703	\$66,792	36.1 %	63.9 %
1991	26,028	42,530	68,558	38.0	62.0
1992	30,816	41,167	71,983	42.8	57.2
1993	32,408	42,882	75,290	43.0	57.0
1994	38,526	42,200	80,726	47.7	52.3
1995	36,361	49,114	85,475	42.5	57.5
1996	40,461	52,900	93,361	43.3	56.7
###	43,754	57,039	100,793	43.4	56.6
###	44,543	60,512	105,055	42.4	57.6
### 1/	45,896	62,350	108,246	42.4	57.6

1/ Estimated.



**Table 4**  
**Number of Carriers**

	1993	1994	1995	1996	1997	1998	1999
<b>Toll Carriers:</b>							
Interexchange Carriers (IXCs)	83	97	130	149	151	171	204
Operator Service Providers (OSPs)	35	29	25	27	32	24	21
Pre-paid Calling Card Providers			8	16	18	20	21
Satellite Service Carriers				22	13	13	21
Toll Resellers	171	206	260	345	340	388	454
<u>Other Toll Carriers</u>	<u>32</u>	<u>34</u>	<u>30</u>	<u>28</u>	<u>15</u>	<u>31</u>	<u>17</u>
<b>Total</b>	321	366	453	587	569	647	738
Other Carriers (Fixed Local Service, Payphone, and Wireless Service Providers)							
Others with Toll Revenues	NA	NA	NA	NA	1,537	1,740	1,777
<u>Others with No Toll Revenues</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>1,498</u>	<u>1,734</u>	<u>2,307</u>
<b>Total</b>	2,388	2,481	2,605	3,245	3,035	3,474	4,084
<b>All Carriers</b>	2,709	2,847	3,058	3,832	3,604	4,121	4,822

Sources: 1993 through 1996: Data filed on FCC Form 431 (*Telecommunications Relay Services Worksheet*).

1997 and 1998: Data filed on FCC Forms 431 and 457 (*Universal Service Worksheet*).

1999: Data filed on FCC Form 499-A (*Telecommunications Reporting Worksheet*).

See also Industry Analysis Division's *Carrier Locator: Interstate Service Providers*.

NA - Not Available

## Calling Volumes

Many subscribers purchase monthly telephone service with unlimited local calling. As a result, most calls are not metered and estimates of total calling are subject to some degree of uncertainty. 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 interstate calling and to allocate costs between interstate and intrastate services.

The volume of telephone calling, measured in DEMs, is shown in Table 5. DEMs are measured at each end of most telephone calls and therefore, in most cases, two DEMs are counted for every conversation minute.<sup>7</sup> Long distance calling increased most rapidly during the 1980's as prices fell rapidly. Over a long period of time, the growth in local calling has tended to reflect population and economic growth and thus grown at a relatively slow and steady pace. During the last few years, however, the volume of local calling minutes has grown rapidly, probably reflecting calls to Internet service providers.<sup>8</sup> These trends are also shown in Table 5.

The volume of international telephone calling is shown in Table 6. The number of international minutes has increased from less than 3 billion in 1980 to over 39 billion in 1999.

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<sup>7</sup> Caveats are needed for: (1) international calls (which are included with the interstate DEMs but counted only on the United States end of the call); (2) calls between wireline subscribers and cellular/wireless subscribers (also measured at only one end); and (3) calls between two wireless subscribers (not included in DEMS at all). Also, there are rather long delays in compiling and reporting industry totals so 1999 data are not yet available.

<sup>8</sup> Internet service providers can be reached in most locations simply by calling a local telephone number. The dial equipment minutes associated with these calls are all recorded as being local, thus affecting the percentage distribution of traffic between interstate and intrastate jurisdictions.

**Table 5**  
**Calling Volumes**  
**(Dial Equipment Minutes Shown in Billions)**

	<b>Local</b>	<b>Intrastate Toll</b>	<b>Interstate Toll</b>	<b>Total</b>
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	1,846	298	353	2,497
1991	1,859	302	366	2,527
1992	1,926	311	381	2,618
1993	2,027	316	396	2,739
1994	2,126	327	420	2,873
1995	2,224	346	454	3,025
1996	2,402	373	490	3,265
1997	2,695	407	528	3,630
1998 *	2,986	422	555	3,962
<b>Increase Over Prior Year</b>				
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	4	3	2
1991	1	1	4	1
1992	4	3	4	4
1993	5	2	4	5
1994	5	3	6	5
1995	5	6	8	5
1996	8	8	8	8
1997	12	9	8	11
1998 *	11	4	5	9
<b>Percent Distribution</b>				
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	74	12	15	100
1993	74	12	14	100
1994	74	11	15	100
1995	74	11	15	100
1996	74	11	15	100
1997	74	11	15	100
1998 *	75	11	14	100

Source: National Exchange Carrier Association.

\* Data for 1999 are not yet available.



**Table 6**  
**International Telephone Calls**  
**(Minutes and Messages in Millions)**

	U.S. Carrier Calls <sup>1</sup>		Foreign Carrier Calls <sup>2</sup>		All Calls	
	Minutes	Calls	Minutes	Calls	Minutes	Calls
1980	1,569	199	1,162	165	2,732	364
1981	1,857	233	1,437	202	3,294	435
1982	2,187	274	1,613	227	3,799	501
1983	2,650	322	1,808	262	4,458	584
1984	3,037	367	1,971	288	5,008	655
1985	3,446	411	2,263	336	5,709	747
1986	4,126	482	2,511	425	6,637	907
1987	4,819	570	2,823	455	7,642	1,025
1988	5,679	687	3,228	547	8,908	1,233
1989	6,751	835	3,810	649	10,561	1,485
1990	8,030	984	4,341	739	12,371	1,723
1991	9,072	1,384	4,769	911	13,840	2,295
1992	10,294	1,663	5,370	1,088	15,664	2,750
1993	11,513	1,945	5,786	1,220	17,299	3,165
1994	13,616	2,347	6,385	1,408	20,001	3,755
1995	15,889	2,830	7,051	1,525	22,939	4,354
1996	19,325	3,520	8,293	1,976	27,618	5,496
1997	22,753	4,259	9,170	2,103	31,923	6,361
1998	24,250	4,477	10,198	2,134	34,448	6,611
1999	28,363	5,290	10,765	2,682	39,128	7,972

Source: Industry Analysis Division's *1999 International Telecommunications Data and Trends in the International Telecommunications Industry*.

<sup>1</sup> U.S. carrier calls include collect and toll-free calls made to the United States, calls from country-direct and country-beyond plans, and calls reoriginated for foreign carriers. Data exclude calls that transit the United States under traditional transiting arrangements.

<sup>2</sup> Foreign carrier calls include collect and toll-free calls made from the United States to foreign countries.

## Market Shares and Concentration Ratios

A generation ago, before divestiture of the Bell System, AT&T's local telephone companies provided local service to most of the U.S. At the beginning of 1984, however, AT&T's local operating companies were divested in the settlement of an antitrust case.

After the AT&T divestiture, AT&T's former operating companies were restricted to providing service within their own Local Access and Transport Areas (LATAs). They were precluded from offering toll service that crossed LATA boundaries. As a result, two separate and distinct toll markets emerged.

In the first, AT&T competed with small but rapidly growing competitors for calls that crossed LATA boundaries. This market included almost all interstate and international calls and a large number of intrastate toll calls as well. A second and much smaller market consisted of short distance toll calls that did not cross LATA boundaries. This second market was dominated, at least initially, by the local exchange carriers operating within their own service territories.

Over time, the distinctions between the two markets have become blurred as customers can now select among competing carriers for their intraLATA calls. In addition, the restrictions preventing AT&T's former affiliates from providing interLATA service in their own service areas are being reduced as well.<sup>9</sup>

Long-term trends in toll revenues are shown in Table 7. Over time, AT&T and the operating companies that provided telephone service have lost market share to new entrants. By 1999, carriers not even in existence a generation ago accounted for more than half of all long distance telephone toll revenues.

Table 8 shows market share information based on the revenues of those firms identified as primarily being long distance carriers. AT&T's 1984 toll revenues were about 90% of those reported by all long distance carriers. In 1995, AT&T was classified as a non-dominant carrier and, by 1999, AT&T's revenues had declined to 41% of those reported by all long distance carriers.

Table 9 shows market share information based on all toll revenues, including the long distance services provided by local exchange and wireless carriers. This broader definition increasingly becomes the relevant definition of the market as these carriers increase their participation in a nationwide market. By any measure, the long-term trends have shown increasing competition and decreasing concentration.

The Department of Justice often uses a measure of market concentration known as Herfindahl-Herschman Index (HHI). This index ranges from zero (in a perfectly competitive industry) to 10,000 (in an industry completely monopolized by a single firm).

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<sup>9</sup> The 1996 Telecommunications Act established a procedure for Bell companies to offer interLATA long distance service after complying with certain preconditions to open their own markets. Thus far, the Bell companies serving New York and Texas have met these conditions and applications from other states are pending.

HHI indices for various segments of the long distance industry are shown in Table 10.<sup>10</sup> The indices remain high based on the standards used by the Department of Justice,<sup>11</sup> but are falling.

Data on the international market are available for a longer period, and HHIs for international service are shown in Table 11. Again, the concentration measures are high but declining over time.

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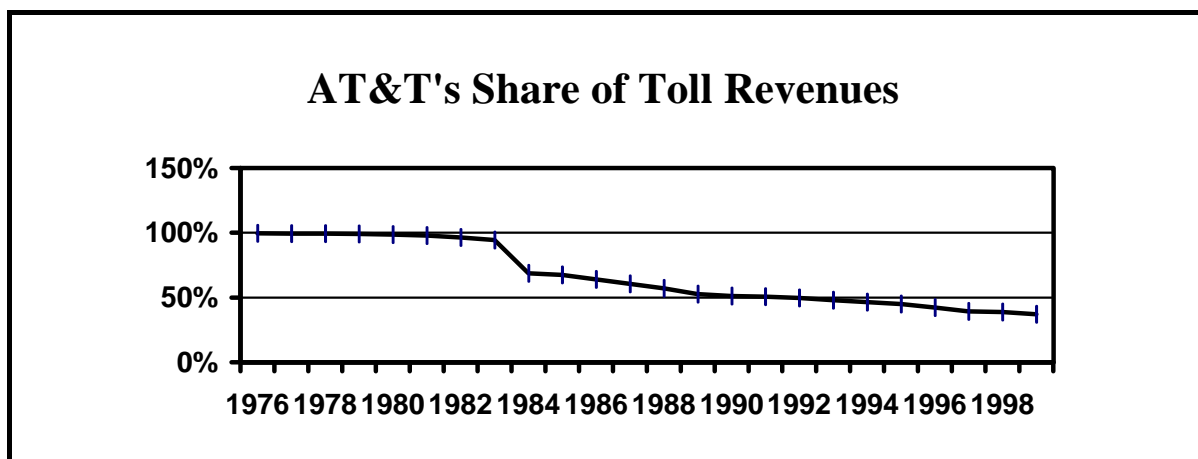
<sup>10</sup> HHIs for earlier years using slightly different methodologies are available in the Industry Analysis Division's *Long Distance Market Shares: Fourth Quarter 1998*.

<sup>11</sup> See U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, §1.5 (Revised Apr. 8, 1997). (<[http://www.usdoj.gov/atr/public/guidelines/horiz\\_book/hmg1.html](http://www.usdoj.gov/atr/public/guidelines/horiz_book/hmg1.html)>)

**Table 7**  
**Toll Revenues of AT&T, ILECs, and Other Toll Service Providers**  
**(Dollar Amounts Shown in Millions)**

Year	Long Distance Carriers		Local Exchange Carriers		Total Industry Toll Revenues
	AT&T 1/	Other Long Distance Carriers	Incumbent Local Exchange Carriers	Competitive Local Exchange Carriers	
1976	\$19,800	\$67			\$19,867
1977	22,429	146			22,575
1978	25,891	188			26,079
1979	29,262	289			29,551
1980	32,855	480			33,335
1981	38,309	871			39,180
1982	42,332	1,587			43,919
1983	44,298	2,672			46,970
1984	35,190	3,565	\$12,401		51,156
1985	37,041	5,589	12,185		54,815
1986	36,782	7,813	12,873		57,468
1987	35,481	9,302	13,736		58,519
1988	35,679	11,807	15,113		62,600
1989	34,827	16,160	14,840		66,024
1990	34,139	17,748	14,690		66,792
1991	34,722	19,513	14,115		68,558
1992	35,828	22,297	13,615		71,983
1993	36,051	24,660	13,757		75,290
1994	37,495	29,856	13,375		80,726
1995	38,394	35,749	11,332		85,475
1996	39,382	42,769	11,248		93,361
1997	39,592	50,558	10,215	\$550	100,793
1998	40,674	53,722	9,429	1,230	105,055
1999	40,220	58,568	8,046	1,412	108,246

1/ AT&T's revenues include the long distance revenues of Anascom (acquired in 1995) and Teleport Communications Group (including ACC Long Distance Corporation) which merged with AT&T in July of 1998 and, prior to 1984, the toll revenues of the Bell operating companies which were not reported separately to the FCC.



**Table 8**  
**Shares of Total Toll Service Revenues - Long Distance Carriers Only**

Year	AT&T	MCI WorldCom	Sprint	Other Long Distance Carriers 1/
1984	90.1 %	4.5 %	2.7 %	2.6 %
1985	86.3	5.5	2.6	5.6
1986	81.9	7.6	4.3	6.3
1987	78.6	8.8	5.8	6.8
1988	74.6	10.3	7.2	8.0
1989	67.5	12.3	8.4	11.8
1990	65.0	14.5	9.7	10.8
1991	63.2	15.6	9.9	11.3
1992	60.8	18.1	9.7	11.5
1993	58.1	19.7	10.0	12.3
1994	55.2	20.7	10.1	14.0
1995	51.8	24.6	9.8	13.8
1996	47.9	25.4	9.7	17.0
1997	43.8	25.7	9.5	19.8
1998	43.1	23.5	8.5	24.9
1999	40.7	23.7	9.8	25.7

1/ Excludes incumbent local exchange carriers, competitive local exchange carriers, and wireless carriers.

**Table 9**  
**Shares of Total Toll Service Revenues - All Long Distance Toll Providers**

Year	AT&T	MCI WorldCom	Sprint	Other Long Distance Carriers	Bell Operating Companies	Other Local Telephone Companies 1/
1984	68.3 %	3.4 %	2.1 %	2.0 %	17.7 %	6.6 %
1985	67.1	4.3	2.0	4.4	16.5	5.8
1986	63.5	5.9	3.3	4.9	16.7	5.7
1987	60.2	6.7	4.4	5.2	17.5	5.9
1988	56.6	7.8	5.4	6.1	17.0	7.1
1989	52.3	9.5	6.5	9.1	16.0	6.5
1990	50.7	11.3	7.5	8.4	15.8	6.2
1991	50.2	12.5	7.8	9.0	14.7	5.9
1992	49.3	14.6	7.9	9.3	13.5	5.4
1993	47.5	16.0	8.2	10.1	13.1	5.2
1994	46.0	17.3	8.4	11.7	11.8	4.8
1995	44.9	21.4	8.5	12.0	9.6	3.7
1996	42.1	22.4	8.5	15.0	8.5	3.5
1997	39.2	22.9	8.5	18.8	7.1	3.6
1998	38.7	21.1	7.6	22.4	6.5	3.6
1999	37.2	21.6	9.0	23.5	5.7	3.0

1/ Includes incumbent local exchange carriers, competitive local exchange carriers, and wireless carriers.

**Table 10**  
**Herfindahl-Hirschman Indices (HHIs) for Toll Services <sup>1</sup>**  
**(Dollar Amounts Shown in Billions)**

	Revenues (\$ billions)			HHIs		
	1997	1998	1999	1997	1998	1999
<b>Long Distance Carriers Only</b>						
Carrier's Carrier Services:						
Operator Services	\$0.7	\$0.3	\$0.3	5,807	3,422	2,771
Ordinary Long Distance and Other Switched Private Line	6.9	8.4	9.4	1,702	2,271	1,692
Private Line	1.2	1.9	2.1	3,111	2,275	1,589
<u>Other Toll Revenues <sup>2</sup></u>	<u>1.8</u>	<u>1.7</u>	<u>2.3</u>			
All Toll Revenues Provided for Resale	10.6	12.3	14.0	1,270	1,675	1,225
End-User Services:						
Prepaid Card	0.9	1.2	1.3	1,725	1,526	1,098
Operator	9.2	8.9	6.5	3,859	3,537	2,688
Ordinary Long Distance and Other Switched Private Line	52.5	56.1	59.6	3,387	3,225	3,260
Private Line	8.2	8.5	9.7	3,450	3,904	3,427
<u>Other Toll Revenues <sup>2</sup></u>	<u>5.2</u>	<u>1.4</u>	<u>4.0</u>			
All Toll Revenues Provided to End Users	76.0	76.1	81.2	3,355	3,216	3,060
Total Toll Revenues	86.6	88.4	95.2	2,882	2,826	2,576
<b>All Long Distance Toll Providers</b>						
Carrier's Carrier Services:						
Operator Services	0.8	0.3	0.3	4,684	2,838	2,616
Ordinary Long Distance and Other Switched Private Line	7.4	9.1	10.1	1,518	1,997	1,466
Private Line	1.3	2.0	2.2	2,835	2,089	1,436
<u>Other Toll Revenues <sup>2</sup></u>	<u>1.9</u>	<u>1.9</u>	<u>2.3</u>			
All Toll Revenues Provided for Resale	11.4	13.3	14.9	1,152	1,485	1,088
End-User Services:						
Prepaid Card	1.0	1.3	1.5	1,700	1,455	932
Operator	9.7	9.4	7.3	3,455	3,199	2,236
Ordinary Long Distance and Other Switched Private Line	62.1	65.1	68.3	3,065	2,902	2,572
Private Line	9.2	10.0	11.0	2,790	2,914	2,752
<u>Other Toll Revenues <sup>2</sup></u>	<u>5.3</u>	<u>1.5</u>	<u>4.3</u>			
All Toll Revenues Provided to End Users	87.3	87.3	92.3	2,633	2,486	2,446
Total Toll Revenues	\$98.7	\$100.6	\$107.3	2,295	2,232	2,093

Sources: 1997 and 1998: Data filed on FCC Form 431 (*Telecommunications Relay Service Worksheet*) and Form 457 (*Universal Service Worksheet*).

1999: Data filed on FCC Form 499-A (*Telecommunications Reporting Worksheet*).

<sup>1</sup> Includes both domestic and international toll service revenues consolidated by holding company. De minimis carriers were not required to file FCC Form 457 and are not included in data for 1997 and 1998. All figures exclude revenues from calls that both originate and terminate in foreign points. This accounts for the difference in total toll revenues reported in Tables 1 - 3.

<sup>2</sup> The other toll revenues categories include: surcharges on customer bills identified as recovering universal service contributions (1999 only), satellite services, and revenues reported as other toll services. HHIs are not necessarily meaningful for these categories.

**Table 11**  
**Herfindahl-Hirschman Indices (HHIs) for International Toll Services**  
**(Dollar Amounts Shown in Millions)**

	International Message Telephone Service <sup>1</sup>				International Private Line Service	
	U.S. Billed Revenues	HHI	Revenues Net of International Settlements	HHI	U.S. Billed Revenues	HHI
1980	\$2,097		\$1,549	n.m.	\$115	2,399
1981	2,239		1,674	n.m.	126	2,374
1982	2,382		1,502	n.m.	138	2,357
1983	2,876		1,737	n.m.	154	2,373
1984	3,197		1,806	n.m.	158	2,533
1985	3,487		1,843	9,494	172	2,463
1986	4,004		1,958	8,961	175	2,336
1987	4,750		2,337	8,573	191	1,981
1988	5,800		2,916	8,110	194	1,810
1989	6,901	6,963	3,513	7,156	208	1,737
1990	8,042	6,497	4,236	6,584	204	2,712
1991	9,219	6,007	5,902	5,848	309	2,371
1992	10,331	5,469	6,974	5,499	323	2,291
1993	11,505	4,897	7,800	4,931	366	2,758
1994	12,431	4,789	8,140	4,926	441	2,824
1995	14,160	4,413	9,217	4,633	528	2,761
1996	14,234	4,354	8,576	5,053	661	2,726
1997	15,250	3,871	9,821	4,369	851	2,862
1998	14,246	3,811	9,762	4,210	915	2,990
1999	14,505	3,502	9,925	3,876	1,201	3,233

Source: Industry Analysis Division's *1999 International Telecommunications Data and Trends in the International Telecommunications Industry*.

n.m. - not meaningful

<sup>1</sup> Data shown represent facilities-based and facilities-resale service revenues. Data for pure resale services are not included.

## Access Charges and Universal Service Fund Factors

Long distance companies rely on the loops, switches, and transport facilities of local telephone companies for access to their customers. Local telephone companies recover a portion of their costs from long distance companies accessing their networks. Both the manner in which access charges have been assessed and the proportion of the costs they have recovered have varied considerably over time.

Table 12 shows the average per-minute access charge paid by long distance carriers from July 1, 1984 to the present.<sup>12</sup> Table 13 illustrates the per-line access charge paid by long distance carriers from the time these monthly charges were first instituted in January 1998 to the present.<sup>13</sup>

Several programs have been established to help ensure that all Americans have access to affordable telecommunications services. Separate programs deal with high-cost and low-income support; schools, libraries and rural health support; and interstate access support.

Table 14 shows the universal service fund factors for high-cost and low-income support; schools, libraries and rural health-care support; and interstate access support from the first quarter of 1998 through the present.<sup>14</sup> Funding to pay for the programs is received from interstate service providers. During the first quarter of 2001, the revenues of each provider of interstate telecommunications were subject to a contribution factor of 6.68%.

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<sup>12</sup> The access figures reported in Tables 12 and 13 are taken from the Universal Service Joint Board's *Monitoring Report* and from access tariff filings.

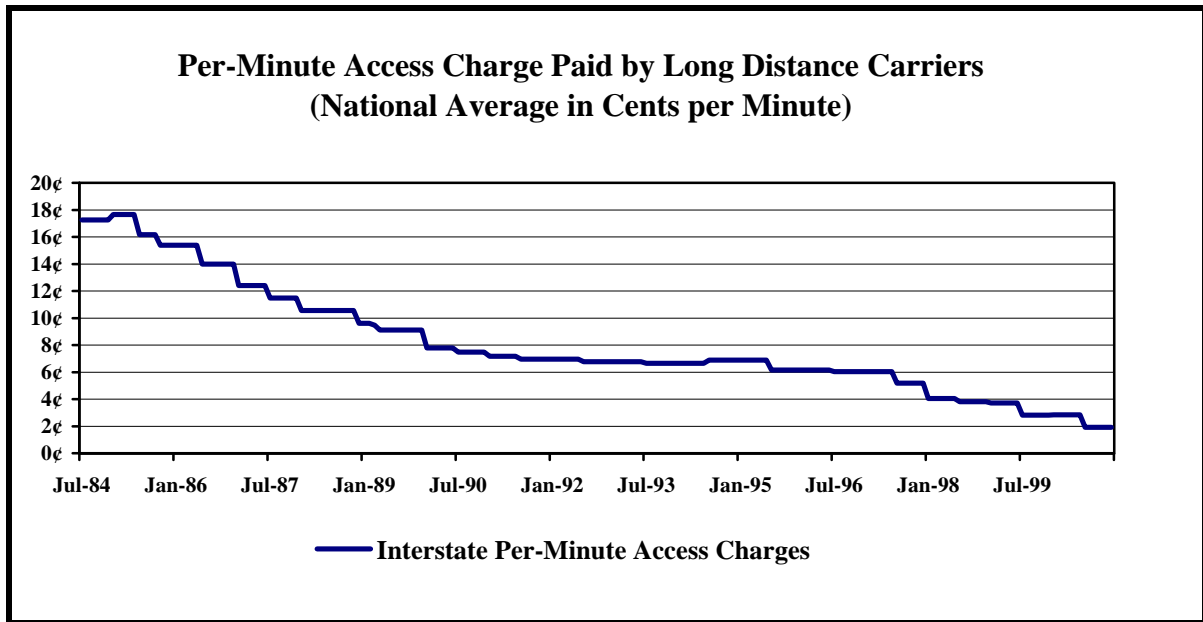
<sup>13</sup> The access figures reported in Tables 12 and 13 do not include subscriber line charges (SLCs), which are billed directly to customers and not to long distance carriers.

<sup>14</sup> Fund factors are taken from the Universal Service Joint Board's *Monitoring Report* and from FCC Public Notices in Docket 96-45.



**Table 12**  
**Per-Minute Access Charge Paid by Long Distance Carriers**  
**(National Average in Cents per Minute)**

Year	Month	Per-Minute Access Charge	Year	Month	Per-Minute Access Charge
1984	July	17.3 ¢	1993	January	6.8 ¢
1985	January	17.7	1993	July	6.7
	July	16.2	1994	January	6.7
1986	January	15.4	1994	July	6.9
	July	14.0	1995	January	6.9
1987	January	12.4	1995	July	6.2
	July	11.5	1996	January	6.2
1988	January	10.6	1996	July	6.0
	July	10.6	1997	January	6.0
1989	January	9.6	1997	July	5.2
	July	9.1	1998	January	4.0
1990	January	7.8	1998	July	3.8
	July	7.5	1999	January	3.7
1991	January	7.2	1999	July	2.8
	July	7.0	2000	January	2.9
1992	January	7.0	2000	July	1.9
	July	6.8			



**Table 13**  
**Per-Line Access Charges by Long Distance Carriers**

Year Month	Per-Line Access Charges			
	Primary Residential & Single-Line Business	Non-Primary Residential	Multiline Business	Centrex
1998 January	\$0.49	\$1.50	\$2.52	\$0.35
July	0.49	1.38	2.38	0.38
1999 January	0.49	1.38	2.22	0.32
July	0.95	1.77	2.78	0.42
2000 January	0.92	1.70	2.44	0.35
July	0.00	0.00	2.30	0.37

**Table 14**  
**Universal Service Fund Factors \***

Year Period	Factors for Interstate End-User Revenues			Factors for Intrastate End-User Revenues		
	High-Cost & Low-Income Support	Schools, Libraries, & Rural Health-	All Support	High-Cost & Low-Income Support	Schools, Libraries, & Rural Health-	All Support
1998 First Quarter	3.19%	0.72%	3.91%	0.00%	0.72%	0.72%
Second Quarter	3.14	0.76	3.90	0.00	0.76	0.76
Third Quarter	3.14	0.75	3.89	0.00	0.75	0.75
Fourth Quarter	3.18	0.75	3.93	0.00	0.75	0.75
1999 First Quarter	3.18	0.58	3.76	0.00	0.58	0.58
Second Quarter	3.05	0.57	3.62	0.00	0.57	0.57
Third Quarter	2.94	0.99	3.93	0.00	0.99	0.99
Fourth Quarter	2.89	1.10	3.99	0.00	1.10	1.10
2000 First Quarter	3.27	2.61	5.88	0.00	0.00	0.00
Second Quarter	3.21	2.50	5.71	0.00	0.00	0.00
Third Quarter	3.77	1.77	5.54	0.00	0.00	0.00
Fourth Quarter	3.88	1.79	5.67	0.00	0.00	0.00
2001 First Quarter	4.07	2.61	6.68	0.00	0.00	0.00

\* These factors do not include any assessments for the Telecommunications Relay Service or administration of the North American Numbering Plan.

## Industry Average Revenue per Minute

Table 15 shows average revenue per minute for 1930 - 1999 for interstate and international calls and for 1992 - 1999 for international switched services. For comparison, the table also shows the per-minute charges restated to 1999 dollars.

**Table 15**  
**Industry Average Revenue per Minute**

	Average Revenue per Minute for Interstate and International Calls			Average Revenue per Minute for Interstate and International Calls		International Calls 1/	Domestic Calls
		Restated in 1999 Dollars			Restated in 1999 Dollars		
1930	\$0.27	\$2.74	1965	\$0.24	\$1.27		
1931	0.27	2.95	1966	0.24	1.25		
1932	0.26	3.19	1967	0.24	1.21		
1933	0.28	3.53	1968	0.24	1.13		
1934	0.27	3.38	1969	0.24	1.09		
1935	0.27	3.23	1970	0.23	0.99		
1936	0.25	3.01	1971	0.25	1.01		
1937	0.22	2.51	1972	0.24	0.97		
1938	0.21	2.53	1973	0.25	0.95		
1939	0.22	2.59	1974	0.26	0.87		
1940	0.21	2.50	1975	0.27	0.85		
1941	0.21	2.35	1976	0.29	0.83		
1942	0.22	2.21	1977	0.28	0.78		
1943	0.21	2.03	1978	0.29	0.73		
1944	0.22	2.04	1979	0.29	0.67		
1945	0.21	1.96	1980	0.30	0.61		
1946	0.20	1.69	1981	0.33	0.60		
1947	0.19	1.43	1982	0.34	0.59		
1948	0.19	1.29	1983	0.35	0.58		
1949	0.19	1.32	1984	0.32	0.52		
1950	0.19	1.33	1985	0.31	0.48		
1951	0.20	1.29	1986	0.28	0.43		
1952	0.20	1.27	1987	0.25	0.36		
1953	0.21	1.30	1988	0.23	0.33		
1954	0.22	1.38	1989	0.22	0.29		
1955	0.23	1.43	1990	0.20	0.26		
1956	0.23	1.43	1991	0.20	0.24		
1957	0.24	1.41	1992	0.19	0.23	\$1.04	\$0.15
1958	0.24	1.38	1993	0.19	0.22	1.03	0.15
1959	0.24	1.38	1994	0.18	0.20	0.96	0.14
1960	0.24	1.36	1995	0.17	0.19	0.92	0.13
1961	0.25	1.39	1996	0.16	0.17	0.78	0.12
1962	0.25	1.40	1997	0.15	0.15	0.71	0.11
1963	0.25	1.35	1998	0.14	0.15	0.68	0.11
1964	0.25	1.34	1999	0.14	0.14	0.56	0.11

Source: Estimates for 1930 through 1981 are based on information in AT&T's *Long Line Statistics*, 1930–1963, 1946-1970, and 1960-1981, and appear to represent data for the conterminous United States only. Data prior to 1946 may not be comparable. Data for 1982 and 1983 were estimated using BLS price index changes. Starting with 1992, data are from the Industry Analysis Division's *Telecommunications Industry Revenues*. Some previously published data have been revised.

1/ Revenue per minute for international service differs from Table 6.1 of *Trends in Telephone Service*. Data in *Trends* are based on revenues billed by underlying carriers, whereas the revenues here are based on staff estimates of end-user revenues.

# Residential Market

## Usage

Bill harvesting data collected by TNS Telecoms (TNS), formerly PNR and Associates, provide information on phone usage in the long distance residential market, as opposed to the overall market for toll service. TNS, an economic research and consulting firm located in Jenkinstown, Pennsylvania,<sup>15</sup> conducts surveys (bill harvesting studies) of residential telephone usage and household expenditures on telephone service and asks consumers to mail copies of their phone bills to TNS. TNS has donated databases containing information on residential phone usage to the Commission. The surveys contain data on residential calling for all states except Alaska and Hawaii.

The bill harvesting data reflect calls itemized on residential telephone bills. Thus, 800 toll calls<sup>16</sup> made from residential telephones are not included, nor are collect calls made toll free from residential telephones. In contrast, 800 toll calls received and shown on the household monthly bill, are included, as are collect calls received.

Table 16 shows the percentage of residential long distance telephone usage that is intrastate, interstate, and international. In 1999, 38% of residential toll phone calls were interstate. These calls accounted for 50% of toll minutes. Table 17 shows the average number of toll minutes on household telephone bills. In 1999, the average household had 131 minutes of toll calling in a representative month.

Table 18 shows the distribution of residential long distance calls by call duration. For interstate calls, the average residential call lasts eight minutes, although over one-third of toll calls last one minute or less. Table 19 shows the length of haul of long distance calls. For interstate calls, the average length is 702 miles, as opposed to 54 miles for an intrastate call. Table 20 shows that the average duration of both interstate and intrastate calls generally increases with the distance of the call. Table 21 shows the percentage of residential long distance minutes by day of week. In the 1999 survey, 33% of residential minutes were on weekdays between 7:00 a.m. and 7:00 p.m., and 37% of residential minutes were on weekends.

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<sup>15</sup> For additional information, TNS can be contacted by phone at (215) 886-9200 and by e-mail at [info@pnr.com](mailto:info@pnr.com). The address is 101 Greenwood Avenue, Suite 502, Jenkinstown, PA 19046.

<sup>16</sup> Also 888, 877 and 866 toll-free calls.

**Table 16**  
**Distribution of Residential Toll Calls and Minutes**

<b>Type</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
<b>Calls</b>					
IntraLATA-Intrastate	41 %	40 %	38 %	38 %	39 %
InterLATA-Intrastate	19	18	19	19	18
IntraLATA-Interstate	1	1	1	1	1
InterLATA-Interstate	37	35	37	36	37
International	1	1	1	1	1
Others *	2	5	5	4	4
Total Calls in Sample	197,787	165,465	483,685	578,850	474,408
<b>Minutes</b>					
IntraLATA-Intrastate	28 %	29 %	27 %	27 %	28 %
InterLATA-Intrastate	18	18	18	18	17
IntraLATA-Interstate	1	1	1	1	1
InterLATA-Interstate	50	47	49	49	49
International	2	1	1	1	2
Others *	1	4	4	3	3
Total Minutes in Sample	1,493,674	1,210,675	3,673,315	4,330,888	3,544,905

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM*.

Note: Figures may not add due to rounding.

\* Toll-free calls billed to residential customers, 900 calls, and calls that cannot be classified.

**Table 17**  
**Average Residential Monthly Toll Calling: 1999**

<b>Type of Call</b>	<b>Minutes</b>
IntraLATA-Intrastate	36
InterLATA-Intrastate	23
IntraLATA-Interstate	1
InterLATA-Interstate	65
International	2
Others *	4
All Types	131

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM*.

Sample Size: 26,999 households.

Note: Figures may not add due to rounding.

\* Toll-free calls billed to residential customers, 900 calls, and calls that cannot be classified.

**Table 18**  
**Duration of Residential Long Distance Calls \***

<b>Duration of Call (In Minutes)</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
1	32.0 %	32.6 %	33.3 %	34.0 %	36.1 %
2	11.2	11.3	11.3	11.6	11.9
3	6.7	7.3	7.4	7.6	8.2
4	4.8	4.8	4.9	4.8	4.8
5	4.0	4.0	4.0	3.9	3.8
6	3.3	3.3	3.2	3.2	3.1
7	2.9	2.9	2.8	2.8	2.7
8	2.7	2.6	2.5	2.5	2.3
9	2.3	2.4	2.3	2.2	2.1
10	2.3	2.2	2.1	2.0	2.0
11-15	8.2	8.1	8.0	7.7	7.3
16-20	5.8	5.6	5.4	5.1	4.7
21-25	4.0	3.7	3.7	3.5	3.2
26-30	2.8	2.5	2.6	2.5	2.2
31-45	4.1	4.0	3.9	3.8	3.3
46-60	1.6	1.5	1.5	1.5	1.3
Greater Than 60	1.3	1.1	1.2	1.2	1.1
Average Duration	9.4	8.9	8.9	8.7	8.0
Median Duration	4.0	3.0	3.0	3.0	3.0

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market Monitor*

Sample Size: 110,734 calls for 1995; 94,830 calls for 1996; 295,498 calls for 1997; 364,942 calls in 1998; and 376,850 calls in 1999

\* Direct-dial calls carried by long distance carriers include intrastate, interstate and international calls but exclude intrastate calls carried by local exchange carriers.

**Table 19**  
**Length of Haul of Residential Long Distance Calls in 1999 \***

<b>Distance of Call (In Miles)</b>	<b>Interstate Calls</b>	<b>Intrastate Calls</b>	<b>All Calls</b>
1 - 10	1.5 %	7.7 %	5.1 %
11 - 22	3.9	30.2	19.5
23 - 55	7.1	34.3	23.2
56 - 124	8.3	17.4	13.7
125 - 292	15.8	8.8	11.6
293 - 430	9.1	1.3	4.5
431 - 925	24.3	0.4	10.1
926 - 1,910	22.4	0.0	9.1
Greater Than 1,910	7.7	0.0	3.1
Average Distance	702	54	317
Median Distance	507	29	62

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM*.

Sample Size: 419,511 calls.

\* Direct-dial calls carried by long distance carriers and local exchange carriers include only domestic calls.

**Table 20**  
**Duration of Residential Long Distance Calls by Length of Haul in 1999 \***

<b>Distance of Call (In Miles)</b>	<b>Average Duration Interstate Calls (Minutes)</b>	<b>Average Duration Intrastate Calls (Minutes)</b>	<b>Average Duration All Calls (Minutes)</b>
1 - 10	4.5	4.5	4.5
11 - 22	5.1	4.8	4.9
23 - 55	6.1	5.7	5.8
56 - 124	8.2	7.4	7.6
125 - 292	9.8	8.7	9.3
293 - 430	10.7	9.7	10.5
431 - 925	11.4	10.1	11.3
926 - 1,910	11.3	NA	11.3
Greater Than 1,910	11.2	NA	11.2
Average Minutes	10.0	6.0	7.6
Median Minutes	3.9	2.0	2.1

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM*.

Sample Size: 419,511 calls.

NA - Not Applicable.

\* Direct-dial calls carried by long distance carriers and local exchange carriers include only domestic calls.



**Table 21**  
**Distribution of Residential Long Distance Minutes by Day of Week in 1999 \***

<b>Day</b>	<b>7:00 AM-6:59 PM</b>	<b>7:00 PM-6:59 AM</b>	<b>Total</b>
Monday	6.9 %	6.3 %	13.2 %
Tuesday	6.5	6.2	12.6
Wednesday	6.4	6.4	12.8
Thursday	6.5	6.2	12.7
Friday	6.7	4.9	11.6
Saturday	10.1	4.6	14.8
Sunday	14.2	8.1	22.4
<b>Total</b>	<b>57.3</b>	<b>42.7</b>	<b>100.0</b>

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market Monitor*<sup>TM</sup>.

Sample Size: 245,480 calls.

\* Direct-dial calls carried by long distance carriers and local exchange carriers include only interLATA calls.

## Market Shares

Table 22 shows residential market shares from 1995 to 1999 calculated by Industry Analysis Division staff using data provided by TNS Telecoms. The table is divided into three categories: access lines, toll revenues, and direct-dial minutes. Tables 23, 24, and 25 present by state, for 1999, the residential market shares for toll revenues, access lines, and direct-dial minutes, respectively.

**Table 22**  
**Residential Market Shares: 1995 – 1999 1/**

	AT&T	MCI WorldCom 2/	Sprint	All Others
<b>Access Lines</b>				
1995	74.6 %	13.0 %	4.2 %	8.2 %
1996	69.9	14.1	5.0	11.0
1997	67.2	13.2	5.7	13.8
1998	62.6	15.1	5.7	16.6
1999	62.5	16.0	6.2	15.4
<b>Toll Revenues</b>				
1995	68.5 %	14.6 %	5.6 %	11.3 %
1996	63.3	16.0	6.6	14.1
1997	61.1	16.6	5.6	16.7
1998	58.3	18.4	5.7	17.6
1999	56.1	21.6	6.2	16.1
<b>Direct-Dial Minutes</b>				
1995	69.5 %	16.1 %	5.8 %	8.6 %
1996	62.5	15.9	7.1	14.5
1997	62.4	14.9	6.5	16.2
1998	58.4	17.0	6.5	18.1
1999	53.2	20.9	6.6	19.3

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market Monitor*<sup>TM</sup>.

Note: Market shares for past years have been revised to take into account mergers, acquisitions, and changes in methodology.

1/ In 1995, 1996, and 1999, TNS Telecoms identified the household's primary long distance carrier. In 1997, a household's primary long distance carrier was determined based on calls made through long distance carriers, and in 1998, a household's primary long distance carrier was determined based on interLATA calls.

2/ 1995, only includes MCI. In 1996, includes MCI and LDDS. For, 1997– 999, MCI WorldCom subsidiaries have been consolidated.

**Table 23**  
**Market Shares of Residential Toll Revenues by State: 1999 1/**

	<b>AT&amp;T</b>	<b>MCI WorldCom</b>	<b>Sprint</b>	<b>All Others</b>	<b>Toll Revenues 2/</b>
Alabama	57.9 %	24.2 %	3.7 %	14.3 %	\$9,186
Arizona	57.7	16.1	7.5	18.7	9,300
Arkansas	60.8	12.0	7.4	19.8	5,260
California	51.2	25.8	7.0	16.0	53,013
Colorado	58.7	20.8	5.2	15.4	7,310
Connecticut	51.1	27.1	6.2	15.6	3,220
Delaware	63.6	19.6	0.6	16.2	1,268
District of Columbia	21.1	49.7	6.5	22.7	1,599
Florida	60.2	18.1	8.7	13.0	33,380
Georgia	64.4	17.1	5.2	13.4	13,267
Idaho	45.6	29.1	1.3	24.0	2,386
Illinois	62.6	18.1	3.1	16.3	21,769
Indiana	53.2	23.5	10.2	13.2	11,557
Iowa	45.1	31.8	2.8	20.3	8,051
Kansas	60.0	8.4	8.6	23.0	4,691
Kentucky	54.2	22.8	1.6	21.4	8,275
Louisiana	57.0	23.0	2.4	17.6	7,557
Maine	70.3	18.4	2.5	8.8	2,677
Maryland	51.9	24.4	9.8	14.0	10,753
Massachusetts	63.0	24.9	3.2	8.9	9,053
Michigan	56.8	20.1	7.0	16.2	16,922
Minnesota	53.1	23.7	4.8	18.5	15,031
Mississippi	54.9	22.8	4.1	18.2	4,675
Missouri	58.0	18.4	6.8	16.7	11,084
Montana	39.1	31.1	2.5	27.3	3,247
Nebraska	57.0	21.1	3.7	18.2	3,932
Nevada	55.9	11.8	10.8	21.5	3,936
New Hampshire	60.2	18.9	4.9	16.0	1,919
New Jersey	65.8	20.4	2.4	11.4	19,045
New Mexico	48.3	20.0	6.9	24.8	3,726
New York	57.9	22.6	5.7	13.8	32,442
North Carolina	57.4	18.8	11.0	12.8	15,505
North Dakota	33.1	22.9	10.4	33.6	2,437
Ohio	57.8	20.4	6.1	15.6	24,510
Oklahoma	49.7	20.4	8.2	21.7	6,589
Oregon	58.4	16.2	6.3	19.1	7,847
Pennsylvania	58.9	21.8	4.3	15.0	26,299
Rhode Island	71.5	14.8	6.3	7.4	1,323
South Carolina	61.6	19.9	4.9	13.5	6,550
South Dakota	44.8	17.4	5.6	32.2	1,588
Tennessee	56.9	20.3	5.3	17.5	12,666
Texas	49.0	23.5	9.3	18.1	30,436
Utah	51.3	21.0	7.4	20.4	3,323
Vermont	65.1	17.7	2.4	14.8	1,269
Virginia	52.6	25.4	9.4	12.6	17,721
Washington	52.2	21.4	6.4	20.0	11,298
West Virginia	50.9	26.4	3.0	19.7	4,858
Wisconsin	58.6	19.3	5.6	16.4	15,999
Wyoming	42.5	32.7	0.1	24.7	2,003
<b>Total</b>	<b>56.1</b>	<b>21.6</b>	<b>6.2</b>	<b>16.1</b>	<b>531,750</b>

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market Monitor*™.

1/ Market shares are based on long distance carrier revenues. Residential toll revenues do not include taxes. Caution should be used in interpreting market shares for states with low toll revenues, where sample sizes are generally small. Alaska and Hawaii data are not included in the TNS database.

2/ Toll revenues represent toll revenues in the Bill Harvesting study.

**Table 24**  
**Market Shares of Residential Access Lines by State: 1999 \***

	AT&T	MCI WorldCom	Sprint	All Others	Sample Size
Alabama	62.7 %	19.7 %	3.7 %	13.9 %	402
Arizona	61.8	14.5	7.6	16.2	463
Arkansas	60.8	9.6	6.0	23.6	250
California	61.3	18.5	5.4	14.7	2,326
Colorado	61.1	17.4	5.4	16.0	350
Connecticut	33.0	20.2	3.9	42.9	203
Delaware	65.1	20.5	3.6	10.8	83
District of Columbia	46.8	21.3	10.6	21.3	47
Florida	60.5	16.5	10.3	12.7	1,426
Georgia	66.2	16.1	3.7	14.0	542
Idaho	55.5	15.1	5.0	24.4	119
Illinois	70.5	13.7	4.2	11.6	1,012
Indiana	60.1	15.4	7.8	16.7	604
Iowa	54.4	21.3	3.8	20.5	371
Kansas	65.1	4.1	12.9	17.8	241
Kentucky	59.8	18.6	2.7	18.9	366
Louisiana	72.3	14.4	3.4	9.9	354
Maine	78.7	12.6	3.1	5.5	127
Maryland	62.6	16.4	6.4	14.6	513
Massachusetts	71.8	16.1	3.7	8.4	490
Michigan	65.4	14.7	5.6	14.4	878
Minnesota	57.9	19.8	5.7	16.5	665
Mississippi	69.4	15.3	6.1	9.2	196
Missouri	61.2	12.8	8.9	17.1	515
Montana	63.8	12.9	2.6	20.7	116
Nebraska	62.6	15.0	3.1	19.4	227
Nevada	51.1	15.1	18.0	15.8	139
New Hampshire	67.7	13.1	5.1	14.1	99
New Jersey	76.4	12.4	3.4	7.8	653
New Mexico	63.6	17.1	6.2	13.2	129
New York	66.3	15.5	4.1	14.1	1,772
North Carolina	57.5	14.5	12.8	15.3	602
North Dakota	52.4	21.4	3.6	22.6	84
Ohio	61.9	14.9	6.7	16.5	1,210
Oklahoma	60.9	16.5	4.6	18.0	327
Oregon	61.2	11.1	7.7	20.1	379
Pennsylvania	62.0	16.4	5.2	16.3	1,391
Rhode Island	64.4	15.1	6.8	13.7	73
South Carolina	58.3	16.6	6.0	19.2	302
South Dakota	48.3	21.8	5.7	24.1	87
Tennessee	67.7	13.6	6.0	12.7	529
Texas	59.2	15.2	9.1	16.5	1,322
Utah	55.9	22.0	8.5	13.6	177
Vermont	59.7	20.9	6.0	13.4	67
Virginia	58.7	18.5	8.3	14.5	671
Washington	55.7	15.8	6.6	22.0	533
West Virginia	60.9	16.7	3.0	19.3	233
Wisconsin	63.5	17.1	4.7	14.7	767
Wyoming	63.9	24.6	0.0	11.5	61
Total	62.5	16.0	6.2	15.4	24,493

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM*.

\* Caution should be used in interpreting market shares for states with small sample sizes.

**Table 25**  
**Market Shares of Residential Direct Dial-Minutes by State: 1999 1/**

	AT&T	MCI WorldCom	Sprint	All Others	Minutes 2/
Alabama	55.0 %	27.6 %	3.1 %	14.2 %	40,262
Arizona	56.3	13.7	8.9	21.1	46,349
Arkansas	61.1	10.2	9.7	19.0	22,415
California	47.5	22.3	7.2	23.0	234,299
Colorado	48.3	26.9	4.7	20.1	32,515
Connecticut	37.7	15.4	4.6	42.2	20,635
Delaware	54.5	27.2	0.6	17.7	5,240
District of Columbia	14.7	31.9	14.3	39.1	3,357
Florida	56.6	19.7	8.5	15.2	177,347
Georgia	59.2	20.2	6.7	13.8	62,934
Idaho	47.6	21.9	1.9	28.6	9,416
Illinois	57.4	17.9	4.0	20.7	88,251
Indiana	51.7	21.9	10.4	16.0	43,339
Iowa	47.0	27.5	3.3	22.2	32,687
Kansas	59.3	5.0	7.9	27.8	19,350
Kentucky	50.8	21.3	1.8	26.1	32,412
Louisiana	61.2	19.9	2.9	16.0	28,922
Maine	70.7	19.6	4.0	5.7	6,963
Maryland	53.1	20.7	9.1	17.1	49,389
Massachusetts	56.8	25.6	3.3	14.3	36,519
Michigan	57.5	17.9	6.8	17.8	62,187
Minnesota	49.3	24.4	4.5	21.8	68,411
Mississippi	53.2	33.2	2.7	10.9	16,298
Missouri	54.9	16.6	9.2	19.3	37,674
Montana	44.4	19.9	5.6	30.0	10,402
Nebraska	56.3	19.7	2.8	21.2	15,979
Nevada	46.7	13.1	7.8	32.4	19,573
New Hampshire	61.4	11.2	5.4	22.0	8,211
New Jersey	62.3	17.4	3.2	17.0	80,164
New Mexico	40.6	26.8	8.0	24.6	11,638
New York	58.0	22.3	4.4	15.3	139,423
North Carolina	53.7	18.9	12.0	15.5	75,385
North Dakota	39.9	28.2	3.2	28.7	7,438
Ohio	55.8	23.5	7.2	13.4	97,804
Oklahoma	45.8	14.9	15.9	23.3	32,545
Oregon	60.3	12.3	3.7	23.6	32,706
Pennsylvania	52.8	23.0	5.2	19.0	105,628
Rhode Island	53.5	21.2	12.9	12.4	4,210
South Carolina	53.8	20.3	6.4	19.5	33,056
South Dakota	46.0	24.2	2.6	27.1	7,727
Tennessee	58.6	19.4	5.9	16.1	49,391
Texas	44.3	19.0	11.9	24.9	127,652
Utah	49.8	22.1	6.7	21.4	14,397
Vermont	67.6	21.4	0.6	10.4	4,575
Virginia	49.2	26.2	7.3	17.3	81,643
Washington	52.6	20.4	5.8	21.2	40,838
West Virginia	50.2	21.3	5.5	22.9	20,727
Wisconsin	54.5	22.8	3.5	19.2	64,499
Wyoming	31.8	49.2	0.0	18.9	8,048
Total	53.2	20.9	6.6	19.3	2,270,828

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM*.

1/ Based on interLATA toll calls.

2/ Total minutes of direct-dial toll calling in the Bill Harvesting study. Caution should be used in interpreting market shares for states with few minutes, where sample sizes are generally small.

## Prices

The Consumer Price Index (CPI) is the nation's most widely recognized measure of retail price changes. It is published monthly by the Bureau of Labor Statistics (BLS), and measures the prices all urban consumers pay for most goods and services. BLS defines urban areas as Metropolitan Statistical Areas (MSAs) and small cities with populations greater than 2,500. About 80 percent of the U.S. population lives in urban areas.

Price indices are less reliable when industries are changing rapidly. For example, in 1992, long distance carriers began to increase basic rates while greatly expanding their range of discount offerings. The fixed market basket of toll calls measured for the CPI did not fully reflect these discounts. Because of these circumstances, measures of average revenues are sometimes used as alternatives to price indices. Table 26 shows the consumer price indices for telephone service from January 1978 through November 2000.<sup>17</sup>

The proliferation of calling plans has made it difficult to calculate a single rate for long distance calling. In addition, the calling behavior of individual consumers varies significantly and the best plan for one consumer may not be the best for another. To cut through the myriad plans and promotions, the Industry Analysis Division calculates the "best available rate" offered by AT&T. Using the actual calling behavior of consumers, it is possible to identify the calling plan that offers a consumer the lowest per-minute rate. Table 27 shows the average long distance bill for price-sensitive residential callers from January 1984 through September 2000.

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<sup>17</sup> See Industry Analysis Division's *Reference Book of Rates, Price Indices and Expenditures for Telephone Service* for monthly information on the CPI going back to 1972.

**Table 26**  
**Consumer Price Indices**  
**(December 1997 = 100)**

BLS Series ID	All Items	Telephone Services 1/		Local Telephone Services	Long Distance Telephone Services 2/	Interstate Long Distance Services	Intrastate Long Distance Services	
		CUUR0000SA0	CUUR0000SE270A	CUUR0000SEED	CUUR0000SEED01	CUUR0000SEED02	CUUR0000SS27051	CUUR0000SS27061
1978	January	38.7	59.4		42.2		110.2	90.3
	July	40.7	59.7		42.8		110.0	90.3
1979	January	42.3	59.5		42.5		109.4	90.9
	July	45.3	59.4		42.2		109.2	91.3
1980	January	48.2	59.9		43.3		108.4	90.9
	July	51.3	61.3		44.5		112.8	89.7
1981	January	53.9	63.4		47.1		112.9	91.0
	July	56.8	66.1		49.3		121.0	91.4
1982	January	58.5	70.6		52.4		129.5	98.4
	July	60.4	73.6		55.7		132.8	99.2
1983	January	60.6	76.9		59.3		134.2	102.7
	July	61.9	78.0		59.9		135.2	106.5
1984	January	63.2	82.4		65.1		134.7	110.0
	July	64.5	84.5		68.6		128.9	113.5
1985	January	65.4	85.7		70.6		128.9	111.8
	July	66.8	88.5		75.1		123.8	113.5
1986	January	67.9	89.9		77.0		124.1	112.7
	July	67.9	93.1		83.6		112.6	112.7
1987	January	68.9	91.5		84.0		102.5	113.0
	July	70.6	91.5		86.1		97.6	109.8
1988	January	71.7	90.8		85.4		96.0	109.9
	July	73.5	90.8		86.3		95.9	105.9
1989	January	75.1	91.6		88.5		94.3	102.9
	July	77.1	92.4		90.2		92.6	102.4
1990	January	79.0	92.2		90.6		91.9	100.5
	July	80.8	90.6		88.8		89.6	100.7
1991	January	83.4	93.6		93.7		89.2	98.6
	July	84.4	93.8		93.9		89.8	98.4
1992	January	85.6	94.7		95.1		91.2	97.7
	July	87.1	94.4		95.1		89.8	96.5
1993	January	88.4	94.7		95.5		90.8	95.7
	July	89.5	94.9		95.4		92.2	95.8
1994	January	90.6	95.7		95.7		95.5	95.6
	July	92.0	96.6		95.9		100.1	95.4
1995	January	93.2	97.8		98.2		101.5	90.7
	July	94.5	97.3		97.9		99.6	91.0
1996	January	95.7	100.2		98.0		100.8	92.1
	July	97.3	99.0		98.5		104.3	94.1
1997	January	98.6	100.1		98.7		106.9	97.0
	July	99.5	100.6		99.8		104.7	99.4
1998	January	100.2		99.9	100.0	99.8	100.0	99.6
	July	101.2		101.5	101.5	101.9	102.0	101.3
1999	January	101.9		100.7	102.2	99.9	99.3	101.3
	July	103.3		99.5	103.7	96.7	95.3	100.0
2000	January	104.6		100.9	104.8	98.5	98.3	100.1
	February	105.3		99.4	104.9	95.5	94.0	99.2
	March	106.1		98.9	105.1	94.4	93.1	98.5
	April	106.2		98.6	105.2	93.7	92.4	97.8
	May	106.3		98.5	105.3	93.4	92.0	97.6
	June	106.9		97.2	105.8	90.6	89.0	95.0
	July	107.1		98.2	107.3	91.3	89.8	95.7
	August	107.1		98.9	109.5	90.7	89.2	95.1
	September	107.7		97.0	108.5	87.9	86.2	92.0
	October	107.9		98.3	109.8	89.4	87.9	92.9
	November	107.9		97.5	110.3	87.2	85.0	91.9

Source: Bureau of Labor Statistics.

1/ Series revised in December 1997. Current and previous series are not comparable.

2/ Series began in December 1997.

**Table 27**  
**Average Long Distance Bill for Price-Sensitive Residential Callers \***  
**(Based Upon AT&T's Basic Schedule, Calling Plans and Long-Term Promotions)**

	Monthly Interstate InterLATA Calling Volumes				
	30 Minutes or Less	50 to 70 Minutes	110 to 130 Minutes	270 to 330 Minutes	500 Minutes or More
January 1984	\$3.95	\$16.54	\$31.98	\$79.02	\$179.26
January 1989	2.47	10.75	21.07	52.04	118.78
January 1991	2.19	9.60	18.43	44.32	99.60
January 1992	2.16	9.48	17.94	42.17	93.67
January 1993	2.16	8.99	16.36	37.76	84.96
January 1994	2.22	8.64	15.36	36.66	83.63
January 1995	2.39	8.89	15.68	36.90	83.84
February 1996	2.47	9.10	16.77	37.12	72.75
February 1997	2.00	8.71	15.83	36.96	79.52
October 1997	1.70	7.75	14.88	34.05	75.54
December 1997	1.70	7.75	14.91	34.17	73.87
February 1998	1.70	7.75	14.91	34.17	73.87
April 1998	2.33	8.70	15.85	35.12	74.84
July 1998	3.48	9.54	16.68	35.95	75.40
September 1998	4.92	9.53	16.68	35.95	75.61
November 1998	4.92	9.53	16.28	33.81	69.89
August 1999	5.64	10.18	15.83	27.71	47.29
November 1999	6.03	10.57	16.22	27.13	46.73
December 1999	4.98	10.57	16.22	27.13	46.73
April 2000	3.90	9.98	16.12	26.88	48.13
September 2000	2.14	6.00	11.28	23.75	45.90
Households in Sample	2,050	550	264	123	94

**Sources:**

Phone bills from 3,081 households selected from Bill Harvesting III, TNS Telecoms (formerly PNR and Associates), Jenkinstown, Pennsylvania.  
 AT&T rates from AT&T tariffs and AT&T historical tariff summaries from *Dr. Bob's Long Distance for Less*, Market Dynamics, Bethesda, Maryland.

**Calculations:**

AT&T residential tariffs are used to determine the lowest cost calling plan for each of 3,081 households that made at least one call during the survey month. The actual interstate interLATA direct-dial calls on the household's phone bills are used, so that the program is able to determine the lowest available bill for actual calling patterns, rather than hypothesized calling patterns. All calling plans accepting new customers, including the basic schedule, are evaluated, with the exception that those calling plans that have a pre-determined date after which the rates will not be available. The average bill for each calling volume group (e.g. 30 minutes or less) is calculated as the sum of each household's total bill in the group divided by the number of households in the

\* These are the lowest available bills in effect during the specified month for the varying calling volume



## Expenditures

TNS Telecoms provides information on telecommunication expenditures of households. Table 28 shows monthly household payments to both local and long distance carriers for 1995 through 1999.

**Table 28**

**Average Monthly Household Telecommunications Expenditures  
by Type of Provider 1/**

	<b>Local Exchange Carriers 2/</b>	<b>Long Distance Carriers</b>	<b>Wireless Carriers</b>	<b>Total</b>
<b>1995</b>	\$30	\$21	\$5	\$56
<b>1996</b>	30	21	7	58
<b>1997</b>	32	25	8	65
<b>1998</b>	33	23	10	66
<b>1999</b>	34	21	9	64

Source: Calculated by IAD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market Monitor TM*.

Note: Household payments to long distance carriers are based on monthly household bills for those households with wireline telephone service.

1/ This sample does not include households from Alaska and Hawaii.

2/ Includes incumbent local exchange carriers and competitive local exchange carriers. Does not include DSL or other high-speed services.

**Customer Response**

Publication: *Statistics of the Long Distance Telecommunications Industry – January 2001*

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.

1. Please check the category that best describes you:

- press
- current telecommunications carrier
- potential telecommunications carrier
- business customer evaluating vendors/service options
- consultant, law firm, lobbyist
- other business customer
- academic/student
- residential customer
- FCC employee
- other federal government employee
- state or local government employee
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2. Please rate the report:   Excellent    Good    Satisfactory    Poor    No opinion

Data accuracy	()	()	()	()	()
Data presentation	()	()	()	()	()
Timeliness of data	()	()	()	()	()
Completeness of data	()	()	()	()	()
Text clarity	()	()	()	()	()
Completeness of text	()	()	()	()	()

3. Overall, how do you rate this report?   Excellent    Good    Satisfactory    Poor    No opinion

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4. How can this report be improved?

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